A HISTORY
OF THE BEEF CATTLE INDUSTRY
IN THE FITZROY REGION OF CENTRAL QUEENSLAND
1850s-1970s

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Doctor of Philosophy Thesis
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To the best of my knowledge and belief the work presented in this thesis is original, except those parts acknowledged in the text and identified in footnotes. This manuscript has not been submitted, either in whole or in part, for a degree at this or any other university.

[Signature]
ACKNOWLEDGMENTS

In researching and writing this thesis, I have been encouraged by the interest and co-operation of a wide range of people, from beef cattle producers to beef processors, from agricultural and genetic scientists to librarians and archivists. The names of individuals are listed at the end of the bibliography, but there are also a number of organisations and institutions whose assistance I wish to acknowledge.

I particularly appreciate scientific advice from officers of the CSIRO and the QDFI, both in Rockhampton and Brisbane, and also access to their libraries in Canberra and Rockhampton. The Australian Brahman Breeders Association Library, the Capricornia Institute of Advanced Education Library, the Rockhampton Municipal Library, and the Rockhampton and District Historical Society Library all provided valuable source material, some of it unavailable elsewhere. Further afield, I found the manuscript collections in John Oxley Library, the Queensland State Archives, the United Graziers Association Library and Fryer Library invaluable to my research. The Archer Papers, the most extensive of all pastoral manuscript collections, held by the Mitchell Library (Sydney), were the basis for those chapters dealing with the early history of the beef cattle industry.

Finally, through the advice of my supervisor, Associate Professor W.R. Johnston, and the patient endurance of my typist, Lyn Ryan, this thesis finally achieved form.

Lorna McDonald.
ABSTRACT

Beef cattle reached the Fitzroy River inauspiciously in 1856 as the second choice of pastoralists; sheep and the wool trade were the favoured enterprise. Yet, as early as 1858 during the Canoona gold rush Colin Archer's good trade in beef 'dead and alive' caused his change of attitude to the 'despised stock'. Within fifteen years beef cattle had almost replaced sheep in coastal districts. The region's pioneer cattle, predominantly Shorthorn, were gradually improved or replaced by Herefords through bloodlines from Archers' two Gracemere stud herds, or by other well bred bulls imported from the south. By the 1890s a keen controversy had erupted over the respective merits of Shorthorn and Hereford breeds, leading eventually to the predominance of Herefords. A similar controversy in the 1930s regarding horned and Poll Herefords produced more heat than rational argument. By the end of the period, 1850s-1930s, the dictates of half a dozen breed societies encouraged emphasis on the appearance of cattle rather than their commercial qualities, although some producers achieved excellence both on the hoof and the hook.

The most outstanding development in cattle breeding during this 120 year history has been the introduction of humped cattle (*Bos indicus*) to the British pioneer stock (*Bos taurus*). These environmentally adapted cattle, first imported from the United States of America in 1933 by the CSIR (later, CSIRO) caused a vociferous outcry from the United Graziers Association. This opposition was so politically powerful that
plans to establish an experiment station near Emerald had to be abandoned. Despite this, in the period 1930s to 1970s, scientists and a nucleus of resourceful graziers, largely independent of one another, developed several fixed crosses between British and humped cattle. Known as *Taurindicus*, these cattle are tick resistant and able to withstand Central Queensland's long dry seasons. By the end of the 1970s more than 80 per cent of regional producers were breeding *Taurindicus* cattle. This dramatic change has been described as the greatest livestock revolution in the history of the industry.

While much effort was expended in improving the quality of beef cattle throughout the entire chronological period, producers in each generation struggled against recurring problems, both seasonal and economic. Those of the colonial period are, in effect, put under the microscope through a survey of station records. These show how the majority of producers adapted to problems ranging from floods and droughts, cattle diseases and the introduction of the cattle tick, to diminishing cattle markets and low financial returns. The severest blow was the great drought, 1900-1903, which completely wiped out some herds and an estimated 80 per cent on a regional basis.

The relentless search for viable cattle and beef markets is the most consistent theme, 1870s-1970s. Droving or transporting cattle to district saleyards, the most usual market place, was of little avail without markets for beef. Because the Fitzroy Region traditionally has been export oriented, this problem was compounded first by distance from
British markets and later through exclusion by more economically produced Argentinian beef. When Empire preference (1934) provided a small but assured English market, the multinational meat processors took over the two surviving regional meatworks. The Lakes Creek Works then became the largest export works in the southern hemisphere. Periods of profitability prior to this had been rare, except briefly in the 1890s and before the First World War. Whenever cattle prices are low, profitability for processors is correspondingly high. While the 1920s were the most devastating period for both sectors of the industry, with Lakes Creek closed for several years, the most complex period for exporters commenced in the mid 1970s. The partial collapse of post-war markets in the United States and Japan, largely on political grounds, forced them to search the world for a multiplicity of small, new markets.

The most important (and successful) land settlement scheme ever undertaken in Australia was the Fitzroy Basin (Brigalow) Land Development Scheme instigated in 1962. The clearing of more than half the four million hectares of brigalow scrub within the three designated areas by 1978 and the settling of 247 new families in the region has tripled cattle numbers, improved pastures and water storage, and allowed broadacre grain production to be carried out successfully. New roads, schools and an end to social isolation in most districts benefitted old established families as well as new settlers. For the 170 landless young men who obtained blocks by ballot, the scheme provided adequate living areas and low interest loans.
Its greatest deficiency was the exclusion of housing loans, a factor which forced most families to live in tin sheds for some years. The greatest majority of new settlers revealed the same attachment to their way of life, and to the land itself, as the pioneers and their descendants.

The Brigalow Scheme and the establishment of *Taurindicus* cattle have been the two most significant developments in the history of the industry in the Fitzroy Region. Both have contributed to its pre-eminence in the national industry, but have not solved the basic problem affecting it since colonial times: the search for stable beef markets.
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ABBREVIATIONS (used more than once):

General:

ABBA  Australian Brahman Breeders Association
ABCRC  Australian Beef Cattle Research Committee
ABS  Australian Bureau of Statistics
AHS  Australian Hereford Society
AMB  Australian Meat Board
AMIEU  Australian Meat Industry Employees Union
BAE  Bureau of Agricultural Economics
CQME Co.  Central Queensland Meat Export Company
CSIR  Council of Scientific and Industrial Research
CSIRO  Commonwealth Scientific and Industrial Research Organisation
DPI  Department of Primary Industries [Queensland]
IBC  International Brahman Congress
LAC  Land Administration Commission
QBFC  Queensland British Food Corporation
QDAS  Queensland Department of Agriculture and Stock
QDPI  Queensland Department of Primary Industries
QMIO & MA  Queensland Meat Industry Organisation and Marketing Authority
QPAHC  Queensland Producers Animal Health Committee
RAS  Rockhampton Agricultural Society
TCRAC  Townsville Cattle Research Advisory Committee
UGA  United Graziers Association

Newspapers, Journals and Government Publications:

CQH  Central Queensland Herald
MB  Morning Bulletin
QAJ  Queensland Agricultural Journal
QPP  Queensland Parliamentary Papers
QVP  Queensland Votes and Proceedings
RB  Rockhampton Bulletin
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For almost a century Queensland has depastured at least half the Australian beef cattle herd, yet no definitive history of the industry has yet been published. The Fitzroy Region in Central Queensland is even more noteworthy in having the highest concentration of beef cattle of any statistical division in Australia, a fact which has earned Rockhampton the title, 'Beef Capital of Australia'. Even so, there is a lamentable dearth of secondary sources other than one chapter in a general history of the region and references in several local histories. This history has been undertaken in order to discover how and why the industry developed in the Fitzroy Region, and the problems encountered in breeding and marketing cattle and in finding world markets for the end product - beef. A further influence in choice of subject was the ready availability of manuscript sources, either held by station owners or deposited in library archival collections.

The Fitzroy Region covers that part of Central Queensland drained by the Fitzroy River and its chief tributaries, the Dawson, Comet, Nogoa and Isaac rivers. On the west it is bounded by the Drummond Range (part of the Great Divide), in the north by the Connors Range and in the south by the Dawes Range. The Pacific Ocean forms its eastern boundary. [See Map.] The original pastoral districts of Port Curtis and Leichhardt, proclaimed 10 January 1854, are almost entirely enveloped by today's region of approximately 55,500 square miles (143,744 km²). Within this area, clearly identifiable
sub-regions exist in the Dawson and Callide Valleys, the Springsure-Arcadia Valley, the Central Highlands and the coastal districts. Large areas of the Fitzroy Region were originally covered by dense brigalow and associated softwood scrubs, but since the Second World War there have been dramatic changes in land use, particularly as a result of the Fitzroy Basin (Brigalow) Land Development Scheme. The effect of this and similar land clearing projects have raised regional beef production considerably.

In researching the history, the most valuable of all manuscript sources were the Archer Papers, 1833-1948, now in Mitchell Library, Sydney. These were described by a Mitchell librarian in 1976 as the largest collection of pastoral papers in any Australian library, and among the most significant. Fortunately, access to a large portion of the collection was obtained before removal from Gracemere Station in 1975-76. Those already transferred to Mitchell Library in 1955 have also been researched where relevant to this history. Other major station records from the Fitzroy Region, including diaries and letter books, are now preserved in Rockhampton archival collections. These include the McDonald Papers (Raglan Station), the P.F. MacDonald Papers (Yaamba), the Tooloombah Cattle Books and other smaller collections. Other cattle books and station records, still held by descendants of original owners or later owners, have been researched in situ. While the majority of these records belong to the colonial period or prior to the First World War, the Archer Papers extend to the 1940s. In analysing and assessing their
contents as the basic research material for Chapters I, III and parts of Chapter IV (in particular), I have checked their subjectivity, where possible, through newspaper sources and the limited published sources available.

The almost complete absence of reliable secondary sources relative to the Queensland cattle industry has severely restricted research for periods prior to the Second World War. Critchell and Raymond's *A History of the Frozen Meat Trade* (London, 1912) is practically the only early in-depth publication on any sector of the industry. S.H. Roberts, *The Squatting Age in Australia 1835-1847* (Melbourne, 1935), while providing an excellent background to squating, obviously has no direct relevance to Central Queensland. Nineteenth century reminiscences such as those of Oscar de Satge\(^1\) and Cuthbert Fetherstonhaugh,\(^2\) while relevant to the region, are peripheral to the cattle industry. Sheep were the 'glamour stock' on the Peak Downs (Central Highlands) in pioneering days. Early published histories of Queensland, including the Aldine, Alcazar and Fox's three volumes, tend to be promotional rather than analytical. Nor does J.T.S. Bird, *The Early History of Rockhampton* (Rockhampton, 1904), provide enlightenment on the genesis of the cattle industry. J.G. Pattison's "Battler" *Tales of Early Rockhampton* (Melbourne, 1939) has more relevance because of his father's and his own involvement in the beef cattle industry; but as the author indicates, he deals in 'tales' rather than documented history.

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Only in the post-war years did scholarly publications begin to appear, for example, R.B. Kelley, *Native and Adapted Cattle in Australia* (Sydney, 1959). This is the first book length history on the introduction of *Bos indicus* blood to the *Bos taurus* herds of northern Australia and has considerable significance to this regional history. Pamphlets on this subject had been published by the CSIR (now CSIRO) since 1932. Even so, no one appears to have researched the Queensland beef cattle industry in the manner of Ross Duncan for his *The Northern Territory Pastoral Industry 1863-1910* (Melbourne, 1967).

Among early journal articles, the most valuable is Robert Archer's 'Second Prize Treatise' published in *Journal of the National Agricultural and Industrial Association of Queensland* in November and December 1891. This provides historically important findings on the comparative environmental adaptation of the two chief breeds of beef cattle, Shorthorn and Hereford. Most articles in early rural journals such as the *Pastoral Review* (founded 1891-92) and the *Queensland Agricultural Journal* (founded 1897) were of a technical or practical nature to fulfil the purpose for which they were established. Not until after the Second World War did agricultural scientists such as P.J. Skerman look back over the history of the industry as in his article, 'One Hundred Years of Animal Production in Queensland', published in 1960 in the *Journal of the Australian Institute of Agricultural Science*.³

By the 1970s (the computer age), there appeared a plethora of published statistical information and articles on the industry's economy, its future prospects and (all too seldom) its past history. The valuable technical bulletins published by the CSIRO and the Queensland Department of Primary Industries (QDPI) began to be supplemented by Bureau of Agricultural Economics publications by the 1950s. Nor were the export and marketing problems of the industry overlooked in those years by such specialist journals as the Australian Quarterly or Business Archives and History. These and many similar publications provided specialist advice for beef producers which ranged from genetic science to agricultural economy. In Chapters IV and V it will become evident that economists, at times, actually misled producers.

In contrast to those sections of the history based chiefly on station records, Chapter II depends largely on scientific sources. As well as published books and articles, there are numerous CSIRO bulletins, pamphlets and reports relative to the introduction of Zebu blood to Queensland herds. The CSIRO Archives (Canberra) also hold minutes of meetings of those organisations formed to provide communication between scientists and producers, such as the Townsville Cattle Research Advisory Committee. These sources, including original correspondence, illuminate the nature of political power wielded by grazier organisations (especially the United Graziers Association) in their opposition to revolutionary changes in

5. See The Economic Importance of the Cattle Tick (Canberra, Bureau of Agricultural Economics, 1959).
the traditional structure of cattle breeding through the introduction of Zebus in the 1930s. They also provided one of the research 'highlights' in revealing unpublished information on the implications of this controversy. In addition to published and manuscript sources, much valuable data was provided by practising or retired scientists in the CSIRO, the Department of Primary Industries and the School of Veterinary Science, University of Queensland. Practising cattlemen, those who 'built a breed' without scientific training, are also included among oral history sources.

The complexities of world beef markets, dealt with in Chapter V, depend on a much greater variety of sources than the history of regional meatworks in the same chapter. A greater understanding of contemporary problems in meat processing and marketing was gained through oral interviews with a meatworks manager, a meat company export manager and an officer of the Australian Meat and Livestock Corporation. The difficulty in finding and maintaining markets for Central Queensland beef is a recurring theme from the 1870s to the 1970s. In the modern period, however, the old yardstick of supply and demand has been replaced by the much greater subtleties inherent in political markets.

The Fitzroy Basin (Brigalow) Land Development Scheme brings to the history of the industry a new perspective, while confirming continuing themes relative to cattle breeding and marketing [Chapter VI]. Because the brigalow ballots to determine which applicant was to settle each of the 170 ballot blocks were held between 1963 and 1974, it has been possible
to interview a cross section of settlers from Taroom in the south to the Isaac River in the north. The eleven settlers contacted were either suggested by people within the industry or their names supplied by the Land Administration Commission. All completed the original questionnaire and agreed to tape-recorded interviews (for research purposes only). In every instance I was invited to the property and given hospitality where necessary. The subsequent field research involving 2,500 kilometres of car travel (much of it on unsealed roads) and the seven full days entailed were both challenging and rewarding. It also demonstrated the contemporary version of the value of the 'historian's walking boots' in becoming familiar with the environment to be depicted in the written history. In using oral history as a basic research source, it has been necessary to confirm personal evidence from published sources. This provided no problem as a number of agricultural scientists and rural economists have been involved in an advisory capacity in the implementation of the scheme, and have published articles, booklets and research bulletins relative to it. Several of these scientists, including an ecologist who has made a special study of brigalow regrowth, have also been interviewed. As far as I am aware, this is the first attempt to evaluate the brigalow scheme in an historical sense.

S.R. Harrison's 1976 thesis (Department of Economics) was restricted to economic factors affecting participants in the scheme. 6

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The persistent thread which unites the themes of all six chapters is that no matter how perfect the breed of cattle, how beneficial the seasonal conditions, how skilled the cattle husbandry, if stable markets for beef do not exist, the cattle producer's work is economically in vain. The history of the industry in the Fitzroy Region nevertheless reveals that this economic fact is not the most powerful influence on the men and women who, over three or four generations, have built a way of life revolving around and dedicated to the beef cattle industry.
The Fitzroy Region extends slightly beyond these boundaries (---) to include the coastal country. (Water and Energy Resources of the Fitzroy River Basin, Symposium Papers, 1980.)
CHAPTER I

THE SEARCH FOR PERFECTION IN BEEF CATTLE

1850s to 1930s

1. Pioneer Cattle
2. The Very Best Blood: A Case Study
3. The Art of Reaching Perfection

1. Pioneer Cattle

The fact cannot be denied that, even weighing the scrub cattle against modern types, pioneer cattle have played a most important role in the moulding of Central Queensland's great cattle industry. 1

It must have taken courage to refer to pioneer cattle in 1936, for this was the decade which witnessed the ultimate in 'perfection' in British breeds, an achievement partially negated by economic conditions in the beef cattle industry. It was also the revolutionary decade in which experiments with Zebu-cross strains promised higher production through hybrid vigour. The 1930s were therefore the watershed between two opposing breed streams: selection, breeding and conformation of beef on the hoof to achieve perfect quality beef on the hook; and selection and mating with exotic breeds for commercial purposes with emphasis on early maturity and 'weight for age' to produce beef more economically. The second of these streams is the subject of Chapter II, while the struggle to achieve the former is now traced from the 1850s when the first pioneer cattle reached the Fitzroy Region. It should be

1. 'Rural Expansion in Central Queensland', Morning Bulletin (MB), 9 July 1936,
stressed, however, that the search for traditionally perfect animals did not end with the advent of the Second World War.

Pioneer cattle have indeed 'played a most important role in the moulding of Central Queensland's great cattle industry'. The blood lines of selected pioneer cattle mated with imported pure breed bulls produced progeny whose descendants included prize winning cattle at Queensland and Sydney shows. In the relationship between stud breeding and the commercial herd, the peak of perfection was reached in 1930 when carcases of eight bullocks bred by William Beak of Rockhampton were judged 'the world's best' at Smithfield, London.  

Central Queensland's pioneer cattle were predominantly Shorthorn, with the Hereford only slowly overtaking this breed in popularity during the first three or four decades of settlement. There are also early references to the Durham breed, itself one of the progenitors of the Shorthorn. Another dominant breed was the Devon which was often crossed with the Shorthorn, to provide 'hardiness and strength of colour'.

As early as 1862, Burdekin Downs was stocked with pure Devon and Devon-cross cattle. The annual statistical returns provide no references to breeds of cattle, but Shorthorns and Shorthorn-cross made up 80 per cent of the Queensland herd in 1901. Gracemere and Tooooloomba station records provide evidence of a higher proportion of Herefords in the Fitzroy Region. 

These distinct breeds were all descendants of the

2. William Beak, letter to editor, Australasian, 13 May 1939.
3. See Chapter I, Part 2, also Chapter III.
aboriginal cattle of Britain, which, in turn, derived from the European ox. This was quaintly described in 1834 as having been 'domesticated before the flood' and therefore not neglected by Noah and his sons afterwards. Then 'as the families of men spread abroad after the confusion of tongues, the ox would be carried with them....'\(^5\) A less romantic but more authentic reference to the British ox is quoted from Caesar's Commentaries: the Britons were said to possess great numbers of cattle, 'living on their flesh and milk, but not using them to plough'.\(^6\) It was not until the eighteenth century that breeding experiments were carried out which resulted in, among others, the chief breeds found in mid-nineteenth century Central Queensland: Shorthorn, Devon, Durham and Hereford. For example, the improved breeding programme of a Durham man named Colling, prior to 1800, in which he would take one cross-breed and then breed back to the Shorthorn was much ridiculed, but it produced cattle celebrated both for their short horns and high milk yields, also high quality meat.\(^7\) Similar experiments were carried out in the late eighteenth century to establish other distinct breeds. This development in cattle breeding is referred to by Professor John Francis as 'the Bakewell era'. The precept of cross-breeding and then selecting for desired characteristics was initiated a generation earlier by Robert Bakewell who 'produced


\(^6\) Ibid.

\(^7\) Ibid., pp. 227-29. See also W.A. Beattie, *Beef Cattle Industry of Australia* (Melbourne, CSIRO, 1956).
new types of animals to meet new demands'. 8 This method was to be particularly significant in northern Australia during the twentieth century.

Australian colonial cattle had other ancestral blood lines through the original two bulls and five cows brought from the Cape of Good Hope by the First Fleet in 1788. Recent descriptions identify these as humped cattle (*Bos indicus*) of Africander breed. 9 Governor King's account of the colony's livestock in 1806 clearly indicates wider diversity of breeds:

The breed of cattle have been from the Cape of Good Hope and the small Buffalo breed from Calcutta - an Adalusian cow was left by Commodore Malaspina in 1794, another was brought from St Catherines and a few are of the English breed, but the most valuable cross of Cape and Bengal cows was by a Bull and Cow [sic] of English breed sent from St Helena in 1796... 10

In September 1800 there were 805 cattle of all ages, but by September 1805 these had multiplied to 6,556 by natural increase. King noted this was '96 more than doubling themselves in Two Years'. 11 Because these cattle ran wild in the Cowpastures, breeding was uncontrolled. Early Tasmanian farms were also stocked with humped cattle from Bengal. Three or four decades later, descendants of both the New South Wales and Tasmanian animals 'upgraded' by British blood, principally Shorthorn, became the pioneer cattle of the Fitzroy Region. By that time they showed no visible evidence of their Zebu ancestry.

11. Ibid.
In the 1850s and 1860s the 'shepherd kings' who settled the Fitzroy Region were more concerned with their flocks of sheep than the then 'despised stock' which most purchased to graze the rougher portions of their virgin runs. This was a rational preference, given the demand for wool by English mills and the almost non-existent markets for beef. There was a temporary live cattle market among the lessees of unoccupied runs which had to be stocked within 21 months of the initial lease to avoid reversion to the Crown. Neither run speculators nor squatters were too concerned about the breed of the animals, provided there were sufficient bulls, cows and heifers to ensure adequate reproduction. Most early references are to 'cattle' without breed identification. There were exceptions, such as the Archer brothers, who established a Shorthorn stud soon after bringing the first cattle to the Fitzroy River in 1856 and a Hereford stud about 1862. Most pioneer squatters, for example P.F. MacDonald, were content to put 'well bred bulls' into a herd of mixed cattle. In 1862, MacDonald's three bulls running with 580 nondescript cattle on Columbra, Mackenzie River, were Durham bulls bred at Westbrook, Darling Downs. In addition there were 140 steers 'fit for yoking or fattening for the Butcher'. Others such as J.A. Macartney bought their pioneer cattle from someone who had arrived earlier and bred up an increase; Macartney purchased his first stock for Waverley Station (Broadsound) from Archers in January 1860.

12. See Chapter III.
13. P.F. MacDonald to A. MacDonald, 4 September 1862, MacDonald Papers, Rockhampton Municipal Library.
Pastoral runs were offered for sale at so much per head of stock; quality did not matter greatly. P.F. MacDonald offered Columbra for sale in 1862. It comprised four blocks with a total area of 141 square miles (365.178 km²) and was offered on the basis of 580 mixed cattle at 52 shillings and 6 pence a head ($5.25) and the 140 steers at 80 shillings ($8) plus £300 ($600) for improvements on the station - a total sum of £3,632.10.0 ($7,265.00). He failed to attract a buyer, undoubtedly because Columbra was unsuited to sheep as well as cattle. As a speculator he was much more successful in selling the sheep runs which he offered at the same time. As he explained to his brother: 'The late Land Bill compels us to stock every Run without delay and as you are perhaps aware I have still a few unstocked which I must make an effort to secure....' One day earlier he had written cheques to the value of £300 ($600) as rents on these runs and apparently became alarmed about his commitments. MacDonald retained Columbra as his own cattle station, but his first favourite was Fernlees in the Springsure area; it was a sheep station.

Thomas and George Creed bought Langmorn Station in November 1869 for 55 shillings per head ($5.50) of the estimated 2,600 cattle on the run - with all beasts younger than six months 'given in'. As Corfield points out, wool might have been the preferred income, but cattle were considered a good investment.

15. P.F. MacDonald to A. MacDonald, 4 September 1862.
16. Ibid. See Appendix.
17. P.F. MacDonald to Colonial Treasurer, 3 September 1862.
Samuel Birkbeck, who purchased Glenmore Station near Rockhampton in 1861, bought the glamour stock, sheep, but he also arranged immediately to secure cattle. He contracted to purchase 1,500 head of cattle, two to six years old and of equal sexes, from Narveena Station on the Barwon River in northern New South Wales. The cattle were selected by his overseer, John Sutherland, assisted by Birkbeck's eldest son and delivered to Rockhampton at the risk of the seller for 40 shillings per head ($4). Again, the breed is not specified; Birkbeck simply refers to them as 'horned cattle'. It is interesting to note that while he was able to purchase 3,590 sheep locally (from Archer Bros., John Sutherland and Robert Ross), cattle had to be 'imported'. By the end of 1864 there were 2,058 cattle (whose book value had by then dropped to 30 shillings [$3] per head) and 5,350 sheep on Glenmore. This was a higher ratio than on the majority of district runs at that time; total numbers for the Rockhampton Police District were 21,356 cattle to 196,119 sheep. Sheep had also dropped slightly in value, an economic downturn reflected in Glenmore's operating loss of £1,071.9.3 ($2,142.92) in the first four years.

Pioneer pastoralists purchased bulls from one another in order to prevent inbreeding in their herds by the introduction of new blood. Instances of this are recorded in station accounts and diaries: Birkbeck purchased six bulls from

23. Ibid., December 1864. See Appendix.
Vicary of Canoona in 1862 for £69 ($138); 26 Broome (of Toorilla) inspected a bull at Macdonald's Balnagowan Station in 1874. 27 David Wilson of Raglan Station recorded on 7 November 1873, 'Mr. Beardmore here with bulls', and there are other entries showing his own purchase of bulls from neighbours. In one entry he referred to Macdonald (probably of Balnagowan) inspecting the '12 Mile' and commenting that 'he likes the country but not the cattle'. 28 Wilson also bought bulls from Sydney in 1873 (breed unspecified) and fourteen Hereford bulls from Archers. 29 He was either upgrading his commercial herd or establishing his own stud. In the following year he sold a draft of 43 bulls to E.P. Rogers of Toorilla Station. 30 Queensland must have been considered a good market for bulls as in 1879 Thomas Creed attended an auction sale of 50 pure bred Herefords brought from New South Wales. Although in poor condition, Creed bought six aged bulls bred by Wyndham 31 (Hunter River) at £8 ($16) each, and eight young bulls at £5.10.0 ($11). 32 In the 1870s, O.C.J. Beardmore bought Hereford and Durham bulls (later, Devons and Herefords) from New South Wales, and in 1874, W.H. Holt of Glenprairie purchased 'a fine lot of bulls of Durham breed' at the Sydney Show, while J.B. Rundle of Cawarral Station imported seven

27. William Broome, Diary, 19 May 1874, Rockhampton and District Historical Society Library (RDHS Library).
28. David Wilson, Diary, 11 September 1873, McDonald Papers, (Raglan Station), Capricornia Institute of Advanced Education Library, Rockhampton.
29. Ibid., 4-23 January, 4 May 1873.
30. Broome, Diary, 23 March 1874.
bulls of unspecified breed. 33

John Shannon, who bought Saltbush Park, St Lawrence, in 1872 with 130 mixed cattle added his own herd of Shorthorns from Crinum, Capella; he then bought 500 culled heifers and ten bulls from Black of Glenprairie, in the same district. These pioneer cattle, it is interesting to note, were the foundation of the Saltbush Park Hereford herd; they were 'converted' over the years by use of pure Hereford bulls. 34

In 1876 when E.P. Rogers introduced Hereford bulls to Toorilla he was subjected to much criticism; Shorthorns were the preferred breed. His neighbour, D.F. Mackay, in 1883 brought 150 bulls and 1,050 'choice cows' from his Hunter River stud to improve the quality of Tilpal's pioneer cattle. 35 That squatters in the Fitzroy Region were taking cattle breeding seriously is confirmed by a Rockhampton editorial in 1876:

The squatters and breeders of Queensland are exhibiting fully as much energy and judgment as their confreres in the southern colonies, by purchasing and importing animals of the purest strain, and those residing in the central districts are not one whit behind their fellow colonists. Very many excellent bulls and cows have lately been landed at our wharf, or have travelled overland to their destination.... 36

Early Agricultural and Pastoral Societies at Springsure (the Queensland Pastoral Society 1865), Gracemere (the Central Queensland Graziers and Farmers Society 1874), and Rockhampton (the Fitzroy Pastoral, Horticultural and Agricultural Society 1875) also encouraged the breeding of better stock. For

33. MS, 9 May 1874.
34. History of Saltbush Park, MS, 25 November 1943, John Oxley Library.
35. MB, 2 January 1883.
36. Capricornian, 6 May 1876.
(Archer Papers).
example, the Mayor's Cup at the 1878 Rockhampton Show was awarded to Pattison & Jones of Princhester and West Hills stations, Marlborough, 'for the best Colonial Bred Bull over 12 months, any breed'. More specifically, in 1880 a silver cup valued at ten guineas ($21) was offered for a colonial bred Hereford bull.

While it appears that cattle arrived inauspiciously and originally as 'despised stock' in Central Queensland, they soon replaced sheep on runs within 150 kilometres of the coast. Returns for the Rockhampton Police District (about one-quarter of the area of the Fitzroy Region) in the first two decades illustrate this:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
<th>Sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>1860</td>
<td>13,132</td>
<td>303,849</td>
</tr>
<tr>
<td>1869</td>
<td>48,359</td>
<td>190,986</td>
</tr>
<tr>
<td>1879</td>
<td>154,579</td>
<td>6,558</td>
</tr>
</tbody>
</table>

The most dramatic period of growth in the nineteenth century Queensland herd was 1875-80, when it increased from 1.813 million to 3.163 million. From that time the increase continued steadily until the colonial peak of approximately seven million was reached in 1894. While these figures include dairy cattle, by far the greatest number were beef animals, especially in Central Queensland. Just one century after the

37. Inscription on Silver Cup held by Rockhampton Agricultural Society.
38. Minute Books, Fitzroy Pastoral, Agricultural and Horticultural Society, 1878-91, Rockhampton Agricultural Society; Central Queensland Graziers and Farmers Society, 1876-77, RDHS Library.
39. Statistics, selected years 1860-87, QVP.
40. *The Queensland Cattle Industry* (Brisbane, Queensland Meat Industry Organisation and Marketing Authority [QMIO & MA], 1981), Appendix II.
first cattle grazed on Gracemere Station in 1856, the beef herd in the Fitzroy Region numbered 1,628,425. This gave it the highest concentration of beef cattle in the whole of northern Australia - 21.8 beasts to the square mile. But it had all begun with the strawberry and roan pioneer cattle.

Despite the industry's rapid growth prior to 1895, it is clear that herd improvement was not neglected. Even so, the only commercial stud breeders of that period were Archer Brothers who maintained both Shorthorn and Hereford studs from the pioneering days to the sophisticated era of stud breeding in the mid twentieth century. [See Part 2.] Looking back from the vantage point of 1936, a special feature on Central Queensland's development includes this quaint but basically true statement:

In her brief history the blackfellow has been ousted, gold rushes have become events of the past, the wallaby has been controlled, the bark humpy of the pioneer has rotted away, and carriage by bullock team is more of a novelty than a means of transport. Yet, the days of romance are not left behind. 43

43. MB, 9 July 1936.
2. The Very Best Blood: A Case Study

Our aim has been to produce herd bulls of the very best blood, quality and constitution, at such a cost that breeders can afford to pay, leaving us a reasonable return. 44

In 90 years of stud breeding, from the 1850s to the 1940s, the Archer family of Gracemere Station, Rockhampton, did reach perfection with their show cattle; the progeny of these, as herd bulls, carried the best blood, quality and constitution and passed it on to northern Australian beef cattle. The persistence of this one family to improve the quality of northern herds, and their sense of responsibility both to a family tradition of breeding good bulls and to the wider cattle industry, against their own financial interests, provides a most remarkable saga.

In relation to the history of the Central Queensland beef cattle industry, the family saga begins with Charles Archer's applications for twelve blocks of pastoral leasehold country on the Fitzroy River in 1853. These were recorded by the New South Wales Government during January to March 1854. Eight of these separate tenders for named blocks include estimates for the number of sheep to be depastured, while four are specifically designated for cattle. These are The Flats, Fitzroy Block, Marine Plains and Meadow Flats, each of 16,000 acres (6,475 ha.) or 25 square miles (64.74 km²) and each is estimated to run 640 head of cattle. 46 One more lease was

44. Robert Archer to G.L. Archer, 11 May 1925, Archer Papers, Mitchell Library.
45. Crown Lands Register, NSW, CLO/10, Queensland State Archives.
46. Applications to lease Crown lands, Archer Papers, A 3910, Mitchell Library.
added later. According to these estimates, Archer expected to run 2,500 cattle and 44,000 sheep. In 1858 they shore 26,775 sheep and had almost built the numbers up to the estimated 44,000 before moving the majority to more suitable inland country in 1873 (Minnie Downs). It did not take many years to discover that their coastal run was much better suited to cattle than sheep.

An undated valuation of the thirteen pastoral blocks which comprised Gracemere Station made by C.F. Gregory, apparently in 1860, shows 4,030 cattle depastured on ten blocks and 11,000 sheep on five. Three of the blocks, Jarlesburgh, Fitzroy Block and The Rocks, were shared by sheep and cattle. The greatest number of cattle on one block was 700 on Meadow Flats, part of the marine plain below Rockhampton. The cattle numbers and dating of this document are confirmed by a letter from James Archer to his mother on 2 February 1860 in which he refers to mustering the cattle - 'about 4000'. James, the youngest of the nine brothers, had driven the first herd of Shorthorns from Eidsvold and Coonambula (on the Burnett) to Gracemere, arriving about May 1856. He seems to have been the cattleman of the family as he brought another mob from the south in January 1858.

Colin Archer, second youngest of the brothers, who was managing Gracemere in 1858-59, believed that wool would be 'the staple article of export for some time to come'.

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47. Colin Archer, Journal, 11 December 1858 (Copy), RDHS Library.
49. J.F. Danker, letter to editor, MB, 21 April 1884.
50. Macartney, Journal, 9 and 10 January 1858.
was a correct assumption, but, unlike the majority of pastoralists at that time, he did not altogether despise cattle. While his nephew, Simon Jorgensen, was returning from Moreton Bay with cattle, Archer commented: 'I hope he will...bring out a good lot of cattle, which despised stock appears to me to pay reasonably well as we are situated'. 52 [My italics.]

After the Canoona gold rush of 1858, a permanent population was already settling in Rockhampton and thus providing a steady market for Archers' beef - £35 to £40 ($70 to $80) worth a week from beef as well as sales of cows and bullocks on the hoof for £7 and £9 respectively ($14 and $18). 53

Before the end of 1858 William Archer had sent their overseer, Teage, overland to Moreton Bay to discover which stations had the most suitable cattle for sale. 54 Simon Jorgensen left Gracemere on 8 March 1859 to collect and drove the purchased cattle home, assisted by a man called Day, three other Europeans and three 'black boys'. They took eleven horses including two draught animals pulling a dray carrying rations. 55 Throughout April 1859 great preparations were in progress to receive the cattle, including a tailing paddock and a two room hut at Wanyeweilem on the marine plains near the Port Curtis road on the way to Gladstone. Wanyeweilem later became known as 'the Fifteen Mile' to denote its distance from Gracemere homestead. In January 1858, J.A. Macartney referred to camping 'at a waterhole close to Archer's 15 Mile

52. Ibid., 8 March 1859.
53. Ibid.
54. Ibid., 1 January 1859.
55. Ibid., 7 March 1859.
Early in 1859, at Wanyeweilem, 1,800 branded cattle had already been mustered. 'This won't do', complained Colin Archer; a mob had been left out, probably the 850 brought from Coonambula. This indicates that even before the arrival of the Moreton Bay cattle, the herd had already exceeded the 1853 estimate of 2,500.

Other planned preparations included new yards to be erected at Meadow Flats 'in readiness for a draft of heifers when the cattle arrive', and stockyards at Nankin Creek. Since the arrival of the first cattle in 1856 Nankin Creek (sometimes spelt Nankeen) was designated as 'the Heifer Station', for, like Meadow Flats, it was on the opposite side of the river to Gracemere. On unfenced runs natural barriers such as the Fitzroy had to be utilised in order to carry out controlled breeding. The stock were taken to and from Nankin - down river from Rockhampton - via Brown's crossing, downstream from town. When Jorgensen arrived with the additional cattle on 12 June 1859, his uncle described them as 'a very fine lot...in good condition and I believe all right as to number'.

Even in those early years, Archers were concerned with improving the quality of their herd by establishing a Shorthorn stud. Robert Archer (of the next generation) later claimed this was in 1856, the year the commercial herd was overlanded to Gracemere; in view of preparations at the Heifer Station

58. Ibid., 12 June 1859.
in 1859 this latter date seems more probable. Supporting this assumption is documentary evidence of the arrival in Rockhampton on 9 March 1859 of two stud bulls from England. They were unloaded from the Jenny Lind during a flood, and, being aristocrats, were stabled overnight at Parker's Bush Inn. Thomas Archer had selected them in England and paid the Yorkshire breeder 60 guineas for one and 100 guineas for the other ($126 and $210). Freight to Sydney was 50 guineas each ($105) with additional freight on the Jenny Lind to Rockhampton. Colin Archer facetiously noted: 'Pedigree said to be unexceptional - which means I suppose that they are thoroughbred - which means I don't know what'. Undoubtedly they were Shorthorn as Yorkshire was one of the two counties celebrated since the 1790s for the breeding of these cattle.

Importing bulls from England for use in the tropics was a risky business as the Archers re-affirmed throughout the 90 years in which Gracemere stud breeding contributed so significantly to improving the quality of northern herds. Those first two bulls which reached their new home in March 1859 did not thrive at first. Though they appeared to be in 'good health and lively', they lost condition in the first month even though fed daily with bran - they refused to eat corn. 'When they are acclimatized & accustomed to green feed they cannot fail to become fat in the paddock', commented Colin Archer. As the bulls kept trying to get out, he put four old milkers in with them 'to keep their minds easy'.

61. Ibid., 4 January 1859.
62. Ibid., 18 March 1859.
Between 1860 and 1864 in the Rockhampton Statistical Division, cattle numbers increased by more than 100 per cent while sheep decreased by approximately 30 per cent. [See Table for selected years, sheep and cattle numbers, in Appendix.] This was partly owing to depression in the wool industry, but more directly to the unsuitability of the coast country for wool growing. Foot rot and the black spear grass took their toll as well as the wet, humid summers. In 1865, Archers purchased Rosewood Station from the Atherton family in an attempt to find better sheep country. They paid £6,556 ($13,112) for it, even though it was only about 50 miles (80 kilometres) inland from Gracemere. It, too, proved unsuited to sheep, and in 1873 they moved all their sheep from Gracemere to their newly purchased station, Minnie Downs, near Tambo. Colin Archer was not the only pastoralist to discover that cattle were not to be despised in a decade which saw new gold fields springing up and Rockhampton's population increase from 698 in 1861 to 6,464 in 1871. By July 1868, Archers depastured 9,629 cattle with a stock book valuation of £27,355.16.0 ($54,712.20). Their 41,250 sheep were valued at £19,927.13.6 ($39,855.35), confirming the capital value of the cattle as well in excess of the sheep.

Orders for Shorthorn bulls in the 1860s, though not spectacular as to numbers, show that some buyers such as Berkelman & Co. of Elizabeth Creek, Tambo, regularly

63. Inventory, Rosewood Station, 5 September 1865, Archer Papers; George Dingle to W.J. Kinross, August 1939.
64. Census Returns, 1861-71.
65. Stock Returns, July 1868, Archer Papers.
66. Elizabeth Creek, Tambo, was purchased by Archer Brothers in 1872 and its name changed to Minnie Downs as a compliment to their brother Alexander's wife.
purchased bulls from Archers: 'We want two young Short Horn Bulls any age from 9 mths to 1½ years old', wrote Berkelman in 1866. He asked that they be selected and delivered to Donald McPhail. 'Those purchased from you three years since gave satisfaction', he added. A rare request regarding colour of bulls was made by G.N. Living in the same year. He stipulated that the price was not to exceed £25 ($50) and that the bulls were to be two to three years old - 'strawberry roan or white color preferred'. Obviously these were Shorthorns, but it seems that 'fashions' in beef cattle colours existed long before more scientific preferences based on heat tolerance.

The 'chancy' business of importing stud bulls was again demonstrated in 1865. The brig Prospero left England with 'two fine bulls' for Archers, but one died on the voyage out. 'This is particularly unfortunate, being not only a loss to the importers but to the district generally', commented the Rockhampton Bulletin, thus acknowledging at that early stage the contribution of this pioneer stud in upgrading district herds. Throughout the 1860s and 1870s cattlemen established the practice of buying pure bred herd bulls from Gracemere. Recorded purchasers include J.A. Macartney of Waverley, A. Wood of Calliungal, John Shannon of Saltbush Park, David Wilson of Raglan, and Thomas Murray-Prior of Monte Christo, Curtis Island. By 1871 bulls were selling so briskly that W.H. Risien, the Gracemere book-keeper, spoke of 'a rush of buyers' and wished there were another hundred bulls as they could

67. Berkelman & Co. to Archer & Co., 10 August 1866; Delivery Note, 30 May 1867, RDHS Library.
68. G.N. Living to Archer & Co., 28 April 1867.
69. Rockhampton Bulletin (RB), 16 March 1865.
70. Selected letters, Archer Papers, 1860-80.
easily dispose of them. In March alone they sold 44 herd bulls for just under £12.10.0 ($25) a head.\textsuperscript{71} Conditions were less favourable in 1875 when only twelve bulls cleared at a Gracemere Station sale. According to William Broome, a potential buyer, they were in poor condition.\textsuperscript{72}

The Gracemere Hereford Stud was established in 1862 with stock brought from New South Wales, the bulls being bred by John Fowler of Hunter River, the man who imported the famed Pearl Diver. Cows were purchased from Griffith & Co. of Richmond and from J.D. Low of Mudgee.\textsuperscript{73} Archers imported their first Hereford bulls in 1872. They were selected by William Archer from the best herds in England, including one from Philip Turner of Herefordshire. These six bulls 'inspired the whole of Australian squatterdom with terror of foot and mouth disease'. Government proclamations in both Queensland and New South Wales were issued to prevent the landing of these 'distinguished animals of aristocratic lineage'. The bulls were quarantined on Garden Island, Sydney, till the panic subsided and then brought to Rockhampton. It was indeed fortunate that they neither carried the disease, nor had to succumb to the vociferous clamour for their destruction by stockowners 'from Cape Otway to Cape York'.\textsuperscript{74}

Gracemere Hereford stud eventually assumed greater importance than the older Shorthorn stud, especially after 1882 when Robert Stubbs Archer took over the management from

\textsuperscript{71} W.H. Risien to W. Archer, 10 April 1871.
\textsuperscript{72} Broome, Diary, 31 March 1875.
\textsuperscript{74} RB, 7 September 1872; A.J. McConnel, The Hereford in Queensland, 1941, Australian Hereford Society, Brisbane.
his uncles - Charles, William, Colin, Thomas and James, who had previously taken 'turns' in this duty. Archibald, the prominent Queensland politician and colonial treasurer, also spent much time at Gracemere, assisting in the running of the station from time to time. Charles, the founder, died in Norway in 1861. David, who brought the first flocks to the north and established the first cattle herd at Durundur in 1841, returned to England in 1852, the year before his brothers discovered and named the Fitzroy River. Robert Archer was David's son and had been trained in business methods before coming to Gracemere in 1880 at the age of twenty-two. His brother John was book-keeper at Gracemere for a while but left in 1885 to manage Torsdale cattle station in the Dawson Valley which he and Robert took up in partnership. Robert's interest in stud breeding was evident very early. In 1882 he visited the chief Hereford and Shorthorn studs in Victoria and New South Wales, buying both bulls and cows. His top purchase was Welcome Duke, a dark roan Shorthorn bull for which he paid 275 guineas ($389.50).^{75}

Robert Archer brought the enthusiasm of youth with him and also more up-to-date methods of cattle husbandry; for instance, the introduction of ensilage. He constructed the first silo in Queensland in 1882. In 1891 he contributed a paper, 'The Silo and Silage', at an Agricultural Conference held in Rockhampton. In writing the history of Gracemere

75. This brief resume of early family history is based on a wide reading of Archer Letters, 1833-1938, and Archer Brothers Minute Books, 1907-49.
76. *Capricornian*, 24 June 1884.
77. See diagram in Appendix.
78. Minute Book, Rockhampton Agricultural Society, 11 April 1891.
Hereford Stud in 1925 he recalled that in 1882 he purchased 48 stud heifers from F. Reynolds of Tocal, New South Wales, whose herd by the first quarter of the twentieth century was considered the best in Australia. He stressed the value of proven blood lines in the example of the calf Kinsman, which secured first prize for Archers at the Sydney Show prior to the First World War. Kinsman's dam was 'that great cow Last Day', whose descendants themselves were distinguished animals. Kinsman provided meritorious service for Gracemere Stud until his thirteenth year, siring many prize winning animals. In 1908 Archer had purchased twelve heifers of the Fancy, Minerva and Last Day families from Tocal, also the bull Prince Regent who later sired two junior champions, Lord Clovis 1st and Lord Clovis 3rd.79

Archer Bros. Gracemere Stud was one of only three commercial Hereford studs in the whole of Queensland in the early years. The other two were Durundur Estates (Brisbane Valley) and Braeside (Warwick). In the far north there were 'well known grade herds' of Herefords on Lammermoor and Lyndhurst, but no registered studs.80 The first Central Queensland Hereford stud to provide serious competition for Gracemere was J.L. Wilson's Calliope Stud, established in 1920. [See Part 3.] By the 1920s Gracemere Hereford Stud still relied heavily on stud sires bred by Reynolds, but also bought bulls from Beattie of Victoria, McConnel of Cressbrook and Barnes of Warwick. In 1925 it comprised 200 registered cows

79. See Appendix for list of Archer Brothers' stud bulls, 1917-18.
and heifers, also 700 head of pure unregistered cows. This was the result of 65 years of stud breeding on stated lines. Herd bulls were bred from pure breed unregistered cows, using only registered sires. Gracemere's stated aim was to produce herd bulls of the very best blood, quality and constitution. Archer believed they had proved the success of this policy by selling herd bulls at a price buyers could afford. They had distributed bulls from southern Queensland to the Gulf of Carpentaria and in later years to the Northern Territory. Their stud bulls were consistent winners at Rockhampton and Brisbane shows.\(^81\)

Among pedigreed bulls listed for sale at the 1919 Rockhampton Show were twelve Shorthorns priced from 200 guineas ($420) down to 75 guineas ($157.50). The Herefords included Lord Clovis 1st at 500 guineas ($1,050), Lord Clovis 2nd at 200 guineas ($420) and lesser stars down to 75 guineas ($157.50).\(^82\) In 1920 Lord Clovis 1st won second prize at the Brisbane Show, while Lord Clovis 3rd won first in Class A and was sold for 300 guineas ($630).\(^83\) These aristocrats reached perfection in the show ring and also produced fine herd bulls, but after the economic crash in the industry in 1920, stud breeding commercially became a hazardous business. Robert Archer was justifiably proud of their record, but in 1925 when he publicly expressed such optimism, the firm's financial returns show that he was literally 'whistling in the dark'.

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82. Show List, 1919, Archer Papers.
Archer Bros., Ltd.
Rochhampton Show, 1918

"Fancy 1st"
1st Prize Shorthorn Heifer Calf

Archer Bros., Ltd.
Rochhampton Show, 1918

"Merry Prince"
Reserve Champion Hereford Bull. 1st Prize, 2 yrs and under 3 yrs

(A.J. Archer.)
TORSDALE STUD

BROS. LTD.,

SHORTHORN COWS

TORSDALE STUD HERD

(A.J. Archer.)
($72,000)\textsuperscript{84} and another £8,000 ($16,000) to 'private persons'.\textsuperscript{85}

While Robert Archer did not make his own or his firm's fortune through stud breeding, it remained a life-time interest and one to which he gave much thought. 'I do not think we in Australia study sufficiently the suitability of our different breeds of cattle for our various districts', he told E.H. Pearse of the \textit{Pastoral Review} on 6 November 1918. He believed such factors as soil, climate and rainfall should be taken into account and that a close study of these factors 'would benefit our Industry in Australia'. As far back as the 1880s he had undertaken a study of the relative merits of Shorthorn and Hereford cattle under Central Queensland conditions. In 1891 he wrote a dissertation on his findings on the two stud herds kept in adjoining paddocks on Gracemere under the same conditions.

He described how the common herd on the run, originally Shorthorn, had gradually been converted to Herefords by the use of pure breed Hereford bulls. The Shorthorn stud was retained, chiefly to supply herd bulls to northern and western properties. As well as breeding pure cattle of both breeds, Archer was experienced in crossing Herefords upon Shorthorns and in fattening bullocks of both breeds, also cross-breed bullocks between the two. He found that Shorthorns were more susceptible to tuberculosis (but not pleuro-pneumonia), that Herefords travelled better than Shorthorns in hot weather and, most importantly, that Herefords were better 'doers' in dry seasons.\textsuperscript{86}

\textsuperscript{84} See Appendix for Report and Balance Sheet, Archer Brothers, 1927.

\textsuperscript{85} Robert Archer to G.L. Archer, 11 May 1925.

\textsuperscript{86} Robert Archer, 'Second Prize Treatise'. 
Archer recalled that during the 1883 drought the firm's losses among Shorthorns were very heavy (20 stud cows out of 50), while among Herefords grazing in an adjoining paddock they lost only five or six out of 100. In the following two dry years, they fed their pure Shorthorn bulls on their own silage, while the pure Herefords 'were left to shift for themselves' with losses of only 2 or 3 per cent. In the more severe drought of 1888-89 he again noted that losses of Shorthorn stud cows were far greater than among Herefords, even though 60 per cent of the Shorthorns were given supplementary feeding. In the same drought they lost 250-300 Shorthorn bullocks from a herd of 2,000 which they had purchased because Hereford steers 'were hard to come by' in the district. Yet, not one of the 500 Hereford bullocks running in the same paddocks as the Shorthorns had died. He also noted that 'the big, coarse, badly-bred Shorthorn bullocks' were the first to die while 'more nuggety well-bred animals' did much better. He used this finding to try to convince cattlemen of the necessity to use well bred bulls if they wished to run Shorthorn herds; they could thus avoid 'these ugly and unprofitable brutes'. He stressed that even better results would be obtained in breeding commercial herds if Hereford bulls were put in Shorthorn herds. Although Archer was unable to account for the superior hardiness in their progeny, he had inadvertently discovered that hybrid vigour results from cross breeding. He believed that for the sake of the cattle industry in Queensland the drought resistant qualities of the various breeds should be tested, for recurring droughts were 'a moral certainty'.

87. Ibid.
Archer then went on to compare the reproductive powers of the two breeds, quoting numbers taken from their carefully kept stud books. He found that the proportion of calves branded from the Hereford cows was about three head to two from the same number of Shorthorn cows. This meant that he could breed three Hereford bulls to two Shorthorn bulls from the same number of cows and at a lesser cost; the Hereford cows did not require nearly as much supplementary feeding in a dry season. Hereford bulls served 55 to 60 cows, but Shorthorns only 50 to 55. Hereford bulls also 'on an average last two years longer', while even pedigreed show Hereford bulls thrived out in the paddocks, but not the Shorthorns. 'What is the use of attempting to breed cattle intended to make their living on natural grasses of the country from bulls that cannot keep themselves alive on those grasses', he asked. He thought this factor should be taken into account by show judges and so disqualify 'many of the forced and pampered animals' which, however attractive in the show ring, would never produce hardy, vigorous stock to thrive on natural grasses during bad seasons. Archer was ahead of his time in reaching this conclusion in 1891, but it is one echoed by a leading Central Queensland cattleman, Graham McCamley, in 1971.

Archer then compared the fattening qualities of the two breeds, also early maturity and suitability for the frozen beef trade. He found that Hereford bullocks matured earlier

88. See Appendix for extract from 'Second Prize Treatise' pp. 103-84.
89. Archer, 'Second Prize Treatise'.
90. G.F. McCamley, The Development of Tartrus, Field Day Notes, 29 June 1971, Department of Primary Industries, Rockhampton.
on the coast and topped up more quickly than Shorthorns. They sold Hereford bullocks of their own breeding at from three and a half to four years, while Shorthorns as a rule were not prime until five years or more. When bullocks were sold by weight, this did not matter, but since the frozen meat trade was established (in 1883) cattlemen found that the 'home' market (that is, the English) demanded young, well topped bullocks, not too heavy. From his own experience and observations, Archer was convinced that Herefords were the more profitable of the two breeds and that this applied to the whole Fitzroy Basin. He concluded his treatise with the remark that it was not in his own interest 'to run down the Shorthorns' as Gracemere still had a valuable Shorthorn herd which he was then preparing to move to their Torsdale Station in the Dawson Valley. Despite Archer's argument, Shorthorns constituted 80 per cent of the Queensland herd in 1901.

Archer's valuable article on the relative merits of the two chief breeds of beef cattle in Queensland at that time was awarded second prize of ten pounds ($20) by the National Agricultural and Industrial Association of Queensland for a treatise on beef cattle; it was published in two successive numbers of its Journal in 1891. It is most noteworthy as an agricultural-scientific dissertation based on experience in an age predating the establishment of the CSIRO and regional Department of Primary Industries by nearly half a century. Among Central Queensland cattlemen who supported Archer in

91. Archer, 'Second Prize Treatise'.
92. Skerman, 'One Hundred Years of Animal Production'.
the breed controversy of the 1890s was O.C.J. Beardmore. [See Chapter III.] In 1891 he presented a paper to the Agricultural Conference in Rockhampton on Hereford cattle; the chief supporter of Shorthorns, W.K. Peberdy, addressed the conference on the merits of Durham cattle. Twenty years later, Archer believed that Herefords still suffered unreasonable prejudice in the north where Shorthorns were the preferred breed, but he noted the growing popularity of Herefords in central and southern Queensland.

Skerman attributes the outback preference for Shorthorns in those early years to their ability as walkers. Cattle not only had to walk long distances to water in the dry season, but also to be overlanded hundreds of miles to markets or meatworks. Accurate breed surveys were not undertaken until after the Second World War, but a partial survey in 1930 suggests that Shorthorns probably accounted for 70 per cent of the Queensland beef herd, Herefords 26 per cent and Angus 1 per cent. This was a very limited estimate as it collected data on only 19 per cent of beef cattle. A more accurate survey was conducted by W.A. Beattie of the CSIRO, 1946-52. His estimates show a growing preference for Herefords (30 per cent), but Shorthorns still comprised 53 per cent of the total herd. In the Fitzroy Region Herefords were the dominant breed by 1950, comprising 90 per cent of

95. Skerman, 'One Hundred Years of Animal Production'.
96. Daly, 'Beef Cattle Breeds'.
97. Ibid.
the herd.\textsuperscript{98} Not only had Gracemere influenced this exceptional breed proportion during 80 years of change, but by the 1940s there were six other registered Hereford studs in the region. The first Bureau of Agricultural Economics (BAE) survey on breed composition took place in 1965, by which time Herefords accounted for almost half the Queensland beef cattle and Shorthorns one quarter.

In the Fitzroy Region the growing popularity of Herefords was evident as early as 1901 when some buyers stipulated colour preference: 'We must be careful to keep the bulls dark in colour', wrote John Archer from Torsdale, 'every buyer that comes wants dark bulls'.\textsuperscript{99} Herefords were affectionately known as 'ballys' or 'baldys' by 1912 when beef baron Sidney Kidman referred to Archers' herd as 'fine Baleys' [sic]. He intimated he might buy 1,000 young heifers as he intended going in for Herefords.\textsuperscript{100} [See page 31 for copy of original letter.] The term 'bally' or 'baldy' for the white faced Herefords has its origin in the zoological sense of 'having white on the head'.\textsuperscript{101} Ironically, the red rumps and baldy faces were just about to be converted to one or other strain of cattle carrying Brahman (\textit{Bos indicus}) blood by 1950 when the central herd had become so predominantly Hereford.

The fact that experienced stud breeders such as Harry Bracker (founder of Waroo Shorthorn Stud, Darling Downs) and E.J. McConnel of Cressbrook, respected Robert Archer's

\textsuperscript{99} John Archer to Robert Archer, 7 October 1901.  
\textsuperscript{100} Sidney Kidman to Robert Archer, 18 September 1912.  
18 Sept. 1912
ERINGA,
KAPUNDA, S.A.

Archers Post
Graemeere
Rockhampton

Dear Sir,

I have yours of the 10th September and hope your letter came on time.

Your offer of $1000 is not quite what you dream we agree.

I will tell you what I have had in mind.

If you can make your proposal

I will look into the matter.

Yours truly,

Sidney Kidman

Letter, Sidney Kidman to Robert Archer, 18 September 1912. (Archer Papers).
contribution to the beef cattle industry confirms his place in it. Commenting in 1916 on Archer's sale of 150 herd bulls at good prices, Bracker referred to the preceding twenty years as 'a weary uphill fight'. He thought those who 'stuck to' breeding herd bulls deserved financial compensation. \(^{102}\)

McConnel referred to Archer in 1919 as 'one of the leading breeders' in Queensland. \(^{103}\) The long awaited upturn in prices had come with the Australian Government's acquisition of all beef for the British Army. As always during times of good beef prices, commercial herds increased rapidly with a temporary high demand for herd bulls. William Beak, already experimenting with polled Herefords and therefore a potential rival, recommended a Nebo grazier in 1917 to buy herd bulls from Archers because they could be relied upon more than any other breeder in Central Queensland. 'All others known to me are too anxious for numbers to get and keep quality in the progeny of the bulls sold', he said. \(^{104}\)

But there were brickbats as well as bouquets, though these usually came from 'one bull' buyers on small selections. There were three distinct tiers of bull buyers by the early 1920s: the large cattle station owners or managers, usually far away in North Queensland or the Northern Territory; the more numerous cattlemen of Central Queensland with herds of from 2,000 to 10,000; and what Edward Archer referred to as 'the near-in cookies' around Archer and Bajool or the newly opened farming country at Wowan and in the Dawson Valley.

\(^{102}\) H. Bracker to Robert Archer, 3 March 1916.
\(^{103}\) E.J. McConnel to Robert Archer, 10 March 1919.
\(^{104}\) William Beak to Robert Archer, 24 March 1917.
These were always on the look-out for a bargain and were usually hard to please. 'I cannot understand why a man like you allows such bad management', complained a Wowan farmer when his bull did not arrive by rail on the day expected. Archer, on his part, frequently complained to the Railways about trucks not being available when ordered. Despite the Wowan complaint, Archer showed his interest in improving the herd generally by donating three bulls to the Queensland Farmers Union at Wowan to be shared by district farmers. The secretary referred to the gift as 'truly magnanimous and quite worthy of the name of Archer Bros.'

Those buyers who from time to time complained about the price of pure bred bulls obviously had no conception of the work involved in running a cattle stud. Among the many routine chores were: inspection of cattle by prospective buyers, usually at Gracemere and the Fifteen Mile where Torsdale bulls were sent for sale; promoting bull sales by letters, advertisements, photographs of stock (from about 1916); exhibiting cattle at shows over a wide area from Rockhampton to Brisbane and (in some years) Sydney, also west to Springsure and Emerald; arranging for railway wagons to consign stock on specific dates to suit purchasers; arranging shipping from Port Alma or Gladstone for bulls consigned to the north (there was no rail link until 1921); obtaining travel permits from District Stock Inspectors to move cattle between the firm's several properties and especially from Torsdale to the Fifteen Mile; sending monthly lists of progeny to each breed society;

106. A. Pearson to Robert Archer, 4 June 1917.
preparing pedigrees for buyers and breed societies; keeping in touch with pastoral associations, graziers' organisations and pastoral and agricultural journals; inspecting stud stock in New South Wales or southern Queensland, and, at times, arranging for inspection and purchase in England in order to introduce new blood lines; engaging in friendly correspondence with stock and station agents, buyers and a variety of people associated with the beef cattle industry; listing stud stock for sale and forwarding to the Pastoral Review (Sydney) every few months. All this in addition to the day to day husbandry necessary in the physical care of stud herds made stud breeding for commercial purposes a formidable task. No wonder Archer attacked Badgery Bros. in 1918 over their criticism that herd bulls at 30 guineas ($63) were too highly priced. He told them a good pure bred herd bull was surely worth two fat bullocks. If the stud breeders failed to get that price it would pay them better to breed bullocks for the market. 'Your friends must be after some common garden "Mickey",' he dryly added. 'Mickey' is the term for an inbred scrub bull.

The twentieth century had brought little joy to the shareholders of Archer Bros. Ltd. Managing Director, Robert Archer, explicitly revealed the problems of the first decade in a letter to his pioneering uncle, Colin Archer, on

108. Robert Archer to Badgery Bros., 2 July 1918.
109. See Appendix for Cost of Living, 1901-1978.
110. Colin Archer, later famed as a naval architect in Norway for his design of the Arctic exploration vessel, Fram, was also architect of Gracemere homestead. This was completed in May 1858 and is still lived in by the fourth generation.
22 November 1913:

Since 1902, when the Drought left us with 2000 head, the remains of 12,000 head of Stock, with a heavy interest charge to meet, it has been one continual struggle. The reorganisation of the company in 1907 & the sales of land which followed somewhat relieved matters & it seemed, given continued good seasons we might work our way out. Then three years ago came the Land Tax which at once depreciated values, besides making a heavy annual charge - sales stopped, as also the influx of settlers from the south....The Drought of 1911 then struck us, the whole district losing heavily, we 800 head out of 3,500 head & a Debt of 3000 to the Bank was incurred on our No 2 Working A/c which I have personally guaranteed....Interest, Land Tax & Rates absorb £3000 per an. before we can even start to pay wages....

Even in the 'good' years, 1909-19, the average profit was only 3.8 per cent as a result of drought in 1911-12 and 1916:

<table>
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<tr>
<th>Year</th>
<th>No Profit or Loss</th>
<th>1909</th>
<th>1910</th>
<th>1911</th>
<th>1912</th>
<th>1913</th>
<th>1914</th>
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<td>1 July 1908 to 30 June 1909</td>
<td>No Profit or Loss</td>
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In the three wartime years in which profits from 7 to 11 per cent were recorded, a special tax was levied.\textsuperscript{112} Wages also increased up to 50 per cent following the Wages Award of August 1918 to a minimum wage of 53 shillings ($5.30) per week plus keep. The wages bill was particularly heavy on Torsdale and Scoria, where prickly pear eradication added to normal station costs. Station hands had to be reduced wherever possible.\textsuperscript{113} The disastrous slump which engulfed the beef

\textsuperscript{111}. Recorded in Archer Letter Book, n.d., 1919.
\textsuperscript{112}. Robert Archer to Clavering Collins, 26 May 1919.
\textsuperscript{113}. Robert Archer to David Archer Jnr., 8 August 1919.
cattle industry in 1920, with scarcely any relief for more than a decade, almost annihilated stud breeders. The economics of producing stud cattle to be sold at little more than meatworks prices can only be described as suicidal. As Archer commented to Harry Bracker in 1920 on hearing of his brother's losses on cattle: '...it proves the precarious nature of the calling of "Beef Barons".' 114

In August 1920, Robert Archer explained the situation to the Bank of New South Wales in Rockhampton which held a mortgage on the firm (£36,000 or $72,000 in 1925). The cessation of demand for bulls following the closure of the British beef market to Australia, he said, was not because Gracemere prices were too high as the bank manager had suggested. Archers could legitimately reduce their price of 30 guineas ($63) for large orders and would gladly quit 400 head at a reduction of 25 shillings ($2.50) a head to relieve the situation. But there was more at stake than money: 'Bulls...cannot be freed on the market except at great sacrifice not only in cash, but to our reputation as Breeders....'115

By December it was obvious that the depression was not going to lift in the near future and so they reduced the price to 25 guineas ($52.50) with 500 bulls still on hand.116 It seems that buyers did not exist and so in March 1921 the price was reduced to twenty guineas ($42) 'owing to financial stringency'. Even so, several paddocks were full of 'fat 3 yr old Bulls of our own three breeds, as good as any we have ever sold'.117

114. Robert Archer to H. Bracker, 5 May 1920.
117. Robert Archer to H. Bracker, 12 March 1921.
In the following months, herd bulls were offered for fifteen guineas ($31.50), a decision that would have been unthinkable eight months earlier.\textsuperscript{118} Even more drastic reductions occurred in August 1921 with herd bulls selling at twelve guineas ($25.20) and stud Hereford heifers for six guineas ($12.60).

Despite financial stress, the firm did not slacken in its efforts to improve quality. Three Shorthorns, two Herefords and one Ayrshire stud bull were purchased at the 1921 Brisbane Exhibition - the Ayrshire to provide dairy stock for returned servicemen being settled on starvation blocks in the district. All this despite Archer's acknowledgement of 'the complete collapse of the cattle market'.\textsuperscript{119} The Fifteen Mile Cattle Station was offered for sale at £3 ($6) an acre,\textsuperscript{120} but only a few small blocks were sold for cotton growing. Then came notice of the government resumption of the whole of their grazing farms on Torsdale and Scoria.\textsuperscript{121} Edward Archer, who managed the Fifteen Mile at that time, was probably correct in stating, 'The stud stock business was never attractive financially, tho' it might have panned out had values kept up'.\textsuperscript{122} Desperate measures were certainly called for as at the end of 1921 there were 4,000 cattle on Scoria alone; this was the 'overflow' grazing lease adjoining Torsdale. 'Please consider the matter of reducing stock at Scoria as urgent', wrote John Archer, 'it is getting very much on Nicholai's nerves'.\textsuperscript{123}

\begin{flushleft}
\textsuperscript{118}. Notice to Agents, 6 April 1921. \\
\textsuperscript{119}. Robert Archer to United Graziers Association (UGA), 8 September 1921. \\
\textsuperscript{120}. Notice to Agents, 22 September 1921. \\
\textsuperscript{121}. Robert Archer to J.W. Fletcher, 20 March 1922. \\
\textsuperscript{122}. Edward Archer to Robert Archer, 13 January 1922. \\
\textsuperscript{123}. John Archer to Robert Archer, 19 December 1921.
\end{flushleft}
Nicholai Aagard was about to become John Archer's son-in-law.

A bitter irony occurred about this time concerning the sale of bulls to Vestey's for nine guineas ($18.90), for this was the firm whose Argentine beef had pushed Australia out of the English market. [See Chapter V.] Even though Archer had 'stuck out' for ten guineas ($21) he was obliged to let them go. He drily commented: 'For a very wealthy firm they have crude ideas re. improving their herds. They are buying these Herd Bulls to put to their common cows to produce Bulls for their own use'.\footnote{Robert Archer to E. Baynes, 21 July 1924.} Bulls were still 'dull of sale' in 1923 and in April an advertisement was submitted to the Queenslander offering herd bulls of all three breeds at six guineas ($12.60) on trucks, and younger ages for eight guineas ($16.80). No wonder Archer told the President of the Pastoral Society in 1924 that the sale of 511 pure bred bulls 'from Bundaberg to the Gulf' in the past year had done more good to the cattle industry than themselves.\footnote{Robert Archer to Chairman, Meat Advisory Board, 14 May 1923.} Despite these depressing experiences he told the Chairman of the Meat Advisory Board that the only hope Australia had of competing with the Argentine was to improve the standard of its beef cattle.\footnote{Robert Archer to C.J. Gall, 29 September 1922.}

The official viewpoint was also to encourage Queensland cattlemen to improve their herds - as though better quality beef would magically dissolve Vestey's control of the English meat market. An article in the Queensland Agricultural Journal in 1922 referred to 'the parlous condition of the beef industry' and added that the immediate objective should be herd

\footnotesize{\textsuperscript{124}} Robert Archer to C.J. Gall, 29 September 1922.\textsuperscript{125} Robert Archer to E. Baynes, 21 July 1924.\textsuperscript{126} Robert Archer to Chairman, Meat Advisory Board, 14 May 1923.
improvement:

...the production of deep, evenly fleshed, early maturing, weighty steers which could be marketed at 2½ to 3 years old - animals which can only be produced by using pure-bred pre-potent bulls capable, when used with suitable cows, of transmitting characteristics which may be summed up in one word "quality". 127.

It is obvious that such advice merely encouraged breeders to continue losing money, as they must do, when there were no overseas markets for this 'quality beef'. Archer Bros. Cattle Returns for 1923-24 show a total of 15,197 cattle: 4,424 on Gracemere and the Fifteen Mile; 9,871 on Torsdale and Scoria; 902 on Laleham.128.

A decision relating to stud breeding and showing was made by Archer Bros. at their annual meeting in September 1923. While showing was to be continued 'on the present small scale', bull breeding was to be reduced by a stricter culling of bull calves; all stud cows over six years were to be spayed.129 Then in the following year Robert told his brother John: 'We have decided it is useless to continue breeding Shorthorns here & that you had better take them back to Torsdale....I think we should get the Red Polls down here and push them a bit at the Shows'.130 A great deal of interest in polled cattle was generated in those years with the formation of the Australian Polled Hereford Breeders Association in Rockhampton in 1922. John Archer thought this interest in hornless cattle would cause a great run on the

130. Robert Archer to John Archer, 14 March 1924.
Red Polls, but unfortunately it did not have this effect. Archer's early interest in crossing Red Polls with Shorthorns had extended to Hereford crosses by 1924, perhaps in the hope of breeding hornless Herefords. In any case, he believed they 'put colour and constitution in the herds...producing a thick fleshed, short legged beast, well ribbed, and good on top'. They were hardy and prolific and did well in the coastal country.

Preparing cattle for shows, especially the Brisbane Exhibition, was becoming more exacting and costly and could legitimately have been abandoned in the 1920s cattle depression. Archer's own comment to a fellow cattleman in 1922 explains why he could not abandon stud breeding (and showing): 'I fear the microbe is in our blood, as it is for others for Horse Racing, & it will be hard to give it up'.

Records show that Archer Bros. exhibited and won prizes at the Brisbane Exhibition each year 1920-25, except 1922, when no show was held.

In 1920 Robert Archer handed over the task of showing cattle to his son-in-law Alister Archer, advising him while in Brisbane to see Bracker to try to learn something of stud cattle from 'the G.O.M. of our industry'. Alister Archer was appointed manager of the stud farm on Gracemere and Secretary of Archer Bros. Ltd. also. After Robert Archer's death in 1926, the younger man continued the 'search for perfection in beef cattle'. Prior to this there was a

132. Robert Archer to Meat Exporters, 14 August 1924.
133. Robert Archer to D.E. Stirrat, 18 May 1922.
134. Robert Archer to H. Bracker, 2 July 1920.
particularly encouraging happening for Alister Archer, and
justification of his years of stud breeding for Robert
Archer: in 1925 Archer Bros. won a special prize at the
Brisbane Show for a pen of bulls twelve months to two years
bred by the exhibitor. The prestigious prize was presented
by the Hereford Herd Book Society of England. One of the
bulls in the prize winning pen, Odin (undoubtedly named by
Norwegian born Alister), brought top price for any breed at
the Exhibition sale - 360 guineas ($756). 136 Alister Archer
also was to find stud breeding an absorbing occupation. He
commented in 1934: 'There are lots of disappointments in
breeding good cattle. Still, the pleasure of having good
cattle outweighs the disappointments'. 137

The adverse factors affecting the industry did not go
away in the second half of the 1920s, advancing as it was
towards the great depression. An industry leader referred
in 1927 to the great stress arising from a combination of low
prices and drought 'to rob the outlook of promise'. 138 The
1926 drought was the most severe since 1902. In 1928-29
there was an abortive recovery with improved prices for
meatworks cattle and a brief demand for good breeding stock.
Gracemere Red Poll bulls were quoted at twenty guineas ($42)
and Shorthorn and Hereford herd bulls at the same price. 139
The average return per beast of total sales that year was
£11.8.0 ($22.80), the highest in the period 1922-33. 140 Lack

137. Alister Archer to W.J. Greedy, 11 March 1934.
139. Alister Archer to A.S. Mellick, 11 September 1929.
140. Archer Bros. Stud Cattle Sales, 30 October 1929.
of stability in the industry is again apparent. In August 1930, Archer referred to 'two good seasons with a rising result' and then 'suddenly another meat embargo, financial depression etc. settled the whole business and the outlook now is not at all reassuring'.

During the period of false optimism in 1929, Archer Bros. faith in the industry's recovery was confirmed by their decision to import first quality bulls from England. R. Bach of Selopian Park, Oakey, who was about to visit Britain, was asked to select a Hereford bull about ten to eighteen months, as older animals were at risk after inoculation. Archer stipulated:

Now, we want a *good* bull, a bull which you consider equal to the best out here....There are some points we would like you to keep in mind. Avoid dark colour, as it seems to intensify here, also black nose and horns, as that seems to be a special abomination here at present. Get the markings as near as possible, not too much or too little white.

Especially see the horns are *naturally* turned *down*, as our cattle, owing to severe winters, are apt to send theirs skywards. There is no need for us to explain to you, what we consider a good bull in bodily conformation and quality - you know a good bull when you see one. Still we might ask you to give special attention to the head - that is, to be a bull, and *look it*....

This letter is quoted at length to demonstrate the emphasis on conformation and appearance generally at that phase in the search for traditional perfection. Archers were prepared to pay 500 to 600 guineas ($1,050 to $1,260) 'to secure a good youngster' of the Hereford breed.

141. Alister Archer to C.T.A. Tyndall, 7 August 1930.
142. Alister Archer to R. Bach, 15 October 1929.
In the same year (1929) no less an authority than The Hereford in Australia advised breeders to look for 'perfection of loins, ribs and thighs' and to remember that the head of the Hereford bull is 'square and broad and markedly masculine'. The writer also included a quaint requirement for cows of the breed: 'The head of the Hereford cow is square and broad, also, but markedly matronly and sweet'.

She is given human, or even goddess, attributes.

Bach was also asked to choose a Red Poll bull in England - 'if they are cheap and good, perhaps two'. Archer stressed one point to watch in English animals - their noses. They tended to have 'blue' noses which he considered most undesirable, preferring 'deep red and pink noses'. After all that care in stipulating the right characteristics, it seemed for a time that imported stock might be banned owing to a foot and mouth disease scare in Kent. As in 1872, this did not eventuate. Three bulls arrived at Gracemere in September 1930 in good condition. They were the Hereford, Shrine Cavalier, valued at £360 ($720) and two Red Polls from His Majesty's Stud at Sandringham, appropriately named Royal Mandarin and Royal Roysterer. They cost £140 ($280) and £100 ($200) respectively. When the aristocrats were inoculated at Gracemere, Archer had an anxious time as the Hereford's temperature rose to 107.6°F and he was very near collapse. He required 'special nursing' by Archer

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143. The Hereford in Australia No. 5, 31 August 1929, p. 12.
144. Alister Archer to R. Bach, 15 October 1929.
145. Alister Archer to R. Bach, 6 November 1929.
146. Alister Archer to Secretary, Red Poll Cattle Breeders' Association, 20 May 1930.
Golf Hill Randolph, c. 1940, with head 'square and broad and markedly masculine'.

Odin - Champion Hereford Bull, 1925. Archer Bros. Ltd.
Archer Bros., prize-winning cattle at Rockhampton Show. c. 1916.
himself for three days to 'pull him through'. Importing bulls was still a chancy business, both physically and financially. There was even some difficulty in obtaining the promised refund of importation expenses under the Empire Marketing Scheme and the 50 per cent rebate on railage 'owing to the straitened circumstances of the government'. At this time Archers claimed to have 'the largest pure-bred Hereford Herd in Australia'. This claim was probably correct as even in 1922-23 there had been 4,000 pure bred Hereford cattle on Torsdale and Scoria alone, and in 1925 a total of almost 6,000 stud cattle. By 1930, the numbers would have been even greater owing to lack of markets.

The cattle market was affected by the great depression in the same manner as other industries. In 1930 Archer told a fellow grazier that the bull market was as dead as it could be and added, 'But this uncertainty about everything is no good for business'. Archer Bros. had to resort to a new mortgage agreement with the Bank of New South Wales. By 1933, in the depths of the great depression, the mortgage extended over 18,633 acres.

Despite the critical times through which the nation was passing, a glimmer of hope came in 1932 with the Ottawa Agreement. [See Chapter IV.] In 1936 Alister Archer provided a valuable resume of conditions in the cattle industry,

147. Ibid.
148. Alister Archer to Under Secretary of Agriculture and Stock, 5 March 1930.
149. Hereford in Australia, p. 7.
150. Robert Archer to E.G. Theodore, 13 October 1923.
151. Alister Archer to S.A. Barratt, 20 May 1930.
153. Ibid., 4 September 1933.
1930-36, in the course of a submission to the Chairman of the Land Administration Board regarding deferment of two final payments on Torsdale improvements to 1 August 1938. During the worst depression years his firm had sold very few bulls in northern Australia - their main market - and this led to heavy losses. Between 1930 and 1933 there was severe drought at Torsdale which obliged them to send two-thirds of the herd away on agistment, greatly reducing production of bulls. Throughout the depression they had endeavoured to keep up their high standards in breeding through the purchase of pedigreed stock from overseas and the southern states. The registered herds of both Herefords and Red Polls kept at Gracemere were a liability under conditions then existing. Even so, Archer then expressed a similar responsibility to the cattle industry as that of his father-in-law many years earlier:

We have retained these herds at a high standard believing it to be in the interests of the Industry to breed bulls which we know from experience will stand up to severe tropical conditions....

We think we can claim to have played our part in the improvement of the standard of cattle required at present.... 154

In the following year, Archer was 'somewhat disturbed' by buyers asking for bedrock prices for bulls. He pointed out to a Brisbane stock firm that even at ruling prices bull breeding was not a paying proposition. He asked that they stress these points to prospective clients: the Torsdale herd had been established for over 50 years and none but stud

154. Alister Archer to Chairman, Land Administration Board, 7 September 1936.
bulls were ever used; from the pedigreed cows kept at Gracemere and served by high priced imported or southern bulls, the pick of the males were selected to work at Torsdale. Before any bull was sent there it was paddock grazed at Gracemere to prove its constitution before use. He argued that to keep Gracemere and Torsdale herds up to standard they could not reduce the price of the finished product any further. Bulls were then averaging only £4.16.3 (±9.62) a head, the lowest since 1923. In addition to the Gracemere and Torsdale herds, the company still retained 14,000 acres (5,665.8 ha.) of the original 16,000 acres (6,475.2 ha.) of the Fifteen Mile Cattle Station at Archer. This was used as a 'shop window' for displaying young herd bulls, also for culled cattle awaiting buyers. The firm also continued to lease Laleham and Terang Pastoral Holdings, the former acquired in 1920 (before the slump) as drought relief country for Torsdale. Separate property managers and station hands must have added to the financial burden as well as costs involved in droving stock between widely separated holdings. Archer admitted in December 1936 that no profits had been distributed to family shareholders since 1919 and that the accumulated losses were £32,594 ($63,188). Such was the plight of Central Queensland's so called 'beef barons'.

Alister Archer attempted to evaluate the situation in a letter to his brother-in-law, Archibald Archer, in August

155. Alister Archer to Manager, Primary Producers' Association, 2 March 1937.
156. Alister Archer to Archibald Archer, 3 August 1937.
158. Ibid.
1937. He could see no way out of their difficulties except by 'winding up' the business when a favourable opportunity occurred. He had advocated carrying on through the depression years because freehold leases were practically unsaleable at the time. They had been through seventeen years of 'down & out' prices and nearly the same of indifferent seasons - perhaps by the law of averages they should now expect an improvement. After initial doubt, he was more optimistic about the commercial market with the introduction of chilling, and with new standards of grading, for he thought graziers would be forced to breed better animals.

Having allowed himself that one spark of optimism, Archer then reverted to his former gloom: 'However, this is by the way; the cattle industry may never see prosperous times again, and if this is the case, the sooner we are out of it the better'. He was disappointed that 'this hornless business' had not increased sales of Red Poll bulls, but the firm's traditional market in the north had been 'more or less down and out'. He thought the combination of a large overdraft, extraordinary overhead expenses, and the situation of the two small properties (Gracemere and the Fifteen Mile) provided 'hurdles we can't get over while times are bad'. An additional and most significant reason for their financial state was unconsciously provided by Archer a few days later in a letter to the Chairman of the Land Administration Board in Brisbane:

We think we can lay claim to having expended more capital in the purchase of good stock than any other firm in Queensland. We have been

159. Alister Archer to Archibald Archer, 3 August 1937.
160. Ibid.
largely activated in this by our past achievements and pride in having bred good stock since 1860. 161

Alister and Robert Archer had sacrificed themselves and the family firm for the sake of maintaining a tradition of improving the national herd, a tradition established in the pioneering days by their respective fathers, James and David, and their uncles who discovered the Fitzroy River and were the virtual founders of Rockhampton. The original brothers who took up the land, established the flocks and herds, and built the homestead, had all eventually returned to their European homes. It was Robert and Alister Archer, separated in age by a generation, who remained on Gracemere till death and were buried in the family cemetery. Each had declined to abandon stud breeding for the sake of the industry and his 'pride in having bred stud stock since 1860'. Obviously, it was also a way of life enjoyed by both men.

It was not imperfection in their stud stock, nor over-priced bulls which brought them to the brink of financial ruin; it was economic depression in the beef cattle industry so deep and prolonged that buyers could not afford to pay even low prices for pure bred stock. As a result, Archers' return on their considerable capital investment, combined with high running expenses, was insufficient to maintain solvency. But despite the depressing situation indicated by Alister Archer in 1937, the firm was not 'wound up' until 1949.

Originally known as Archer Bros., in 1907 the firm became Archer Bros. Ltd. - a Joint Stock Company - in an

161. Alister Archer to Chairman, Land Administration Board, 7 August 1937.
attempt to achieve a sounder financial position for the family shareholders. It not only took over the assets of the original firm, but also a £21,500 ($43,000) mortgage with the Bank of New South Wales. Robert Stubbs Archer was appointed Managing Director and given extraordinary powers in buying and selling land and stock. As the majority of shareholders (all members of the Archer family and their descendants) lived in Norway and Great Britain, it had become impossible for Robert Archer to administer the company in the position of manager.

In 1914 Robert and John Archer sacrificed their personal interests by 'allowing' the shareholders to purchase the whole of the assets of R.S. & J. Archer - Torsdale and associated leaseholds and about 10,000 cattle. In lieu of cash they received 50,000 fully paid up £1 ($2) shares in Archer Bros. Ltd. In order to do this, the firm had borrowed £66,500 ($133,000) from the Bank of New South Wales in the form of a debenture. John Archer was appointed manager of Torsdale, Scoria, Dawsonia, Coolibah and Pegunny leaseholds on a salary of £300 ($600) a year. In the following year, 1915, Robert and John Archer's salaries were increased to £400 ($800) and their younger brother Edward's (then managing Coolibah) to £250 ($500). It seems likely that Archer Bros. would have traded itself out of financial difficulties by the mid 1920s but for the disastrous slump

163. Minutes, Extraordinary General Meeting, Archer Bros. Ltd., 27 April 1914.
165. Ibid., 6 August 1914.
166. Ibid., 17 September 1915.
which ushered in that decade, also recurring drought. [See Appendix for Archer Bros. Selected Balance Sheets & Returns.]

In 1932, to conform with the Companies Act of 1931, the firm became Archer Bros. Pty. Ltd. This made it a private company within the meaning of the Act, with family and debenture holders limited to fifty. In 1937 Archibald Archer (Robert's younger son) moved that steps be taken to realise the assets of the company. This was one of the few motions ever to be lost at company meetings. Finally, at an extraordinary general meeting held in June 1949, Archer Bros. Pty. Ltd. went into voluntary liquidation on the motion of John Archer, seconded by David Archer (Robert's elder son). The directors approved the sale of Gracemere Station to Alister Archer and his wife Joan, only daughter of Robert Archer. The sale included the much loved old homestead designed by Colin Archer and built in 1858, also the stock depastured on the remaining 6,000 acres (2,428.2 ha.) for the sum of £28,000 ($52,000). The Fifteen Mile had been sold to the Western Grazing Co. in 1942 for £1.13.6 ($3.15) an acre, and Torsdale to W.H. King in 1948 (price unrecorded). Alister Archer died in 1965 and Mrs Joan Archer in 1980. Their two sons, Cedric and James, still own and live on Gracemere, producing commercial beef cattle, not stud bulls 'of the very best blood'. In respect for family tradition

167. Ibid., 27 August 1932.
168. Ibid., 22 September 1937.
169. Ibid., 17 June 1949.
170. Ibid., 30 January 1942.
171. Ibid., n.d., October 1948.
they have retained their membership of the Australian
Hereford Society. They no longer breed pure Herefords,
but beef cattle with up to 50 per cent Zebu blood.
3. The Art of Reaching Perfection

To reach perfection in any art requires great study, but the art of reaching perfection in beef production draws its requirements from such a multitude of angles that only those who reach the goal have a true conception of its intricacies. 172

William Beak, a Rockhampton cattleman, made the above statement in 1939. He had already reached the goal, he believed, when beef from Polled Hereford stock which he bred and fattened achieved the distinction of being judged the world's best at Smithfield in 1930. In detailing the essentials by which he gained this distinction, he stressed the importance of selecting and mating for the moulding of animal flesh into the perfect beast. He believed the next step in the art of reaching perfection in beef production was to castrate the calf when only a few days old, 'with the operation correctly done to enable the purse to get its only chance of developing right, to give that particular part of the carcase that beautiful adornment essential for full marks'. 173 The next test was conformation and quality. Conformation includes smoothness of flesh, the length and depth of the loin and all other parts to make a well balanced carcase. Quality beef includes marbling, thickness, juiciness and tenderness. He was convinced that such perfection could be found only in the Polled Hereford breed and that in hornless cattle 'the cream of body building elements is fully utilised for beef production....' In other cattle these elements were wasted in producing horn tissue. 174 Although

173. Ibid.
174. Ibid.
Beak referred specifically to Polled Herefords, all breed societies have similar basic guidelines.

Long before William Beak looked back from his vantage point of success in the 1930s to outline his recipe for perfection, other Central Queenslanders were also selecting, breeding and rearing cattle with 'eye appeal, breed character, conformation and quality'. 175 F.H. Hobler of Bucknalla, Westwood, kept a stud herd in the 1880s. In 1891 he sold 100 pure bred Hereford cows and heifers to R.S. & J. Archer, providing individual pedigrees. [See Appendix.] His father, George Hobler, had first imported pure Devon cattle to Tasmania in the early 1820s. 176 Later he bred stud Devons and Herefords in New South Wales. When the bank foreclosed on him, Reynolds of Tocal purchased his stock. Ironically, some of that blood came to Central Queensland later in the nineteenth century in Hereford bulls purchased by Archers, William Pattison and others. 177 The only means colonial pastoralists had of upgrading their usually long-legged shaggy cattle was by use of pure bred herd bulls, preferably from a registered stud. As already indicated, they were often obliged to buy from one another in the first two decades, but from the 1880s showed a preference for bulls from a proven stud breeder.

Pioneer Shorthorn studs in Queensland were Cressbrook, Canning Downs and Waroo (all in the south-east) and Gracemere on the Fitzroy. 178 Other beef cattle breeds (British)

175. Calliope Herefords (Brisbane, Wilson & McDouall, c. 1968).
176. Devon Beef Cattle Handbook, p. 3.
178. Skerman, 'One Hundred Years of Animal Production'.
relative to Central Queensland and represented by breed societies include the Devon Breeders of Australia which published its first Herd Book in 1929. Prior to that, stud herds were registered in England.\textsuperscript{179} Red Polls were always a minority breed in Queensland, but in 1918 when Robert Archer was offered a seat on the Victoria Council of the Society he accepted because there was none in Queensland.\textsuperscript{180} According to the Society he had purchased two bulls from a New South Wales stud in 1898 and another four in 1899. Gracemere Red Poll Stud was registered in 1910 and additional females purchased in Victoria in 1914.\textsuperscript{181} In 1939 Archers bowed to popular demand and established a Polled Hereford stud in its place.\textsuperscript{182} While the value of breed societies is a controversial issue among cattlemen today, they played a significant role in the past in upgrading Queensland herds.

The Wilson family provide another example of several generations contributing significantly to the beef cattle industry in the Fitzroy Region. David Wilson, who bought Raglan Station in the late 1860s but sold it to R.L. Paterson in 1874, had an even earlier connection with the district as overseer on Mount Larcom Station near Gladstone. But he returned to New South Wales and it was his son, James Lockie Wilson, who actually planted the family roots firmly in Central Queensland soil; he bought Calliope Station in 1905 in partnership with P.J.C. McDouall.\textsuperscript{183} Reference has already

\textsuperscript{179} Devon Beef Cattle Handbook, p. 5.  
\textsuperscript{180} Robert Archer to Secretary, Victoria Council, Red Poll Society, 18 October 1918.  
\textsuperscript{181} History of the Red Poll Breed in Queensland, MS, n.d., Red Poll Society.  
\textsuperscript{182} Minute Book, Archer Bros. Ltd., 7 October 1939.  
\textsuperscript{183} Calliope Herefords.
been made to David Wilson breeding pure Herefords on Raglan, but when his son took over Calliope he chose to form a Shorthorn stud with 70 head of selected stock to suit local conditions. The great drought was not far behind and, in addition, the industry had not yet adjusted to the tick problem (introduced to the region in 1896). Wilson planned to breed pure herd bulls with an immunity to tick fever which affected imported stock so drastically. By 1909 he was ready to expand and so purchased Calliungal (Upper Dawson) which is good fattening country. In the following year he bought historic Rannes Station which was already occupied by the Leith-Hay brothers when Charles and William Archer made their journey of discovery to the Fitzroy in 1853. But it was the acquisition of Balcomba on the Mackenzie in 1920 which stimulated J.L. Wilson to establish a Hereford stud on Calliope.

As a result, Wilson's name and influence during the following three decades was to parallel that of Robert Archer which had reached its peak by 1920. Balcomba, then 209 square miles, already had a fine Hereford herd including 5,000 breeders; to maintain and improve its standard Wilson decided to produce his own herd bulls, aiming for 'deep-fleshed, early maturing sires'. Foundation females for the stud were purchased from leading southern studs including Hobartville and Tocal; among its sires were 'many notable champions' such as Eaton Victory, champion bull at the Brisbane Show of 1923. Tarrington Ramrod, an imported bull, sired champions of the 1930s. The sire most directly responsible 'for fixing

184. MB, 9 July 1936.
185. See biographical details in Appendix VII.
the commercial qualities inbred in Calliope cattle was Golf Hill Resolute; but his history belongs to the post World War II period of stud breeding by J.L. Wilson's son, Richard Struth Wilson and his sons.

Wilson & McDouall's Calliope Stud was one of the earliest to provide serious competition for Archers' show cattle. In 1920, when Wilson won the champion bull section at Rockhampton Show, Robert Archer told him, 'I'm glad you came along with your cattle & I hope you will be a regular competitor at Rockhampton & that we will meet often in friendly competition'.

Friendly rivalry between the two studs was certainly continued during the 1930s with, at least on one occasion, wry sympathy for each other in a judge's wrong decision. Alister Archer told Crichton McDouall that Beak's cow had been wrongly awarded champion fat cow though actually ineligible - 'so I was robbed of another championship & you evidently of the reserve'.

Conveying the same opinion to J.L. Wilson, Archer added: 'I told Wells (the judge) I would turn the other cheek this time - they got me disqualified once for not remembering to sign an entry form!' At the 1929 Brisbane Show, out of seven classes for Hereford bulls, Wilson & McDouall gained four firsts and one second, also Reserve Champion Bull and Junior Champion Hereford Bull of Queensland, as well as a number of firsts for females. They were already a force to be reckoned with in show circles. In the 1930s, Wilson &

186. Calliope Herefords.
188. Alister Archer to Crichton McDouall, 26 June 1934.
189. Alister Archer to J.L. Wilson, 27 June 1934.
190. Herefords in Australia, pp. 3-5.
McDouall ran about 45,000 cattle on their associated properties and employed approximately 200 men. Calliope Station itself was a small township with its own store, post office and savings bank.\(^1\)

With the death of Robert Archer in 1926, James Lockie Wilson became the most prominent Central Queensland cattleman in state and national pastoral affairs. By 1927 he was on the Council of the Australian Hereford Society and in 1934 on the panel of Hereford judges (as was Alister Archer). He was one of three trustees of the Society in 1943 and by 1957 was its co-patron.\(^2\) He served 27 years on the executive of the United Graziers' Association, including three years as vice-president, and many years as chairman of the Cattle Committee. He served for several years on the Graziers' Federal Council and, with Edward Archer, was responsible for the founding of the Capricornia Graziers' Association in 1936. He was a council member of the Royal National Association for 26 years and its president from 1948 to 1951. He was awarded the O.B.E. in 1955 and died in 1956. Like Robert Archer, Wilson also served for many years on his local Harbour Board and Show Society. He was also a Shire Councillor for many years.\(^3\) His contribution to the beef cattle industry was of major significance, but, as will be seen in Chapter II, his attitude to the proposed introduction of *Bos indicus* cattle in the 1930s was ultra-conservative.

Another family of local cattlemen to enter the stud

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191. Personal interview with Lionel De Landelles, 16 August 1983.
193. *Calliope Herefords.*
breeding arena about the First World War period was the Beak family. The original Henry Beak took up a selection at Mount Hedlow, near Rockhampton, in 1869 which he called Pennard and for most of his lifetime ran a dairy herd on it. As he prospered he gradually acquired beef cattle stations on which he placed his young sons. Charons Ferry, so named because it was on the Styx River in the Broadsound area, was acquired in 1892 and the Beak boys were given the task of driving mobs of dairy steers the 128 kilometres from Pennard to fatten there. In 1895 two of the boys, including twelve year old Henry II, went to live at Charons Ferry, while young William remained in charge of farming and dairying operations at Pennard. By late 1897 as the numbers of beef cattle had increased, 'advantage was taken to improve beef quality in the Hereford herd we were developing on the new place - that is Charons Ferry'. This was done through culling as the young William Beak learned 'from the experts' the qualities to look for in beef on the hoof in order to obtain the best results in beef on the hook. He and his brothers were 'using the knife' by 1899 to spay culled heifers and to make steers of faulty males. After the great drought Beaks took advantage of abandoned leases to acquire May Downs in the Clermont district and Apis Creek north of Rockhampton in 1904. The eldest son was sent to manage Apis Creek and William went to May Downs at the age of twenty-six.

Henry Beak, who had been managing director of the family

195. Ibid., pp. 4-7.
firm, Henry Beak & Sons, died in 1908, leaving his well trained sons to carry on. According to William Beak, 1913 was a year 'destined to have far reaching possibilities'. He claimed to have founded Polled Hereford cattle in Australia in that year. Having heard of two hornless Hereford bulls on Waverley Station, progeny of the same stud Hereford cow but with different sires, he bought them; he named the older one Poll Foundation and mated it with selected pure bred horned Herefords. Sixty per cent of the progeny were polled animals. The younger sire, Meadows King, was kept in reserve to be mated later with the Poll Foundation hornless heifers.

Meantime, Beak heard of experiments begun in the USA in the breeding of polled Herefords; he persuaded Henry Beak & Sons to import three bulls and three heifers. The bulls included Poll Gemnation which eventually sired the animals whose beef was to achieve fame at Smithfield in 1930. Poll Gemnation was first mated with the progeny of the original bull, Poll Foundation, in 1919.196

The concept of Herefords 'minus horns' originated among a small group of Hereford breeders in the USA in the 1890s, with the first serious breeding programme commencing in 1898.197 Motivated, like William Beak, by losses from bruising caused by horn damage among their beef cattle, they also took advantage of an aberration of nature - as in the Waverley bulls. Beak's claim to have founded Polled Herefords in Australia in 1913 is immediately suspect as the two hornless bulls were bred by Talbot, manager of Waverley, and described

196. Ibid., pp. 8-10.
197. Dalgety's Beef Digest, p. 23.
by him as 'freaks'. More accurately, he was instrumental in forming the Australian Poll Hereford Breeders Association (later, the Australian Poll Hereford Society) in Rockhampton in 1922. He was appointed Secretary/Treasurer and Keeper of the Herd Book. The first entry is Beaks' Poll Gemnation. By 1932 there were 27 members of the Association in Central Queensland. Skerman's assertion that Polled Herefords were introduced to Queensland by A.W. Stirrat of Euroa, Gladstone, and James Sparkes of Dalby appears doubtful. A Gladstone breeder, H.H. Horne, imported a polled bull and cow at the same time as Beaks, but the bull died in quarantine in Brisbane. While Beak's claim to have founded the breed in 1913 is questionable, his importation of pure breed hornless stock (three bulls and three cows) and his founding of the breed society in 1922 confirm his place in its history. The American Polled Hereford Society later made him a life member in honour of his work in Australia, thus setting their seal of approval on him.

Breeders faced a great deal of opposition to their polled Herefords as pure breed Herefords. It was 'the toughest opposition ever known in the beef arena' according to William Beak. In February 1930, the Cattle Committee of the Rockhampton Agricultural Society decided that Polled Herefords could not compete in the same class as horned Herefords.

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199. William Beak, The Key, pp. 11-12.
203. William Beak, The Key, p. 11.
204. MB, 11 February 1930.
This opinion seems to have been based on the assumption that horns themselves were one aspect on which Herefords were judged. The controversy as to whether the polled animals were true Herefords had been well aired in *The Hereford in Australia* in the previous year, with leading stud breeders discounting hornless Herefords as freaks, and insinuating secret crossing with other polled breeds (such as Red Poll).  

In the Rockhampton controversy, J.L. Wilson expressed the opinion that the polled cattle were not directly descended from traditional Herefords, but were a distinct breed in character and conformation. F.W. Hutton agreed that Wilson's explanation was a lucid one, but asked that the RAS seriously consider the resolution before them to ban Polled Herefords so that they would not 'make themselves ridiculous before the cattlemen of Australia'. An amendment to allow the two types to compete in one class was lost and the motion against carried. Actually the RAS was contradicting its own earlier practice, for in 1924 A.H. Stirrat's Polled Herefords competed in the show ring against Archers' horned Herefords, winning the Champion Cow section.

In May 1930 the RAS challenged Beaks to accept arbitration through the English Hereford Society after submitting a sample pedigree. The arbitrator found that the cattle were eligible for registration in the English Hereford Society Herd Book because 'they traced in all cases to cattle in that book'. The years of experimental breeding had

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206. MB, 11 February 1930.
207. Robert Archer to McTaggart Bros., 30 June 1924.
208. Quoted in *The Key*, p. 11.
been justified. There must have been some embarrassed cattlemen later that year when the Chief Meat Inspector of London declared the eight carcases produced by the Beak family to be the world's best beef. William Beak claimed this was the only Australian beef ever to win full possible marks in London.⁴⁰⁹ Praise was also showered on their beef on the hoof. A pen of their Polled Hereford 'fats' exhibited at the National Show in Brisbane were described by E.S. Summers as 'the quality he desired to see produced more often in Australia'.⁴¹⁰

Despite initial opposition from the Show Society, and Alister Archer's opinion in 1936 that though Polled Herefords were then 'all the rage' and that it was simply a matter of 'letting the boom come and work itself out',⁴¹¹ the breed was here to stay, though not without controversy. Almost against their wills, it seems, other district cattlemen were attracted to the concept of polled cattle. In 1936 the established Hereford and Shorthorn studs at Calliope Station introduced to their numbers a Polled Shorthorn bull bred in the USA and also a Polled Hereford bull. These were mated with selected cows in an experimental breeding programme,⁴¹² and in the same year Calliope Poll Hereford Stud was founded.⁴¹³ That stern opponent of 1930, J.L. Wilson, concentrated on breeding polled cattle with an infusion of 'horned blood' in order 'to breed Herefords without horns

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209. William Beak to Australasian, 3 May 1939.
211. Alister Archer to H. Edwards, 22 March 1936.
212. MB, 9 July 1936.
213. Calliope Herefords.
suitable for Queensland conditions'.\textsuperscript{214} In 1938 he imported from the USA 'probably the biggest shipment of pedigree stock ever brought to Queensland up to that time'. It included an unspecified number of females and six notable Poll Hereford bulls.\textsuperscript{215}

Even so, as late as 1939 F.W. Bulcock, Minister for Agriculture and Stock (Queensland), publicly opposed the importation of polled cattle.\textsuperscript{216} This caused some concern in the CSIR (later, CSIRO)\textsuperscript{217} and led to a request to Dr R.B. Kelley to prepare a popular article explaining polledness in cattle. After describing the genetic principles involved in laymen's terms and by the use of simple diagrams, Kelley quoted in full Dr John Hammond's letter (from USA) of encouragement to Australian cattlemen:

It is quite an easy matter to breed on the hornless character to any carcase type - as the polled character is Mendelian in inheritance and the carcase type is multiple factor. Take for example the Hereford - a polled Hereford bull can be bred to some good conformation Hereford cows, a polled bull from this cross can be mated to such cows again, and so on until the conformation is as good as that of the original cows. When this is done it is merely a matter (as you know) of testing the bulls and cows for recessive hornlessness and then breeding the pure polled together.... Costs of dehorning are large...while the losses to the carcase quality by animals horning one another are large. All you need to do it is a few bulls and a planned system of breeding on the stations which carry them.\textsuperscript{218}

\begin{flushleft}
\textsuperscript{214} Ibid.
\textsuperscript{215} Ibid.
\textsuperscript{216} R.B. Kelley to A.C.D. Rivett, 25 August 1939. CSIRO Archives, Canberra.
\textsuperscript{217} Chief Executive Officer, CSIRO, to F.W. Bulcock, 11 September 1939.
\end{flushleft}
Following a discussion with Kelley, and through the force of this article, Bulcock revised his views on the importation of polled cattle. 'Your missionary efforts seem to have been successful', wrote A.C.D. Rivett to Kelley on 6 May 1940. While it had taken William Beak almost two decades to convince his opponents, he must have been pleased to find support in scientific circles. Significantly, this controversy of the 1930s was concurrent with that raised by the introduction of Zebu blood (Chapter 2). The exponents of traditional British breeds appear to have acted on the premise that they had already achieved perfection.

Standards of excellence as detailed by Queensland's Chief Inspector of Stock, P.R. Gordon, in 1910219 and used by most breed societies have changed little in the intervening years, though William Beak appears to have added one or two exotic touches. Today the stud cattle industry is seen as a separate section within the beef cattle industry; this also seems to have been the case with Archer Bros. as far back as the 1880s. The chief reasons for stud breeding have been suggested by a practising cattle breeder, R.W. Wilson,220 and an agricultural scientist, T.H. Rudder:

- a means of greater economic return
- production of breeds with individual characteristics which are readily identifiable and easily promoted
- improving the productivity of cattle by selection and culling

220. Richard Wilson is the son of R.S. Wilson of Calliope Hereford Stud and a grandson of the late J.L. Wilson who established that stud.
- the social aspects of participating in breed societies. 221

In their own words:

It can be seen that this section of the beef industry has little reason to support change in breeding technology. Many of the studmasters are leaders in the beef industry and change in breeding technology represents a threat to financial interests and to some of their social needs. Therefore, the normal adoption process of influential processors spreading new technology to others does not operate in this case. 222

Wilson also believes that stud breeders persist, sometimes against their financial interests, because it is a way of life they find attractive. 223 This certainly applied to the Archer family; there was also the admission that 'the microbe is in the blood of the stud breeder'. In a way the stud breeder is playing God within the bovine world to achieve perfection as Hitler wished to do to secure a perfect Aryan race. The physical appearance of cattle, especially Herefords, has already been shown as important. In the 1950s, when Herefords were facing their first serious challenge from Zebu (Bos indicus) breeds, the president of the Australian Hereford Society referred to 'our beloved breed' and later to Hereford bulls as 'the Gentle Giants of the Beef Breeds'. 224

Breed societies and herd books in the early years were English. Although the Australasian Hereford Herd Book Society was constituted in 1885, its first Herd Book was not published until 1890. Robert Archer was the only Central

222. Ibid.
Queenslander among the seven Queensland foundation members. The Society lapsed during the bad years at the turn of the century caused by the tick plague and the great drought; it was not reformed until 1917 when it became the Australian Hereford Society. Archer was elected to its first council in 1918 and in 1919 became vice-president. The only other herd within the Fitzroy Region to be registered in the nineteenth century was that of Camboon Station, Taroom, in 1895. The Bell family (Camboon) continued in membership until 1980, but latterly as the Camboon Pastoral Co. Galloway Plains Stud was registered in 1916, Wilson & McDouall's Calliope Stud in 1920, and A.J. Stirrat of Euroa, Gladstone, founded his horned Hereford stud herd in 1922. Significantly, because of industry depression, there were no further registrations until 1936 when R. Creed & Sons of Cleveden, Raglan, became members. They resigned in 1972. While the head office of the Australian Hereford Society was in Brisbane in 1980, most other British breed societies had head offices in New South Wales or Victoria. By then the Brahman 'take-over' was almost completed.

While cattlemen of the 1930s were, on the whole, still attached to traditional forms of excellence, it is obvious that some restlessness, brought about chiefly by economic uncertainty and changing requirements in overseas beef markets, led not only to experiments with new breeds, but also to variations in established breeds, especially Herefords.

While William Beak was convinced that perfection on the hoof

225. Ibid., Vols. I-VI, 1890-1918.
ensured perfection on the hook, he himself was an innovator. There was also a wider recognition of the concept put forward by Robert Archer in 1891, and adopted by J.L. Wilson in the next generation of cattlemen, that cattle bred for Central Queensland conditions need special qualities. But the traditionalists wanted these qualities within their British breed cattle, they refused to accept the need for change in the breeding structure, or to recognise the validity of the new breed structure which deprived their Herefords of horns or added humps and dewlaps to the hybrid cattle of the 1930s.

In the search for perfection in beef cattle within the period defined, the greatest 'plus' has been the general high standard maintained in commercial herds throughout the Fitzroy Region. This was made possible through the infusion of 'the best blood' from herd bulls obtained from stud breeders. That this was achieved by the pioneer stud breeders through a sacrificial effort to uphold family tradition, and their reputation as leaders in the industry, is confirmed by the inward and outward correspondence of three generations of the Archer family and by the firm's Annual Reports. That they continued stud breeding through the most difficult decades in the cattle industry, 1920-40, obviously contributed to financial decline and eventually to the dissolution of the family company. They might well have handed over the responsibility to new studs such as Calliope, and to new breeds such as that developed initially by the Beak family.

The greatest wastage in stud breeding, from a commercial viewpoint, arose from fads which ruled that selection be made on colour of noses or hides, the angle of horns, or the
'blockiness' of a beast. Despite William Beak's argument in relation to 'the world's best beef' produced by him in 1930, many modern cattlemen see such obsession with minor physical characteristics as ruinous - both to the breed and the finances of the cattleman. The 'trail blazers' among today's cattle breeders give priority to 'weight for age' and tropically adapted cattle, rather than the art of reaching visual perfection.
CHAPTER II

THE SEARCH FOR ENVIRONMENTAL ADAPTATION IN BEEF CATTLE

1930s to 1970s

1. Humped Cattle Enter the Arena
2. _Bos Taurus_ to _Bos Indicus_
3. The Greatest Livestock Revolution in History: _Taurindicus_ Cattle

Prior to the Second World War each northern cattleman worked more or less in isolation, meeting his peers at district shows, sales or primary producer organisations, but usually remote from the kind of scientific and personal advice provided today by the Department of Primary Industries and the CSIRO on all aspects of cattle husbandry and breeding. While these institutions were both in existence during the earlier period, their active regional influence was minimal. Despite this, and against a conservative rural opposition, several northern cattlemen possessed the initiative to pursue their own experiments in breeding environmentally adapted beef cattle before the First World War. When the CSIR did plan to set up an experimental tropical breeding station in the Fitzroy Region in 1932, conservative cattlemen opposed it, and so the work of geneticist, R.B. Kelley, had to be carried out on several privately owned cattle properties by remote control from the south. Ultimately, through the work of scientists and veterinarians and a nucleus of innovative cattlemen in Central and northern Queensland, this led to the almost complete
'take-over' of *Bos taurus* by *Bos indicus* cattle in northern Australia. It culminated in the 1970s with what has been described as 'the greatest livestock revolution in history'. The end and visible result is *Taurindicus* cattle on the great majority of properties within the tropics.

1. Humped Cattle Enter the Arena

...the Joint Commission appointed to inquire into the beef cattle industry of North Australia, in its report of 1929, recommended, *inter alia*, the investigation of problems of animal genetics with the object of creating a new breed of tropical cattle. 1

Creating a new breed of tropical cattle was to be a slow and frustrating experience, with humped cattle entering the Australian arena on several widely separated occasions. It will be remembered that the First Fleet brought with it Australia's first humped cattle - Cape Cattle from South Africa. By the 1830s the characteristics of these early Zebu imports had been absorbed by growing numbers of imported British breeds. (Zebu is the zoological name for *Bos indicus* or humped cattle, while European cattle are *Bos taurus*, the two kinds being reciprocally fertile.) 2 A hybrid developed by crossing the two breeds is now generally known as *Taurindicus*. During the nineteenth century, a small number of Indian (Zebu) cattle were brought to the Northern Territory, but their only importance in this theme is J.A. Gilruth's observations on their progeny

1. R.B. Kelley, *Zebu (Brahman) Cross Cattle and Their Possibilities in Northern Australia* (Melbourne, CSIR, 1932), p. 7. (Foreword by J.A. Gilruth.)
in 1911 during a government expedition after the Commonwealth took over the Territory from South Australia. The 600-700 descendants of the eight Zebu bulls and four cows brought from Batavia by the Cable Company of Darwin in 1872 left a lasting impression on Gilruth's consciousness of their ability to thrive in a harsh tropical environment. This, and his observations in Texas in 1920, ultimately led to revolutionary changes in the structure of beef cattle breeding in tropical Queensland. A new breed of tropical cattle was created.

Also relevant to tropical Australia's cattle industry were the successful experiments in breeding *Taurindicus* cattle at Riverstone, New South Wales, after 1900. These were undertaken by A.S. Le Souef whose veterinarian father, A.A.C. Le Souef, was Director of Melbourne Zoo from 1882 to 1902. He was succeeded by his son, W.H.D. Le Souef (from 1902 to 1923) who, like his brother at Riverstone, played an important role in introducing Zebu blood to Queensland. The Riverstone Le Souef acquired the Indian Zebu cow brought to Australia in 1900 on the ship carrying the first Governor-General, Lord Hopetoun, to supply him with fresh milk during an illness. This cow is of particular significance in the history of the Central Queensland cattle industry as six of her male descendants came to Waverley Station in 1929.

Another early Zebu blood line which eventually contributed

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4. Ibid., p. 5.
genes to the Central herd derived from bulls purchased from Melbourne Zoo about 1911 by W. McDowall of Christmas Creek Station, near Townsville. McDowall's purchase followed the Queensland Government's refusal to buy a blue-grey Zebu bull offered to it by Melbourne Zoo following government advice from the USA in 1910 regarding tick resistant cattle.

J. Robbins of Mowbray (Cairns) also obtained a Zebu bull from the Zoo at the same time and so by crossing them with British breeds, these two enterprising men established Taurindicus cattle in North Queensland before the First World War. Descendants of the blue-grey Zebu bull came to Central Queensland after the Beak Pastoral Co. of Rockhampton bought Christmas Creek and its herd in 1926; by 1928 a large number of these cattle were running on their several stations in the Marlborough area and later at Prairie Station, Biloela.

The chief catalyst in McDowall's and Robbins' experimental breeding was the cattle tick which had reached northern and Central Queensland by the mid 1890s. Its effect on British breeds was disastrous, even more so than the recurring droughts which also provided an impetus in seeking environmentally adapted beef cattle. Neither governments nor cattlemen could plead ignorance of the proven results of Zebu cross-breeding in the USA, even in the first decade of the twentieth century. As early as 1903, the Queensland Agricultural Journal published details of tick resistant and

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7. Ibid., 15 November 1911; John Francis, *Resistance of Zebu and other Cattle to Tick Infestation* (Pamphlet), November 1965.
more vigorous strains of hybrid cattle being bred in Texas. Central Queensland cattlemen were told in 1911 through an article in the Rockhampton Morning Bulletin that Le Souef (then Director of Sydney Zoo) was convinced that the introduction of Zebu cattle to this country should receive serious consideration and he believed there was an important future for them. It had already been proved in America that they were 'tick-proof' and he thought a Zebu-Shorthorn cross might help solve the problem in north Australia. He referred to J. Pye's breeding experiments at Riverstone, where some cattle had reached the third cross and were fat and thriving while British breeds were merely in store condition.

There were also numerous articles on Zebu cattle in the Pastoral Review between 1908 and 1911, and in 1910 (as indicated above) the Queensland Government actually communicated with the United States Bureau of Animal Industry concerning experiments with the cattle. In view of government inaction, McDowell and Robbins showed commendable initiative. Another North Queensland pioneer was Louis Fischer of Daintree Valley who in 1922 purchased four Shorthorn cross Zebu bulls sired by the original Melbourne Zoo Zebu at Mowbray. The part played by R.L. Atkinson in forming Australia's first fixed cross-breed, the Droughtmaster, was of much greater importance to the industry, but this is dealt with later in the chapter.

While the Beak family undoubtedly brought the first Taurindicus cattle to the Fitzroy Region by 1928, and later became convinced of their commercial value, their original

11. MB, 14 August 1911.
acquisition of the breed was accidental because these cattle happened to be running on Christmas Creek Station when they purchased it. By 1962, no less than three registered Brahman studs had been established in the Rockhampton district by members of the Beak family; these were Apis Creek (R.J. Beak), Cobra Ball (A.W. Beak) and Sandringham (M.C. Beak). But in the 1930s they were more interested in producing commercial bullocks than in experimenting with Zebu cattle.

The true pioneer breeder of Taurindicus cattle in the Fitzroy Region was Colin Wright of Waverley Station who, like McDowell and Robbins, was motivated by an environmental factor. Following the severe drought of 1926 in which he lost half his herd of about 9,000 (chiefly Herefords), he decided it was time to seek a breed better adapted to the St Lawrence area. His interest in hybrids appears to have been stimulated by his observations of Beaks' cattle. In 1929 he approached Riverstone Stud and obtained six part-Zebu bulls which he used over Hereford heifers to obtain meatworks steers. These bulls were descended from the vice-regal Indian cow imported in 1900. While Wright's aim did not differ greatly from the Beaks', his choice of Zebu bulls was a deliberate attempt to obtain environmentally adapted cattle. All these independent experiments in cross-breeding in Central and northern Queensland were only locally significant in the early years, but their long term impact became evident in 1932-33.

Dr John A. Gilruth, who held the first Chair of Veterinary Science at Melbourne University and also served as Administrator

13. 'Stud Directory', ABBA.
14. NB, 17 December 1952; 'Stud Directory', ABBA.
of the Northern Territory, achieved another notable first in January 1930 when he took over control of the new Division of Animal Health in the CSIR. He had joined the Council on a part-time basis in 1929 following Sir Arnold Theiler's recommendation the previous year of 'the early appointment of a Director or Chief of Division' of Animal Health.  

(The Council of Scientific and Industrial Research [CSIR] was established in 1926 and in 1949 became CSIRO - Commonwealth Scientific and Industrial Research Organisation.) Gilruth, it will be seen, wanted to investigate the potential for Zebu cattle in northern Australia as early as 1920.

Gilruth had visited the coastal lands of southern Texas on the Gulf of Mexico in 1920. He was 'favourably impressed with the many crosses of imported Brahman (Zebu) cattle, descendants of specially imported heavy dams and sires....'  

At that time, Texan cattlemen had not established a new breed, but Gilruth believed this was desirable. As he had already travelled across northern Queensland in 1896 (investigating the tick problem), and was already familiar with conditions in the Northern Territory, he immediately recognised the tremendous advantages possible in cross-breeding in the north of Australia. What is not generally known is that as early as 1920, following his visit to Texas, he urged the Federal Government 'to attempt the creation of a special breed by crossing selected types of our best breeds with the best Brahman cattle that could be


16. J.A. Gilruth, Confidential Report, MS, Submitted to CSIR Executive, 30 January 1930, pp. 5-6.
secured', if not in India, then from America. In his confidential report to the CSIR Executive Committee in January 1930, Gilruth clearly stated that however desirable the evolution of a special breed of cattle might be, he had thought the possibility remote until his visit to Texas. He pointed out that the Special Joint Commission inquiring into the northern cattle industry in 1929 had supported his contention in its recommendation urging investigation of 'problems of animal genetics with the object of creating a new breed'.

Among problems encountered by Gilruth was the sensitive issue of States Rights and the necessity for a demarcation between CSIR livestock research activities and the Queensland Department of Agriculture and Stock. Tension was alleviated to a certain extent by a Queensland State Committee (CSIR) with Professor H.C. Richards as chairman. On his strenuous train journey through Queensland to investigate the establishment of an animal (especially cattle) diseases laboratory, not only did Gilruth need to exercise diplomacy in his meeting with Richards, but government and pastoral industry leaders as well. These included the Premier, A.E. Moore, whose party had defeated the long entrenched Labor Government in 1929, and the Minister for Agriculture and Stock, H.F. Walker. They told Gilruth that 75 per cent of northern Australia's cattle population were in Queensland and impressed on him the importance of this to the

17. Ibid.
19. G. Lightfoot to Under Secretary, Queensland Department of Agriculture and Stock, 15 February 1933, CSIRO, Canberra. (Correspondence and reports dated 1930s-1950s cited in this chapter are held in the CSIRO Archives, Canberra. Correspondence and transcriptions of tape-recorded interviews dated 1970s are in the CSIRO Library, Rockhampton.)
Gilruth was very conscious of the necessity of gaining the confidence of stockowners; his own proposed plans always took into account possible objections from the man on the land. In Queensland, the majority of cattlemen were in the centre and north, therefore, he visited both these areas, spending eleven nights in train travel in order to do so. After inspecting the Government Stock Breeding Station at Gindie, near Emerald in the Central Highlands, Gilruth admitted the re-emergence of his long-time desire regarding 'the creation, or rather evolution, of some special breed of cattle more suited than the present breeds to the climate and herbage' of the northern littoral. It is of the greatest importance to note that even at this early date, Gilruth listed the points in which crosses between British breeds and Zebu excelled over other cattle:

(a) their resistance to tick infestation,
(b) their tolerance of and resistance to all biting flies and skin parasites,
(c) their ability to live and thrive under adverse conditions of feed and hot weather when other cattle died or were "dog-poor", and
(d) their rapid growth after birth and early maturing as "baby beef" now so much in demand.

He also admitted the 'somewhat unpleasing confirmation of our eyes' of crosses close to the 'Brahma' and their wildness if not subjected to early handling.

Gilruth considered Gindie an ideal location on the Tropic of Capricorn, in the midst of an enormous tract of cattle country, and only 'a short night's journey' from Rockhampton.

21. Ibid., p. 5.
22. Ibid., p. 6.
by train. He believed Australia's strict quarantine laws could be satisfied, even with Zebus imported from India; if not, the cattle could be purchased in the USA. In dealing with almost certain objections from cattlemen in a rational manner, never for a moment did he foresee the bitter antagonism which was to erupt over the 'mongrelisation' of British breeds. But in 1930 this was still in the future, obscured by initial co-operation from Professor Richards and the Queensland Government. In November 1930, Richards confidentially advised the Cattle Committee of the United Graziers Association (UGA) that:

Gindie State Farm would be handed over entirely to the C.S.I.R. Townsville Depot would also be handed over entirely to the Commonwealth. A further block is also to be made available at Gindie if necessary.

The total value of these properties will amount to over £25,000 [$50,000] to be contributed by Queensland to secure a similar amount from the Empire Marketing Board. The Empire Marketing Board had agreed to subsidise breeding experiments at Gindie on a pound for pound basis. Significantly, Zebu cross-breeding had not yet been mentioned to the UGA and so a motion to give every assistance to the CSIR was passed; it was moved by E.W. Archer and seconded by J.L. Wilson. Even so, Gilruth was confident enough to approach the Walter & Eliza Hall Trust for financial assistance to send a scientist to the USA to investigate

23. Rockhampton to Emerald, three hours by car in the 1970s.
25. Ibid.
26. Minutes, UGA Cattle Committee, 19 November 1930, UGA Archives, Brisbane.
27. J.A. Gilruth to W.A.N. Robertson, 19 January 1933.
28. Minutes, UGA Executive Meeting, 19 November 1930.
tropical cattle. It declined, but he obtained support from the Science and Industry Endowment Fund and so was able to approach R.B. Kelley, B.V.Sc., with an invitation to take part in an exciting new development. In Kelley's words:

Dr Gilruth explained his plans for a series of experiments he wanted me to conduct on the Queensland State Station which was to become available to the C.S.I.R. for the purpose. He loaned me a lot of booklets and reprints relevant to Zebu cross-breeding that he had brought back from the U.S.A. and elsewhere....

Kelley soon became as enthused about tropical cattle as his mentor. Consequently he arrived in San Francisco in January 1931 and during that year not only visited Brahman (American name for Zebu cattle) breeders in Texas, but also attended a Summer School on animal genetics at the State Agricultural College, Iowa. He found that Zebu cross-breeds had been entering the beef cattle markets increasingly since 1854 and that there were already 40 registered herds since the formation of the American Brahman Breeders Association in 1925. At King Ranch, Texas, he studied the breeding history and hybridization between Zebu and British breeds which had led to the establishment of a new breed, the Santa Gertrudis; this animal is approximately three-eighths Brahman and five-eighths Shorthorn. His observations of 'this huge enterprise, actuated by commercial considerations only', and the introduction of Zebu blood to '50,000 head of erstwhile pure-bred Hereford and Shorthorn breeding herds' led him to conclude that the same

31. Ibid., p. 15.
thing could be done in tropical Australia. At the same time, he was against the 'wholesale importation' of Zebu cattle which might be allowed to run wild in the back country.\footnote{Kelley, Zebu (Brahman) Cross Cattle, pp. 9-10.}

When Kelley returned to Australia early in 1932, Gilruth had disappointing news for him: the CSIR's proposal to establish a cattle breeding station at Gindie, when put to the UGA in Brisbane, had been accepted but for one aspect - the experimental mating of Zebus with British breeds. This was the only proposal which interested Kelley. Maurice South later recalled that A.D. Walsh\footnote{A.D. Walsh was Queensland manager of Dalgety & Co.} had told him 'the meeting was a hopeless failure because the UGA, in particular J.L. Wilson, was entirely opposed to the introduction of tropical blood in Australia'.\footnote{Maurice South, Transcript of taped interview by A. Packham, 13 September 1979. South was Rockhampton manager of Dalgety & Co.} On hearing Gilruth's scheme, the cattlemen, he said, had virtually 'thrown him out'.

Relevant minutes of the UGA in 1931 confirm this statement. In February, after hearing Professor Richards' account of the proposal put to the Queensland Committee of CSIR by Dr Rivett, the Cattle Committee recommended to the UGA Executive, '.... that in the opinion of this committee the matter of carrying on experimental breeding with Zebus should be eliminated from the scheme to be drawn up by the C.S.I.R.'\footnote{Minutes, UGA Cattle Committee, 18 February 1931.} It was also decided that when a definite scheme was received from the CSIR, a further conference of joint interests would be called. This took place in April 1931 and was the meeting to which A.D. Walsh referred as having 'thrown out' Gilruth. This conference confirmed that the previous resolution to exclude Zebus should
be re-affirmed. Gilruth responded by stating that it was his intention to request the Premier to dispose of Gindie State Farm. It was no use to the CSIR without Zebus. 36

The contentious matter did not end there. While the Cattle Committee itself supported the disposal of Gindie State Farm because it was 'no benefit to the cattle industry', its anti-Zebu resolution incurred the displeasure of Premier Moore. The government reduced its subsidy to the UGA by 50 per cent 'owing to the fact that the offer of Gindie in the scheme has not been accepted'. Even more humiliating was the Premier's comment that 'he could not understand the attitude of the Association in opposing the portion of the scheme to experiment in crossbreeding of Zebus at Gindie'. 37

Later in 1931 the Cattle Committee reported yet another attack on their anti-Zebu resolution. The Acting Agent-General for Queensland in reporting on the favourable reception of a consignment of Zebu-cross beef from the Central Queensland Meat Export Co. (CQME Co.), Rockhampton, enclosed a letter from Angliss & Co. The meat processors expressed astonishment at the UGA's opposition to experiments with 'this breed of cattle'. They hoped that efforts would be continued to induce authorities and graziers to proceed with the scheme. 38 But the graziers were adamant, if any experiments were to be undertaken, they should be on areas of Crown land 'unsuitable to British breeds' and the costs should be borne by the government, not the industry. 39

36. Ibid., 10 June 1931.
37. Report, UGA Cattle Committee, 4 August 1931.
38. Ibid., 25 November 1931.
39. Ibid.
On a more dignified level, the Council of the UGA advised both the CSIR and the Moore Government that the grazing industry was not prepared to accept a levy scheme to support the proposed investigations. It must be remembered that Australia (and the western world) was in the depths of the great depression at the time and, as well as more general financial difficulties, the beef cattle industry had still not recovered from the disastrous slump which began in 1920. Governments were near bankruptcy and the CSIR, a government instrumentality, had no funds other than to pay scientists and staff. While there appears to be no published comment by Gilruth on the cattlemen’s rejection of Zebu hybridization, in a letter to the Chairman of the Queensland Meat Industry Board in January 1933 he clearly blames them for aborting the scheme:

As you are aware, the Council's proposals for conducting exhaustive experiments with the endeavour to produce what would be virtually a new breed of cattle more suitable for the northern tropical areas of Australia at Gindie Experiment Farm (which was to be handed over to us by the Queensland Government), had to be abandoned because of the opposition of a large number of prominent pastoralists in Queensland.

R.B. Kelley, who had returned early in 1932 after familiarising himself with Zebu cattle in Texas, immediately began a series of lectures in an effort to break down opposition arising from ignorance. An instance of this was his paper titled, 'The Development of a New Breed of Cattle for a Tropical Environment', which was delivered in Melbourne to

41. J.A. Gilruth to E.F. Sunners, 20 January 1933.
members of the Veterinary Association; it was published in the Pastoral Review, 16 April 1932. Following this and other publicity, some cattlemen expressed mainly supportive opinions in the columns of the same journal. A correspondent signing himself 'Etna' detailed his own observations on two Brahman-cross steers on Belmont, Rockhampton (then privately owned), which were neither dipped nor bothered by ticks. The meatworks buyer of these prime bullocks in 1932 remarked that 'all tropical cattle would benefit by an infusion of Zebu blood'.

On the other hand, a Northern Territory correspondent took the more general view that the introduction of 'Brahma' cattle would be a retrograde step - they could 'gallop all day without tonguing'. Ironically, he was unconsciously praising their hardiness.

During 1932, Kelley himself visited northern towns, addressing meetings of cattlemen on his findings in the USA and their relevance to tropical Australia, but was frequently heckled by cattle breeders. They maintained his scheme would 'damage the whole structure of beef cattle breeding, fill the country with mongrels and, in short, do great damage to the cattle industry of Australia'. In the light of his investigations in the USA, Kelley was anxious to put to the test in Queensland these questions relative to the breeding programme he had mapped out:

- Whether Zebu cattle would show the same degree of tick resistance and adaptability as elsewhere?

42. cf. 'Culkah', letter to editor, Pastoral Review, 16 May 1932; '9WD', letter to editor, Pastoral Review, 16 September 1932.
43. 'Etna', letter to editor, Pastoral Review, 16 September 1932.
44. J.W. Rogers, letter to editor, Pastoral Review, 16 July 1932.
45. Kelley, Establishment of Humped Cattle, p. 32.
- Whether a hybrid between British and Zebu bred cattle could reproduce itself and cross-breed satisfactorily?
- Whether animals carrying Zebu blood would be more resistant to tick fever than British and, if so, how did they carry this resistance?
- What gives Brahman cattle their constitution?
- Whether hybrids were economically sound for tropical countries compared with locally bred descendants of British breeds? 46

Gilruth was again in Rockhampton in July 1932, apparently to publicise Kelley's report which was prepared before his return to Australia. Titled Zebu (Brahman) Cross Cattle and their possibilities in North Australia, it was published by the CSIR in 1932 as Pamphlet No 27. Extracts from this appeared in the Central Queensland Herald on 14 July 1932, but without reference to Gilruth's presence in the city or his earlier plans to implement the programme. 47 Significantly for the future, the Rockhampton Manager of Dalgety & Co., Maurice South, took him to Waverley to meet Colin Wright. 48

Meanwhile, a frustrated Kelley had been posted to Oonoonba (Townsville) unaware that 'the concept of Zebu (Brahman) cross-breeding was not dead but asleep - and might awaken'. 49 He was also unaware that CSIR Pamphlet No 27 was to be the catalyst in the re-awakening, for it was read by the chiefs of three influential pastoral companies with adjoining head offices in Melbourne and large cattle stations in Central and northern Queensland. These were G. Coleman (Australian Estates acting for Meredith Menzies Pty. Ltd.), W. Angliss and H.T. Sanderson for Queensland Stations Ltd., and J.I. Winter-Irving for

46. Ibid.
49. Kelley, Establishment of Humped Cattle, p. 35.
Winter-Irving & Alison. These men had discussions with Gilruth in December 1932, and all expressed interest in importing Zebu stock from the USA. They agreed upon the wisdom of supervised breeding by CSIR and offered to finance the proposed scheme up to £1,000 ($2,000) each. Gilruth said they 'jumped at' the idea of Kelley selecting and supervising the cattle in the USA and returning with them. Consequently R.B. Kelley was requested to be in Melbourne as early in the New Year as possible. By mid-January Gilruth was referring to him as 'our special officer and geneticist'. Events up to this time had proved so frustrating that Kelley must have found this sudden development almost unbelievable.

Gilruth was thrown into a frenzy of activity during January 1933 in his attempts to have Kelley sail for America by 2 February so the cattle could be selected and despatched during the specified relaxation of quarantine regulations. It was 'practically certain' the Commonwealth would not allow further imports should this venture fail. It took three meetings with the pastoralists in Melbourne to resolve their last minute fears, and the intervention of the Director General of Health to obtain a clearance from the American Bureau of Animal Industry, before Kelley could sail from Sydney on 16 February 1933. Significantly, when Professor

50. Memorandum of Agreement between Cattle Owners and CSIR, MS, 2 February 1933, File A/30/C/2/1/15, CSIRO, Canberra.
51. J.A. Gilruth to A.W. Turner, 22 December 1932.
52. J.A. Gilruth to W.A.N. Robertson, 19 January 1933.
53. Ibid.
54. J.A. Gilruth to G.A. Julius, 19 January 1933.
55. At the first of these meetings the participants agreed to Colin Wright's request to join the scheme.
56. J.A. Gilruth to A.C.D. Rivett, 2 February 1933; A.C.D. Rivett to A.J. McLachlan, 2 February 1933; Memorandum of Agreement, MS, 2 February 1933, A.C.D. Rivett to Konrad Ewart, 13 February 1933.
Richards announced details of the scheme (but not the names of the graziers concerned) to the Townsville Cattle Research Advisory Committee (TCRAC) in March 1933, 'Messrs Wilson and Bell were delighted'. 57 This was good news for Gilruth, who had been upset by the previous opposition from these important industry leaders. 58

On arrival in the USA, Kelley immediately visited a number of ranches to inspect and purchase Brahman cattle. He brought ten males and nine females back to Australia - nine head more than expected, including four gift cattle from Texas breeders. 59 There was no doubt, according to Rivett, Kelley was 'a great enthusiast' for Zebu hybridization. More importantly, he had passed on his enthusiasm to the four participants in the scheme, some of the biggest cattle breeders in Central and northern Queensland. 60

Brahman is the name given in America to humped cattle which originally came from Ongole, Kankrej, Gir and Krishna Valley breed imported between 1854 and 1906. 61 Two kinds were eligible for the American Herd Book: 'full blood' Bos indicus cattle imported either from India or Brazil, or descended from this stock through both dam and sire; and 'pure breeds' which were descended from early Zebu-British breed crosses bred back to pure Bos indicus characteristics by 1925. 62 They had to carry at least 15/16th Zebu blood. Kelley made his selection in South Texas, endeavouring to obtain a cross of the original

57. H.C. Richards to A.C.D. Rivett, 7 March 1933.
58. A.C.D. Rivett to H.C. Richards, 14 March 1933.
59. R.B. Kelley to CSIR, 12 May, 29 May 1933.
60. A.C.D. Rivett to C. McCann, 11 April 1933.
61. Mason, Dictionary of World Cattle.
Indian breeds. He was most impressed by the Hudgins herd of 1,000 registered cows having 15/16th or better of Brahman blood; thirteen of the nineteen purchased cattle came from this herd. They did not carry any 'Manso' blood which was so influential in the development of the American Brahman after 1924 and also the post-1950 Australian Brahman.

The cattle selected by Kelley arrived in Sydney in August 1933, were quarantined for one month, then railed to St Lawrence for acclimatisation at Waverley Station. Kelley commented on the number of interested people who came to St Lawrence trucking yards to see their first pure blood Zebu cattle - humped at the withers, lop-eared, loose skinned, smooth coated in colours ranging from white and grey to red. When Professor Richards reported the arrival of the Brahmans in Sydney to a TCRAC meeting, E.W. Archer asked if the cattle were going to North Queensland. He had heard that some might go to Springsure 'and the people in that district were somewhat concerned about it'. Professor Richards, who must have known that Zebus were going to Wealwandangie (Springsure), also to Waverley and Glen Prairie, promised to 'ascertain' their exact destinations. He assured Archer that the CSIR had the experiments under control and 'would not do anything to upset cattle owners of Springsure or anywhere else'.

After inoculation of the cattle and a period of adjustment to their new environment, the four nominees drew

63. Kelley, Provisional Report, MS, July 1933, p. 5.
64. John Francis, 'Reflections on Breeding Cattle in the Tropics', Seminario Internacional De Ganaderia Tropical (Mexico, Seminar Proceedings, 8-12 March 1976).
66. Minutes, Townsville Cattle Research Advisory Committee (TCRAC), 1 August 1933, CSIRO Archives, Canberra.
Marine plains, Waverley Station, where the 1933 imported Zebus grazed. (L. McDonald)

'Pioneers' Memorial', Waverley Station. (L. McDonald)
Ralph Bodkin Kelley, who selected the Zebu cattle and brought them to Waverley Station in 1933.
(CSIRO, Rockhampton.)
lots for them and distribution took place in January 1934. The original stations and owners were Waverley (Colin Wright), Glen Prairie (Queensland Stations), Wealwandangie (Winter-Irving & Alison), all within the Fitzroy Region; the fourth was Millungera (Meredith Menzies) in North Queensland. [See map.] Owners had already agreed to sterilise Zebu progeny considered unsuitable for breeding purposes; also not to sell or distribute the original cattle or their progeny without the consent of CSIR before the end of the experimental period in 1941-42 except to other members of the syndicate.

During the first year, Gilruth called at Waverley to visit Wright and inspect the cattle, and Kelley visited each station at least twice. Early observations pleased him, especially as Waverley and Millungera both experienced drought without Brahmans or their progeny being 'markedly affected'. In 1937, Wealwandangie withdrew from this scheme (reasons not stated) and Wright purchased the whole herd. Frank Frazer Pty. Ltd. of Ingham joined the syndicate in 1937 by signing the existing agreement and obtaining stock from Wright. Ken Atkinson of Wairuna, Mt Garnet, joined in 1940, his brother having had experience already in cross breeding from the Melbourne Zoo bull of 1911.

Despite Kelley's favourable reports, and reluctant approval from the TCRAC Committee in 1937, opposition continued in some quarters. The Chief Executive Officer of CSIR, A.C.D.

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68. Memorandum of Agreement, 1933.
69. Minutes, TCRAC, 3 December 1934.
72. Kelley, Progress Report No. 4, 1940, p. 3.
Location of cattle stations where CSIR breeding experiments began in 1933. (Progress Report No. 1, 1935).
Rivett, was shocked into protest by a statement from the Queensland Minister for Agriculture and Stock, F.W. Bulcock, at a meeting of the Australian Agricultural Council on 12 August 1939. Bulcock said that 'the best thing to do with our Zebus was to round them up and shoot them'. Rivett mildly castigated Bulcock for his attitude, reminding him that in the five and a half years since the nineteen Zebus were released to the four stations, they had remained in excellent condition. Yearly observations on the (by then) approximately 1,193 hybrid animals showed that they were bigger and better than British breeds of the same age and class, and better adapted to the environment. On Rivett's suggestion, Bulcock and Kelley later met in Brisbane and had an 'almost cordial' conversation, though Kelley suggested the minister should postpone further comments until the experiment was concluded.

About half way through the planned programme, the progeny of Wright's Zebu stock won him second place in the Chiller Beef competition at the 1938 Rockhampton Show. In the overall competition judged both on the hoof and on the hook, the Waverley pen of Zebu-cross steers tied with Archers' pen of pure Hereford steers, 62-63. During the subjective 'on the hoof' judging by traditional methods of eye appeal and conformation, Archers' cattle scored 39 out of 40, while the Waverley steers gained only 29 points - placing them last in ten entries. But as carcases judged on different criteria they moved up to second place. The diverse results in this contest between

73. F.W. Bulcock, Quoted in, R.B. Kelley to A.C.D. Rivett, 25 August 1939.
74. A.C.D. Rivett to F.W. Bulcock, 11 September 1939.
75. R.B. Kelley to A.C.D. Rivett, 27 September 1939.
British and Zebu-cross cattle in the show ring and abattoir demonstrate the watershed between the two different breed structures in the 1930s.

At the end of the restrictive period, Kelley was particularly pleased by the tendency among the breeders to increase the percentage of Zebu blood in their herds. Wright's whole breeding herd of about 2,500 females was included in the scheme, while others were also broadening the scope of their breeding programmes. For both Wright and Atkinson, more Zebu blood meant 'security from drought and tick worry', but for Queensland Stations (Glen Prairie) it was unashamedly the greater financial return per head which gave most satisfaction. By 1941 the breed was being sought by beef processors at Lakes Creek, Townsville and Bowen. Agent, Maurice South, later recalled that Lakes Creek buyers

...'were so keen to buy Waverley cattle' that all he had to do in later years was fly their buyer up there, land on the airstrip in front of the homestead, walk to the cattle yards, settle on the price, have lunch and a drink at the homestead, and fly back to Rockhampton. 'That's how easy it was to sell Waverley cattle.'

Despite these positive results, there still existed a kind of racism in the blind prejudice of many cattlemen against non-British breeds.

In 1944, J.L. Wilson, through the TCRAC, attacked not only the hybrid cattle, but also Kelley and Wright. Although not made public, it must have been a bitter disappointment to the CSIR. Wilson questioned the credibility of some of Kelley's claims in his report, *Zebu Cattle in Northern Australia*

(CSIR Bulletin No 172) including tick resistance and superior weight gains among Zebus. Colin Wright was attacked for his written statement that 'Zebu-cross are definitely an improvement on British cattle for this class of country'. The traditional cattle breeders were fighting for the continuing supremacy of British breeds; those with studs had a vested interest in opposing Zebus. Early in 1945 a complaint was made to the newly constituted Queensland Producers' Animal Health Committee (QPAHC), which replaced TCRAC in November 1944, that Zebu-cross cattle should be confined to experimental areas. People who had gone to great expense to build up 'other types of herds' had been annoyed by Zebus straying among them. Ironically the great majority of meetings (including this one) were largely occupied with seemingly never-ending discussions on how to control the cattle tick. But their move to confine the Zebus was already too late. Lionel De Landelles had acquired his first Brahman cattle and others, including Adam Rea, would soon follow.

There had been problems for Kelley during the years of experiment. In 'Cattle Here and There' (unpublished) he commented on the difficulty of conducting scientific experimental breeding on commercial cattle properties. Only general non-scientific observations were possible and, in one instance, when the CSIR installed a cattle weighbridge on the property, the owner failed to use it. Yet another protested that 'nobody was going to tell him how to breed the cattle once they became

79. Minutes, TCRAC, 15 May 1944.
80. Minutes, Queensland Producers' Animal Health Committee (QPAHC), 13 February 1945, CSIRO Archives, Canberra.
his'. With one exception (Atkinson), the breeders themselves failed to grasp the opportunity to establish a fixed breed through rotational breeding (such as the Santa Gertrudis developed in the USA), though they had the cattle to do so. When the restrictions were lifted, those breeders waiting on the sidelines wasted no time in obtaining the cattle, either to develop a fixed hybrid or to establish a Brahman stud. Adam Rea, the Tennents, and Lionel De Landelles were the pioneers in these fields in the Fitzroy Region. [See Part 3.]

By 1943, at the end of the restrictive period, Kelley was able — despite the difficulty of conducting scientific experiments by remote control — to answer most of the questions posed in 1932 and to add comments on new discoveries. He found Zebus most suited to northern Australian conditions through their heat regulating mechanism, their ability to sweat (less well developed in European cattle), and their short hair close to the skin. They had comparative freedom from tick infestation and worry; they showed immunity to disease in many instances and to some tick borne diseases. Other characteristics making them suitable for the tropics were their ability to move freely, walk faster than British breeds, and 'jog trot' without harm — thus enabling them to travel further and faster to water. They were more gregarious than British breeds and mothers provided a higher degree of protection for their calves from dingo attack. William Purvis, a retired cattleman of Clermont, stresses this latter point, describing how one Hereford cow

will attempt to 'mind' several calves while their mothers travel to water, thus making them especially vulnerable to dingo attack. Brahman-cross cows take their more mobile calves with them and so provide constant surveillance. 83

Despite the very real achievements of this early collaboration between scientists and practising cattlemen, there was no widespread understanding, let alone acceptance, of the significance of Kelley's programme, either during its course or in the following decade. The Queensland Agricultural Journal merely referred in 1937 to 'pleasing experiments' being carried out in Central Queensland with Zebu-cross cattle. 84 Even official attitudes were lukewarm; Dr Bull (who succeeded Gilruth) commented in 1952 that 'few or no results of any scientific value came out of this earlier work on Zebu hybridization'. 85 But there were positive results, even in the short term, and a very significant long term effect: Kelley thought that many cattlemen changed their minds about the so-called 'mongrels' after observing the relatively low losses among them in drought years of the mid 1930s. 86 He later referred to the major test, in an environmental sense, which came with the severe drought of 1945-46. Waverley, with a relatively high percentage of Zebu-cross cattle, lost only 12.5 per cent of its general herd, but in an isolated group of 100 Herefords, only two survived the drought. Herds on neighbouring properties, mainly British breeds in which Herefords predominated, lost

83. Personal interview with William Purvis, Clermont, 8 December 1976.
84. QAJ, Vol. XLVII, February 1937.
85. Packham, Cattle Breeding Research at Rockhampton, p. 7.
86. Kelley, Establishment of Humped Cattle, p. 34.
50 to 100 per cent. Glen Prairie lost 15 per cent of its cross-breeds, again a much lower percentage than neighbouring British breeds. 87

Gilruth and Kelley were both men of vision whose contribution to the northern beef cattle industry deserves national recognition. Gilruth's dream of producing 'virtually a new breed of cattle' for the tropics, and Kelley's energetic enthusiasm in attempting to turn dream to reality, eventually triumphed over the opposition of conservative cattlemen, reaching its mighty climax half a century later. But as early as 1941 it must have given Kelley a great deal of satisfaction to conclude his final Progress Report on the breeding experiment with these words:

There can be little remaining fear that the introduction of this particular kind of Zebu is likely to affect the nation's interests other than beneficially.

In like manner, efforts further to stabilise the hybrid as a fixed type can proceed according to well-chosen plans, secure in the knowledge that there is nothing to lose and possibly much to gain from the process of Zebu hybridization. 88

87. R.B. Kelley, Native and Adapted Cattle in Australia (Sydney, Angus & Robertson, 1959), p. 234.
2. *Bos Taurus* to *Bos Indicus*

Genetic adaptation is revealed when the relative merit of two genotypes differs in two different environments or, in other words, the genotypes react differently to a change in the environment. We seek to identify the crucial elements in which environments differ, and to measure how different genotypes react to them. The genotypes compared here are mainly zebu-cross and British breeds.

It is clear that in tropical Australia genetic measures have important contributions to make in mitigating the effects of heat, ticks, gastrointestinal parasites, some diseases such as eye and foot infections and possibly Babesiosis, and some nutritional limitations.

The first semi-official phase in the search for environmentally adapted beef cattle progressed unevenly under grazier management and remote scientific control. The second phase in the post World War II period was quite different: scientific research proceeded concurrently, though independently, with breeding experiments carried out by a few district cattlemen advised by veterinarians of the University of Queensland. While several of these independent cattle breeders achieved the same end result, a fixed Zebu-British cross-breed, it is readily understandable that only the scientists were capable of identifying and measuring 'the crucial elements in which environments differ, and...how different genotypes react to them'.

Without being aware of the scientific terms, some local stud cattle breeders, even before the turn of the century, were conscious that something inexplicable happened to their well bred Herefords, Shorthorns and Devons in the Central Queensland.

environment and that some breeds adapted better than others. Chapter I provided instances of this, such as Robert Archer's study in 1891 of the comparative qualities of Shorthorns and Herefords, and J.L. Wilson's attempt in 1905 to establish a Shorthorn herd resistant to tick borne diseases, while in 1929 Alister Archer recognised the tendency of Herefords in the tropics 'to send their horns skywards' and for their coats to darken. These men had each discovered something about genetic adaptation or, in H.G. Turner's words, how 'genotypes react differently to a change in the environment'.

Despite continuing hostility to the Zebu, Central Queensland stud breeders did not completely cut their lines of communication with the scientists. Between 1932 and 1952, Edward Archer, J.L. Wilson, R.S. Wilson and J.B. Shannon (Saltbush Park) served as members of the Queensland Producers Animal Industry Committee, J.L. Wilson for the entire twenty years. But it was to be a long, slow process fraught with dissension between various Boards and Committees before consensus was achieved and scientific research begun. In the light of the 1929-33 experience, it is not surprising to discover that the basic contentious issue was 'Zebu and other exotic breeds of cattle'. Fortunately the CSIR (after 1949 the CSIRO) never completely abandoned its original goal; one of the earliest and most significant steps in the second attempt to achieve this was a conference of leaders in the Division of Animal Health in March 1944 - only two years after

90. Survey of Minutes, TCRAC and QPAHC, 1932-52.
Kelley's 'remote control' programme ended. Addressing the conference, Sir David Rivett asked:

What about the genetical side of our work? Does not the present position suggest an unhappy suppression of very great potentiality? The staff dealing with genetics is lamentably small. We cannot help it: we can only be grateful to those who have carried on under depressing circumstances. But they have some compensations for I suspect there may be no section of the CSIR quite so free to follow its own gleam... 92

Rivettsurely had Gilruth and Kelley in mind when he referred to those who had worked in the past under depressing circumstances, but he would have been aware also that Kelley would ever be ready to follow his 'own gleam' in the field of genetics. Because of the expressed uncertainty as to the duration of the war, the conference could not make definite plans, but northern pasture nutrition and cattle breeding were considered important matters for future research. 93

Then, in 1947, the UGA approached the Australian Meat Board (AMB) requesting it to have research carried out into the beef cattle industry,

...having regard to problems associated with the spear grass country in Queensland and to the fact that British breeds of cattle didn't do as well in northern environments as they did in the more temperate areas. 94

At this time, J.L. Wilson was Chairman of the UGA Cattle Council and Shute (Chairman, AMB) believed this approach was initiated by him. 95 This is confirmed by the

92. Proceedings, Conference of Leaders, MS, CSIR, 20 March 1944.
93. Ibid.
95. Ibid.
minutes of a meeting between CSIRO and the AMB showing the cattle breeding proposals 'had been developed from an authoritative statement of Mr J.L. Wilson of U.G.A.' In view of his earlier documented opposition to Gilruth's plan, he probably referred to his own request that CSIR carry out experiments with British breeds, similar to those with Zebu. The request was communicated to CSIR and, later, recommendations by its Technical Sub-Committee on Beef Cattle Production were adopted by the Australian Agricultural Council on 21 and 22 July 1947. Among the adopted projects was one of significance: 'Cattle breeding investigations, including strain management and trials'. The idea was taken even further at a meeting of Chiefs of Animal Health (CSIR) in December 1947 when a cattle breeding station 'north of the tropic' which was to be 'supervised by Dr Kelley' was specifically referred to. Its chief objective was to investigate Zebu cattle, test the locally bred British breeds and institute a programme of cross-breeding.

In February 1948 a most important meeting took place in Melbourne between representatives of the Meat Board, the Queensland Department of Agriculture and Stock (QDAS, later DPI), the Queensland Meat Industry Board and the CSIR. The QPAHC at its February meeting expressed displeasure at not being invited. The only formal proposal came from CSIR which recommended that the following investigations be undertaken

96. K.A. Green to A. Packham, 9 September 1977.
97. Minutes, TCRAC, 15 May 1944.
98. K.A. Green to A. Packham, 9 September 1977.
100. Minutes, QPAHC, 23 February 1948.
and that they be sponsored by the Meat Board:

- beef cattle genetics and breed research
- agrostological research into beef cattle pastures
- stall feeding of beef cattle. 101

The long term significance of this meeting is apparent in the CSIR's recommendation that two cattle stations should be acquired - one north of the Tropic of Capricorn for cattle breeding and the other in the Burnett Region for pasture research. 102 Although there appears to be nothing contentious in these proposals, the Meat Board representatives were not happy about 'the necessity for investigating the place of the Zebu and other exotic breeds of cattle in Northern Australian cattle production'. 103 The Queensland Government, on the other hand, approved in principle proposals for both stations. Despite this, the QPAHC chairman in referring to collaboration between the above two bodies maintained that:

They are not going ahead on the lines of trying to breed half-bred Zebus. It was possible, however, that Zebus may be introduced later, but the emphasis in the first place would be on British cattle. 104

He rightly concluded that this was of great interest to the bodies represented on the committee. J.L. Wilson was one of these representatives. Ultimately the Federal Treasury was brought into the dispute and in 1949 a compromise was reached the formation of yet another committee, the Australian Beef Cattle Research Committee (ABCRC). It comprised two

101. Work on Beef Cattle, MS, Notes for discussion with Australian Meat Board (AMB), 27 February 1948.
102. Ibid.
103. Report, Beef Cattle Research, MS, CSIRO Advisory Committee, 1951.
104. Minutes, QPAHC, 16 August 1948.
representatives from each of the interested bodies, including one cattle producer from the Fitzroy Region and one from the Burnett. 105

The functions of the ABCRC were, briefly, to scrutinise proposals and financial provisions, receive reports and recommendations from the co-operating bodies, provide advice and assistance to the two Technical Committees and also provide a link between research stations and primary producers. 106

Meantime, a search was under way for a suitable property for beef cattle research in the Fitzroy Region. In August 1950 the CSIRO reported to the AMB that it had located a property and requested an inspection as soon as possible. The Meat Board rejected the property without inspecting it and without consulting either Kelley (who had found it) or the CSIRO. Communications again broke down, leaving both CSIRO and QDAS (involved in a similar manner with the southern station) 'extremely disillusioned'. It seemed to them that a successful working partnership could never be undertaken with the Meat Board. 107

In an attempt to resolve the matter one way or the other, a meeting between the chairmen of the three organisations was held in April 1951. The Chairman of CSIRO, Sir Ian Clunies Ross, 'stated quite frankly' that his officers had come to the conclusion:

...that the Meat Board had no real interest in the conduct of the joint scheme...due to the Board's fear that the interest of C.S.I.R.O. in

105. Memorandum of Agreement between AMB, CSIRO and QDAS, re establishment of beef cattle research centres in Queensland, MS, 16 October 1951.
106. Ibid.
conducting investigations with Zebu or other exotic cattle might be opposed by the beef cattle industry. 108

The Meat Board strenuously denied this, or that it wished to terminate the joint arrangement, maintaining its only objection was to the size of the proposed property which would run about 3,000 head of cattle. The Board thought this might appear to cattlemen that the government 'was entering into cattle production on a large scale'. The CSIRO then agreed to search for a smaller property (than Marlborough Station, Kelley's recommendation) to run no more than 1,000 head. The Board, on its part, agreed not to seek 'in any way to limit or influence the nature of the scientific investigations... whether in respect to British or exotic cattle breeds'. 109

At a meeting of the Advisory Council of CSIRO in 1951, members were told of the above sequence of events to explain why 'no progress whatsoever' had been made in investigating the problems of beef cattle research in the 'more than three years' since these were first brought to the notice of the Council. 110 Kelley, again involved both in the property search and in making detailed submissions to the AMB, must have felt that he was reliving the events of 1932 - except that in this second phase the agony was more prolonged. This time he was not dealing with individuals, but with committees and institutions. Eventually his long submission became the 'Memorandum of Agreement between the AMB, CSIRO and the QDAS regarding establishment of beef cattle research in Queensland'.

108. Ibid.
109. Ibid.
110. Ibid.
The two stations agreed upon were Brian Pastures in the Gayndah district of South-east Queensland, and Belmont near Rockhampton. The Agreement dated 16 October 1951 and signed by Kelley became binding upon all parties for at least five years. [See Appendix for 'Responsibilities of co-operating organisations'.] The original document was 'up dated' in 1958, 1966 and again in 1981. In the final analysis the Meat Board was responsible for capital costs including equipment and livestock, and the CSIRO (northern property) and QDAS (southern property) for technical and other staff, management and costs of operation and maintenance.

Belmont was purchased by the AMB which took delivery of it in March 1952. It is situated 24 kilometres north-west of Rockhampton, 40 kilometres from the coast and 25 kilometres north of the Tropic of Capricorn and at an altitude of about 30.5 metres. Of the mean average rainfall of 780 mm, one half falls in the three summer months of November to February. The station itself originally comprised 2,852 hectares, but in the late 1960s an adjoining 798 hectares were acquired, making a total holding of 3,650 hectares. It has a horse-shoe shaped frontage to 27 kilometres of the Fitzroy River, a large area of which is subject to periodical flooding. Soils vary from heavy alluvials in the flood country and from sandy loams to clay loams in the scrub formations. Its carrying capacity as a breeding property is one beast to five acres (2.023 ha.).

111. Memorandum of Agreement, 1951.
112. Ibid.
Station's bullock paddock and was later owned by William Pattison, master butcher, boiling-down works operator, and colonial politician. Its previous land use and ownership seem to link it naturally to its modern use in experimental cattle breeding.

Having acquired Belmont National Cattle Breeding Station, there were further delays and conflicting opinions within CSIRO as to how it should be managed. Kelley obviously expected the 1947 recommendation by the Conference of Chiefs that he should supervise it to be carried out. But in 1952 he was amazed to discover that his request to organise the research as resident officer-in-charge had been overturned.\(^\text{114}\) Dr Bull told Kelley he could not be spared and in any case he was too senior for the post - he had recently been appointed Assistant Chief. Then came the real rebuff: both the CSIRO Executive and the Meat Board favoured 'an experienced lay manager to protect its investment'.\(^\text{115}\) Kelley did not think it was 'humanly possible' to recruit an experienced man from the beef cattle industry and then expect him to 'implement and give guidance to such a proposal as I have put forward'.\(^\text{116}\) Non-scientific co-operation from northern cattlemen 1933-42 had no doubt provoked this response. Nor does it appear that he enjoyed the same rapport with Bull as he had with Gilruth. Bull was not enthusiastic about the Zebu, he was more interested in animal health than genetics.\(^\text{117}\) After a further exchange

\(^{114}\) R.G. Kelley to L.B. Bull, Quoted in, Packham, 'Cattle Breeding Research in Rockhampton', p. 18.

\(^{115}\) Ibid.

\(^{116}\) Ibid.

\(^{117}\) J.F. Kennedy, Transcript of taped interview by A. Packham, 14 August 1979.
of correspondence concerning the Belmont Technical Committee, Kelley’s patience appears exhausted:

The foregoing and many similar instances of delayed decision, of hesitant and critical acceptance or complete rejection of suggestions and proposals generally volunteered by me on matters I have regarded as being within my specialized sphere of activity all discount any importance which I might have attached to the appointment as an Assistant Chief. I have found it to be most ill-defined and unsatisfying.

I have several plans which appeal to me for my future and one of these is to carry on. I await your proposals so that I may consider them in relation to the other plans. 118

Kelley might have been excused for suspecting that his appointment as Assistant Chief was the traditional 'kick upstairs'. He resigned from the CSIRO early in 1954, having already chosen in the USA the Bos indicus cattle for Belmont. It must have been bitterly frustrating to Kelley as a geneticist not to be allowed to proceed as expected. On the other hand, perhaps he found some satisfaction in following his own 'gleam' in breeding Taurindicus cattle in partnership with John Murray, Tutt and Bryant (Tropical Cattle Pty. Ltd.) at Ingham until 1955. 118a

Although the Meat Board took possession of Belmont in March 1952, the CSIRO (Animal Health) had neither resolved its staffing problems, nor obtained the experimental cattle, so the station was leased for a year and cattle from the Gulf country sent there on agistment. 119 Dr J. Rendel arrived in Australia in 1952 from the Animal Breeding Research Organisation,

118. R.B. Kelley to L.B. Bull, Quoted in, Packham, 'Cattle Breeding Research in Rockhampton', p. 19.
119. Kennedy, Transcript of taped interview.
Edinburgh, to lead the development of animal genetics research in the CSIRO. According to J.F. Kennedy, Rendel was responsible for changes in Kelley's original plan for the northern station, but as far as Rendel was concerned, he and Kelley 'made the research plans'. Rendel himself later recalled that though the basic idea was to find out what was wrong with European cattle in the tropics and to compare them with adapted and unadapted animals, in practice it was more complicated.

The third meeting of the ABCRC (which had to approve the breed structure), held in Sydney on 8 and 9 September 1952, considered the British breeds to be used. Their first choice was Hereford heifers, but it is interesting to note that R.S. Wilson, who had offered 'a line' of these to the CSIRO, supported F.A. Brodie's (AMB) opinion that Shorthorns should also be included as these were the dominant breed in non-coastal areas. A few days later, Wilson selected 310 Hereford heifers from Walloon (south-east Queensland) and in January 1953 he chose six Hereford bulls from McCamley's Playfields Stud at Dululu (about 60 kilometres south of Rockhampton). J.F. Kennedy, who had been appointed to Belmont, selected 30 Zebu-cross cows from Waverley in May 1953. He also inspected cattle on Frankfield and Pasha stations (north of Clermont) and purchased three Poll Shorthorn bulls and 180 Poll Shorthorn heifers for Belmont. Care was obviously taken to draw the parent cattle from a range of environments within the region.

120. Personal interview with H.G. Turner, CSIRO, 26 April 1983.
121. Kennedy, Transcript of taped interview.
In relation to the *Bos indicus* cattle for Belmont, it is usually accepted as Kelley's decision to include Africanders among the Zebu stock selected in the USA by himself and R.S. Wilson for importation in 1953. Wilson recalls that Africanders were chosen because Kleberg refused to sell Brahmans for CSIRO experiments.¹²⁴ When the imported Zebus eventually arrived at Belmont they comprised four Brahman bulls and two Brahman cows, eight Africander bulls and two Africander cows. These ten Africanders were the first non-Indian Zebu cattle to enter the mainland of Australia since 1788. Other Brahman cattle were brought to Australia in 1953 by private breeders; these included 'fairly large numbers of Santa Gertrudis', but despite an earlier recommendation by the ABCRC they were not used in the Belmont breeding programme because they were a fixed breed carrying five-eighths British blood.¹²⁵

In 1953 the AMB handed over the management of Belmont to the CSIRO, two years after the 'Memorandum of Agreement' was signed and more than twenty years after the first abortive attempt planned for Gindie. No wonder Kelley later wrote: 'The story of organized Zebu cross breeding in Australia has been principally one of lost time, money and opportunities'.¹²⁶ In the new and ultimately successful venture, Rendel was in charge of the overall breeding programme, but the on-the-spot scientists were J.F. Kennedy and H.G. Turner. Kennedy was transferred from Gilruth Plains, a CSIRO Research Station in south-west Queensland, to be Officer-in-Charge at Belmont;

¹²⁴ Personal interview with R.S. Wilson, 30 August 1985.
¹²⁵ Personal interview with H.G. Turner.
¹²⁶ R.B. Kelley, *Cattle Here and There*, MS, Quoted in, Packham, 'Cattle Breeding Research in Rockhampton', p. 5.
Turner, a CSIRO geneticist, was appointed Officer-in-Charge of the laboratory - then a small makeshift building near Rockhampton Airport.

Significantly in relation to the breeding programme, Kelley and Rendel had decided they must use a cross between Shorthorn and Hereford on the British side 'because the bombardment from the breed societies was a bore from the start'. In the end the systems to be examined were 'more or less agreed to' by a meeting of the Belmont Technical Committee on the landing of the Criterion Hotel, Rockhampton. Among those present were Rendel, Kelley, Bull, Kennedy and R.S. Wilson. The systems to be researched included body temperature, digestion and nutrition, growth rate and disease and tick resistance. It is difficult to describe the breeding programme in layman's terms, but it began simply enough with four first crosses between *Bos indicus* and *Bos taurus*:

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<th>Brahman</th>
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<tr>
<td>Brahman</td>
<td>X</td>
<td>Shorthorn</td>
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<tr>
<td>Africander</td>
<td>X</td>
<td>Hereford</td>
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<td>Africander</td>
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<td>Shorthorn</td>
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Concurrently, matings between and within Herefords and Shorthorns took place to provide British cross-breeds and so keep the peace with breed societies.

By 1959, Kennedy and Turner had already made worthwhile observations on many aspects of Zebu-cross cattle. Realising that the ultimate test of environmentally adapted cattle had to be measured 'in terms of economic productivity', they checked rate of growth, reproductive performance and carcase quality.

Heat tolerance was an obvious factor to be examined in tropical cattle and this included skin and rectal temperatures, coat consistency and skin thickness, blood constituents and degree of tick infestation. It was too soon to provide answers, for they were aware of the limitations in studying one group of cattle in one specific environment.\textsuperscript{129} [See page 114 for details of breeding structure.]

Attitudes to Belmont and its breeding programme were not always complimentary in the early years. When the 'results' were put on show at a Field Day in April 1960, Wallace Skelsey (then editor of \textit{Queensland Country Life}) was obviously conscious of the United Stud Beef Cattle Breeders' claim that unbalanced publicity was being given to exotic breeds, so he launched an attack on the scientists for 'letting their enthusiasm run away with their judgement'. This, he said, was in the matter of 'certain theories' being let loose on the public as 'findings'. That his attitude was typical of the layman's lack of understanding of research procedures is apparent in this featured statement: 'Results of less than eight years work - much of it incomplete - were released in such a way to upset beliefs based on at least two generations of human experience.'\textsuperscript{130} The Zebu-British cross cattle on show were, at that stage, only second-cross. This appears to be the least promising stage in the process of hybridization, as Adam Rea commented at the Field Day: '...it reminds me of the situation I found myself in in 1949. We got similar results when we produced the second cross, and there were no

\textsuperscript{129} Ibid.
\textsuperscript{130} \textit{Queensland Country Life}, 5 May 1960.
geneticists to advise us'.\footnote{Ibid., 28 April 1960.} Spencer-Smith of Emerald, obviously a British breeds supporter, scathingly commented that the second cross cattle 'should be a warning of what can happen without proper selection'.\footnote{Ibid.} By 'proper selection' he undoubtedly meant conformation and colour - eye appeal.

The CSIRO publication, \textit{Surprise and Enterprise} (1976), summarises the longer term breeding programme as the production of first-cross animals 1954-60, with the second generation being gradually accumulated 1957-64. It was only in the third generation 'when the parental characters had been well stirred to provide a richly stocked genetic pool in which to fish that selection began'.\footnote{Frederick White and David Kimpton (eds.), \textit{Surprise and Enterprise, Fifty Years of Science for Australia} (North Melbourne, CSIRO, 1976), p. 34.} This unexpected imagery assists in interpreting a scientific process. 'Selection' is used in the same sense as the breed societies, but while they seek conformation the new stud masters sought cattle that were heat and tick resistant as well as commercially viable. It was not until 1966 that the first small matings of selected animals were made to produce a fixed breed.

The breeding programme was primarily designed to provide genetically diverse animals from which the inheritance and significance of characters of tropical adaptation and productive attributes could be investigated. A by-product of the programme was the distinct breed, the Belmont Red. This unique cross-breed based upon Africander genes, not available elsewhere in Australia, had special characteristics to contribute to the
industry. It is a handsome red animal (as its name implies) with a modified Africander 'hump'. It is decidedly heat resistant, tick resistant, has a quiet temperament and a satisfactorily high level of fertility under harsh conditions. It is a medium sized beast which yields a carcase of comparatively low fat. The fixed breed is half Africander, quarter Hereford and quarter Shorthorn with selection based on 'accurate measured characters that are heritable and economically important in terms of beef production'.

Belmont Red cattle are one of several 'synthetic' breeds developed in Queensland between European and Asian cattle, including Belmont's own Brahman-British cross. These were not achieved without difficulty, nor were the findings on environmental adaptation of beef cattle all clear cut and instant. Because Brahman-cross and Hereford-Shorthorn-cross are also bred at Belmont, comparisons between these and the Africander-cross cattle are made on every aspect of adaptability. In 1975 the Australian Meat Research Committee journal, *amrc review*, published H.G. Turner's scientific dissertation, 'Breeding of Beef Cattle in Tropical Australia'. After 21 years' experience at the Tropical Cattle Research Laboratory at Rockhampton, Turner admitted 'complexities and unknowns; there are variables, genetic, environmental and

134. Personal interview with H.G. Turner.
CSIRO Breeding Procedure for Belmont Red Cattle. The finished product, lower right. (Surprise and Enterprise, p. 35)
Africander derived Belmont Red bull on left; Brahman-cross bull in centre. (QDPI Rockhampton)
managerial, that may throw the balance one way or the other'.  
While a first cross between *Bos taurus* and *Bos indicus* gave full heterosis (hybrid vigour) in progeny performance, this could not be sustained without crossing back to one or other pure bred parent. A three breed rotation achieved better results - that is, 'a large return of heterosis'. Africander cross cattle showed less decline in both body weight and fertility in the second cross than Brahman. 'This lends particular force to the establishment of the Africander cross as a synthetic breed, the Belmont Red', Turner concluded.

Despite the unresolved problems in 1975, Turner recognised beef cattle breeding in northern Australia as being in 'an exciting state of flux' in which the traditional British breeds and the new synthetic breeds each served the industry. The opening words of his dissertation are most appropriate to this theme:

The introduction of *Bos indicus* (zebu) breeds into the established British (*Bos taurus*) population has probably been the most important development in beef cattle breeding in tropical Australia. It happened in the first place because a few people realized that the zebu genes offered scope for genetic adaptation to tropical conditions. The spread of the breeds and their crossbreeds and the clearer perception of their advantages and problems has led to a widespread exploration of the roles of different breeds, to a demand for identification and understanding of the inherited characters that are economically important in Northern Australia, and for methods of obtaining these characters by combining breeds and selection.  

The dispersion of Zebu-cross cattle on northern stations

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137. *amrc review*, No. 24, August 1975, p. 25.  
139. Ibid., p. 25.  
by 1975 had dispelled the early doubts of Turner and Kennedy concerning the study of one herd in one particular environment. Likewise, the scope of the experiment station itself had expanded. By 1976 there were 2,000 head of cattle on Belmont, including 1,200 breeding females. By that time both the pure bred Africander and Brahman herds (deriving from the original imports) were 'highly inbred' so some new blood was introduced to the Africanders through the use of Africander-cross cows.\textsuperscript{141}

The importation of Brahman semen from the USA has to some extent counteracted inbreeding in that breed since 1976 though, as Turner points out, it comes from the same gene pool as the original stock. Turner does not see inbreeding as a major problem in animals used for cross-breeding.\textsuperscript{142}

In September 1977, a Commonwealth Parliamentary Standing Committee heard submissions regarding a proposed cattle research laboratory at Rockhampton to be used in conjunction with Belmont National Cattle Breeding Station. A variety of industry leaders and specialists supported the concept, though 'one or two claimed that Brahman cross-breeding had been initiated many years ago by graziers and effective breeds developed'.\textsuperscript{143} This certainly was the view held by Professor Francis, never an enthusiast for the CSIRO breeding programme or the Belmont Red, but rather for the cattlemen who developed their own fixed breeds, especially the Droughtmaster. Francis claimed that Africander and Africander derived cattle brought less money at auction than the 'better' Brahman and Brahman

\textsuperscript{141}. Notes on the Research Programme (Rockhampton, CSIRO, Revised 1976), p. 7.

\textsuperscript{142}. Turner, 'Breeding of Beef Cattle in Tropical Australia', amrc review, p. 2.

\textsuperscript{143}. MB, 4 October 1977.
derived cattle. Yet only in 1972 Belmont Reds had brought top prices at an 'All Breeds' sale held at Rockhampton, and in 1975 an article in *Queensland Country Life* stressed the wide acceptance of the Belmont Red. While Francis supported the establishment of the beef cattle research laboratory, he also pointed out that his Department of Veterinary Pathology and Public Health carried out beef cattle research work in University laboratories costing only a fraction of the proposed building. In addition, a Droughtmaster herd had been established at the Veterinary School Farm and much valuable work done on *Taurindicus* cattle. It seems there was some rivalry, not only between the supporters of either British or Zebu breeds, but also between the supporters of Brahman and Africander derived breeds, and even between scientific institutions.

Tropical cattle research is an on-going project in the Fitzroy Region with beef production as a predominant industry (shared with grain growing and coal production). In 1980 a multi-million dollar Tropical Cattle Research Centre on the outskirts of Rockhampton city was opened to provide the best facilities for a new generation of scientists. There they may further probe and analyse 'the impact on productivity of different elements of tropical environments'. These include heat tolerance, tick and worm resistance, disease resistance, fertility in Zebu cross-breeds, drought tolerance and factors involved in food utilisation and metabolism, also the factors

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144. Ibid.
146. Ibid., 10 July 1975.
influencing selection and growth rate in the so-called synthetic breeds.

In the long and difficult struggle to discover why British breeds perform less well in the tropics, and to breed environmentally adapted animals, the contributions of Gilruth (who died in 1937) and Kelley, prior to 1953, and to Kennedy and Turner in implementing the experiments at Belmont under Rendel's direction, ultimately provided a 'break-through' of tremendous significance to the beef cattle industry in the north. This has confirmed and complemented in a scientific manner the independent developments by some Central and northern Queensland cattlemen in the same period. It is fitting that a booklet published by the CSIRO to mark fifty years of scientific research by the organisation especially honours Kelley, Rendel and Turner in the section 'Cattle for the Tropics'. With the three scientists appears the visible product of their research - Belmont Red cattle.
3. The Greatest Livestock Revolution in History:

**Taurindicus Cattle 1950s to 1970s**

In a tropical environment change from *Bos taurus* to *Bos indicus* "Taurindicus" cattle represents at least 15% increase in gross income and from 24% to 90% increase in net income, depending on current beef prices and costs of production. There is no other technology available that has this potential to increase productivity...

...breeding more productive lines of cattle not only involves the logistics of doing the job but also requires a dramatic change in attitudes towards breeding cattle. Old and firmly established practices must give way to new technology.... 148

It is unlikely that the livestock 'revolution' which climaxed in the late 1970s would have occurred if breeding experiments had been confined to the laboratory and experiment station. Even so, within the cattle industry momentum gathered only slowly; initially this was through the efforts of a few individual cattlemen to 'build a new breed'. It took almost two decades for the majority to accept the need for change in attitudes towards cattle breeding. By the late 1970s the Fitzroy Region's 3,000 beef cattle properties carried a herd component of 80 per cent Zebu blood in a total herd of two and a half million.149 This was revolution indeed, with so many breeders abandoning 'established practices' for the 'new technology'.

Before recounting the steps which led to these dramatic changes both in attitude and breed structure, it is necessary


to outline changes in land use, largely as a result of the Fitzroy Region Brigalow Development Scheme [see Chapter VI], which converted some large cattle stations to a much greater number of smaller holdings. Nor was it simply a matter of more properties and therefore more cattle; land use itself underwent a small revolution from almost totally grazing areas to increasing numbers of grain and beef cattle holdings. This particularly applies to the Central Highlands, Dawson Valley and three brigalow development areas. Relevant statistics clearly indicate the extent of the changes:

<table>
<thead>
<tr>
<th>Year</th>
<th>Holdings</th>
<th>Av. Acreage</th>
<th>Av. Cattle</th>
<th>Total Cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>1,492</td>
<td>10,763 (4,049 ha)</td>
<td>1,208</td>
<td>1,802,823</td>
</tr>
<tr>
<td>1970</td>
<td>3,170</td>
<td>8,778 (3,552 ha)</td>
<td>703</td>
<td>2,229,826</td>
</tr>
</tbody>
</table>

By 1976, at the end of a beef cattle 'boom', numbers exceeded two and a half million. Within the Fitzroy Region, 98 per cent of the total herd was classed as breeding and fattening enterprise, the highest in this category in the whole of Queensland; the north-west and Gulf country had the next highest with 62 per cent. The increase in cattle numbers was directly related to the buoyancy of the export market prior to 1974.

As indicated earlier, in 1950 Herefords comprised 90 per cent of the Central Queensland herd, but by 1971 this had dropped to 38 per cent and by the end of that decade to less

150. M.K. Wegener, *Fitzroy Region Agricultural Resources Utilization* (Brisbane, DPI Economic Services Branch, 1972), pp. 17-33, Table I.
than 20 per cent. In the same period no less than twenty stud Hereford breeders within the Fitzroy Region had resigned from the Australian Hereford Society, leaving only six registered herds at the end of the 1970s. [AHS Records.]

Even so, the remaining 243,860 Hereford cattle (including Polled Herefords) in the Fitzroy Statistical Division in 1981 far surpassed in numbers all other British and European breeds.

While the origin of local cattlemen's interest in Bos indicus cattle in cross-breeding programmes may be found in the 1933-42 experiments, these men were not left in scientific ignorance. In the early 1950s, an article appeared in the *Queensland Agricultural Journal* which gave the history of the Santa Gertrudis breed and its possible use in Queensland. A year later, the methods used in crossing Indian breeds of cattle with British breeds were given in detail. In relating the experience of the King Ranch (USA) to the similar climatic zone in Central Queensland, encouragement was given to those already experimenting with Zebu cattle. A great deal of credit must also be given to the Queensland Department of Primary Industries, and to Professor John Francis of the Faculty of Veterinary Science, University of Queensland, for encouraging and personally assisting those independent cattlemen who were the pioneers in the breeding of pure Brahman and

hybrid cattle in tropical Queensland. Between 1964 and 1976, no less than seven articles by Professor Francis on various aspects of breeding tropical cattle were published in veterinary and other journals. Unlike the 1933-42 experiments which were all conducted on large cattle stations, the majority owned by powerful pastoral companies, the post-war breeding experiments began on relatively small 'selector' blocks.

J.F. Kennedy recalled:

> It was mostly the smaller people, not socially prominent and not particularly affluent, who saw a hope to carry on their existence. The feeling was that if you had these humped animals you were socially inferior. It was said that if you were a breeder of these nobody in the Club would speak to you. 157

As early as 1960 Wallace Skelsey used the phrase 'in the throes of revolution' in a feature article in *Queensland Country Life* to describe the beef cattle industry. He said it was not widely enough known that the coastal strip north of Rockhampton had 'practically gone over to Brahman crosses'. Contrary to his Belmont statement, he believed this must eventually have a 'terrific impact' on the entire beef cattle industry of Australia, especially in the north, where half the nation's cattle grazed. The swing to Brahmans, he said, was based on the old law of survival - 'better a live Zebu than a dead British Breed'. 158 Nor was it coincidence that the coastal country north of Rockhampton was in the forefront of the revolution. These cattlemen were neighbours to Waverley and Glen Prairie. They would have been less than astute had they failed to observe the hardy Brahman and *Taurindicus* cattle

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157. J.F. Kennedy, Transcript of taped interview.
which survived drought and resisted tick infestation so much better than their own Herefords.

Lionel De Landelles who was the pioneer of pure-bred Brahman stud cattle in Central Queensland (other than those involved in the 1933-42 experiments) did not fit this category when he obtained his first Brahman bull in 1944 - in settlement of a debt. This bull had been bred on Glen Prairie and originally obtained in 1942 by another neighbour. At that time, De Landelles had a small property in the Marlborough district. After the 1946 drought the only cattle still alive on it were his Brahmans and their cross-breed progeny. This convinced him that survival depended on the breed and in 1949 he acquired the bull Christmas (whose sire was the original Waverley Zebu, Christmas Vulgar) and two females. In the following year he took them to the Rockhampton Show.

De Landelles describes the attitude of the RAS to Zebu cattle in the early 1950s as 'shocking'. For three successive years his cattle were put in the rodeo yards. The ban on their exhibition in the show cattle pens was lifted only when he threatened to expose their action to the press. It was much the same when he took his *Bos indicus* cattle to the Brisbane Exhibition in 1954: they were put in the horse stalls the first year, and with the dairy cattle in the following year. *Country Life* refused to take advertisements for his Brahmans so De Landelles had his own sale 'dodgers' printed and distributed. Dalgetys would have sacked Lindsay Stone (their auctioneer) if he'd 'talked to' De Landelles. Later, when the Cherokee Stud Annual Sale began in 1967, and in subsequent
years, Lindsay Stone was auctioneer.159

Significantly, De Landelles began his career in the cattle industry in the 1930s as a young jackaroo on Calliope Station. His older brother was J.L. Wilson's stud master. Later, in the Marlborough district, he came under the influence of Colin Wright of Waverley. From Wilson the young man learned the methods of breeding stud cattle, and from Wright the methods of producing commercially viable beef cattle. In order to remain economically viable, De Landelles established a Brangus stud in the early 1950s, showing these cattle for the first time in 1952. He is credited with establishing the Brangus breed in Australia, but disposed of these in 1957 in order to concentrate on his pure Brahman stud. He named this 'Cherokee, because it is a red name' and he wanted to breed red Brahmans. His first red Brahman calf was dropped in 1952. He then obtained a large number of Brahman cows from Waverley and in 1955 the bull, King de Manso, joined the stud. And so began one of the most remarkable success stories in cattle breeding in Australia.160

After leaving Marlborough, De Landelles 'bought and sold a few properties' and in 1960 repurchased Canomie (on the coast near Rockhampton) which he had previously owned in partnership. By 1964 he was showing bulls from Sydney to Cairns and selling them throughout Australia and, later, to New Guinea. During this decade he introduced early weaning, weight testing, pasture improvement, a keyline irrigation system and (in 1969) four Harvestores for improved fodder

159. Personal interview with Lionel De Landelles, Cherokee Stud, 16 August 1983.
conservation. He had already established a full time veterinary service and received a world record price for a Brahman female - $13,000.161

De Landelles recognised the value of Brahman females as admirable 'suckling mothers' which produce early maturing progeny. In choosing female cattle he always buys the mother of the most promising calf. His overall criteria for selection of *Bos indicus* cattle relates to their strong breed characteristics, the hump and the dewlap. In choosing adult bulls he looks for those with 'a good hump - directly over the shoulders and shaped like a bean'.162 After nearly forty years' experience with *Bos indicus* cattle, he claims their intelligence is beyond any other animal.

By the early 1980s an estimated 80 per cent of all stud Brahman and *Taurindicus* breeds throughout Australia carried Cherokee blood. Wallace Skelsey refers to Cherokee Stud as 'a national gene pool'.163 The annual Cherokee Stud Sale is now an institution; so is the quietly spoken, unassuming Lionel De Landelles in his Texas style hat and ornamental braces. The financial success of the Cherokee Stud, a family company operated under the name Brahman Cattle Co., is evident in the million dollar Glenora Historical Complex. This was established in 1977 by De Landelles and his wife on a hill overlooking the Capricorn Coast and has magnificent 360° views. This collection of historic buildings which he has saved from demolition gives him more pleasure, he says, than race horses, gambling and alcohol.164

162. Personal interview with Lionel De Landelles.
164. Personal interview with De Landelles.
Another district cattleman in the forefront of those taking advantage of the availability of *Bos indicus* blood in the 1940s was Adam Rea of Eden Garry, Kunwarara (north of Rockhampton). He already possessed a herd of well bred Herefords, his bulls originally having been purchased from Archers' Torsdale Stud. In 1946 Rea found he could no longer control the tick infestation in his herd and so on 7 July he purchased a pure grey Brahman bull from Glen Prairie. This animal, descended from the 1933 importation, was mated with 45 Hereford heifers of his own breeding. All the calves were brindled, but had white faces. From these first cross animals he selected ten bulls to begin a breeding programme based on 'conformation and fertility'. It seems it was too early to abandon the traditional emphasis on colour and conformation, or to realise that 'eye appeal' was not necessarily related to commercial return. It was 1952 before Rea obtained one bull calf with Hereford colouring and markings from a half-breed Brahman cow and half-breed Brahman bull. He then selected the least brindled of the three-eighths Brahman heifers with which to mate the selected bull; to his surprise 'no brindle came from this cross'. Selected bulls from this calving were then used to replace the original brindled bulls in the herd, with the result that brindling 'practically never showed up again'. But Adam Rea did more than seek colour and Hereford-type conformation in 'building' his new breed; he also culled females to obtain a 96 per cent calving rate and he measured growth rate - finding this to be

165. Francis, The Story of Zebu, Brahman and Taurindicus Cattle, p. 10.
167. Francis, The Story of Zebu, Brahman and Taurindicus
Typical high-grade *Bos indicus* animal from which *Taurindicus* cattle are bred. (QDPI, Rockhampton)
The Braford breed, first developed by Adam Rea. Note Hereford markings. (QDPI, Rockhampton)
25 per cent greater than among his Herefords. In a tribute to the recognised founder of the Braford breed in Australia, Professor Francis ranks Rea with 'the master breeders of the 19th century, who fashioned the breeds on which our livestock industries are still based'. Yet Rea was a commercial cattleman, believed never to have studied a book on cattle breeding.

Eventually Rea fixed the desired breed structure and, as a number of district cattlemen had watched developments with interest and already begun their own cross-breeding programmes, a meeting was called in Rockhampton on 13 September 1962 which resulted in the formation of the Australian Braford Society. The Braford breed had already been developed in the USA in which proportions of Zebu and Hereford blood were varied to discover the most commercially viable. This proved to be Hereford bull over half-Zebu cows, therefore a different structure from the Australian Braford which has approximately 50 per cent Brahman blood achieved by rotational breeding. Significantly, the Rockhampton meeting which accepted this breed structure was attended by fifteen breeders and the Society was formed with 600 registered cattle. By the late 1970s there were over 500 members with more than 25,000 registered cattle in Australia - principally though not exclusively in Queensland.

The Australian Braford has similar characteristics to

other Zebu hybrids in being heat resistant, relatively tick resistant and amenable to hot-humid as well as hot-dry conditions. With traditional emphasis on breed identification (and some would say 'gimickry') the Braford Society in an undated brochure claims their animal as 'Big, Bold, Beautiful, Taller, Longer, Heavier, The Top Breed'. Conformation is detailed for each facet of head and body as in the traditional breed societies. The Braford was the first registered Zebu-cross in Central Queensland; the Droughtmaster and Brangus societies preceded it in North Queensland. The typical Braford looks more like a hornless Hereford than a Brahman: its red colouring, white face and chest are more noticeable than its modified hump, shorter coat and loose skin. Undoubtedly it provides the best of both worlds in a region which has had a long 'love affair' with red rumps and baldy faces. This point is stressed by the Society with: 'Enjoy the sight of a beautifully coloured herd of "whitefaces" which will produce more beef, more quickly, thus more economically'.

More important than its appearance, however, is the Braford's confirmed ability as a better 'doer' than its British ancestor, also its greater resistance to disease. This was shown in trials carried out by the CSIRO at Belmont in which Braford and British breed steers were given identical rations during a 200 day period. The Brafords gained an average of 57 pounds (25.8 kg) more than the British breed steers. Eye cancer, transmitted genetically, which affects Herefords badly

174. Ibid.
is practically unknown in the Braford, while its high
fertility rate is said to be inherited from its British
ancestry. Since 1963 Brafords have been shown at Rockhampton,
Townsville and Brisbane shows. Mrs M. Tennent, who with her
husband W.J. Tennent of Doonside, Kunwarara, were foundation
members of the Australian Braford Society, describes the
first occasion on which the breed was shown in Brisbane:
'Naturally, numerous breeders looked upon our cattle as
intruders into the beef industry - consequently they resented
their appearance in the show ring'. On one occasion she heard
a person comment after a quick look at the cattle: 'Just what
I thought they would look like - Herefords gone wrong'.
At this same Brisbane Show (1963) pure Brahmans were excluded
from exhibition and competition.

Although the Belmont Red breed was developed by scientists
at Rockhampton, the purpose of the CSIRO was to place it in the
commercial herd as soon as possible, and in 1960 the first
public auction of Belmont Africander bulls took place. A
breed society, the Australian Africander Association, was
formed in Brisbane in 1969 but the name was changed in 1978 to
Australian Africander-Belmont Red Association as being more
accurately descriptive of the breed structure. Unlike
traditional societies, this one directs its members' efforts
toward 'the continued improvement of performance under commercial
conditions....' Thus the spirit and purpose of the
enterprise in developing the Belmont Red is adopted by the

176. M. Tennent, 'Showing of Brafords', Field Day Brochure,
177. Toon, Africander and Belmont Red Cattle, p. 1.
178. Ibid., Foreword.
Association. This is summed up by H.G. Turner who succinctly described recognised breeds as 'pre-packed parcels of genes with a trademark'. In relation to the development of the Belmont Red he said:

...we didn't have any interest at all in a trademark. We were not concerned, as virtually everyone who sets out to make a breed, to make it look like a breed, to get a white face, or the right shape of horns. We ignored these things completely. We were able to concentrate all our selection on fertility, growth rate, and resistance to ticks and heat. 179

This in itself is a revolutionary departure from the Australian Hereford Society's ideal in 1929 for a bull with a masculine head and a cow with 'a sweet and matronly face'. It also contrasts with the emphasis placed on appearance by the developers of the Braford breed.

Africander cattle are a very ancient breed deriving from Hottentot cattle in the Cape of Good Hope region which, in turn, are believed to be descended from an Egyptian Longhorn and Zebu Longhorn cross which occurred 2,000 to 3,000 B.C. 180

Early in this century in South Africa, breed improvement in the Africander was begun with emphasis on beef production. In 1930 Gilruth expressed interest in the breed, an interest which seems to have influenced Kelley's choice in 1952. Veterinarians now believe, because of anatomical and other characteristics of Africander cattle (notably behaviour), that they approximate three-quarter *Bos indicus* heredity and one-quarter *Bos taurus*. 181

179. H.G. Turner, Quoted in, *Surprise and Enterprise*, p. 34.
Since breeders other than the CSIRO may now produce Belmont Red cattle, wider interest in its particular qualities has developed. To be eligible for registration the stock must either be graded up 'from any base cow herd through three generations of mating to registered Belmont Red bulls'; or by using pure Africander bulls over any chosen British breed to produce cross-breed progeny which are then graded up to Belmont Red 'through two generations of mating to Belmont Red bulls'. ¹⁸² Both the Africander and Belmont Red possess a quality said to be lacking in pure bred Indian (Brahman) cattle: they are easy to handle and have a docile temperament. One station manager said of them: 'They are the nicest cattle I've ever had to handle. I could run this property [Walloon] practically single handed with Belmont Reds'. ¹⁸³

The most uniquely Australian of all the synthetic breeds is the Droughtmaster, for it has not been modelled on American cross-breeding programmes, but rather 'tailored' to suit northern Australian conditions. ¹⁸⁴ This was also the first fixed breed of Taurindicus cattle in Australia, for it began when the original blue-grey Zebu bull of Indian origin was brought from Melbourne Zoo to Christmas Creek in 1911. Between 1930 and 1932 R.L. Atkinson used two red Zebu-cross bulls descended from this animal on his North Queensland property. He mated these with Devon X Shorthorn, Shorthorn and Hereford cows, finally deciding in favour of red cattle as best suited to the northern tropics. By 1944, in the Ingham district, he

¹⁸². Toon, Africander and Belmont Red Cattle, p. 2.
¹⁸³. Surprise and Enterprise, p. 34.
¹⁸⁴. Personal interview with H.G. Turner.
had established a fixed breed, later named Droughtmaster. About 1950 he began improving his stud herd with several half-breed Zebu bulls purchased from Waverley Station, including a red bull named Waverley King, whose grandsire was the American Santa Gertrudis bull, Aussie, allocated to Colin Wright in the 1933 imports. Atkinson was instrumental in forming the Australian Zebu-Cross Cattle Breeders’ Association in 1952. In 1956 the preferred type was decided upon and the name Droughtmaster adopted.

Although originally established in North Queensland, the Droughtmaster breed has also made an important contribution to the Central Queensland cattle industry. By 1979 there were 46 registered studs in the Central Zone. Of the seven ‘straight’ tropical breeds in the Fitzroy Statistical Division it was rated fourth with 44,647 cattle. Professor Francis singles out its ‘architect’ - R.L. Atkinson - as having provided most significant initiative and drive in the creation of Taurindicus cattle in Australia. Droughtmasters are the least regimented of the hybrids, for they derive from any Bos taurus and Bos indicus cross, followed by ‘selective breeding of the progeny to finally arrive at a fixed tropical breed carrying 50 per cent of each blood line. They may be polled or horned and are of medium size. The bulls have a modified hump over the withers, on the cows it is usually

185. Francis, The Story of Zebu, Brahman and Taurindicus Cattle, pp. 8-11.
187. Ibid.
188. Queensland Cattle Breeds, pp. 8-9.
Droughtmaster cow and bull on the Veterinary School Farm, Moggill. (Professor John Francis)
Part of a Brahman stud herd, Marlborough district. (QDPI)

Brahman-cross bullocks, Marlborough district. (QDPI, Rockhampton)
A herd of about 150 Droughtmaster cattle run on the University of Queensland Veterinary School Farm at Moggill, near Brisbane. This not only includes Brisbane Show champions, but also serves the industry through use in experimental observations, particularly in relation to tick resistance. Cattle from the Veterinary School herd have been exported to Nigeria, New Guinea and Pakistan, Samoa and Taiwan, thus allowing comparisons between Droughtmaster and native cattle.\textsuperscript{191}

The Brangus, like the Braford, was originally established in the USA and then independently developed in the Fitzroy Region. As indicated earlier, Lionel De Landelles was the first known Australian breeder of Brangus cattle, having established this fixed cross between Brahman and Angus cattle in 1951. The breed has three-eighths to five-eighths Brahman blood in its cross with the Angus. A separate breed society was established in 1961. The Brangus was fifth (out of seven) in popularity in the Fitzroy Division (1981) with 4,848 cattle.\textsuperscript{192} Its black coat is seen by some breeders as a disadvantage in the tropics.

Professor Francis' opinion, in relation to the tropical breeds developed in Queensland, is that the cattlemen concerned ...

\textsuperscript{190} Personal observation, University of Queensland Veterinary School Farm, Moggill, 19 July 1983.
\textsuperscript{191} Silver Jubilee Department of Veterinary Pathology and Public Health (St. Lucia, University of Queensland, 1977), p. 7.
\textsuperscript{192} Queensland Cattle Breeds, pp. 8-9. The Australian Brangus Cattle Association was established in North Queensland in 1961.
cattle, to mention the three most important from an importation of only about 25 male and 25 female Brahman cattle between 1933 and 1952. 193

There are also several tropical breeds originally developed in the USA which are now bred in Central Queensland. The most numerous of all 'straight' breeds in the region is the Santa Gertrudis with (1981) 133,036 of the 457,136 pure tropical cattle in the Fitzroy Division. This breed was evolved in the USA in the 1920s and (as well as the 1933 bull Aussie) imported to Australia in large numbers in 1952 (75 bulls and 200 heifers) and again in 1954. There are now 250 Santa Gertrudis studs in Queensland. 194 The animal has three-eighths Brahman and five-eighths Shorthorn blood and is cherry red in colour. Some avant garde cattlemen, notably Richard Wilson, dislike the rigid classification system imposed by the Society, for example, 'white markings not exceeding half of the underline are permitted as is a white switch'. 195 Because the Santa Gertrudis is a large animal, it is a bad 'doer' in drought years. 196

Small numbers of several other breeds of tropical cattle appeared in the region during the 1970s. The lifting of the import ban on semen in 1969 allowed some Brahman breeders to experiment with an infusion of Charolais blood into their pure Brahmans. Three of the four 'pioneers' were Central Queenslanders: Hector Maynard of Greenfields, Jambin; Graham McCamley of Tartrus, Marlborough; and George Robertson of Biralee, Ridgelands (near Rockhampton). They all commenced

193. MB, 4 October 1977.
195. Ibid.
their breeding programmes in 1969. The Charbray, so called, was originally developed in the USA in the late 1930s with a cross between the Brahman and Charolais. The Charbray Society of Australia was founded at a meeting in Brisbane in 1977. One quarter to three quarters Brahman blood in a mating with the Charolais makes the progeny eligible for registration. This allows for variation according to the environmental needs of the cattle. Total numbers are not available.

The Sahiwal is a pure Indian breed originating in the dry areas of the Punjab in Pakistan. R.B. Kelley arranged for the import of ten Sahiwals to New Guinea in 1952 where they were quarantined. Eventually five females and five males were shipped to the CSIRO research station at Badgery's Creek, New South Wales. Progeny was later distributed in northern Australia, but there were only six studs in Queensland at the end of the 1970s. With a mere 238 Sahiwal cattle in the Fitzroy Division, this was the smallest representation of all straight tropical breeds in Central Queensland. Sahiwal mothers provide the best milk supply of all Zebu breeds, while their crosses have a high degree of heterosis. Small numbers of Simbrah, Simmental X Brahman, have also been bred in the Fitzroy Region. The Simmental, like the Charolais, is a large European breed. Recently, in weight trials at the Biloela Research Station, the Simbrah outperformed Brahman X Hereford cattle, but their large frames are a liability in the dry season and during drought as they require proportion-

197. Daly, 'Beef Cattle Breeds'.
198. Ibid.
200. Daly, 'Beef Cattle Breeds'.
201. MB, 23 September 1983.
ately large amounts of feed.  

With the exception of the Santa Gertrudis imports of 1952 and 1954, and of those animals deriving from imported semen in the 1970s, the great majority of Brahman and Taurindicus breeders in Central Queensland owe much to the Brahman imports of 1950-54, before the live cattle import ban was again applied. In 1950, Colin Wright brought from the USA two Brahman males and three Brahman females carrying the famous Manso blood. A total of fifteen Manso males and sixteen females came to Australia in the four years to 1954, including three males and two females among the CSIRO Belmont cattle of 1953. The original Manso was sired on the Hudgins Estate, Texas, by a superior Guzerat type (Indian) bull imported to the USA from Brazil in 1924. The modern American Brahman is said to derive from these 90 Guzerat imports. Likewise, according to Professor Francis, it is the blood of these Manso animals which has provided the quality in many Queensland Brahman studs. He also points out that 'Manso' is Spanish for quiet.

Regarding the semantics of 'Manso', both earlier and contemporary experience on cattle stations with Brahman and their crosses suggest that the higher the percentage of Zebu blood, the more intractable the cattle. When J.F. Kennedy accompanied a buyer to the Waverley dispersal sale (Estate of C.W. Wright) he noticed ten or twelve Brahman bullocks grazing on the marine plains; they were aged four or five years and were 'immensely big fellows'. Inquiring why they were not in the yards, he was told the stockmen were unable to yard them:

'...they were just too lively, and if they were put under pressure fences meant nothing to them. Away they went back to their beloved hills'.

It must be admitted that O.C.J. Beardmore sometimes had the same trouble with his pioneer British breed bullocks on Tooloombah (adjoining Waverley) back in the 1870s. [See Chapter III.] Experienced Brahman breeders argue that if their cattle are yarded regularly every two or three weeks after calving, they will never be a problem to handle. Stud stock, handled almost from birth, certainly live up to the 'Manso' meaning, for in the show ring they are the most tractable of cattle, even during fireworks displays at Rockhampton or Brisbane shows.

Richard Wilson confirms that 'education' is the secret of quiet Zebu-cross cattle.

De Landelles also believes in early handling of his Brahmans, preferring jilleroos to male station hands as their treatment is gentler.

As already indicated, in the 1950s he upgraded Cherokee Stud with de Manso stock from Waverley.

Field trials carried out in the Fitzroy Region by the Department of Primary Industries and the CSIRO prior to 1977 show marked increases in Bos indicus-Bos taurus first cross cattle. Measurements include fertility, growth rate and survival, and in each instance the hybrids showed increased productivity. Carcases from the first cross cattle ($F_1$) were equal in beef quality to British breeds.

While the next generation ($F_2$) showed comparable productivity and resistance to such diseases as blight, intestinal parasites and tick borne diseases.
complaints, there is 'a marked decline in fertility in the $F_2$ and subsequent generations in Brahman X British, but not in Africander X British cattle'. Sub-fertile bulls were also more frequently found among Brahman X British bulls in $F_2$ and later generations than in other breeds. While Africander-Belmont Red cattle had a slightly lower growth rate, their higher fertility compensates, 'therefore on a herd basis the productivity from these cattle would be at least equal to that of other breeds'. Rudder stresses the importance of British breeds in cross breeding systems 'provided their selection criteria are restricted to productive traits'.

In relation to beef quality in cross-breeds, reports from Smithfield confirm its superiority; in Queensland carcases from these cattle have consistently won chiller competitions since 1938. Studies on carcase anatomy carried out at the Veterinary School Farm, University of Queensland, in the 1960s showed the 'sloping' rumps of *Taurindicus* and Brahman cattle carry as much meat as the 'square' rumps of British breeds and that beef quality is indistinguishable. In 1960 the president of the Australian Hereford Society attacked the statement that Brahman-cross carcases were equal to British breeds in quality as 'ridiculous and misleading'. Twenty years later it is generally agreed that it is not the breed of beast that matters, but the age, condition and handling prior to slaughter that control beef quality.

Having established and assessed the qualities of Zebu
and Zebu-cross cattle, both on the hoof and the hook, it is relevant to recount in some detail the experiences of two younger cattlemen in their change from *Bos taurus* to *Taurindicus* cattle. Their experiences and changed attitudes demonstrate the abandonment of established practices in favour of the new technology. When Graham McCamley purchased Tartrus Station on the Mackenzie River in 1954 it was all scrub country. He paid $100,000 for 42,000 acres (16,376 ha.) with 500 head of horned Herefords included. In 1956, with a bank loan of $56,000, he began scrub pulling, spraying (for brigalow regrowth) and ploughing; by 1961 he had 12,000 acres (4,233 ha.) cleared. At first he introduced Polled Hereford bulls to use with the original Hereford cows, but was dissatisfied with their weight gains as his plan was to market two and a half year old bullocks. As the third generation of a family noted for its Hereford stud cattle at Playfields, Dululu, McCamley first shared the conservative view that the introduction of Zebu blood produced 'mongrels', but after observing his neighbours' *Taurindicus* cattle, he became numbered among the 'converts'. In 1960 he brought in Brahman bulls and eventually achieved weight increases of at least eighteen kilogrammes by two and a half years. Brahman cows were added to give him a higher calving percentage, but he also discovered that nutrition played a major role in getting lactating Brahman cows in calf again. By use of brands and ear tags, records are kept showing fertility and weight gains.

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212. Personal interview with H.G. Turner.
213. McCamley, 'Development of Tartrus'.
McCamley's early weighings, while using pure Brahman bulls, showed 80 per cent of the cross-breeds were superior to Herefords, but the remaining 20 per cent were 'very poor types'. He sold all his pure bred bulls and used those with seven-eighths Zebu blood. He then changed his breed structure by crossing selected Brahmans back to cross-breed Brahmans instead of pure Herefords and increased his beef yield 2 to 4 per cent; he also achieved 'spectacular results' at Rockhampton and Brisbane shows in 1969 with milk tooth steers. McCamley's criteria may be summed up as: fertility through females; weight through bulls. The Tartrus breeding programme in 1971 aimed to produce a beast 295-317 kilogrammes at two and a half years suited to the Japanese market. The key to this form of production, he found, is selection with emphasis on muscle, rather than the 'square blocky type'. In 1971 there was 'no room for fads' in Tartrus cattle, he was producing commercial cattle and had no further interest in the show ring. He believed that 'show fads' ruined all breeds.\

Scientific evaluation of the Tartrus breeding programme undertaken in conjunction with the DPI (Rockhampton branch) was reported upon by Arthur, Mayer and Rudder in 1972; it covered the period 1968-71. A comparative study between three groups of steers, one of pure Polled Hereford and two with different percentages of Brahman blood, showed the average weight of the three-quarter Brahman group as 397.3 kilogrammes, the half Brahman group as 382.8 kilogrammes, and the Polled

214. Ibid.
Herefords only 341-08 kilogrammes (live weight). This was an early justification of 'weight for age' in the finished product (marketable steers), but in 1972 this method of selection was not widely used. The same researchers discovered from these trials that approximately 62 per cent of liveweight gain is carcase beef; as a result they were able to show the gains per head, per acre, in terms of gain in price per 100 pounds (45.36 kg). Ten years later, McCamley operated three properties running 11,000 to 12,000 cattle. Once again his breed structure has changed. Apart from 180 registered Charbray females all his cattle are Brahman. He also has a Brahman stud with 500 registered cows 'in six single sire groups'.

1970-74 were 'boom' years for beef owing to the buoyancy of the Japanese and American markets. A Bureau of Agricultural Economics survey for the years 1968-71 shows that in Central Coastal Queensland (roughly parallel to the Fitzroy Region), 71 per cent of the total turn-off of cattle were for immediate slaughter, the highest rate in the whole of northern and north-western Queensland. It also had the highest average culling rate for females at 17 per cent. This high culling rate indicates greater concern in improving the breed, not for better appearance as in the past, but to obtain better commercial cattle. In the second half of the decade, owing to yet another 'slump' in demand and prices, cow numbers in the region dropped from 48 per cent of the herd (1975) to 43

216. 'Returns from Pasture in Brigalow Land', QAJ, Vol. 98, April 1972, pp. 179-82.
per cent (1980). This planned reduction in the herd reflects instability in the industry. Looking back on this period from the vantage point of the International Brahman Congress held in Rockhampton in April 1983, Graham McCamley (northern Australian representative on the AMLC) said that many cattlemen survived the combination of severe drought and drastic reduction in prices because of Brahman or Brahman-cross cattle. These 'easy care', drought, heat and tick resistant cattle meant survival both for cattle and cattlemen.

Significantly, the turning point between old and new technology coincided with the collapse in cattle prices. In 1976, T.H. Rudder, DPI agricultural scientist, Rockhampton branch, advised cattlemen to discard traditional methods of selection; he then provided performance data to support his scheme of breeder herd management. The data was obtained on Broadmeadow at Moranbah, Mount Eugene at Jambin (and a third property outside the Fitzroy Region) between 1965 and 1974. Nowadays generally accepted, Rudder's advice on culling in 1976 was still revolutionary:

The worth of a breeder should be based on her ability to produce a heavy calf each year and not on her appearance. Colour and physical appearance have little to do with productivity. Culling should be restricted to economically important traits.

He provided a table showing culling and retention rates in a Brahman-cross herd on Mount Eugene, indicating a retention rate

of 85.1 per cent in F₁ Brahman X Hereford, and 86.4 per cent in back cross to Brahman cattle. More and more cattlemen were heeding such advice. By the end of the decade more than 80 per cent of the region's herds were either Zebu-cross or pure Zebu.

One of the most striking examples of dramatic change in attitude has occurred on Banana Station, where Richard W.L. Wilson has ceased to operate the long established Banana Hereford Stud. (Calliope Hereford Stud continues under the management of R.S. Wilson assisted by his younger son, Rodney.) Richard Wilson, grandson of J.L. Wilson, has since 1975 bred and promoted Taurindicus cattle. Having discarded 'eye appeal' and traditional breed conformation, he seeks to improve his cattle in 'economically important traits'. He sees 'weight for age' as by far the most important trait, but stresses that parasite tolerance should not be overlooked either. Objective measurements must be used, he says, 'as an aid to normal value judgements'.

While the majority of early Zebu or Zebu-cross breeders were motivated by a combination of tick infestation and drought, Richard Wilson's decision to change his breed structure was the result of scientific challenge based on proven economic data. He refers to 'the historic day' in 1975 when T.H. Rudder (QDPI) and Dr. George Seifert (CSIRO) challenged him to seize 'the golden opportunity' available since his recent acquisition of Banana and Rannes stations from the family company (Calliope Cattle Co.). After carefully weighing the 'pros and cons' of

222. Ibid., p. 186.
223. Queensland Cattle Breeds, pp. 6-8.
their scheme to produce environmentally adapted and commercially viable cattle, Wilson made his far reaching decision. In doing so, he had to abandon four generations of family tradition in breeding pure Hereford cattle. He had balanced tradition and sentiment against technological and scientific methods and decided in favour of Zebu-cross cattle. After eight years' experience, he can see no value whatsoever in 'a parcel of genes with a name tag' for a fixed tropical breed. What matters is the quality of the bull, scientifically selected by objective measurement and fertility, and the ability of the animal to transmit his genes to his progeny.\(^{225}\)

Wilson's criteria for selection is wholly related to the animal's potential to produce prime young beef. From 2,000 male calves he selects only 40 (2 per cent) as bulls for his own use, beginning with their measured growth rate - weight for age. He culls those with less desirable characteristics such as bad temperament, the physically unsound, those with unsound sexual organs, or poor conformation. He believes that traditional standards of conformation too often lead to non-productive aspects such as colour; conformation in *Taurindicus* cattle should ensure the ideal carcase. Wilson sees selection as the key to cattle breeding and believes that the type produced relate more to the cattle breeder than the breed.\(^{226}\)

In his trial herd of 700 breeders, Wilson has fourteen combinations of Zebu-British cross-breeds with a 50 per cent

\(^{225}\) Personal interview with Richard Wilson, Banana Station, 25 August 1983. At the 1983 Rockhampton Show, Banana Station beef cattle took all major trade cattle prizes. The carcases of these animals then 'scooped the pool' in the chiller competition, judged at Lakes Creek Meatworks: *MB*, 17 June 1983; ABC Radio News, 18 June 1983.

\(^{226}\) Personal interview with Richard Wilson.
Bos indicus component. [See Appendix.] This has enabled him to 'produce cattle for this environment without prejudice'. He revels in his freedom from the dictates of breed societies in 'breeding according to conscience'. Unlike the early exponents of cross-breeding, he is not concerned about brindling. He has found that brindle cattle, previously discarded, are often the best from a commercial point of view. In his experience, the F₂ generation is better than the F₁; these cattle have proven better growth rate because of the better milking ability of their F₁ mothers.²²⁷ In the earlier years, Adam Rea and other breeders despaired of their F₂ generations. As Rudder points out, this was the result of selection under grossly artificial conditions. On the other hand:

If cattle are selected on the basis of weight for age under normal commercial conditions the desired combination of genes from both original parental breeds will be achieved....

On the basis of current knowledge the "best bet" combination is initially half Bos indicus half Bos taurus, and then select for reproduction and weight for age under normal environmental constraints. ²²⁸

Wilson agrees that while selection is based on the above criteria, his cross-breed herd will never deteriorate or become 'mongrelised' as many older cattlemen predict.

Richard Wilson is an innovator: first in promoting and selling Zebu-cross bulls (of no fixed breed) at his own annual bull sale; secondly, because he uses the latest business

²²⁷. Ibid.
techniques to produce and market beef cattle. At the annual Banana Station bull sale, he simply offers 'Banana bulls'. They may be any one of the fourteen Zebu-British crosses, but recent scientific trials show Brahman-Hereford cross animals outperforming others. (While in 1983 Wilson was still able to provide breed details of all bulls offered, he believes that in the future these will be unknown - and unimportant.) His management techniques, on his several properties running 16,000 cattle, and marketing methods have been compared to those used in running a Woolworths Supermarket. His station office is linked to employee groups (or individuals) by two-way radio. In the event of vehicle breakdown, for instance, parts can be ordered by telephone from Rockhampton or Brisbane and be on their way by overnight transport within hours. As well as sixteen full-time station hands, contractors are brought in for scrub-pulling, fencing or other occasional work. (In August 1983 there were four bulldozers and a scraper working on Redcliffe, a recently acquired district property.) Wilson believes that 'a total package of production' is necessary to improve both pastures and cattle.

While the breed structure of the Banana herd differs so radically from that of Richard Wilson's father and grandfather, like them, he feels a responsibility to the industry. Primarily he tries to persuade cattlemen to think in practical

229. Personal interview with T.H. Rudder. A more recent innovation introduced in 1985 by Brahman breeder, George Tucker of Rockhampton, is an embryo transfer laboratory and clinic where Brahman cattle can be sent for embryo transplant.
230. Personal interview with T.H. Rudder.
A Brahman-cross Banana bull of no fixed breed. (QDPI, Rockhampton)
We aim to produce from our 5,000 breeder herd, the most productive beef cattle at the least cost, by selection for growth, reproduction and carcase traits under commercial conditions.

Breed fads, fancies and prejudices do not contribute to economic beef production.

Richard Wilson.
terms; while he has succeeded with a few, he still suffers prejudice from the exponents of British breeds, including his own family. In a broader sense, his responsibility to the industry is reflected in involvement with the Capricornia Graziers Association, and as Chairman of the Division of Tropical Animal Science Advisory Committee. Here he sees his role as bridging the gap between scientists and practical cattlemen. In the educational field, he is a Board member of the Emerald Pastoral College. He is also an industry representative of the CSIRO Division of Tropical Crops and Pastures, through the Narayen Research Station at Mundubbera.

Richard Wilson is in the forefront of what seems likely to become the next phase of the livestock revolution - the selection of *Taurindicus* cattle on purely commercial lines, irrespective of breed or colour. He is one of the 'trail blazers' of the Fitzroy Region in the same sense as Colin Wright in 1929. While his attitude to breed structure differs from that of the post-war pioneers such as Adam Rea and Lionel De Landelles, Wilson agrees that *Bos indicus* cattle have saved the industry from ruin. Even so, it must have taken considerable courage to discard the traditions of four generations of Hereford breeding.

J.R. (Jeff) McCamley of Lancefield, Dululu (Graham McCamley's brother) has summed up the attitude of the younger generation in selecting the best beef building qualities from both *Bos indicus* and *Bos taurus*:

Beef is primarily what we are breeding for. I believe the big heavy beefy Brahman with good bone and plenty of length is superior for crossing

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232. Ibid.
to the small Zebu type. Any beast with more than five-eighths Brahman blood is tick resistant. They can all walk long distances to water. If they have five-eighths Brahman blood or more they are food foragers.

Some of my competitors have criticised me and said 'he has put humps and big ears on a British type animal'. I remember a judge in the showing at Rockhampton criticising two big bulls I had by saying 'they have British breed type hindquarters'. That was reported in the Press. Inquiries came from all over Queensland from people wanting to see Brahmans with British breed hindquarters. 233

In assessing the dramatic change from traditional British breeds to Brahman or Brahman-cross cattle among independent cattlemen, it is obvious that early motivation was primarily environmental or neighbour motivation in seeing the ability of the experimental cattle to survive droughts and also tick borne diseases. Then came a decade of financial motivation: with increasing demand for beef on the American market, producers looked for breeds capable of rapid growth and 'weight for age'. Large and small breeders alike were also attracted by 'easy care' cattle; little or no dipping reduced production costs considerably. Finally, and in addition to these continuing motivations, by the 1970s Taurindicus cattle were 'fashionable'.

The evidence available in the Fitzroy Region supports Kelley's contention that the introduction of Zebu blood has led to 'the greatest livestock revolution in history'. With the advantage of hindsight it is apparent that conservative cattlemen were the greatest initial stumbling block in the development of tropical cattle; the adventurous few who began their own experiments did so against tremendous opposition and

ridicule. These men shared with the CSIRO and other scientists the great step forward in 'building a breed' of beef cattle capable of being produced economically in northern Australia. Even so, the most revolutionary phase of all seems to have been the recent change in attitudes towards cattle breeding. Typical of this change is the almost heretical opinion of at least one agricultural scientist, one geneticist and a few practical cattlemen that 'breed societies are a bit of a confidence trick'.

The livestock revolution came of age in Rockhampton, 18-22 April 1983, with the holding of the first International Brahman Congress. Its theme, 'Beef in a Changing World', was introduced by Ken Coombe, manager of Waverley Station where it all began in 1933. The Congress not only looked back in paying tribute to Gilruth and Kelley and the pioneer Bos indicus breeders in Queensland, but also provided 'a positive forward thinking blueprint for success'.

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234 While the quoted opinion was expressed by T.H. Rudder of QDPI, similar views are held by H.G. Turner, former CSIRO geneticist, and practical cattle producer, Richard Wilson, of Banana Station.
A group of red and grey two year old Brahman bulls on Tartrus Station, Marlborough. (QDPI, Rockhampton)
CHAPTER III
TOOLOOMBAH STATION PROFILE 1860-1904: A CASE STUDY

It was common practice on large pastoral properties, at least until the 1940s, to keep stock books and station diaries. The stock, herd, or cattle books provided monthly reports on stock numbers and associated details while the diaries recorded the day to day work on the station, also prevailing weather conditions. These books not only preserved valuable data for current and later owners and managers, but eventually served as a rare source for historical research.

A complete set of original cattle books from Tooloombah Station, in the Broadsound area between Marlborough and St Lawrence, [see map] enables a case study on the management of this particular property over a period of 44 years, commencing in 1860. While these cattle books fulfil their basic purpose of detailing herd management, they occasionally allow a glimpse of the personality behind the records, and even of the changing environment in which he lived and worked. But most important, both to the station itself and the researcher, are the meticulous details relating to all aspects of cattle husbandry such as breeding, mating, branding, disease control, weather and pasture conditions, stock sales and purchases, and the economy in general. The Tooloombah Cattle Books (incorporating Booroondara Cattle Books 1887-1904) might be considered as a micro-history of the Central Queensland beef cattle industry between 1860 and 1904.
Fitzroy Region, showing location of Tooloombah Station (Fitzroy Region, Queensland, Landforms, 1967).
John Peter Campbell, an early speculator in pastoral runs in the north-eastern sector of the Port Curtis Pastoral District, took up a number of leasehold blocks in 1855 including four identified as Panuco, Tivoli, Borenia and Tooloombah. Each comprised the customary 25 square miles (6,475.2 ha.) and required an annual rental payment, usually £12.10.0 ($25). Archival records show that the original application for Tooloombah was Tender No. 2, July 1855. It was entered in the Crown Lands Register according to custom:

Tooloombah  John Peter Campbell  16,000 acres
Amended description  Conditional acceptance 30 June 1859
30 June 1859  Commenc ing opposite a bloodwood tree about one mile above Tooloombah crossing place marked X on two sides. Bounded from thence by a line northerly to the Back Creek, about five miles. From thence by the Back Creek upwards to the Range dividing the waters of Broadsound from those of the Mackenzie River. From thence by the Range to the headwaters of the Styx River downwards to the tree marked X on two sides, the point of commencement.
Transferred to  J.A. Newman  1860
"  "  A.P. Raymond & J. Cameron  1860
"  "  J. Douglas  1860
"  "  Gilchrist Watt & Co.  1867
"  "  Owen Charles Beardmore  1871.
Campbell also took up Waverley and associated blocks adjoining Tooloombah's northern boundary and Toorilla to the

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1. Crown Lands Register, Port Curtis District Runs, 1848-68, CLO/13, QSA.
2. Crown Lands, Runs Register Port Curtis, CLO/NII, QSA.
south-east.³ In February 1858 he sold Waverley to John Arthur Macartney for £750 ($1,500) and in 1860 the licence for Toorilla was transferred to Campbell and Francis George Newbold in partnership. Newbold became sole owner in 1866.⁴ Waverley was unstocked and unimproved in 1858; it was occupied by clans belonging to the Darambal 'tribe' of Aborigines who had to be 'dispersed' to make way for European cattle. Like other run speculators, Campbell sold his initiative in being the first to claim these so-called 'Waste-lands of the Crown' which became Tooloombah, Waverley and Toorilla stations.

The four Tooloombah blocks (100 square miles or 258.99 km²) when transferred from Newman and partners in 1860 were only nominally stocked with approximately 400 head of cattle.⁵ In January 1860 this run, then identified as Langdale, was managed by 'Mr Bode'. In November of the same year, a man named Armstrong took over the management and remained in charge until May 1868, recording relevant monthly details of his cattle husbandry. When Fred and Owen Beardmore became partners in the station in 1868, the year of government resumptions under the new land legislation,⁶ they adopted the name of the homestead block to identify the station as Tooloombah.⁷ Like several other northern squatters, they appear to have been

³. Ibid.
⁴. Ibid.; J.A. Macartney, Journal, 8 February 1858.
⁵. Tooloombah Cattle Book (TCB), MS, January 1860. The Tooloombah Cattle Books, June 1860-December 1904, comprising nine manuscript volumes, are identified only by month and year in chronological sequence. Textual citations therefore refer to month and year also, prefaced by the abbreviation, TCB. The nine chronological periods recorded are listed in the bibliography. The Tooloombah Cattle Books are held by the Rockhampton and District Historical Society Library.
⁷. TCB, June 1868.
financed by Gilchrist Watt & Co. of Sydney. Langdale was not then recorded as a separate part of the run, but an 1884 pastoral map shows a portion including Langdale Hill, Fort St John and Mt Mamelon as part of Tooloomba Station. A modern '4 Mile Map' retains the name Langdale Holding for a block on the southern boundary of Tooloomba.

In 1871, Fred Beardmore sold his share in Tooloomba to Owen Charles Joseph Beardmore who had been managing it since 1868. He remained as owner-manager until 1904 and continued to live there until 1907 when he retired to Brisbane. Beardmore became not only a respected cattleman in the Rockhampton district, and a long-serving councillor on the Broadsound Divisional Board, but also continued to record the vital statistics of his cattle husbandry during his four decades on Tooloomba. The evidence survives in a series of hand-written herd books. But neither Beardmore nor his predecessors, Bode and Armstrong, included a description of the station's physical environment (though this might have been in long lost diaries), so it is necessary to turn to other sources.

Charles and Colin Archer, the first known Europeans to trek overland to Broadsound from their newly discovered Fitzroy River in July-August 1853, thought the country much less attractive than their chosen land in the Fitzroy Valley:

...much to our surprise and disappointment we found there was no more country of the kind on the river as far up as circumstances would

8. Port Curtis Pastoral District, Map, 1884, CLO/A62, QSA.
9. Four Mile Map, Department of Lands, 1972. (Copy)
10. O.C.J. Beardmore applied for pre-emptive selection of 1,000 acres (404.7 ha.) on Tooloomba Run at the Rockhampton Land Court, 11 August 1873, and for three areas of 430, 1,280 and 520 acres (174, 518 and 210.4 ha.) on 8 February 1875. (Rockhampton Land Court Register, MS, 1868-75. RHMS Library.)
allow us to follow it... We reached [the valley northward of Alligator Lagoon] in three days and spent three more examining the valley of Herbert Creek. It consists of very low, but rich-soiled flats, with Box, Ironbark, Gum, Tea-tree, Oak and all sorts of things on them, pine on the mountains and Brigalow scrub close to Broad Sound....

The Herbert Creek country is 40-50 kilometres south-east of Tooloombah so the station's environment and vegetation would have been similar, though with some rougher country on the Broadsound Range. Run speculators such as Campbell who followed in the footsteps of the Archers were obviously impressed by the tall, waving grasslands of the marine plains; an added attraction was the area's proximity to a potential port on Broadsound, so they rushed to lodge applications for leases with the distant administration in Sydney. Significantly, though, not one appears to have developed a run on his own behalf. 12 J.A. Macartney, the first to stock a run in that district, lost no time in consolidating his position by building yards and huts on Waverley. His diary shows his first impressions as favourable.

Macartney had first ridden up to inspect the run in January 1858 accompanied by Campbell and two 'blackboys'. After crossing the Broadsound Range, which divides the waters of the Fitzroy from those flowing easterly at Tooloombah Creek ('Talumba' according to his spelling), the party camped at waterholes between Granite and Hursts Creek. They then 'mounted a small hill' between 'two nice lagoons on the edge of the plain where some blacks were encamped' to get a splendid

11. Colin Archer to David Archer, 27 August 1853, Archer Papers.
Colin Archer's map (Central Coastal Queensland) drawn on the back of a letter to his brother David, 27 August 1853. (Archer Papers)
view of the marine plains. Even though on returning to Canoona Station Macartney heard glowing reports of the Peak Downs from two pastoralist-explorers, Ker and Munro, he decided to accept Campbell's offer of the Broadsound blocks. Beardmore was to confirm later that in a good season the country was 'like a garden', and on another occasion the grass so high 'it is dangerous to ride'.

Tooooloombah is situated on coastal country south of the sheltered inlet of Broadsound and bounded on the west by Broadsound Range and on the north and south by Granite and Deep creeks which converge to form the sinisterly named Styx River. It has a terrain which varies from lowlands with some hills, and marine plains to 'steep, massive mountains formed on resistant volcanics, folded sediments and granite'. The eucalypts listed by Colin Archer in 1853 are more specifically identified by modern scientists as spotted gum, lemon scented gum (E. citriodora), narrow-leaved ironbark and forest red gum (E. tereticornis). Beardmore's records show that much of this timber was ringbarked or cleared by axemen in the early years of settlement and, although he seldom mentions particular species, it was probably the narrow-leaved ironbark and red gum as these grew on the best land for grazing and cultivation. Scrub was also cleared in the later years; 'scrub' usually meant brigalow and associated softwoods.

15. TCB, October 1871; 4 February 1887.
16. 'Slope Classes and Major Landform Zones' (Sheet Map), Fitsroy Region, Queensland, Rural Production (Canberra, Department of National Development, 1968).
17. Fitsroy Region, Queensland, Rural Production, p. 36.
18. Ibid.
As in other parts of nineteenth century Australia, when Tooloombah was stocked with cloven-hoofed animals vegetation and water catchments would have been immediately subject to change. Recent studies showing the delicate balance between plants and wildlife are included in Judith Wright's *Cry for the Dead* (1981)\(^\text{19}\) and Eric Rolls' *A Million Wild Acres* (1981).\(^\text{20}\) Because Judith Wright describes the changing environment of a Central Queensland pastoral property, Nulalbin, it is more relevant to this thesis, but both authors show how cessation of controlled burning by the Aborigines also accelerated changes in the ecology.\(^\text{21}\) All these factors are relevant to Tooloombah where, as in other places, the change was eventually increased by the introduction of overseas plants, grasses and weeds. Surprisingly, as early as 1878 the Rockhampton *Capricornian* reported that the whole of the northern coastal district looked more impoverished than it had ten years earlier; there was a great increase in weeds and 'injurious undergrowth' as a result of cattle cropping the grass too close to allow regular burning off. This allowed the scrub to flourish.\(^\text{22}\) Although Beardmore himself was probably not conscious of gradual change, there are occasional references in the cattle books to more dramatic changes usually associated with extremes of climate such as droughts and floods.

The majority of pioneer pastoralists in Central Queensland were born in Europe, only a few in the southern colonies of


\(^{22}\) *Capricornian*, 14 December 1878.
Australia, so the climate within the Tropic of Capricorn was completely alien to all. While they seemed to take wet and humid summers as a gift of God, the cattle books record the concern of Armstrong and Beardmore (who was born in Surrey, England, about 1827) with the dry winters and springs. For several decades they cried 'drought' if rain failed to fall in these months, something which is accepted as normal by modern cattlemen.

The Tooloombah cattle books reveal that in the three decades, 1860 to 1890, the district experienced these normal variations in climate both within each year and in the alternation of successive years of drought with years of plenty and occasional floods. Between 1890 and 1904 the climate (in the context of 120 years of records) can only be described as abnormal in the extremities of both floods and drought. Rainfall recording by Imperial measure was not generally adopted until the 1870s, but Beardmore's first actual measurement occurs only in December 1885 with 'Drought broke up fairly on Xmas Day when we had 1½ inches of rain'. Even then he does not immediately continue to record rainfall in points and inches, but merely indicates the days on which rain fell and whether light or heavy, just as he had always done.

Within the decade of the 1860s the pattern was set in the alternation of dry and flood years. January 1861 was exceptionally dry and in 1876 when Beardmore experienced the same, he looked back through Armstrong's and his own earlier records and found that in fifteen years these were the only dry Januaries.\(^{23}\) The first big flood in Central Queensland

23. TCB, January 1876.
after European settlement occurred in 1864; in Rockhampton this was the yard-stick for all subsequent floods until superseded in 1896 and then 1918. Armstrong's complete comments (on the weather) for the three summer months of 1864 are simply:

Jan. Plenty-rain Moderately cool season
     Cattle doing well
Feb. Constant rain. Mosquitoes & Sandflies very bad
March. Much the same as last month.

It took Beardmore about ten years to recognise that 'the climate is so variable and uncertain' in Central Queensland. 24 He experienced his first disastrous cyclone in January 1874, or 'great Tornado' as he called it; it blew down all his buildings, levelled all his fences and mixed all his cattle together as though on an open run. He estimated that one-fifth of the timber on the run was down and the scrubs all gone.

'The injury done to me is enormous', he recorded. 25 At Toorilla Station the homestead was blown down and everything 'in hopeless confusion'. It was the same story at Stanage Bay. 26 The rain again 'fell in torrents' the following month and washed away Beardmore's newly erected fences. The decade of the 1870s also brought cyclical drought in 1877, but he would later look back on what then seemed 'heavy losses in the drought' 27 as very minor.

The next decade was bad enough, with drought again in 1883. He took what measures he could to help tide the stock through these recurring dry years by planting fodder crops and, in September 1883, installing a windmill - the first in

24. Ibid., May 1877.
25. Ibid., January 1874.
27. TCB, December 1877.
the district. The pump was set going on 7 September, 'the Black month'. A month later he dramatically proclaimed: 'Glory be to God. The Drought broke up'. The respite was brief; 1885 was recognised, he said, as 'the most disastrous year known in Queensland'. But when it was followed by an unseasonably wet winter, he looked back through the station records and expressed the view: 'There has been no season like this since the white man came about 58'. Only two years later he was in obvious despair at what was generally recognised as the worst drought for 50 years; his comment was 'Everything is out of gear'. This drought did not break properly until the end of the following year.

The Tooloombah cattle books show that during these first three decades of European settlement in Central Queensland, the droughts became increasingly severe. Yet it seems that their experiences had been merely preparing settlers for the devastating extremes of the next decade and a half, 1890-1904, when the 'out of gear' climate brought terrible suffering to man and beast. It all began with heavy floods early in 1890 setting the pattern for an abnormally wet year. In March 1890 Beardmore recorded:

Nothing but rain....The greatest flood known both here and in NSW for the last 40 years.
Rockhampton bridge gone. Half the town under water. The losses are awful of stock, both sheep and cattle.

28. Ibid., October 1883.
29. Ibid., December 1885.
30. Ibid., November 1886.
31. Ibid., November 1888.
32. Ibid., November-December 1889.
33. The bridge was not completely destroyed as first feared, but lost a pylon and was closed to traffic for six months.
Three years earlier, in May 1887, Beardmore had bought Booroondara Station east of Capella (Peak Downs), with 4,000 head of cattle, 220 horses, and 394 square miles of country for £10,000 ($20,000). When hit by the 1888 drought he had a total of almost 8,000 cattle on the two stations. When that drought broke at the end of 1889 he still had 8,840 head.\footnote{TCB, May 1887; December 1889.}

Then came the 1890 floods, but despite his claim of heavy losses his total herd at the end of that year had increased to 9,065 after record sales of 1,573 head.\footnote{Ibid., December 1890.}

The floods of 1890 were nothing to those of 1896 when in January alone 40 inches (1000 mm) of rain fell at St Lawrence and more than 36 inches (900 mm) at Tooloombah. It was a record flood in Central Queensland. At Booroondara, 593 cattle and fourteen horses were swept away in the flood. The men tailing the cattle saved their own lives by climbing trees, 'but had a swim of 4 miles & no fires & nothing to eat but dead kangaroos discovered in trees and eaten raw'.\footnote{Ibid., January 1896.} Beardmore blamed Dwyer, the man in charge, for not fetching the cattle away from Junction Creek as he had been warned the Mackenzie River was up. On neighbouring Columbra, P.F. MacDonald lost 1,600 head of cattle in the same flood.\footnote{P.F. MacDonald to A.L. MacDonald, 20 November 1903.} In February, Beardmore saw 40 bulls swept from his farm in a second flood, but it was too wet to look for them.\footnote{TCB, February 1896.} Eventually they were located on Wilangie and other adjoining stations and returned to Tooloombah after the flood-flattened fences had been repaired.

34. TCB, May 1887; December 1889.
35. Ibid., December 1890.
36. Ibid., January 1896.
37. P.F. MacDonald to A.L. MacDonald, 20 November 1903.
38. TCB, February 1896.
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<th>Date</th>
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<td>1888</td>
<td>172.2</td>
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The total for year 8 months on

Tooombah, 3 months. 40 head of

Broombura, 30 head of. 30 head of Black Gool Pool.

A Bigtown 6 months

These 12 head of Broombura plus 9 of the 6 30 head. Seeing these get big after getting them.

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The total for 9 months in 2000. 30 head. 30 head of feed.

No. 3 6 30. 500 x 1340. 30 head of equally cattle

Then 6 four Broombura troughs, 6 troughs

With 30 head of no direction. 800 head of cattle, 12. 12

20 head of feed. 15 head of feed.

Now 1st...

2nd head -

Old head, but sold to blood party.

NB 2nd December rain fell at Broombura.

Revenue being a little lower as the result.

Used of month were very fell

9. 10. 11 Not appreciably on 9 12. 9 12. 3 from falls

Purchased or open fact. Rents due data for the 31st from growing.

Cattle sold heavily from

To the S 6000 Broombura, 3000 head

Rain came on 1st October, 29 Points. W

No 0 head of the tanner's form. 3 5

Toooloombah Cattle Book, September-October 1888.
On Booroondara all the swamps were full and there was 'splendid grass'. Perhaps this was an admission that while floods caused capital losses, their long term benefits more than compensated. Some pastoralists believe the same applies to droughts, though economically they are more disastrous.

A survey of the cattle books in relation to breeding and management shows that when Bode commenced keeping them in January 1860, there were 415 male and female cattle on the run. His subsequent entries are sketchy, but when Armstrong took over the management in November of that year he recorded 1,700 cattle carrying twelve different brands. His first entry tantalises by making no mention of breeds, but like most pioneer cattle they were probably Shorthorns.

Received this day the above number over six months old, quiet, and in a great measure broken to the run, the majority about 1350 having been on the station since June, very thin but beginning to improve, the remainder having been a year on the station and in pretty good condition. Two of the deaths were calving [sic], the other a steer, two killed for Beef, the eight increases brought from Hennings [Marlborough] Station had never been on Station. 39

Branding was carried out under great difficulty as the stockyards were still unfinished by the end of the year. Perhaps because there was plenty of virgin pasture, the stock strayed very little from the unfenced run; only the occasional beast wandered on to neighbouring stations, Marlborough and Stoodleigh. 40 In April 1861, Armstrong sold six 'fine & fat' cattle to Biddulph Henning for £5.10.0 ($11) per head. Having not yet adjusted his cattle husbandry to the upside-down

39. Ibid., November 1860.
40. Ibid., December 1860; January-February 1861.
tropical seasons, a great number of calves were dropping in July and August when the grass was dry and lacking nutrition. In September 1861, 104 male and 77 female calves were branded. Without fencing it must have been difficult to control breeding, for there was no large river to form a boundary as on Archers' heifer station across the Fitzroy. Management seemed to consist chiefly in building up the numbers on the run and branding the increase, but 120 store cattle were sold to Hood in January 1862.

Whatever the breed of cattle, the run produced some enormous beasts. Among three bullocks sold to Brookes in May 1862 was one weighing 1,258 pounds; 1,108 pound of beef plus 150 pounds of fat (total weight 569.7 kg). Working bullocks were sold as well as those for beef, but in the two years to January 1863 total sales were only 302. By this time there were 3,996 cattle on the run.

Armstrong's 'log' is extremely simple compared with Beardmore's later detailed entries which, as well as recording the total number each month, notes the number sold, killed and branded, the number of deaths (and reasons for them) and the decrease or increase in the herd. But Armstrong did cull the herd in April 1863, 'getting rid of all the objectionables that run up Glen Stewart' by selling 500 head to 'Mr Kerr for Antill....' As well as objectionable cattle, Armstrong had to contend with 'objectionable' Aborigines. 'Blacks have been hunting cattle on Deep Creek', he noted in May 1863. Two years later there appears a more sinister entry: 'Blacks been amongst the cattle - head for head'.

For each beast killed,

41. Ibid., June 1865. See Appendix.
one Aborigine had been shot. It was not unusual for squatters to take the law into their own hands on such occasions, but if Armstrong had called in the Native Police the slaughter of human beings would probably have been greater. As late as 1876 Beardmore reported 'the Blacks got through the cattle and dispersed them', but did not attempt to kill any. Both men were occasioned some trouble by Aborigines burning off country from time to time - presumably for their own food gathering purposes.

It was an entirely different problem in April 1864: the first symptoms of pleuro-pneumonia appeared in the herd. The cattle were shot as a precautionary measure. The disease was said to be stopped at Waverley, and the south side of Tooloombah was quite free of it; even so, Armstrong commenced to inoculate the cattle. The total losses from deaths, all causes, for the four years to the end of 1864 was 552, and the number of cattle on the run 3,618. It appears that one of the owners checked both the books and the cattle at this time, as the records are initialled. Brandings steadily increased during the remaining years of Armstrong's management and the total number of cattle on the station at the beginning of 1868 was 6,238. Breeds are not specified.

When the Beardmores bought Tooloombah in June 1868, a general muster took place with the numbers entered for each

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43. Pleuro-pneumonia was introduced to Australia by a diseased cow landed in Melbourne in 1858. The disease spread northward with travelling herds to stock new runs. Government restrictions on travelling stock were removed in 1865, having proved ineffective. (*RB*, 20 June 1865.)

44. TCB, November 1864.
cattle camp: Deep Creek Camp, Tooloombah Camp, Ridge Camp, Main Camp and Tailing Camp. [See Appendix.] Herd control depended entirely on the stockmen in charge of these separate cattle camps whose numbers ranged from 361 to 1,312. The number of cattle mustered was 4,540 plus 34 bulls and 486 calves under six months. There is a wide discrepancy between Armstrong's book number for May and the actual muster in June; the book shows 1,750 more than the muster. As runs were then bought and sold at so much per head of cattle, the final number was of great importance both to buyer and seller. The big annual muster of cattle kept on the open range system is described on another Central Queensland station, Wharton Creek:

The cattle would be herded on a large plain, cow and calf cut out and put into the right mob to be taken home for branding and ear-marking.

All motherless calves, stragglers and scrubbers were divided up according to herd size. The mustering method was inefficient and needed the co-operation of several properties, but was all that could be done before the days of boundary fences....

These were the days of superb horsemanship, and good stock horses were a cattle station's most valuable property.... 45

Beardmore's records show that he also used this method in July 1884: 'Began weaning & branding. Mackay [Tilpal] the Boss, Stoodleigh & Wilangie men came to help'.

On taking over Tooloombah, Beardmore wasted no time in instigating herd improvement; he began culling in the new year by killing five old bulls and sending 51 fat cows to Jager, a

Rockhampton butcher. He also introduced the practice of speying cows and by the winter of 1870 had speyed 852. Although he continued throughout his lifetime to spey and fatten cows culled from the breeders, he had a salutary lesson in 1874:

The speyed cows are now all gone but some $\frac{1}{2}$ dozen, the result of bad speying...but of 852 we speyed we have sold only 371 in some 5 years. Better leave speying alone or get a good speyer [better than] us amateurs. 47

In April and May 1870 he sold the first large numbers of cattle to leave Tooloombah - two mobs of 94 and 1,278 respectively. The smaller mob comprised fats, the 1,278 store bullocks were sold to Archer Bros. of Gracemere. These were mustered and driven by Walter Beardmore as far as Yaamba by 28 May 1870.48 His letter reveals one of the problems of droving cattle in the wet season:

I am stuck here as the river is too high to risk crossing so many cattle. I am camped about 5 miles above Yaamba & have any amount of grass & water for the cattle so that it will not do them any harm. If I could have stopped at Canoona one of your men might have returned but having to camp them I will require them to stop.

There is no good Tailing Ground about Canoona as the Flats are all water and the ridges are no good or should have camped there. 49

As well as bringing in much needed cash, the sale was also a means of ridding the station of unsuitable cattle before commencing his own breeding improvements.

46. TCB, April 1869.
47. Ibid., December 1874.
48. O.C. and W. Beardmore to Archer and Co., Telegram, 7 May 1870.
49. W. Beardmore to Archer and Co., 28 May 1870, Archer Papers.
Arranging a cattle sale, 1870. (Archer Papers)

**Electric Telegraph, Queensland.**

From: Markborough

Dated: May 7 1870


BOCKHAMPTON.

Gracemere.

Bullocks will be all on view by Wednesday.

G. W. Bradman.
When Owen Beardmore became sole owner of Tooloombah in May 1871, the total number of cattle on the station was supposed to be 5,424, but shortly after this he suspected the 4,800 sold to him were not all on the run. He mustered and found 1,500 short. Owen wondered whether Fred had sold them, or, alternatively, 'if they were lost in the three years we both had the place, or whether he deceived me from the first purchase as to the number'. In three successive musters the discrepancy between book and herd numbers remained, so he took what must have been a bitter decision to write them off and begin the new year of 1874 with the 3,000 cattle 'absolutely seen in the yard and counted in the paddocks'. His breeding cows had been reduced to 960; the oldest put to the new Cressbrook bulls were seven years and the youngest just over two years. Though he doubted his nephew's honesty, his own integrity is demonstrated by an advertisement in a Rockhampton paper in 1876:

Wanted, owner for Fat Bullock - Gone to market with my Fats, swallow tailed ear-mark, like RID on rump. If proceeds not claimed within 6 mths will be handed to Hospital.

O.C.J. Beardmore, Tooloombah, 24 Nov 1876. 52

One of Owen Beardmore's first moves on becoming sole owner was the introduction of a register of bulls. His original breeds were Durham and Hereford and included some pure bred Durhams from McConnell of Cressbrook. During his third winter on Tooloombah he realised that drastic changes were needed

50. TCB, December 1873.
51. Ibid.
52. Capricornian, 9 December 1876.
in the breeding programme; in August he took all the bulls out of the herd to spell them and also 'because in a dry season the cows don't breed well and also because I want to bring my calving and weaning on more regularly'. His new policy was to have no calves dropping in the driest months, commencing in June. But when he checked his bulls he could muster only 32 of the original 37; the best bred bull, Red Cross, had been drowned, another killed by accident, and the remaining three were believed to be dead. The summer rains came early that season and he put the bulls in the herd on Christmas day; this was his first experiment in controlled breeding. In February 1872 he bought nine new Durham bulls bred by Black of Glen Prairie; their sires had been Homebush, Lord Clyde and Drake. True to his earlier resolution, all bulls were out of the herd by July and put in the bush paddock 'to take their winter and spring spell'.

From this time onwards he bought only well bred bulls and his holidays seem always to have been attached to bull buying expeditions. In January 1872, for instance: 'I went South on 21st to look for bulls & take a holiday'. After taking his bulls out for their annual holiday that winter, he sold all but two pure breeds and one half breed to Spencer and replaced them with his imports from Cressbrook - one of Queensland's leading studs. These were 23 pure bred Durhams, two years old, and ranging in colour from light roan to rich or dark roan and even strawberry; some were distinguished

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53. TCB, August 1871.  
54. Ibid., December 1871.  
55. Ibid., July 1872.
by 'cock horns'. As he received in the same mob eight pure bred cows, this was probably the basis of his stud herd; because his Stud Book (which he refers to in one of the cattle books) is not available this cannot be confirmed. There is a record in January 1874 of 64 'select cows', presumably destined for the stud. At the end of that year he recapitulated on the success of his breeding programme:

I could not brand up till Xmas Day & then had to leave considerably over 100 calves unbranded. The advantage of keeping the breeders close with bulls in the breeding season is now proven as there are now fully 500 calves dropped made in the first 90 days of the year and out of that 90 days the bulls were out of the herd owing to late storms 50 days, so that in 12 days in January & 30 days in March these 500 calves were got by 22 bulls. 57

Beardmore was not a professional stud breeder in the manner of Archer Bros., but rather a commercial cattleman who kept a small stud herd chiefly for the purpose of up-grading his beef cattle herd. Occasionally he sold stud cattle to his neighbours, but this was to prevent in-breeding rather than a means of making money.

Cattlemen had always identified their stock by some system of branding, but the Brands Act of 1872 in which registered brands were allocated to each property provided legal identity and also prevented multiplicity of the same brand. Beardmore's registered brand, IBM, had already been in use 'branding everything up' when the Act became law on 1 July 1872. 58 In January 1885 his registered brand was

56. Ibid., December 1873.
57. Ibid., December 1874.
58. Ibid., June 1872.
changed to IUc for unknown reasons. He later copied changes occurring as a result of Resolutions 44 and 45 of the Australian Stock Conference in 1886 which required the dewlap to be kept 'in all Colonies' for the speyed cow mark and the tip of the right off ear for the sign of inoculation. This early example of federalism probably arose from the need for such identification in the large numbers of Queensland cattle sold in New South Wales and, to a lesser extent, Victoria. Cattle management, especially its marketing aspect, was entering upon the more complicated procedures which are familiar to all twentieth century cattlemen.

Beardmore was progressive in almost every facet of cattle husbandry, including pasture improvement and fodder cropping. The first introduced grasses and legumes on Tooloombah were planted in December 1872; they comprised 60 pounds (27.22 kg) of lucerne, panic and cockspur sown in his fenced paddocks. Clearing of timber was also proceeding and by mid 1873 his cleared paddocks showed 'wonderful grass', which he later noted was less affected by drought than the unimproved pastures. Ringbarking of another 600 acres was begun before the end of that year; six months later he rejoiced that 'trees rung last Xmas on Rocky Nob dying fast'. Fencing had been an early priority, and in 1874 his men began plowing a part of the marine plain, an area later referred to as 'the farm'. Any kind of agricultural activity was rare among early pastoralists even, as in Beardmore's case, when crops of oats

59. See page 179 for copies of original receipts and identification of Beardmore's brand.
60. TCB, July-October 1873.
61. Ibid., June 1873.
62. Ibid., May 1874.
"BRANDS ACT OF 1872."

CERTIFICATE OF REGISTRATION.

BRISBANE, 10 FEBRUARY, 1875.

This is to certify that the Brand mentioned in the Margin hereof was this day duly registered as the Brand of

Charles J. Boardmore, T Tooloombah

in terms of the above-named Act.

[Signature]
Registrar of Brands.

The Person to whom this Certificate is issued is requested to take notice that the Brand must be made exactly as described above in the margin.

For Position and Order of Brands, see the back hereof.

Tooooloombah Cattle Brand, 1872 and 1885 (TCB).
and lucerne were used as fodder. Robert Archer's design for a silo built on Gracemere in 1882 was the first in Queensland. 63

Beardmore's practice of fodder cropping proved most beneficial to his breeding programme. In the very dry year of 1877 when his lucerne paddock saved all his bulls and made them fat, he noted with pride: 'Tooloombah bulls are now beginning to get a name'. 64 A few weeks later there occurred one of those set-backs which bedevil the cattleman; his best Cressbrook bull, Melbourne Booth, died, supposedly from a grass seed in the eye which blinded him and caused death by drowning. The bull had cost £250 ($500) at six months and had grown 'twice the size' of the other bulls. Unkindest blow dealt by fate was that Beardmore had 'only got one season out of him'. 65

During the years 1878 to 1888, Beardmore was to change his mind several times about the best breed of bulls for his station. He also showed an ambivalent attitude to Shorthorns; in December 1878 he expressed the opinion that Shorthorns were 'out' for the coast country 'as I scarcely ever kill a sound one and my losses from bad throats [lumps] are far too many'. Yet in July 1883 he paid £200 ($400) to P.P. MacDonald for the Shorthorn bull Marquis bred by Neil Black of Victoria. MacDonald had paid £400 ($800) for the bull but 'begrudged feeding him'. Marquis possessed 'a grand constitution which I sadly want', recorded Beardmore. 66 Then in March 1885 'Marquis my Grand Short Horn' could not be found. 'He is dead

63. Sketch plan of silo by Robert Archer, Archer Papers. See Appendix.
64. TCB, December 1877.
65. Ibid., June 1878.
66. Ibid., July-August 1883.
or stolen & the 2nd Stud Bull missing from the Farm', he complained. In May a new stud Shorthorn arrived from Melbourne. Apparently he did not come up to the standard of Marquis, for at the end of 1888 Beardmore again 'gave up' Shorthorns.

Devon bulls had been his first choice in 1878 and having purchased thirteen pure bred bulls, he divided his stud paddock in two and kept it for their use. Already he was pleased by the 'All Red or Devon type' showing up in the calves dropped from the first two Devon bulls purchased the previous year. He was so pleased that three months later there arrived on Tooloombah ten more pure Devon bulls and sixteen heifers. After visiting the Sydney Show in 1881, he added the champion Devon bull to his stud, an animal which cost him £105 ($210) in Sydney, plus shipping charges to Rockhampton and droving charges to Tooloombah. Nine months later this animal died from snake bite, causing his owner to bemoan the fact that he had recently declined an offer of twice the purchase price for him. This bull, Welshman, had gone into the stud paddock on 21 May 1881 and his calves were just beginning to drop. No wonder he wrote 'heavy loss' beside the record of his death.

Despite his expressed preference for Devons, Beardmore had also purchased the champion Hereford bull at the same Sydney Show of 1881. By 1888 Devons had fallen from favour as far as his stud was concerned, as well as Shorthorns:

67. Ibid., April 1885.
68. Ibid., December 1888.
69. Ibid., October 1878.
70. Ibid., December 1878.
71. Ibid., March 1879.
72. Ibid., March 1882.
'I now give up Shorthorns and Devons as stud cattle & shall pay attention only to Herefords'. He did not register his stud with the Australasian Hereford Society, established in 1885. Nor did he change his mind again about Herefords. He entered a controversy raging in Central Queensland in 1896 as to which was the better breed, Shorthorn or Hereford, firmly on the side of the Hereford supporters. In fact, he offered £5 ($10) in a wager with Peberdy, the leading Shorthorn advocate, if he would also put up £5. Beardmore suggested they employ a competent cattle judge to inspect a mixed herd of 1,000 cattle on Jellinbah (Peberdy's station) and Booroondara and then give his sealed decision to the editor of the Morning Bulletin as to which was the better class of cattle for that country. The loser was to pay £5 to the Rockhampton Hospital and the expenses of the referee. Peberdy's reply was hardly flattering to Beardmore: 

....As for Mr Beardmore's offer to wager - Pshaw! I know him of old. It would need an adept to pin him so that he could not shift his ground, and a Queen's Counsel to draft an agreement that would hold him in position afterwards. 

At that time Beardmore was prominent both in local government and in matters relating to the cattle industry, being an executive member of the Central Queensland Stockowners Association. The breed controversy, as shown in Chapter I, also involved Robert Archer.

Beardmore's swing from Devons to Herefords followed his

73. Ibid., December 1888.
74. O.C.J. Beardmore, letter to editor, MB, 6 October 1896.
75. Capricornian, 17 October 1896.
76. MB, 19 January 1898.
detailed profit and loss account of 1885, first for the Hereford pure breeds purchased in March 1879 from Wyndham of Leconsfield, Branxton, New South Wales, then a separate account for Devons bought at the same time from the same breeder. 77 It also appears that when he gave up keeping the pedigrees of Devons and Herefords separately in special stud books, he became less interested in stud breeding and more concerned with increased brandings and the production of fat cattle. 78 Nevertheless, he continued to purchase pure breed bulls from time to time, including a South Australian stud Hereford, Conjurer, bred by Angas and bought in 1898. 79 Exchanges of bulls also took place to ensure the introduction of new blood.

On 27 August 1897, Beardmore wrote to Robert Archer:

Please find Pedigree of "Sir Henry Norman" Hereford Stud Bull enclosed - Return when perused. I will deliver him at Booroondara for (7) seven of your best Herd Bulls (young) delivered at same place. He is worth looking at, fat as desirable & only been worked some 4 months each year.... 80

Cattlemen were forced into such stratagems by the economic slump of the 1890s. There were, too, some bargains such as the 'very fine lot' of sixteen Hereford herd bulls Beardmore bought from Wyndham for £8 ($16) a head in 1891. 81 By 1902 the breed of his stock would not concern him, only their survival.

When the great drought broke, one old and one new scourge appeared. Among the surviving cattle ('my breeders have nearly

77. TCB, December 1885.
78. Ibid., December 1886.
79. Ibid., May 1898.
80. O.C.J. Beardmore to Robert Archer, 27 August 1897, Archer Papers.
81. TCB, October 1891.
all died’) both pleuro-pneumonia and redwater fever broke out. As already indicated, the first symptoms of pleuro-pneumonia were observed on Tooloombah in 1864. The cattle books show that inoculation against the disease was carried out at that time and whenever necessary afterwards. This method (used for a century) required ‘natural virus’ from an infected beast to be injected just above the tip of the tail; it proved effective in reducing losses, though not in preventing the spread of the disease. Contagious bovine pleuro-pneumonia occurs in cattle throughout the world. As indicated above, it was introduced to Australia in 1858 by an infected beast imported to Melbourne from England and spread rapidly northwards. Its appearance on Tooloombah in 1864 demonstrates just how quickly the disease was carried across the continent by mobs of cattle moving northward to stock the newly opened leasehold runs. Infection occurs by inhalation, causing it to spread from animal to animal; it is caused by a very small organism, Mycoplasma mycoides, found in the tissue of the lung and chest cavity, lymph glands, bloodstream and organs. Cattle only slightly affected often recovered and acted as carriers. Armstrong and Beardmore had obviously been familiar with the disease in the southern colonies. Even so, when 30 bullocks died ‘all in one place’ in January 1899 and Beardmore found the first one he opened full of pleuro-pneumonia ‘of the worst sort’, he incorrectly assumed it had been caused by poison bush brought up by heavy rain. It is

82. H.G. Belschner, Cattle Diseases (Sydney, Angus & Robertson, revised edition 1974), pp. 6-11.
83. Ibid.
84. TCB, January 1899.
only in recent years that contagious pleuro-pneumonia has been eradicated in Australia.\textsuperscript{85}

The reappearance of redwater fever after the great drought indicates the survival of the cattle tick also. Because Tooloombah and Booroondara were relatively isolated, the tick plague which reached Rockhampton in 1896 took a little longer to infest these cattle. The cattle tick, \textit{Boophilus Mirrornius}, appears to have reached Australia in 1872 with cattle imported to Darwin from Java. By 1880-81, animals travelling from Queensland to stock Northern Territory stations suffered heavy losses from tick fever. Bullock teams travelling along the stock routes from the Territory were mainly responsible for the introduction of ticks to Queensland. These were first reported in 1891 and by 1894 the boiling down works at Burketown had to be closed because of heavy losses. Unfortunately, ticky cattle were then sent to Townsville and Rockhampton meatworks.\textsuperscript{86}

In July 1897, an ominous note appeared in the Tooloombah cattle books: 'Ticks getting close at Waverley'. Early in August 1897 Beardmore wrote to Robert Archer on the subject of tick infestation. Like Archer himself he was well aware of the implications:

\begin{quote}
I can see nothing but total ruin for all & starvation for our wives & children.

If we were ever justified in rebellion it is now. I don't believe Tick by itself is worth bothering about but with redwater it is different. The Tick has come with Poverty &
\end{quote}

\textsuperscript{85} Belschner, \textit{Cattle Diseases}, pp. 6-11.
Droughts & I think will disappear with good seasons - conditional on understocking. 87

As yet he could not speak from experience, but obviously feared ticks less than redwater fever which he erroneously separated from tick infestation. He supported his argument by his own observations on a North Queensland herd 'that had Red Water for years before they ever saw a Tick'. He added that although they now had 'lots of Ticks' these had no effect on the cattle. In this opinion Beardmore was completely wrong.

Redwater fever or Texas fever (known scientifically as *babesiosis*) is not contagious, but is transmitted from one beast to another through the agency of the cattle tick. The tick becomes infected by feeding on an infected animal and, in turn, infects others. It causes fever, anaemia and a breakdown of the red blood cells which sometimes causes the dark coloured urine responsible for the common name, redwater fever. 89

In September 1897, Beardmore offered Archer (whose herd was already badly infested) some tick-free cattle 'to practice on' — that is, to practice inoculation by use of infected blood. His offer included fifteen stud bulls and fifteen heifers all about twelve months old. 90 Perhaps this offer was not as guileless as it appears, for he added, 'immune bulls would be valuable' and he supposed they would allow them back to Tooloombah in due course. In an attempt to prevent the

87. O.C.J. Beardmore to Robert Archer, 27 August 1897.
88. O.C.J. Beardmore to Robert Archer, 4 August 1897.
89. Belschner, *Cattle Diseases*, pp. 82-86.
90. O.C.J. Beardmore to Robert Archer, 4 September 1897.
Letter, O.C.J. Beardmore to Robert Archer, 4 September 1897. (Archer Papers)
spread of ticks (and redwater fever), there were severe restrictions on travelling stock within the Fitzroy Region.

The dreaded tick scourge was not reported by Beardmore until July 1898, almost a year after its appearance on Waverley. In large capitals he added to his monthly comment: 'TICKS ON CATTLE. INSPECTOR OUT HERE TO VISIT'. On 16 August he began to inoculate for redwater fever from infected cattle lent by Barnett. He admitted having great trouble obtaining blood from the jugular vein because they were new to the method: 'At last we got about a pint...the syringe worked beautifully'. Of the 1,510 cattle inoculated in August, including stud cows, very few died though most became sick.

What Beardmore referred to as the first 'real sign' of 'Red Water' appeared in May 1899 when infected cattle came from a neighbouring station, Stoodleigh. It was a memorable month: 'Not only the bank inspector, but also Doctor Sydney Hewit [?] visited', and, said Beardmore, 'taught us a great deal about Redwater'. Consequently the programme of inoculation continued successfully during the following months. By the latter part of 1899 cattle were being inoculated at Booroondara also, both for pleuro-pneumonia and redwater;\(^91\) regular inoculation against redwater continued until the drought made it impossible.\(^92\) On Tooloombah, of the 60 stud heifers which arrived there in September 1901, ten died from redwater.\(^93\) When the drought ended neither the government nor the ticks allowed too long for recovery; by September 1904 a dip was

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91. TCB, September 1899.
92. Ibid., April-October 1900.
93. Ibid., October 1901.
under construction on Tooloombah 'as the law now requires me to dip'. By the end of the year the ticks were again bad among his cattle, but he dipped them without any adverse consequences. Beardmore, like his peers, had already accepted dipping as part of routine management, falsely believing it to be only a matter of time until the tick was defeated. Chief Stock-Inspector P.R. Gordon had also publicly stated this in 1896.

Another troublesome and recurring disease was 'lumpy throats' (probably a symptom of tuberculosis) which Beardmore found particularly bad in Shorthorns. This did not prevent their sale. In March 1899 he sold 228 head, 'all Scallawags, Lumpies & Cancerous ones' to Greedy of St Lawrence. Although Greedy had a butchering business in the town, it seems likely that these cattle were destined for the local boiling down works. In his early years on Tooloombah, Beardmore also lost cattle through the eating of 'poison bush', 31 head in 1871 and 32 in the following year. In May 1872 he identified it as a small green bush with black berries - probably Deadly Nightshade (*Atropa belladonna*). This plant causes rapid death through its alkaloid content. Only occasionally after this was poison bush mentioned as a cause of death, but when the run was fenced it was possible to keep cattle away from affected areas.

A frequently recurring problem after 1877 was the finding of viable markets for beef cattle. Beardmore's recorded sales,
1869-1904, appear in the Appendix, but a survey of those years shows that the greatest part of his income came from the sale of fat bullocks. In the first half of the 1870s it is obvious that he was upgrading his herd with the object of having prime bullocks ready in 1875. (Bullocks were then considered prime at five or six years.) Sales of old cows as fats (1869-70), store bullocks to Archers (1870), and store steers to neighbours (1871-72) all point to a 'cleaning up' of the herd. This is confirmed by a comment of Beardmore's in October 1872 that 'the absence of bullocks' was responsible for failure in the projected sale of the run. Tooloombah had been offered for 65 shillings ($6.50) per head of stock – at that time just under 5,000.

Prime bullocks, bred and fattened on Tooloombah, were sold in 1875 and 1876 for optimum prices (for the entire 35 years excepting the artificially high prices of 1903) of £6.5.0 ($12.50) and £6 ($12) respectively. In 1878, when good bullocks were fetching £6 ($12) in the Rockhampton market, Pattison paid Beardmore the premium price of £6.1.6 ($12.18). In these years William Pattison, the Rockhampton butcher who also had a boiling down works, was a regular buyer of Tooloombah bullocks – usually in lots of 100 to 200. He must have found good quality in these north coast cattle, for he also bought large mobs from Banksia and Toorilla stations.98

In 1882 Macartney of Waverley complained of the 'overbearing manner in which Pattison had exercised the power over graziers which his position as the only large buyer of fat stock for

98. MB, 26 August 1871; 29 September 1881.
several years' had allowed. 99 Later in that decade, Pattison was to make and lose a fortune in Mount Morgan Mine. In 1888 he became Minister without Portfolio in the McIlwraith Government and Treasurer in the Morehead Government in 1889. 100

After the good years, 1875-78, prices declined steadily; the cause was acknowledged again and again from 1877 as 'supply in excess of demand'. In 1877 the European market was said to be 'flooded with American meat'. Yet Australia, with one-twentieth the human population of the USA, had one-quarter as many cattle and twice as many sheep. 101 Over-supply was to intensify in the following years. Central Queensland in the decade to 1885 increased its cattle numbers from 341,726 to 1,348,714. 102 By 1894, the peak year in nineteenth century cattle numbers, there were almost two million cattle in Central Queensland alone. 103

A leading article in Rockhampton's weekly newspaper, the Capricornian, on 11 January 1879 stated that 'the necessity for finding an outlet for our surplus stock is daily becoming more pressing'. A month later, prime bullocks were selling in the town for £4.10.0 ($9) while there was 'nothing doing' for store cattle. 104 Beardmore received a similar return for 98 bullocks boiled at Lakes Creek three months later. 105

100. C.A. Bernays, Queensland Politics During Sixty Years (Brisbane, Government Printer, 1919), pp. 114, 119, 455.
101. Capricornian, 1 December 1877.
102. M.K. Wegner, Fitzroy Region Agricultural Resources Utilisation, Table I. Central Queensland's human population in 1885 was only 38,821 while the whole of Queensland supported only 322,853 people 'excluding Aborigines'. (Census Returns, Capricornian, 25 August 1888.)
103. Wegner, Fitzroy Region Agricultural Resources Utilization, Table I.
104. Capricornian, 8 February 1879.
105. TCB, May 1879.
By the end of the year the situation was even worse: stores returned only £2 ($4) and fats £3.10.0 ($7). Yet his recapitulation for 1879 was: 'The year has been a good one, increase some 200 over last year'.106 'Good' surely referred to the season not the prices, while his increase under current circumstances was scarcely an asset.

Perhaps Beardmore was influenced by the falling market, for in April 1879 when 27 district runs were put up for sale under the Settled Leases Pastoral Act of 1876, Tooloombah was one of eighteen passed in. He commented:

On 17th all the coast runs put up including mine. I did not bid as the rent is raised from £60.10 [$121] to £150 [$300] per annum, I don't think it worth it with all the land I have purchased. Only a few of us bid for runs when not opposed. 107

The 'few' who bid included his neighbours to the south: Rogers of Toorilla bought 90 square miles at 50 shillings ($5) per square mile; W. Harvey Holt of Glen Prairie, 80 square miles at 45 shillings ($4.50) and Duncan Mackay of Tilpal, 250 square miles at 41 shillings ($4.10) and ten and a half square miles on Tilpal East at 61 shillings ($6.10).108 In the following September Tooloombah was again offered; Beardmore 'did not bid' as the upset price was £150 ($300).109 The Settled Leases Pastoral Act of 1876 gave the government power, when a lease had expired or was forfeited, to offer it at auction for a maximum of five years with some reduction in rent. This Act was amended in 1882 to provide for a renewal of leases for

106. Ibid., December 1879.
107. Ibid., April 1879.
108. Capricornian, 19 April 1879.
109. TCB, September 1879.
And so Beardmore appeared in the Rockhampton Land Court in May 1892; on this occasion he claimed that rents should be lowered owing to 'the heavy fall in markets'.

Beardmore might have been suffering some financial problems when he refused to bid on his leases, other than those caused by falling cattle prices. In 1876 he had entered into partnership with John Graham (Apis Creek Station) on Clive Station on the Isaac River near its junction with the Mackenzie. In 1884 he mortgaged his interest in Clive to John and Duncan Graham, having 'cattle lying dead in all directions from poverty [drought] and Poison [bush]' and very small branding numbers. Severe drought in 1883-84 meant very few bullocks were sold. Then in March 1884 late floods on the Isaac caused 'awful losses' at Clive and Yatton, with cattle and horses swept away 'by the 100s'. While Beardmore's name does not appear in the official records for Yatton, his own books show that he ran cattle on it in partnership with Duncan Graham. By the end of the following year his depression is evident: 'The year 1885 has been most disastrous. The losses dreadful. For 3 months I have not had decent beef to eat & sold nothing since Febry last & then the light weights of the cattle made the sales very poor'.

While the breaking of the drought brought relief in one sense, the economy remained stagnant. The sight of fat cattle

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111. *Capricornian*, 14 May 1892.
113. TCB, October 1884.
114. Ibid., March 1884.
115. Crown Lands Registers, QSA.
116. TCB, June 1884.
117. Ibid., November 1885.
grazing on lush pastures in April 1886, combined with a lack of markets, caused Beardmore to add to his usual monthly 'Remarks' a heavily scored and underlined 'P.S. IMPOSSIBLE TO SELL ANYTHING. NO MONEY IN THE COUNTRY'. The steadily declining returns are evident in a comparison of the three years, 1884-86, when average prices per head dropped from £5.10.0 ($11) to a mere £4 ($8). In desperation he sent off a mob of 1,150 bullocks on the hoof to Musswellbrook in New South Wales. But that market was also over-supplied and he received only £4 ($8) for these bullocks in January 1887. Like Albert Wright of Nulalbin and other district cattlemen, he continued to send mobs south with depressing results; the price dropped to £2.18.0 ($5.80) in 1892. Between 1887 and 1892, the Valley of Lagoons Station in North Queensland each year sent a mob of about 1,000 store cattle to the same market, receiving as little as 22 shillings and sixpence ($2.25).

The even more disastrous decade of the 1890s began badly for Beardmore with a southern auction returning only £2.16.4 ($5.64) a head. 'The sale very bad. Market completely gutted', he noted. It took massive sales that year of 1,583 cattle to produce a total return of £4,176.13.10 ($8,352.39). Like other Queensland cattlemen, Beardmore's own herd was increasing rapidly, especially after the purchase

118. *Capricornian*, 14 May 1892.
120. TCB, October 1890.
121. Ibid., December 1890. Beardmore does not record his droving expenses, but in 1911 contract drovers received one shilling per head (ten cents) per hundred miles (160.9 km). Costs in the 1890s were similar, though fixed by private agreement. (A.L. MacDonald to P.F. MacDonald, 5 August 1911; Agreements included in MacDonald Letter Books.)
of Booroondara in 1888. As shown in Chapter I, the Colony's cattle were just past their peak at 6,822,401 in 1895;
Central Queensland's share was 1,946,352, and Beardmore's was 11,178. This gross over-production occurred at a
time when Queensland's export beef market was infinitesimal (a mere 1,500 tons in 1890), and was reflected in the ever falling prices. Ironically, it took the great drought to restore higher prices while drastically reducing overall cattle numbers.

In the three uncertain years prior to the onset of the great drought, the majority of Central Queensland cattlemen were 'isolated' to the north of the wavering tick quarantine line. This was roughly parallel to and a little south of the Tropic of Capricorn. It prevented the movement of cattle to southern markets and even, for a time, to Lakes Creek Works and the small establishment at St Lawrence. In 1897, Beardmore's fat bullocks sold for as little as £2 ($4). Two years later, with the cattle population already declining through fever and tick infestation, his returns were slightly better at £2.16.6 ($5.66) a head. (According to Robert Archer, the mortality rate in uninoculated cattle from redwater fever in those early years was from 50 to 80 per cent.)

122. Wegener, *Fitzroy Region Agricultural Resources*, Table I.
123. TCB, January 1896.
125. At the Rockhampton Tick Conference in June 1897, Beardmore moved that stockowners within the quarantine zone be appointed to a constituted board to control the Diseases in Stock Act under the Minister. Peberdy opposed the motion and it was lost. (*Capricornian*, 19 June 1897.)
126. TCB, December 1897, December 1899.
At the same time, cattlemen south of the quarantine line received as much as £5 ($10) per head from the Gladstone Meatworks.  

Not all Beardmore's neighbours survived the economic crisis of the 1890s. Broadsound's first squatter, John Arthur Macartney, lost Waverley to the Bank of New South Wales in 1896 but stayed on as manager until 1899. (Waverley was owned by the Bank, 1896-1914.) Macartney had been in financial difficulties, with a debt to the Bank, as early as 1886. Judith Wright's *Cry for the Dead*, much of which is based on the diaries of her pioneering grandfather Albert Wright of Nulalbin, suggests that such indebtedness by cattlemen was almost endemic in Central Queensland. Neither the Wright family nor the majority of their neighbours survived the accumulated crises of 1893 to 1904.

With the onset of the drought in 1900 (a year earlier in western parts of the Fitzroy Region), Beardmore's total sales were down by one-third, while prices had improved by 25 per cent for all classes of stock except breeding cows. As the drought deepened, so prices for available stock increased and by 1901 the average price had improved by 17 shillings ($1.70) a head. In the disaster year, 1902, only 102 cattle were sold in small lots, mainly to butchers, with one consignment of cows and scallawags to 'The Creek'. After the first drought-breaking rains fell on Tooloombah early in 1903 the

130. J.A. Macartney to Robertson, 16 July 1886.
131. TCB, November 1900.
132. Ibid., December 1902.
bullocks, which Beardmore had worked so hard to save, fattened well. By August he had sold 1,040 fats at £6.11.0 ($13.10) a head. 'The sales are wonderful and show the value of my run, as in December [1902] the Bullocks could scarcely walk....' he recorded at the end of 1903. Prices remained high during 1904, for very few pastoralists had cattle to sell. Beardmore himself sold a mere 220 bullocks and 69 cows in that year; these were the only saleable cattle on his two stations.

Within the time span of the Tooloombah cattle books, the most unfavourable decade for all cattlemen was that of the 1890s. This was not only affected by over-supply and a dearth of markets, two major floods and the usual period of drought, ticks and tick fever, but also by the bank crashes of 1893 and general economic depression affecting the whole nation. Yet, despite such economic afflictions (followed by the worst drought ever), Beardmore was able to say on parting with Booroondara in 1904 that it had paid him well for fifteen years. As no financial returns survive, it is impossible to assess his degree of profitability.

Herd books are intended to be objective statements of cattle numbers, brandings, sales, diseases, weather reports and associated matters of management. Even so, human aspects occasionally intrude. On several other occasions relating to neighbours or employees Beardmore reveals more subjective reactions to the affairs of his station; only once or twice does he refer to home and family. 133 Not until July 1878,

133. See biographical note in Appendix.
just ten years after arriving on Tooloombah, did Beardmore record the completion of the homestead. Personal comfort was well down on the list of priorities on his cattle station, for all his buildings had been demolished in the cyclone of 1874; the house then would have been the usual primitive pioneer dwelling of slabs and shingle. Four years after the new house was built, he took up his pre-emptive rights on the 2,500 acres around the homestead. One of his rare references to family members concerns the 'dewlapping' of eight calves for 'Miss Beardmore' in 1882 to distinguish them from the thirty especially branded for 'Mrs B'. On two other occasions he recorded gifts of cattle as wedding presents: in January 1876 he sold 46 cattle as a gift to his niece Fanny on the occasion of her marriage to Carr; and in November 1880 he gave his nephew Frank a similar or larger number which included three stud bulls. A more direct personal item was entered by his overseer in August 1891: 'Mr Beardmore in hospital getting cut open and a Rupture put back...he lay 26 days on his back'.

In relation to his neighbours the usual references are to sales of cattle or boundary troubles such as that in May 1882: 'NB XX Stoodleigh Cattle again crossed in to my lucerne & eat it down'. A more notable incident occurred in 1887 when a dispute with J.A. Macartney of Waverley broke out over the pastoral block, Tivoli; this was originally part

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134. This building still stands about 50 metres from the present homestead which appears to incorporate part of the 1878 homestead. (Personal observation.)
135. TCB, July 1882.
136. Ibid., August 1882.
137. Ibid., August 1891.
Disused slab house on Tooloombah, perhaps rebuilt after the 1874 cyclone. (L. McDonald)

Part of the present Tooloombah homestead incorporating the 1878 building. (L. McDonald)
Looking across Tooloombah Station towards the Broadsound Range. (L. McDonald)

Mrs Beardmore's headstone stands in isolation in an open paddock. (L. McDonald)
of Tooloombah but under new government resumptions (Crown Lands Act 1884 and its amended form of 1886) it was again open for selection. 'Macartney got the Poison Block "Tivoli", he drew the lot for it. A nice neighbour he is to try & get my country', he complained. Later in the year he added a rider to this dispute and two years later its resolution:

Macartney took possession of the block Tivoli, warned me not to remove my fence on it & began to split stuff to put a house on it to conform with the occupation clause opposite Xmas; Paddock inside my fence, but consulted me about it & is to fence a bit for himself that won't injure me at all. He uses my fence for one side & takes in about 40 acres of Paddock. After two years got back Tivoli. He found it useless.

About the time of this dispute Beardmore is supposed to have addressed a letter to Macartney:

John Arthur Macartney
Lord of Waverley,
King of Broadsound,
But not God Almighty.

Macartney himself had complained in 1882 to Alcock Tully MLA about settlers taking up land on the top of Connors Range; this prevented him from removing his family 'thither during our hot, sultry & mosquito weather'. Another selection came within 300 yards of his house, obliging him to select it himself at the upset price of 15 shillings ($1.50) an acre. He also deplored the 'evils attendant on neighbours of the selector class'. Beardmore objected only to Macartney, not

138. Ibid., January 1887.
139. Ibid., August 1887.
140. Ibid., n.d.
142. J.A. Macartney to W.A. Tully, 17 March 1882.
'the selector class'.

Employees are seldom mentioned in the early records. Armstrong apparently managed with a minimum of station hands to tail the cattle and depended on his neighbours to help with branding. Beadmore, in his first years on Tooloombah, referred to employees only if they failed in their work. Later records include specific tasks carried out by employees, especially those on Booroondara where the overseer was required to enter these each month. An example of Beadmore's irascibility occurs in July 1882: 'Cross carelessness of my stockmen let the cattle get over to Apis Creek [station] and I lost about 20 head before I could get them back'. In April 1878 there is a detailed account of work on Tooloombah:

Blacks burning off horse paddock. 5 men fencing, ploughing at station with bullocks. Mackay left the farm & came to station & Dwyer took farm on halves [shares]. Kanakas came up.

Three months later he noted that the half-Chinese, Willie, ran away but came back again. Beadmore's workforce at that time therefore included Europeans, Aborigines, Chinese and South Sea Islanders. He appears to have averaged about eight employees during the 1870s and 1880s.

Beadmore's attitude to the Aborigines, some of whom remained in the district for many years, seems to have been the accepted one. At least he does not record 'head for head' as Armstrong did when they killed his cattle. The two dead cattle found at 'Niggers Camp in Waterhole' in 1871 are simply

143. TCB, August 1863.
144. Ibid., August 1878.
recorded as a decrease and so probably were natural deaths.\footnote{145} A couple of months later, two dead cattle were more specifically 'credited' to 'Blacks, Scrub Ck'.\footnote{146} In February 1876 the blacks 'got through the cattle and dispersed them' but did not attempt to touch them. Occasionally they were blamed for starting fires, other than approved ones, but in later years the remnants of the 'tribe' were employed clearing scrub.

Wages were seldom recorded, but in 1878 Beardmore commented: 'Mackay leaves today after 4 yrs service at £100 ($200) per annum dissatisfied, very careless but hard working man'.\footnote{147} When Beardmore returned from a trip to California in December 1881, he complained of his cattle being 'not well branded up' on account of 'the new man not knowing my ways'. Employees also suffered in times of recession, especially if they had families. A sad commentary on the plight of the married stockman appears in December 1888: 'Spencer left in December as I could not afford to keep him any longer with his large family'. Station hands' wages included rations, so a family of perhaps ten children was obviously a liability.\footnote{148}

A separate cattle book kept for Booroondara by the overseer 1901-04 shows an average of seven station hands, apparently all single men. Supplies were brought from Capella, about 40 kilometres distant. Work, other than mustering or branding, consisted of hauling timber, fencing and, during the

\footnotesize{145. Ibid., September 1871.} 
\footnotesize{146. Ibid., November 1871.} 
\footnotesize{147. Ibid., December 1878.} 
\footnotesize{148. See Appendix for station wages, selected years, P.F. MacDonald and Archers. As early as 1865 Gideon Lang commented on 'the miserable social conditions which exist...between the squatter...and the class known as "station hands"'. (\textit{RB}, 31 August 1865.)}
drought, 'drawing water', scrub cutting, skinning dead cattle and turning the hides. None of this was pleasant work; for instance in March 1903, 'McGuire taking in some 300 dead hides to Capella that Tom left kicking about the place'. At such times life was not easy either for owner or employees.

As the nineteenth century drew to its close, Beardmore had no premonition of the great drought which was to provide the cataclysmic climax to his almost 40 years on Tooloombah. False optimism was encouraged by the increase of his total herd to its peak in January 1900: 13,191 head. But by the end of that year the worst of all droughts since European settlement was already threatening. There had been only sixteen and a half inches (412 mm) of rain at Tooloombah in 1900, with just a marginal improvement in the following year. In December 1901, the heat was extreme with 'Glass ranging from 108° to 118° in the shade' at Booroondara. Then came the climactic year of the drought, 1902, which brought devastation to all eastern states of Australia. Beardmore by this time had bought Junee Station on the Mackenzie River, a purchase he soon regretted. In October 1902 he recorded: 'Trees on River dying in millions. Nothing seems left alive, water all gone'. Rainfall for the past eleven months had been an all-time low - three inches ten points (77 mm).

Despair is evident in almost every entry of the cattle books, as in this one for October 1902:

149. TCB, December 1901.
Cattle dying pretty fast both here and Booroondara. Cutting scrub both places. Horses all fed and beginning to die. Fodder coming up in dray loads. Milkers all dead...The drought or Famine seems increasing. News from the north far worse than here.

The effect of the drought on Tooloombah, Booroondara and Junee was in most respects the common experience in the Fitzroy Region, with one significant difference relative to Tooloombah - Beardmore's success in saving his prime bullocks. This was achieved by a combination of activities including the digging of more wells, scrub cutting, the importation of fodder 'by the dray load' and, whenever possible after isolated storm rains, putting in fodder crops at his farm. Beardmore also deliberately sacrificed the breeding cattle to save the bullocks. This is contrary to usual custom during droughts, but as an astute commercial cattleman he was aware that prime bullocks would fetch high prices after the breaking of the drought. This was a correct assumption. Even though these bullocks could scarcely walk in December 1902, by August 1903 he was able to sell them at premium prices (£6.11.0 [$13.10] per head). With no income for almost three years, cash was more valuable than future cattle numbers. Even so, the dramatic impact of the steadily worsening drought on this one man shows that no matter how wisely a property is managed, there are times when nature causes man's efforts to appear puny and futile. Beardmore's cattle returns for these four years illustrate this clearly:

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Heads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1900</td>
<td>13,191 head</td>
</tr>
<tr>
<td>Jan. 1901</td>
<td>12,667 head</td>
</tr>
<tr>
<td>Jan. 1902</td>
<td>9,165 head</td>
</tr>
</tbody>
</table>

150. TCB, January 1900, October 1903.
Despite his drastic losses, Beardmore admitted he was better off than most. He believed the drought had killed fully 75 per cent of all cattle in the country, and in many cases up to 90 per cent of individual herds. (This was P.F. MacDonald's experience.) Between 1894 and 1903 the total Queensland herd decreased from just over seven million to less than two and a half million. Not all these losses could be attributed to the drought; the tick plague had also taken its toll, while in Central Queensland the 1896 floods accounted for some heavy losses. P.F. MacDonald, like Beardmore, experienced the two extremes of herd depletion; in 1903 he wrote to his son Arthur, then hopelessly searching the scrubs on Columbra for surviving cattle: 'It is a sad ending for poor Columbra....We lost everything in February 1896, about 1600 drowned, and now another 1600 from drought....'

These were some of the physical and financial effects of the worst drought ever recorded in Australia to the present time, but it also had a psychological effect synonymous with economic disaster. Through the restricted medium of Beardmore's cattle books there emerges an image of despair in this cattleman who had grown old on Tooloombah:

*March 1903*: Junee I have had to abandon as I can't keep it up. Fencing all ceased and all expenses cut down to the lowest.

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151. Beardmore's cattle numbers recorded in October 1903 later proved to be an over-estimate when Booroondara numbers were checked by 'a bang-tail muster'.
152. Figures selected from TCB, 1900-04.
154. P.F. MacDonald to A.L. MacDonald, 20 November 1903.
December 1903: I retain only the lease on Booroondara, and on Tooloombah only my freehold (13,500) & Grazing Farms (37,000) Dundee & Tivoli. All the rest I give up to save rent. 155

April 1904: Mr Bryce arrived & is to take charge of the cattle as I am too old to go about any longer. He went straight to B/a [Booroondara] to see about the Pleuro.

May 1904: Decided this month to give up Booroondara after paying me well for 15 years. The drought there came and wiped out most of the cattle & there are not enough left to carry on both places without buying. So we begin to remove about the 20th this month....This was not done. Redwater broke out & can't shift the cattle till they are inoculated....On the whole things look bad.

July 1904: On completion of Bryce's bangtail muster on Booroondara we are 1000 short of Lunn's muster. It has been a grievous robbery & I must give it up. The loss is £4000 more in cattle alone & I must content myself with Tooloombah.

November 1904: All tools and many other things brought away in the Waggon & a man called "Manuel" a kangaroo shooter left in charge at £30 per annum.

This was an ignominious end for Booroondara which three years earlier had run over 10,000 head of beef cattle. 156 Lunn had taken the place of Thomas Dwyer, injured in the terrible storm early in 1903. Whether he deliberately falsified the books in 1904, or just found the task of mustering and counting the remnants of the herd too much for him, is not clear. Beardmore was convinced he had been swindled and was the victim of 'a grievous robbery'. 157 His comment towards the end of 1903 that 'the drought has altered everything' proved

155. In 1892 Tooloombah comprised 57 square miles (147.6 km²), of which about 37 square miles (95.8 km²) was suitable for pastoral purposes. (Capricornian, 14 May 1892.) By 1979 the property was reduced to 27,000 acres (1,092 ha.).
156. TCB, May 1901.
157. Ibid., June 1904.
to be an understatement.

When the drought ended, Beardmore was already seventy-seven years old. This grievous experience appears to have been influential in his decision to sell Tooloombah as soon as the country recovered, and then retire to Brisbane. His daughter had died in 1895 at the age of forty-five and his first wife (aged ninety) in 1897; one is buried on a hillside and one in a gully on opposite sides of the homestead.\footnote{158 Personal observation. Beardmore is reputed to have said, 'As they could not get on in life, they should be separated in death'. (Personal interview with Mrs A. Smith, 30 May 1984.)}

Beardmore remarried, but died in 1910 at the age of eighty-three years.\footnote{159 Information obtained from O.C.J. Beardmore's death certificate.}

Subsequent owners of Tooloombah were McKenzie (1907), Shannon (1940), Hardwick (1955) and Graham McCamley in the 1980s.\footnote{160 Personal interview with G. Shannon, 23 May 1984.}

Where Devons, Shorthorns and Herefords once grazed (and died 1902-03), hardy humped Brahman cattle now thrive.

This profile on Tooloombah Station, 1860-1904, shows how virgin country classified as 'Waste Lands of the Crown' has been transformed by cattle herding and associated activities to become a valuable part of the beef cattle industry of Central Queensland. Most importantly, it shows Owen Beardmore building up and improving his herd by the introduction of pure breed bulls and careful cattle husbandry. The case study also reveals with startling clarity that no matter how untiring the cattleman is in his methods and management, he is at the mercy of two factors beyond his control: climate and markets. An assessment of other station records in the Fitzroy Region confirms that Beardmore's hardships were not isolated...
experiences. He was simply another victim of national economic depression, climatic extremes and trials such as the tick plague which combined to bring ruin to many. That he survived is a tribute to his qualities as a cattleman during his four decades on Tooloombah. One of his final entries in existing cattle books, December 1904, discloses both hope for the future and a continuing problem in the cattle industry:

Began to put stud cows to the Bull. Turned the last lot of Boo/dra Breeders into Deep Creek Paddock...About same time put Weaners in Locker Yards. On 23rd noticed Ticks bad on No I studs & dipped them.
CHAPTER IV

BEYOND THE FARM GATE

1. The Market Place
2. 'To Market, To Market....'

A contemporary expression, 'beyond the farm gate', aptly symbolises the many processes through which beef cattle pass between the producer's paddock and the consumer's plate. While in the early days this was a relatively direct and simple transaction between stockowner and retail butcher or meat processor, since the Second World War it has become increasingly complex. The marketing system instead of being controlled by supply and demand is more and more under the domination of a combination of factors in importing countries, including government policies and beef quotas. Even the domestic market has become dependent on international conditions. No matter how perfect the breed of cattle, how well adapted to the environment, how good the seasonal conditions, how skilful the cattle husbandry, how prime the beef, if a stable market does not exist, the cattleman's work is largely in vain. When cattle pass through the farm gate they virtually pass beyond the owner's control.

Market derives from the Latin word *marcari* to trade and was used as a noun in Old English to denote the place where people met to buy and sell provisions and livestock. By the fifteenth century, *market* was also used as a verb.¹ Both noun

and verb have come down through the centuries with practically unchanged meaning, despite the complexities of the modern age and the adoption by economists of such terms as 'market economy'. In the beef cattle industry the (physical) market is most often the district saleyard, though the producer may market his cattle by direct sale to the processor or, through a stock agent, to another producer. Whatever form of market he chooses, his cattle have to be transferred from farm or station to saleyard or abattoir. Within the Fitzroy Region producers have marketed their cattle via stock routes, both locally and interstate, by sailing ship and steamship to the Pacific Islands and southern colonies, by rail wagons and, in the post World War II period, by road transport.

1. The Market Place

The price paid for agricultural commodities in this country has traditionally been determined by competitive forces. Quite simply, this means that buyers have expressed a demand by offering or accepting a price that will secure ownership of a given supply. For a given supply, the price offered by a particular buyer must be competitive to ensure ownership ahead of any other buyer. 2

The simple economic truth quoted above, when applied to the history of beef cattle marketing in the Fitzroy Region (and Australia generally), shows that theory does not always reflect practice. Intermittently, and for long periods within the relevant time span, supplies of beef cattle have far exceeded demand, and the price offered by buyers has been non-competitive.

2. I.F. Whan, Marketing Proposals for Assisting the Australian Beef Producer (Brisbane, QDPI Research Bulletin No. 27, 1977).
Historically, what is referred to as 'the beef cattle cycle' - the effect of supply and demand on both cattle numbers and prices - has reacted with drastic consequences to the industry as a whole. The most traumatic effects of cyclical conditions on individual producers occurred in the 1890s, the 1920s and early 1930s, and in the mid 1970s. After the Second World War a rapidly increasing Australian population (assisted by European migration) provided a more buoyant domestic market for beef, while the export market became the nerve centre of the Australian beef cattle marketing system. In Part 1 of this chapter, the term 'market place' is used as a physical reality, but also as a symbol for the act of trading, of exchanging one commodity (cattle) for another (money). Beef processing and beef marketing, the ultimate end of cattle raising and marketing, are dealt with in Chapter V.

There were no 'farm gates', only the open range when Colin Archer recorded his good trade in beef in 1859. This was the year following the Canoona gold rush which had provided Rockhampton with instant population. Every week Archer Brothers sold $70 to $80 worth of 'beef dead and alive'. Bullocks returned £9 ($18) and were in such demand that the station was 'rather short' of them. The butchers paid treepence a pound (two cents for 480 grams) and retailed the beef for five to six pence (four to five cents) which, in Archer's opinion, left them 'with an ample profit'. This direct form of marketing, without assistance from the middleman, continued through the 1860s and into the 1870s. The price paid for these cattle was certainly 'determined by competitive forces' according to economic theory.

In 1864, Edward Cross who was in charge of Archers' Fifteen Mile Cattle Station (Bajool) forwarded a cheque for 'one Bullock and 204 lbs Beef, Eight Pounds eight shillings, from the person in charge of the Telegraph party'. 4 Fifty years later, J.G. ("Battler") Pattison recalled that his father, William Pattison, who provided both a retail meat market and an export market in tallow, used to ride down to the Fifteen Mile 'where Ned Cross was king, pick the cattle he wanted, and pay cash at the yards'. 5

The pioneer butchers of Rockhampton provided a ready market. The earliest of these, a man called Stevens, in 1859 had a slaughter yard on the river bank below Quay Street, near the site of the present Customs House. He obtained cattle from Archer Brothers, as did most butchers in the 1860s. J.A. Watt, John Ward, George Wilson, Paterson & Jager and Martin Bros. all had butcher shops in the frontier town. 6 The most important market in the early history of the industry was William Pattison's shop in William Street, opened in 1864. His importance stems from his later 'boiling-down' works and as a buyer of cattle on a large scale. He was buying both sheep and cattle from Archers in September 1866, inspecting them 'as requested', and also 'Fat Bullocks' in May 1867. 7 William Jager also gave his order for fifteen bullocks from the Fifteen Mile in 1867. 8 These isolated examples confirm that direct marketing not only of cattle, but also of beef, was widely practised. While auctioneers were in

4. E. Cross to Archibald Archer, 13 August 1864.
5. MB, 3 September 1926.
7. William Pattison to Archibald Archer, 26 September 1866; 28 May 1867.
business in the 1860s, their sales were mainly horses. 9

During the 1870s, Queensland’s total herd increased from 1,077,000 to 3,163,000. 10 Not surprisingly, by the end of the decade supply exceeded demand and Queensland ‘in common with the rest of the world’ was suffering a depression. 11

Both in North and South America there was a growing beef surplus. 12 The necessity to provide outlets for surplus stock in Central Queensland had reached crisis point according to producers. Yet, Lakes Creek Meatworks had been forced to close in the winter of 1878 owing to ‘the high price of stock’. In February 1879 the manager promised to re-open if he received a written guarantee of 8,000 cattle and 100,000 sheep. He offered twelve shillings per 100 pounds ($1.20 per 45.36 kg) for cattle. Stockowners who refused these terms had only one alternative – to boil down their cattle for tallow. 13 Prices continued to fall and six months later cattlemen were obliged to accept ten shillings per 100 pounds ($1 per 45.36 kg). 14

This is an early example of intra-industry ignorance on the part of producers. Even this poor market was lost to cattlemen before the end of the year when the processing company became insolvent.

The necessity to find markets was becoming more urgent every year. By 1886 there were almost 700,000 cattle in the eight police districts making up the Fitzroy Region. Rockhampton

10. The Queensland Cattle Industry, Appendix ii.
11. MB, 8 May 1880.
14. Ibid.
had the highest number, 173,843, with Clermont second, 102,223.  

Many producers sent cattle on the hoof to New South Wales markets [Part 2], others tried the slaughtering or meat marketing business. Archer Brothers, in December 1889, were licensed to slaughter cattle in their own yards, though the purpose was not stated. Some regional cattlemen became independent beef exporters by having cattle slaughtered and frozen at Lakes Creek Works and then consigned to England and marketed through the agency of their choice. Beardmore, who experimented in this way in 1892, found it 'a risky business' and the waiting time for English returns ('if I get any') frustrating. The beef was consigned to banks, pastoral firms with head offices in London or to small agencies. Many of these were ignorant of the complexities of the meat trade and because anxious to avoid cold storage costs were 'over-eager to sell'. Or the reverse could happen. David Archer of London told his son Robert at Gracemere in April 1896 that prospects on the beef market were gloomy. The family firm's consignment of frozen beef which had arrived on the Duke of Buckingham remained unsold while storage charges mounted. 

One week later he wrote:

You will have seen by telegram the depressed state of the Meat market. What is the end to be! Importations of Cattle and Meat exceed all previous records, I believe....It was well that we had only 119 hind-quarters ex. Duke of Buckm on hand. How does the depression affect stores [store cattle]?  

16. License to Slaughter, 11 December 1889, Archer Papers.  
17. TCB, December 1892.  
20. David Archer to Robert Archer, 2 April 1896.
LICENSE FOR SLAUGHTERING CATTLE.

QUEENSLAND.

R. JUNPTON.

In the undesignated, being of Her Majesty's Justices of the Peace for the Territory of Queensland, do certify that, by virtue of the authority vested in me by an Act of the Governor and Council, passed in the fifth year of the reign of His Majesty King William IV, intitled "An Act for Regulating the Slaughtering of Cattle," I hereby license to Slaughter Cattle in their yard situate and being in ___.

And that this License is to remain in force from the date herein until the thirty-first day of December, One thousand eight hundred and eighty-

G.S. EDWARDS.

Reg. - 17th Dec. 1852.

(Archer Papers.)
The first half of the 1890s was the most critical period yet for cattle producers. With the herd multiplying at an alarming rate (c. seven million in 1895), the few available markets (both for live cattle and beef) were saturated and financial returns practically worthless. In 1894 fat cattle sold in Brisbane for 30 shillings ($3) a head, said to be the lowest level in the history of the industry.\footnote{W.A. Beattie, \textit{Survey of the Beef Cattle Industry of Australia} (Melbourne, CSIRO, 1956), Bulletin No. 278, p. 12.} Cattle sold to Lakes Creek Works by Archers in 1897 returned £2.7.6 ($4.75); as this was after the advent of the cattle tick, this was considered preferable 'to having them die of tick fever'.\footnote{David Archer to Robert Archer, 26 August 1897.}

In the same year Beardmore sold 1,750 head to 'the Creek' for an average of £2 ($4).\footnote{TCB, Receipt of Sales, 1897.} The trauma produced by the cattle tick has already been touched upon [Chapter III] but its effect on the live cattle market was yet another burden to be borne by harassed producers. Tick quarantine lines within the Fitzroy Region were decreed by the government in 1896. Mobs of fat cattle were held on the stations and the meatworks forced to partial closure through lack of cattle.\footnote{MB, 17 January 1898.} Editorials and special articles in the daily papers stressed the terrible plight of the cattle owner. As the old century approached its final year, \textit{fin de siècle} depression seemed justified.

Cattlemen looked for someone to blame and, true to the Australian character, attacked the government. One man complained of the injustice of 'a million clean cattle...shut out from markets by government decree'.\footnote{H.F. Hardacre, letter to editor, MB, 9 March 1899.} Appeal after appeal
was made in vain. Even the issue of federation was relevant to the cattle marketing system. Prior to the Federal Referendum (May 1899) Robert Archer pointed out that although nearly half Australia's cattle were in Queensland, they were to a certain extent barred from markets in the southern states because of tariffs (inter-colonial). Archer 'indulged no sentiment, no high falutin, but based his case simply and markedly on the ground of self-interest', commented an editorial; it praised his prudence and foresight and his understanding of the situation. Federations, Archer argued, would ensure inter-colonial free trade, increased markets and possibly increased prices. By the 'well known laws of trade', he said, 'the price in the outside market rules the price of the internal market'. His grandsons were able to confirm this truth in the 1970s.

Federation or not, markets remained scarce because of the cattle tick. 'As soon as the tick plague had passed away there would be a great demand for cattle in Central Queensland', Archer told the annual meeting of the Stockowners Association in August 1899. He knew of people merely threatened by ticks who rushed in and boiled down their fat cattle, thus neglecting the future market for stores as the new grazing leases were taken up. In the year of these Acts (1897), just 38 years since the proclamation of the colony, Queensland cattle had multiplied from 300,000 (1859) to over six million (1897).

26. MB, 3 May 1899.
27. Ibid.
But there were warnings: Queensland beef cattle producers were told in 1899 that Texas, with a human population of three and a half million, had enough cattle to supply the whole world with beef. Their own colony with a human population of only 450,000 had a cattle population of over six million.\(^{30}\) Ironically, with the greatest drought in the recorded history of Australia about to descend on the eastern states, there soon would be more markets than cattle to supply them. Between the double scourge of ticks and drought, the Queensland herd was reduced to 2,964,000 by 1905.\(^{31}\) The reduction rate was even higher in Central Queensland.

When the country did at last recover in 1904, cattle numbers increased surprisingly rapidly, reaching 5,132,000 in 1910. This is another example of the cyclical response to higher prices as the result of shortages. Producers had already learned to live with the tick problem and by 1909 some saw the industry 'on the threshold of a glut'.\(^{32}\) Under the Kidston Government, more and more land was being made available to 'the little man'. A Land Settlement Inquiry Office was opened in Rockhampton and already more than 200,000 acres (80,900 ha.) were available in the Fitzroy Region for agricultural and grazing selections. One such area especially recommended as being 'exactly the class of land much in demand' was the Gogango Scrub, 80 kilometres west of Rockhampton.\(^{33}\) Like all the brigalow scrubs of Central Queensland, this had been despised by pastoralists since the earliest years as nuisance country;

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31. *The Queensland Cattle Industry*, Appendix II.
33. Ibid., 7 August 1909.
in the future it was to produce first class beef cattle. By the end of the first decade of the twentieth century additional selections added to the threat of 'surplus stock'. About this period the Rockhampton newspapers frequently published articles and letters deploring this situation and offering 'solutions'. By 1912, unrest among cattle producers led to the establishment of a 'Meat Commission' to inquire into this key aspect of the marketing system. This is one of the earliest indications of government concern and intervention in the beef cattle industry (other than in a regulatory sense). While the free-enterprise system was to continue (with some state ownership of stations and retail outlets between 1916 and 1929), from this time onwards it would never again be as 'free' as it was in the nineteenth century.

During the years of the First World War and immediately afterwards, producers enjoyed one of their rare economic 'booms'. Then came sudden collapse and the longest period of economic depression in the entire history of the industry. Within one week (1921) fat cattle prices dropped more than 50 per cent 'and stayed there'. Bullock prices, 1920-22, show the enormity of the collapse:

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>£30.15.0 ($63)</td>
</tr>
<tr>
<td>1921</td>
<td>£17.17.6 ($34.75)</td>
</tr>
<tr>
<td>1922</td>
<td>£ 3.15.0 ($7.50)</td>
</tr>
</tbody>
</table>

Blessed at that time with good seasons, Central Queensland producers had everything they needed except a market for their cattle. When Archers' first prize pen of trade bullocks at

34. Robert Archer to G.L. Archer, 7 October 1924.
36. Robert Archer to David Archer, 16 September 1921.
the Rockhampton Show in 1922 sold for one and a half pence a pound (three cents a kg), and a hundred 'good preserving cows' for 25 shillings a head ($2.50), no wonder Robert Archer commented, 'The Cattle Market is awful'. The amazing fact that the majority of regional producers survived this long period of low cattle prices and scarce markets (1921-34) was almost entirely due to their choice of 'a way of life', not to economic viability.

As already indicated (especially in Chapter III), there had been depressed prices intermittently since the beginning of the 1880s, most notably in the 1890s, but never before in conjunction with such high production costs. These had resulted in the first instance from frequent mustering and dipping of tick infested cattle, and since the war by higher wages for station hands. Information supplied by Robert Archer to the UGA in September 1921 for use in the Arbitration Court was followed by this comment:

In the past two years our business has shown a heavy loss partly owing to the drought in 1919-20; this year to the complete collapse of the Cattle Market. We are obliged to discharge more men, as the Industry cannot pay the present rate of wages. 38

In 1918, 60 employees had received wages totalling £8,984.14.6 ($17,969.45), but in 1921 only 28 employees received about two-thirds that amount - £5,653.7.8 ($11,306.77). 39 Wages for single men also included keep; in 1918 this cost 18 shillings a week ($1.80) per man, including the cook's wages. John

37. Robert Archer to Maggie Archer, 14 July 1922.
38. Robert Archer to UGA, 8 September 1921.
39. Robert Archer to UGA, 8 September 1921; Robert Archer to John Archer, 6 August 1918. See Appendix for Wages 1918-21.
Archer, not so involved in the overall costs of running the family company, saw no prospect of recovery in the industry 'till freights and other expenses come down'. But the malady was far more deep seated than this: Australia had been edged out of the London meat market by the Argentine. This, combined with the collapse of European currency in 1921, spelled disaster for the beef cattle industry. An editorial in the Rockhampton Bulletin, 21 September 1922, referred to 'the cattle industry breathing hard and at the mercy of the Argentine....'

In July the Cattle Council of the UGA had met in Rockhampton in an endeavour to have a Meat Board established. Commenting on this, John Archer thought efficient organisation offered the only hope of getting the industry on a firm basis:

I believe something quite worth while could be done if the eastern market was properly exploited. If stockowners do not co-operate and help themselves, I can see little prospect of improvement till the demand in Australia overtakes the supply....

More than 50 years later, the first factor had merely been touched upon, the second was no closer to fulfilment. The industry situation, 1921-25, is aptly reflected in several relevant extracts from Robert Archer's correspondence:

1921: ...an ideal season. Everything we want except a market for our stock. There is no demand in London for Frozen Meats & all the works are practically closed down. It is a serious position.

1922: The cattle market is worse than ever, fine fat cows weighing dressed 600 to 700 (pounds) selling at £2 to £3 a head. Something will have to be done to get the Meat Export trade going again or the Cattle Industry will be ruined.

41. John Archer to Robert Archer, 13 July 1922.
1923: Naturally, when the value of the chief or one of the chief assets of a concern drops 70% or 80% in value and remains so for some years, the prospects of the concern look gloomy....

1925: As you know from our Balance Sheets the three years to June 30th last was a perfectly disastrous time.... 42

The experiences of this one family were shared to a greater or lesser degree by every beef cattle producer. J.G. ("Battler") Pattison commented in 1922 on the effect of loss of markets on the cattlemen he met in the street: 'Amongst the lot I never saw one bright smile'. 43 Articles in agricultural and pastoral journals used such expressions as, 'the present parlous condition of the beef industry'. 44 They told cattlemen what they already knew: '...until overseas markets are established, there seems little likelihood of permanent improvement'; and 'This depression is largely due to the lack of overseas markets and the difficulty of introducing fat cattle to southern states'. 45

By March 1922 there were 7,047,370 cattle in Queensland. Nobody wanted to know about them. A survey of the Queensland Agricultural Journal 1923-28 reveals that beef cattle were seldom mentioned, nor were the associated problems of ticks and prickly pear. They were all too depressing. In 1922 the government had helped halt the complete collapse of the industry by paying a subsidy of one shilling and eight pence (seventeen cents) per hundred pounds (45.36 kg) in addition to the ruling

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42. Robert Archer to David Archer, 16 September 1921; Robert Archer to David Archer, 23 March 1922; Robert Archer to John Archer, 31 August 1923; Robert Archer to G.L. Archer, 11 May 1925.
43. MB, 22 June 1922.
44. QAJ, Vol. XVIII, May 1922, p. 222.
price of eleven shillings and ten pence ($1.19) per hundred for bullocks and five shillings and three pence (52 cents) for cows. There was a temporary upturn in 1924 when Torsdale bullocks fetched £7 ($14) a head and cows £5 ($10). Unfortunately it did not last.

In an attempt to recapture lost markets, cattlemen were advised in 1922 to improve the quality of their herds. In order to be able to compete against the Argentine in the United Kingdom market their immediate objective should be: 'the production of deep, evenly fleshed, early maturing, weighty steers, which could be marketed at 2½ - 3 years old....

When cattlemen took this advice (where possible) the results could be economically disastrous. At the Brisbane Exhibition of 1924 when Archers won the 'baby beef' competition with a steer weighing 677 pounds (306.9 kg), Swifts paid £15 ($30) for him. He had cost them £30 ($60) to feed. 'The question is, can we make a commercial success of such an undertaking?' Robert Archer asked businessman W.H. Rudd. Nobody could provide a valid answer.

Nor were domestic markets worth much to the producer until after World War II when Australians ate two-thirds of beef produced. The Queensland State butcher shops established in 1915, by retailing beef slightly below the Commonwealth recommended price, did little to assist the producer. Robert Archer referred to the system in 1920 as 'barefaced robbery'.

47. Robert Archer to G.L. Archer, 7 October 1924.
49. Robert Archer to W.H. Rudd, 14 May 1925.
50. Bernays, Queensland Politics During Sixty Years, p. 495.
51. Robert Archer to J.W. Fletcher, 3 June 1920.
Naturally this view was not shared by Labor politicians.

James Larcombe, Member for Rockhampton (1912-29; 1932-52), maintained his government had given protection and assistance to the cattle industry. To support his claim he quoted the increase in the number of cattle owners between 1915 and 1941. This was hardly a valid argument considering the lack of markets (except during wartime) for those cattle. He was on firmer ground in quoting government relief measures in 1923 and new provisions of the Land Act which reduced some Crown rentals. In 1927 these provisions were extended for another five years as the cattle market had not recovered. In drought times a concession of 20 per cent was allowed on rail trucking rates and the same on the carriage of frozen beef.\textsuperscript{52} Except for the 1923 relief measures, these concessions all came after Robert Archer's death in 1926.

In 1928 the Queensland Government set up an Inquiry into the Beef Cattle Industry. The substance of the Commissioners' Report was hardly news to cattlemen, but it did provide important figures on the ratio of domestic and overseas markets. Between 1924 and 1926 the number of Queensland cattle sold to the respective branches of the trade were:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>312,468</td>
</tr>
<tr>
<td>Interstate</td>
<td>223,100</td>
</tr>
<tr>
<td>Overseas Export</td>
<td>389,008</td>
</tr>
</tbody>
</table>

The Commissioners found that in Central Queensland, 1922 to 1927, the value of cattle was normally regulated by the price

\textsuperscript{52} James Larcombe, \textit{The Case for Labour} (Brisbane, The Worker, 1944), pp. 67-69.

paid by export companies, by domestic consumption, and to some extent by competition from southern states. While prices did rise slightly in 1925-26, the average working loss per head on sales was ten shillings and nine pence ($1.08). This was scarcely encouraging. The taxable income of cattle producers during those two 'more favourable' years averaged less than 1 per cent of the estimated capital invested in the industry. In addition to these drastic economic conditions, the most severe drought since the turn of the century occurred in 1926 and the following years. While this assisted in reducing over-production, it did not create demand in excess of supply as in 1902-06.

The two major price slumps prior to World War II, the 1890s and 1920s, are shown to have been caused by lack of markets, both domestic and export. To recapitulate, Queensland cattle numbers in 1894 reached 7,012,997, a total which was not surpassed until 1921 when they reached 7,047,370, the highest total to that date. By 1925 numbers had declined to just under six and a half million to equal the 1914 level; meantime the human population had increased by 29 per cent. The chief difference between the nature of over-production in the 1890s and the 1920s is that in the former instance cattle simply multiplied through lack of markets; in the pre-1921 period numbers had increased in response to wartime demand and good prices. In both periods the end result was the same: supply in excess of demand. Cattle cannot be put into storage in the manner of

54. Ibid., p. 694.
55. Ibid., p. 596.
56. The Queensland Cattle Industry, Appendix ii.
wool or wheat to await a price rise. The problem is a complex one from the producer’s point of view alone; in planning his breeding programme in any year he is at the same time fixing his sale turnover for four years ahead. Only severe drought or some other disaster will decrease this level of production. According to some industry commentators, there is always a threat of over production in the beef cattle industry.58

The dismal circumstances of the 1920s dragged on into the 1930s, with minor relief in 1929. Alister Archer summed up the situation:

We had two good seasons, with a rising result and things were heightening up, when suddenly the German meat embargo, financial depression etc. settled the whole business, and the outlook now is not at all reassuring.... 59

The new decade had begun with bullock prices $2.50 a head higher, but in mid-year, prices 'receded very materially'.60 Once more, owing to increased supplies from the Argentine on the London market, also the general depression affecting spending power, 'the trend of values had been steadily downward'. Not only had the closing of the German meat market freed extra meat on to the British market, but the situation elsewhere in Europe was hopeless. France's import duties on Australian meat were prohibitive, and Italy had a reciprocal agreement with Argentina. High duties kept Australian meat out of the United States market also. By 1933 the situation for Central Queensland producers was deplorable:

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60. Capricornian, 1 January 1931.
61. Ibid.
We have had 2½ years of drought and low prices; the drought still continues, and we have reached a point now where the Works will not buy our fats at any price. The outlook is far from bright. 62

This assessment of the industry situation by a descendant of the family which first brought cattle to the Fitzroy clearly reveals the parlous plight of both producers and processors.

A meeting of the Central District Cattle Committee of the UGA was told by Edward Archer and J.L. Wilson (district representatives) of efforts made by their committee to secure 'such control of the marketing of this product as would assure the grazier a fair return'. Federal Minister for Primary Industries, Earle Page, had stated that it was his government's policy to place the control of marketing in the hands of producer organisations, 63 but there the matter ended. The point was stressed at the Rockhampton meeting that more than 80 per cent of beef produced was consumed in Australia, less than 20 per cent exported, yet the price received for the domestic product was limited to the price received for the export surplus. 64 While Robert Archer had been aware of this situation back in 1899, the cost of production since 1928 had usually exceeded returns. The first glimmer of hope for Queensland producers appeared during the Ottawa Conference held in that same year, 1932.

'All roads within the British Empire now lead to Ottawa', reported the Central Queensland Herald on 7 July 1932. Australia would have occasion to be thankful if the outcome was

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62. Alister Archer to Grace Horne, 22 May 1933.
63. Central Queensland Herald (CQH), 28 September 1932.
64. Ibid.
'the amelioration of the burdens under this nightmare of protection gone mad'. At the Imperial Economic Conference held at Ottawa, Britain announced its future policy in relation to meat imports as: protection first for the British livestock producer; and secondly 'to secure to Empire countries an expanding share of the market'. From January 1933 restrictions were to be placed on imports of foreign meat, with progressive restrictions from June 1934. In actual terms for Australia, by 1935 its share of the British market had risen from 7.9 to 12.7 per cent. At the same time, Argentine's share had actually increased by just under 1 per cent.\(^65\) Free entry was accorded to dominion products, while preferential duties on a range of primary products were to be maintained for five years.\(^66\) At the same time, according to F.W. Bulcock (Queensland Minister for Agriculture and Stock), Argentine was promised 'fair and equitable treatment' while Australia's claims to equitable treatment were not mentioned.\(^67\) The Ottawa Agreement, despite its limitations and a certain miserliness towards the dominions, at least expanded the market for Queensland beef and brought a slight improvement in cattle prices.

Much more important in the long term was the modification of the chilling process which enabled Australia to compete against Argentina on the London market. Research carried out at Cambridge University, and by Dr J.R. Vickery of the CSIR at the Queensland Meat Industry Board Works in Brisbane in 1933, extended the safety period for beef shipped under this method

\(^{65}\) Parliamentary Papers (Commonwealth of Australia), Part 3, 1935-36, p. 311.
\(^{67}\) QAJ, Vol. XXXIX, May 1933, p. 196.
to 50 days. This made it possible at last for Australian shipments to London.\textsuperscript{68} Pressure was then put on Queensland cattlemen to maintain a regular supply of cattle, all seasons of the year. At a graziers' meeting in Rockhampton in February 1934 to consider this matter, well known cattlemen in the Fitzroy Region, W. Nott of Greycliffe (Banana) and A. Duncan of Mackenzie River, stressed that as long as the seasons were good, chiller type beef cattle could be supplied.\textsuperscript{69} To further encourage this trade, the CSIR carried out pasture experiments on Fitzroy Vale Station.\textsuperscript{70} The Rockhampton Agricultural Show established an annual 'chiller' competition in 1934, but in its first four years no pen of cattle received full points; it was the old problem of low-nutrition pastures in winter months.\textsuperscript{71} To compete with the Argentine, local cattlemen were advised to produce early maturing stock of the best type, and develop a system of feeding to bring them to top condition at between two and three years.\textsuperscript{72} These factors were stressed over and over again in agricultural and pastoral journals throughout the 1930s. There was also talk of 'orderly marketing', but no real progress in achieving it. Even so, the outlook for producers was much brighter; in 1938-39 beef and beef products accounted for 90 per cent of Queensland's exports to the United Kingdom. This comprised 67,626 tons of frozen beef and veal and 25,813 tons of chilled beef.\textsuperscript{73}

\textsuperscript{69} MB, 17 February 1934.
\textsuperscript{70} Ibid., 1 January 1938.
\textsuperscript{71} Ibid.
\textsuperscript{72} QAJ, Vol. XLI, May 1934, p. 545.
\textsuperscript{73} QAJ, Vol. 65, June 1947, p. 360.
BEEF CATTLE REGIONS OF QUEENSLAND

1. Belyando-Fitzroy.
2. Carpentaria-Peninsular.
3. Darling Downs-Roma.
4. South Eastern.
5. South West-Central West.
7. Wet Tropical Coast.

(Crossbreeding Beef Cattle in Queensland, QDPI, 1978.)
It has been suggested that in the long term the wartime demand impetus and subsequent price stabilisation affected the beef cattle industry adversely. That is not how (Sir) William Gunn sees it. Having lived through the years of poverty, the years of price stability in the 1940s [Chapter V] were 'the only occasion in my lifetime when beef prices have been reasonably profitable over a significant period of time'.

Practising cattlemen look at their own market returns and relate them to production costs while economists analyse statistics; the two seldom agree. G.O. Gutman (BAE economist) argued in 1950 that the industry was 'living on its capital, i.e., the rate of slaughter was too high for breeding herds to be kept intact'. He refers to fluctuations in cattle numbers as cyclical, the four stages of which (over a ten to fourteen year period) can be summarised as:

1. A price increase which causes a sharp increase in producer marketing.
2. A resultant expansion of breeding herds.
3. A downward pressure on prices which causes producers to withhold cattle from markets in hope of a price rise.
4. A large increase in slaughterings of female cattle.

In applying the 'cattle cycle' theory to the 1927-38 period, Gutman's hypothesis does appear valid, even taking into account the effect on the industry of the great depression. But, as already indicated, it is very difficult, even impossible, for a producer to forecast four years in advance what the future

77. Ibid., pp. 24-27.
market demands will be. Gutman's contention that the opening up of new markets, and a guaranteed price (as occurred with the Ottawa Agreement, and in the 1940s with wartime agreements) would remedy future marketing doubts, has in the long term provided insufficient guarantee of stability. Agreements are usually for a limited period and 'new markets' have in every case proved fickle. Even skilled economists, such as the BAE, cannot halt the cyclical ebb and flow of cattle numbers by accurate forecasts of future markets; nor can the Australian Government ensure stable overseas markets.

By 1961 the Australian population had increased to 10.5 million and the domestic market consumed 70 to 80 per cent of beef produced. Even so, the market place was increasingly export oriented. Since the opening of the American hamburger beef market to Australia in 1957-59 and the subsequent price rise, cattle marketing prospects looked brighter than at almost any time in the history of the industry. This market was especially valuable to northern producers as it absorbed 'rubbish' cattle and encouraged the clearing out of scrubber types. It also resulted in a record production of 906,000 tons of beef in 1961. The production potential of the Fitzroy Basin brigalow lands indicated a huge future increase in beef cattle numbers. [See Chapter VI.] In the previous decade, 1953-63, there had already been an 18.5 per cent increase in the Rockhampton Statistical Division alone (936,000 to 1,109,000 head). This was almost 6 per cent more than the

79. Ibid.
80. Submission to the Committee of Inquiry into Matters Concerning the Development of the Livestock and Meat Industry, MS, United Graziers Association of Queensland, (Copy)
Queensland total increase. The industry had entered upon one of its rare phases of optimism. Producers were not greatly concerned about the European Economic Community (EEC) as Europe had never provided a major market for Australian beef. The possibility of Britain joining the EEC also seemed remote. (It did so on 1 January 1973.)

The UGA, in its submission to the Committee of Inquiry into Matters Concerning the Development of the Livestock and Meat Industry in 1964, argued that increased beef production is influenced by other factors than increased stock numbers. It quoted figures for 1936-37 when Queensland cattle numbers rose by 27.2 per cent, while slaughterings were greater by 77.6 per cent. This was apparently a reference to the effect on the export trade of the Ottawa Agreement and in particular the success of the chilling method for beef. In attempting to forecast changes in the existing level of beef production in 1964, the UGA cited increases in cattle numbers due to the brigalow scheme, the introduction of Townsville lucerne in the coastal spear grass region, the 'feedlot industry', and by improved pastures in the wallum country. Their prediction of Queensland herd numbers ten years hence, and of a 20 per cent increase in slaughterings, proved most inaccurate:

<table>
<thead>
<tr>
<th>Predicted herd (for 1973)</th>
<th>6,750,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual herd (1973)</td>
<td>9,795,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Predicted slaughterings (for 1973)</th>
<th>2,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual slaughterings (1973)</td>
<td>1,676,000</td>
</tr>
</tbody>
</table>

The BAE shows the actual overall increase in Queensland

81. Ibid., Terms of Reference, p. 3.
82. Predicted herd and slaughterings according to UGA Submission; Actual herd and slaughterings: The Australian Beef Cattle Industry (Canberra, BAE, 1975), p. 52.
slaughterings during that decade to have been only 1.9 per cent. Overseas demands on the Australian beef market with their cyclical effect on cattle numbers had caused drastic fluctuations in slaughterings from a plus of 25.9 to a minus of 8.5 per cent. In Central Queensland, for example, 71 per cent of the total turnoff went for immediate slaughter in the three years to 1970-71.

By June 1973, the total number of beef cattle in Australia was 29,101,000. Still on the crest of expansionary American and Japanese markets, Queensland producers had increased their herd by 6.7 per cent in the previous year. Apparently without a backward glance at the historic dangers of over-production, Dalgetys commented:

So rapid will be the increase over the next few years that doubts have been expressed whether the present abattoir complex of 100 establishments will be able to cope with the cattle market....

It had taken 25 years, from 1945 to 1970, to increase the Australian herd from 14 million to 25 million. In the following six years 'in response to forecasts of world-wide shortages of beef the Australian herd jumped to 33.4 million'. Just as dramatic was the Queensland increase in beef cattle properties from 13,711 in 1960 to 26,660 in 1974, and the state herd to 10.2 million. In addition to a large number of mixed farms running

83. *Australian Beef Cattle Industry*, p. 52.
85. *Australian Beef Cattle Industry*, p. 52.
86. Dalgetys, *Beef Digest*, p. 5.
beef cattle, the Queensland Government had resumed parts of large leasehold grazing properties to become grazing or homestead leases. The Fitzroy Basin (Brigalow) Land Development Scheme (1962) alone doubled the number of cattle properties in the region. The government had therefore contributed to over-production.

Not only in Australia, but also in all beef importing countries, cattle numbers had increased alarmingly. In one year, 1972-73, the world cattle population increased by twenty million to 1.34 billion.\(^89\) Even so, less than 10 per cent of the world output in beef was traded internationally.\(^90\) The USA, Japan, the EEC and Canada accounted for 80 per cent of world beef imports by 1975. Growing cattle numbers in these countries obviously threatened Australian cattlemen. Other causes of fluctuation in demand were inflation, beef substitutes (including synthetic beef) and changes in consumer levels of affluence.\(^91\) As one economist expressed the combined effect of these factors, 'a ripple over there represents a tidal wave here, as we've learned to our cost'.\(^92\) Unfortunately most of these dire facts were published after the industry crash in 1974. As in 1921 there had been virtually no public warnings, and cattle prices took the same downward plunge. They dropped from an (Australian) average of 79.4 cents a kilogramme (on the hook) to a disastrous 33.2 cents. Individual cattlemen in the

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Pitzroy Region received even lower prices. An Arcadia Valley producer sold 41 prime bullocks to Roma Meatworks on 19 February 1975 which returned him 22 cents a kilogramme.  

When an industry delegation in 1975 took a long list of recommendations to the Minister for Primary Industries (Senator K. Wriedt), he referred these to the Industries Assistance Commission (IAC), requesting a report within 90 days. The IAC, in turn, recommended to the government credit facilities for beef producers, household support for non-viable producers, and the suspension of the meat export charge on beef without prejudicing the brucellosis and TB eradication campaigns. Following a change of government, the Minister (Ian Sinclair) finally announced on 10 February 1976 a very meagre concession: the suspension of the meat export levy and the levy for disease control from 1 March 1976. In its place was a levy of $1 a head on all cattle over 90 kilograms dressed weight; this was imposed to assist the government in disease control. While this shifted the burden slightly, it hardly fulfilled the Minister's pious hope that this 'would provide a stimulus to livestock prices as early as possible'. Ironically, Senator Wriedt (Labor) gave a more sympathetic hearing than his successor, Ian Sinclair (Country Party).

The instability of the market in the 1970s is demonstrated by cattle prices which in 1979-80 rose to an unbelievable 147.5 cents a kilogramme, but dropped again the following year. Despite the occasional 'bonanza', producers themselves deplore

93. Personal interview with Owen Benn (Brigalow Scheme Settler), 12 April 1984.
95. Ibid.
Bullock prices during the beef depression, 1975.

(O.K. Benn)
too-high prices almost as much as too-low; high prices push up retail prices for beef which result in consumer resistance, while low prices sometimes do not cover the costs of production. The sharp fluctuations of the 1970s clearly illustrate the effects of 'highs' in world beef markets on herd planning. Only a short time before the 1974 'crash', a BAE survey showed that 61 per cent of cattlemen intended to expand their herd size in 1975 both by 'breeding up' their own herd and, in Central Coastal Queensland, by purchasing additional cattle. The proposed regional increase reflected the doubling of properties in the Fitzroy Region and especially the current stocking of Brigalow Area III.

The effect of the beef recession on the older generation of cattlemen who had experienced the industry depression of 1921-34 was no less drastic. A retired Clermont grazier, W.T. Purvis, maintained in 1976 that the current slump was worse because of higher costs. What he did not know at that time was the brevity of its duration compared with the between wars beef depression. Once again there were calls for some scheme to stabilise the industry. These had been made in the 1890s, the 1920s and again in the 1947-49 period when the price paid by Britain (under agreement with the Australian Government) was lower than that paid to other Commonwealth countries. But in 1949 grazier organisations had stopped short of a stabilisation scheme in order to 'safeguard their freedom of operations'. This 'freedom' was to be a stumbling block to future schemes

97. Personal interview with W.T. Purvis (Clermont cattleman), 8 December 1976.
as it had been in the past. In 1979 the BAE analysed a number of stabilisation schemes, none of which was adopted. In general, the schemes proposed to maintain competitive trading while removing large price fluctuations without government price control. 99

While international influences were directly responsible for the 1974 debacle, there were also inter-industry changes within Australia which contributed to over-production. Beef prices are not the only factor stimulating the 'cattle cycle'. Prices paid for wheat and wool, and the effect of 'slumps' in these industries, directly affect cattle numbers and ultimately the entire industry. A survey of developments, 1950 to 1980, shows the first two decades to have been periods of rapid expansion in broadacre farming and also in sheep numbers following the Korean 'wool boom' of the early 1950s. Cattle numbers rose only slowly during the 1950s, a time when sheep and wheat were more popular enterprises. Increases in beef cattle were mainly in northern Australia where few alternatives are possible. The situation changed in the mid 1960s when beef prices rose and returns for wool and wheat declined. The direct relationship between the complete collapse of the wool market in 1970 and the rapid increase in beef cattle numbers from this time (when cattle prices rose by over 50 per cent in the four years to 1973) is a dramatic illustration of inter-industry relationships.

Likewise, since the collapse of the cattle market in 1974-75, with cattle prices at their lowest level for 30 years,

broadacre farming has increased in response to higher grain prices. In the Fitzroy Region this increase is most marked in cleared brigalow country and, as shown in Chapter VI, it is usually directly related to the beef cattle depression. The total area under crops (wheat, sorghum, sunflower, safflower and cotton) increased rapidly. By 1974-75 there were already 347,000 hectares under cultivation in the Capricornia Region, excluding the Central Highlands, the most intensive grain growing area in Central Queensland. Beef and wheat had become Australia's two most important agricultural industries in terms of gross value of rural production by the 1970s. The nation's historic ride on the sheep's back had taken a tumble.

Producer organisations within the industry traditionally watch over their members' interests, but in the post-war years there have been a number of boards and organisations set up specifically to assist both cattle and beef marketing. Firstly, the AMB, which since 1935 has been involved in scientific research related both to beef breeds and pasture improvement. More directly relevant to marketing is the Australian Meat and Livestock Corporation (AMLC) established in 1977 by the Federal Government to replace the AMB. Its function is 'to undertake regulatory, promotional, advisory and administrative responsibilities' on behalf of both producers and processors. Its purpose is to oversee the industry, not control it.

Fitzroy Region producer representative, Graham McCamley, is a practising cattleman who in his own words suffered 'the "bust"...that is history'. The AMLC, in attempting to prevent future economic disasters, assesses market prospects in a more sophisticated manner than the prophets of 1890, 1920, 1949 and 1973. While guess work is no longer the yardstick, only history can judge the accuracy of their 1983 prediction: that the USA, Canada and the EEC provide 'an assured market' for 345,000 tonnes of Australian beef annually 'for the foreseeable future'. McCamley admitted that Japan's quota system was less certain.\(^{104}\)

The QMIO & MA was established under the Meat Industry Amendment Act of 1977 to assist in livestock marketing and beef production. According to some cattlemen, this organisation and the AMLC tend to aid meat processors more than producers. Views on this appear to depend on which sector of the industry the speaker represents; there is certainly no consensus. Bruce Gates believes that the AMLC as constituted has itself been part of the problem of marketing because of its refusal to monitor profitability of the meat processors.\(^{105}\) He also blames the Federal Government for maintaining a system highly favourable to the processor.\(^{106}\) The Australian Meat Industry Employees Union (AMIEU) argues that the QDPI and 'its subsidiaries' such as the BAE and AMLC 'are geared solely to promote the interests of the primary producers'. They would like to see an Australian Meat Corporation.\(^{107}\) While AMLC

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105. Personal interview with Bruce Gates (then lecturer in Economics, CIAE), 7 December 1983.
106. Bruce Gates, untitled paper presented to Cattlemen's Union Regional Forum, Rockhampton, 28 May 1977. (Copy provided by author.)
publications do emphasise the beef export side of the industry, and overseas markets, the QMIO & MA seems more producer orientated. Its research reports, such as those on the distribution of saleyards (1982), its inquiry into railed-cattle losses (1981) and a feasibility study on carcass auctions (1982), provide guidance for all sectors of the industry. Unfortunately the historic hiatus between producers and processors seems no nearer being closed despite the number of boards on which representatives from each sector serve. Whether Corporation, Marketing Authority or Board, these tend to suggest 'government control', something which the grazier traditionally fears. He has an entirely different attitude to the DPI whose officers live and work in his own district. These provide a wide range of specialist services to cattlemen including marketing advice and evaluations on different methods of selling cattle. Both QDPI and the CSIRO maintain research laboratories and experiment stations within the Fitzroy Region (Rockhampton, Biloela and Moura).

The cattleman of the 1970s was able to market a vastly superior beast to the rough coated, rangy animal marketed by his grandfather in the 1870s. But one factor remained unchanged: instability in the market place. At no time in the history of the industry has this been demonstrated so clearly as in the 1970s. In the four years to 1973, cattle prices rose by more than 50 per cent and yet in the following year they reached their lowest level in 30 years; only four years later (1978) prices were almost double the record of 1973 and more than four times the 'slump' price. Such violent fluctuations are surely more damaging to the industry as a
whole than the previous long periods of low prices, depressing as these were to individual cattlemen.

The economic principle, *a competitive price to ensure ownership*, is one of the cornerstones of the free enterprise system. In applying this to the beef cattle industry both in the nineteenth and twentieth centuries, there have been obvious periods of failure. Even so, more revolutionary changes had occurred by 1980. The ebb and flow of demand and supply had given way to international forces. As expressed by one of Australia's leading economic advisors, Dr Harold Bell, 'world economic changes are impacting not solely on conditions of demand for our products but also upon some of the supply factors as well'.

No matter how prime the condition of the producer's cattle, they were beyond his control when they passed through the 'farm gate'. The price he received was no longer determined by competition at his local saleyards, but by the degree of political pressure within importing countries leading to quotas or total bans on Australian beef; and by the even more subtle forces of the world money market. The mechanisms controlling these international forces are so finely sprung that 'a ripple over there represents a tidal wave here'.

2. 'To Market, To Market....'

Market is again used as both noun and verb in this section, with the sub-title emphasising verbal action in the movement of cattle from the producer's paddock to abattoir or saleyard - the 'place where people meet'. In the early days, and for long afterwards in some areas, the only method of getting cattle to market was on the hoof. J.G. ("Battler") Pattison recalled an instance in 1875 when 2,000 prime bullocks had to be delivered to Lakes Creek Meatworks 'as required, after ten day's notice'. This meant the contractor had to make arrangements well in advance. Sufficient drovers, horses and packhorses had to be assembled, and basic food stuffs such as flour, sugar and tea purchased. The head drover preceded the droving outfit as he always chose the cattle from the mob ready mustered by the station manager. On one occasion the head drover supplied 5,000 head to the meatworks comprising mobs of 100 or more from different stations. Some of these cattle walked hundreds of miles, yet the bullocks averaged 800 pounds (362.8 kg).

W.K. Peberdy, the Shorthorn advocate, told the Rockhampton Agricultural Conference in 1891 that it was a common thing for central-western cattle 'to march from their home to Melbourne - 1,000 to 2,000 miles - and then compete with and frequently beat' locally raised cattle in the market place.

Tens of thousands of live cattle were shipped from Port Curtis (Gladstone) in colonial times. Commencing in 1865 when

110. Ibid.
111. Quoted in Tozer, Guide to Queensland, p. 42.
the Town Council agreed to lease the government wharf to Captain Johnson for five years at an annual rental of £20 ($40) plus 'a toll of one penny' on every head of cattle shipped, this trade was the town's chief industry.\textsuperscript{112} The wharf itself became known as the Cattle Wharf. Initially shipments were to Sydney, but in 1876 an extensive and lucrative trade began in shipping live cattle to New Caledonia.\textsuperscript{113} This operated by schooner transport, taking from eight to 30 days depending on the weather. In 1884, following the destruction of Lakes Creek Meatworks by fire in 1883, steamers carried over 9,000 cattle from Gladstone to Sydney in one year.\textsuperscript{114} The trade continued almost to the end of the century. By 1895 a total of 45,000 cattle had been shipped to New Caledonia and southern colonies.\textsuperscript{115} In 1896 one disastrous shipment was sent to Britain. The shippers, by failing to seek the advice of experienced (since 1865) local agent, Henry Friend, allowed the animals to be incorrectly loaded and improperly housed and husbanded on the ship. To make matters worse, the cattle shared the ship with a cargo of nickel ore which, when damp, gives off noxious fumes. During the voyage of more than 90 days, out of a consignment of 383 head, 349 bullocks died and a miserable and bruised 34 animals were unloaded in England. At the same time, 'good clean cattle were being shipped from the USA in eight to ten days'.\textsuperscript{116}

Rockhampton cattle producers also tried this means of

\textsuperscript{112} Minute Book, Gladstone Town Council, August 1865; \textit{RB}, 5 September 1865.
\textsuperscript{113} \textit{Capricornian}, 1 April 1876; 13 January, 17 February 1877.
\textsuperscript{114} Ibid., 27 February 1884; 19 March 1887.
\textsuperscript{115} Ibid., 7 December 1895.
\textsuperscript{116} Ibid., 25 January, 15 February, 29 February 1896.
getting cattle to Melbourne markets, 1887-96. Christian Brothers of St Lawrence were the agents, but they loaded the cattle at Lakes Creek Wharf. R.S.G. Macdonald of Balnagowan Station accompanied his 300 'fats' on the steamer, also a mob belonging to his son-in-law, William Broome of Woodlands, Yeppoon. Beardmore, forever searching for viable markets, shipped cattle this way, also Archer Brothers. A trial mob was shipped from Rockhampton to London in January 1895. Like the Gladstone scheme, this appears not to have been repeated.

The increase in cattle shipments 1885-95 was just one aspect of producers' desperate attempts to find markets. Large mobs of cattle also travelled on the hoof from central and northern Queensland to Musswellbrook and Murrurundi in New South Wales. Albert Wright of Nulalbin (Dawson River) sent his first mob by this means in February 1885; between 1886 and 1892 Beardmore sent as many as 1,500 in one year to Musswellbrook. Edward Higgins & Co., a New South Wales stock firm, advertised in Rockhampton in 1891 the advantages of plenteous grass and water for stock consigned to them.

Beardmore told the Rockhampton Land Court in 1892 (when appealing against increased leasehold rents) that about 30,000 cattle annually passed through Tooloombah, via the great northern road (and stock route) in the years 1888-91. While some of these

117. MB, 12 February 1887; 29 June 1896.
118. Ibid., 19 March 1887.
119. Ibid., 19 January 1895.
120. Judith Wright McKinney to L. McDonald, 4 February 1985; TCB, 1885-92.
121. Capricornian, 31 January 1891.
122. Ibid., 14 May 1892.
would have been destined for local markets, a large number must have been en route to New South Wales saleyards. In one year alone, 1889, no less than 175,000 Queensland cattle crossed the border southwards. During the previous ten years the New South Wales cattle population had declined from 2.9 million to 1.7 million in a massive 'switch' to sheep.  

At the same time Queensland cattle numbers were rapidly approaching their colonial peak of seven million in 1894. The southern market was initially lucrative, but as Beardmore's experience shows, it responded in the usual manner to over-supply.

Until the advent of motor transport, cattle raised and fattened north or south of the central railway travelled to local markets on the hoof. The Squires of Wharton Creek (Carnarvon Range) took seven days to drove their cattle to Springsure (rail-head since 1887) with cattle losing condition on the way.  

Vic Priddle described the stages by which mobs of bullocks were taken to Rockhampton from Planet Downs (Rolleston) in the early years of this century.  

Cattle were mustered at the end of the wet season and sent to whatever market was available while stock routes still retained grass and water. A rural writer in 1938 referred to the practice of 'depotting', that is, spelling cattle in rented paddocks for extensive periods during long droving trips. The main obstacle was in finding agistment in dry seasons.  

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123. Ibid., 10 January 1891.  
124. Squire of Wharton Creek, p. 45.  
1900, 'learnt the ways which made him a successful cattleman' from pioneer pastoralist Thomas Creed of Langmorn Station. As a young man, McCamley did Creed's droving, taking the 'fats' to Gladstone Meatworks. Bill Nott of Greycliffe, Banana, was only thirteen when he helped his father in 1895 drove a mob of Shorthorn bulls for sale in Taroom. He later assisted in droving 1,000 bullocks to Sydney from the Dawson Valley. While droving was usually a matter of necessity in the early years, the drover himself did not become redundant until well after the Second World War.

When railway transport became available (Rockhampton to Central Highlands 1879-87, Dawson Valley 1915-27, Rockhampton to St Lawrence 1921) stock routes were often the preferred means of marketing. During a period prior to 1895 Lakes Creek Meatworks refused to accept trucked cattle and so the railways converted all wagons to carry sheep. A change of policy by 'the Creek' in 1895 obliged the railways to reconvert the wagons for cattle and order another fourteen wagons from Burns & Twigg (Rockhampton) and seven from Brisbane. Despite claims of a 'record' the total number of cattle trucked on the Central Railway in 1895 was a mere 1,571.

Over-production in the cattle herd was halted dramatically in the closing years of the nineteenth century. In 1896 the first of two natural disasters within five years brought chaos to the industry. The advent of the cattle tick, *Boophilus*

130. *Capricornian*, 24 August 1895.
131. Ibid., 18 April 1896.
Microplus, to the Fitzroy Region not only decimated herds through redwater fever, but almost brought stock movements to a standstill. By government proclamation (Diseases in Stock Act 1896) stock, including horses, could not be moved out of declared tick areas, and a quarantine line was fixed 'on' the 24th parallel just south of Gladstone.¹³² Not even clean cattle from clean areas were allowed to cross this line to the south. Then the French Government banned for a time the shipment of live cattle from the region in fear of importing ticks. The last noted consignment left Gladstone in July 1896.¹³³ As the old century closed and the new began, the great drought killed many of the cattle which had survived ticks and redwater fever. Cattle breeding superseded cattle marketing for several years. Financially, the war years were opportune for cattlemen and marketing proceeded normally except in 1916, another drought year. This was followed by a long period of depression in which marketing methods remained unchanged. After the war the changes were revolutionary, although this was not immediately apparent.

A survey by K.L. Bardsley in 1961 of cattle movements in Central Queensland showed that by this time cattle were marketed by three means of transport: droving via stock routes, railway k-wagons and motor transport. Drovers were already becoming scarce, but this was still the cheapest means of getting stock to district saleyards. Motor transport was still in its infancy, most operators having been in business since about 1955. This study shows comparative costs per hundred

¹³². Ibid., 30 January 1897.
head of cattle over 100 miles (160.9 km):

Droving: c. 10 days paddock to saleyard @ 1/- [ten cents] per beast per day: £50 [$100]
Railway: c. 2 days paddock to saleyard in 5 k-wagons: £132 [$264]
Motor Transport: 1 day paddock to saleyard in 5 semi-trailers: £210 [$420] 134

In 1959-60, 17 per cent of cattle marketed at Gracemere Saleyard were transported by rail, 20 per cent on the hoof, and 63 per cent by motor transport. 135 This early emphasis on motor transport was probably due to the concentration of beef cattle within the region. The statistical divisions of Rockhampton, Mackay and Central West depastured 30 per cent of the Queensland herd and 15 per cent of the Australian total. (The southern part of Mackay Division includes areas within the Fitzroy Basin.) Droving costs in the period of Bardsley's survey had increased considerably since 1920 when Archers paid a droving contractor the following sums:

427 steers and heifers from Archer (Bajool) to Torsdale: £60 [$120]
600 head Laleham (Blackwater) to Torsdale @ 4/- [40 cents]: £120 [$240]. 136

In the first instance the trip would have taken about three to four days and in the second a week to ten days. By 1980 only occasional small mobs of very local cattle (Gracemere area) arrived on the hoof at the saleyards, about 20 per cent by rail and 80 per cent by motor transport. 137

135. Ibid.
137. Personal interview with Peter Priem (Manager, Rockhampton District Saleyards, Gracemere), 29 March 1984.
The concept of motorised road transport for live cattle was considered mere fantasy prior to 1949. In that year experiments were carried out which proved its feasibility. Between March and November 1949, 2,700 head were moved in 45 consignments of 60 head from the Northern Territory to Queensland rail heads. These road trains, as they were called, comprised a prime-mover towing trailer wagons - later called 'dogs'. At the conclusion of the experiment it was found that 80 per cent of the cattle were free from bruising, 10 per cent were slightly bruised and the remainder showed bad bruising.¹³⁸

Long before motorised transport, cattle on their way to market suffered bruising from various causes. Lakes Creek Works' antipathy to rail wagons pre-1895 was undoubtedly motivated by damage to carcasses through bruising. In 1924 a State Government Inquiry was held into the problem of bruising. According to one witness,

Barking dogs, big sticks, noisy engines, and sharp-edged posts...are some of the trials which cattlemen suffer when cattle are trucked ....All helped in the bruising of beasts. He thought there was unnecessary rough handling of cattle.... ¹³⁹

Other causes of bruising included the building of trucking yards with square timber and sharp edges, trucking yards built too close to shunting yards, and abuse of the train braking system. J.L. Wilson (Calliope Station) said the faulty couplings of rail trucks were also responsible, while some trucks in use in 1924 were not fit for cattle. He also thought that only men

with experience of cattle should be in charge of stock trains.\textsuperscript{140} By 1958 the estimated loss from bruising in Queensland was £900,000 ($1,800,000) of which £700,000 ($1,400,000) was for cattle slaughtered for export.\textsuperscript{141} Australia wide, losses to the industry from this cause alone had risen to a colossal $35,000,000 annually by the early 1980s.\textsuperscript{142}

Severe bruising and 'significant numbers of dead and dying cattle' carried by rail in 1978-79 led to an Inquiry by the Queensland Meat Industry and Marketing Authority. While the 1924 Inquiry was motivated from within the industry, the latter was instigated through public concern expressed through the RSPCA. The following figures supplied by one Queensland abattoir for the period 1975-79 indicate not only the extent of the problem, but also wide variations in losses:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Cattle Railed</th>
<th>No. of Losses</th>
<th>% Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>39578</td>
<td>113</td>
<td>0.29</td>
</tr>
<tr>
<td>1976</td>
<td>37140</td>
<td>113</td>
<td>0.30</td>
</tr>
<tr>
<td>1977</td>
<td>37704</td>
<td>173</td>
<td>0.46</td>
</tr>
<tr>
<td>1978</td>
<td>41108</td>
<td>79</td>
<td>0.19</td>
</tr>
<tr>
<td>1979</td>
<td>35232</td>
<td>93</td>
<td>0.26</td>
</tr>
<tr>
<td>TOTAL</td>
<td>190762</td>
<td>571</td>
<td>0.30</td>
</tr>
</tbody>
</table>

(Sir) William Gunn maintains that if the animal welfare lobby were to examine what happens to cattle after they leave the

\textsuperscript{140} Ibid.
\textsuperscript{141} K.M. Grant, 'Padded Wagon Tested for Bruising of Cattle', \textit{QAJ}, Vol. 85, January 1959, pp. 18-19.
\textsuperscript{143} 'Railed-Cattle losses in Queensland', QMIO & MA, April 1981, p. 22. (Duplicated booklet)
property, '...we haven't got a case. What we do to the animals is unforgivable...'. This can occur while loading cattle in the owner's yards, during transport by rail or road train, or in the saleyards. Attention to correct lighting in saleyards to eliminate shadows which frighten cattle and cause them to crash against the rails is important. Although processors usually blame the three stages of transport handling, bruising is just as likely to occur in the meatworks yards. With almost 100 per cent of cattle now arriving at saleyards or abattoir by mechanised transport, the problem is obviously more acute than in 1924. Getting the animal to market is less time consuming, but perhaps more hazardous.

The second and most vital aspect in marketing cattle is the market itself. Within the free enterprise system the producer can either sell his cattle direct to the abattoir of his choice, choose the auction system operating through district saleyards, or sell privately to another producer. From both producers' and processors' points of view, saleyard auctions are a most important part of the marketing process. The producer's profit margin depends largely on the price he receives at auction; the price paid by the processor determines his bargaining strength on world markets. (Although the processor buys a large portion of his stock direct from producers, the auction system acts as a guide to market price levels.) This type of marketing which has been in existence in Central Queensland since the Gracemere Fair of 1876, and earlier, is

145. Personal interview with Peter Priem.
likely to continue, particularly for store cattle.

Rockhampton's pioneer saleyards were at Allenstown, then on the outskirts of urban settlement. The wide thoroughfare leading over Athelstane Range from the west, now Penlington Street, was originally the stock route to the saleyards. Eventually the venue was changed to the Agricultural Society's showgrounds and cattleyards in suburban Wandal. By 1953 congestion within the area had become so acute that the Rockhampton District Saleyards Board moved to new yards at Gracemere about ten kilometres south-west of the city. This move took cattle auctions in Rockhampton full circle. In 1876 the Central Queensland Graziers and Farmers Society organised the Gracemere Fair to which they invited cattle buyers. On 25 February almost 300 buyers competed for the 300 available cattle. Many of these had recently taken up small selection blocks. Prices paid for all classes of stock were higher (in actual money) than those received by the sons and grandsons of these pioneers in the late 1890s or in 1921-35. If inflation and high production costs are also taken into account, the 1876 returns were much higher than those of 1976 when the price paid for a cow purchased a pair of child's shoes. In 1876 the £6.2.6 ($12.25) received for a cow would have bought a dozen pairs of children's shoes.

In the early years the larger processors did not patronise saleyard auctions at all. Rockhampton's biggest domestic butchery in colonial and pre World War I times, Pattison & Co.,

146. _MB_, 26 February 1876.
147. Personal interview with Phillip Dowe (Brigalow Scheme Settler), 12 March 1984.
slaughtered each week '40 bodies of beef', 160 sheep and 80 pigs to supply its five retail shops. Not until 1912 did they buy cattle through the local saleyards. Pattison bought his stock mainly from coastal producers north and south of Rockhampton; Beardmore's cattle books show many such direct sales commencing in the 1870s.

The Rockhampton District Saleyard at Gracemere is the Fitzroy Region's major selling centre with an annual average throughput in excess of 100,000 since the 1976-77 season. It commenced in 1953 with a modest 35,168 head, reaching 120,000 in 1965-66 during one of the industry 'booms'. Bookings for one sale alone exceeded 4,000 and despite the sale commencing at 6.30 am and finishing at dark, a second day's selling had to be arranged several weeks in succession. Relays of auctioneers and 'the utmost facility' in handling and dispersing sale lots made little difference. The Rockhampton Livestock Auctioneers Association reported that in the three months to September 1965 no less than 55,000 cattle had passed through the yards, grossing £2,291,392 ($4,582,784). This was a record both for numbers and gross proceeds. Saleyards throughout the region grossed more than $10,000,000 in the three months.

Buyers from as many as 23 southern exporters and wholesalers attended weekly Gracemere sales in addition to local meatworks and butchers. The phenomenal demand was attributed to dry seasonal conditions in southern Queensland and New South Wales. There was also a substantial (for that period) price rise from

150. Ibid.
Rockhampton District Saleyards at Gracemere.
( Queensland Country Life)
Young Brahman-cross bullocks ready for the saleyards. (QDPI, Rockhampton)
the previous year from 42.8 cents a kilogramme (average for Australia) to 51.9 cents.  

Ironically, for the rest of the 1960s the central districts experienced extreme drought conditions which imposed natural limitations on marketing. A Rockhampton journalist had commented on that record year: 'So long as there is a livestock industry in Central Queensland, 1965-66 will go down in history as the high water mark of fat cattle sales up to that time'. Numbers were not exceeded until the *annis mirabilis* of 1978-79 when an incredible 248,711 head passed through Gracemere Saleyards following the introduction of live-weight selling and yet another price 'boom'.

Excluding Gracemere, other regional saleyards took a varying share of the market with average throughput for the five years, 1972-77, in this order:

<table>
<thead>
<tr>
<th>Location</th>
<th>Average Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerald</td>
<td>22,602</td>
</tr>
<tr>
<td>Clermont</td>
<td>17,106</td>
</tr>
<tr>
<td>Moura</td>
<td>16,081</td>
</tr>
<tr>
<td>Taroom</td>
<td>11,266</td>
</tr>
<tr>
<td>Springsure</td>
<td>9,366</td>
</tr>
<tr>
<td>Injune</td>
<td>5,556</td>
</tr>
<tr>
<td>Biloela</td>
<td>5,365</td>
</tr>
<tr>
<td>Rolleston</td>
<td>4,958</td>
</tr>
<tr>
<td>Theodore</td>
<td>4,672</td>
</tr>
<tr>
<td>Baralaba</td>
<td>4,500</td>
</tr>
</tbody>
</table>

Dingo, Duaringa and Theodore (No. 2) all sold at least 2,000 head, while Calliope and Mantuan Downs averaged less than 2,000. (Dingo and Mantuan Downs yards had closed by 1982.) Gracemere's average throughput in the same period was 80,538 head and Cannon Hill's was 142,995. Despite the Fitzroy Region's

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152. Westacott, *The Beef Cattle Boom*.
154. Ibid.
('A Preliminary Study...of Queensland Cattle Auction Selling Centres 1972-77', QDPI.)
high concentration of beef cattle (c. two million) the following figures indicate that only about 25 per cent were marketed through saleyards in 1979-80:

- Southern: 1,393,479
- Central: 461,684
- Northern: 177,246

The QMIO & MA confirms that regional saleyards throughputs are poorly related to cattle population. While drought, prices, and level of production all affect throughput, direct marketing is the most consistent factor. (By 1981-82 this situation showed change.)

The saleyard auction is a tradition which has come down with few changes until the last decade with its introduction of liveweight scales and several forms of electronic selling. Unfortunately statistics relative to cattle marketing prior to the 1960s are almost non-existent. Hall confirms the few publications in the past on this subject; he also refers to 'the dearth of quantitative data on saleyard operations'.

Prior to the 1970s the auction system depended largely on subjective judgment and estimates of a beast's weight. Since then, the subject has received expert attention. The efficiency of the marketing system for slaughter cattle was reviewed in the 1970s by an agricultural scientist and an agricultural economist. They found that the saleyard auction system had higher operating costs than direct selling, while price variations were 'unacceptably high'. This was due to producers' inadequate

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156. Hall, 'A Preliminary Study into the Distribution and Efficiency of Queensland Auction Selling Centres', p. 5.
market information, or 'because of errors associated with
the evaluation of the live animal'. Yet, at the end of the
1970s, 52 per cent of slaughter cattle in Australia were sold
by auction. The auction system operates in two ways:
bidding in dollars per head of unweighed stock, that is, by
estimated weight; and liveweight selling on a cents per
kilogramme basis. Most major saleyards (such as Gracemere and
Emerald) had installed liveweight scales by 1980.

Liveweight selling was introduced to Queensland at Cannon
Hill and Gympie in 1975 and to Gracemere in 1979. By the end
of that year there were 27 liveweight selling centres in the
state handling 84.8 per cent of beef cattle. While the two
major factors in this great increase were the tremendous build
up of cattle on properties during the slump, and the huge price
increase towards the end of the decade, liveweight selling
attracted vendors away from smaller regional saleyards. Hall
believes that the demands for the 'more objective' liveweight
selling are debatable because of additional costs, including
more accurate and comprehensive price reporting. The
change-over cost the Rockhampton District Saleyards Board
$190,000 including modifications and additions to the yards
themselves. Even so, the AMLC, in its review of livestock
marketing in 1980, recommended that larger regional centres should
adopt this method of selling. Reference was made to 'a new and

157. W.J.A. Hall and M.C. Todd, 'Farm Gate to Abattoir: Cattle
158. P.A. Cassidy, Optimum location, number and size of beef
slaughter plants in Eastern Central Queensland, M.Ag.Sc.
159. Hall, 'A Preliminary Study into the Distribution and
Efficiency of Queensland Auction Selling Centres', pp. 5-6.
160. Personal interview with Peter Priem.
ongoing demand' to have stock sold liveweight; the AMLC believed this would partly compensate for fat stock lost to direct trading. The rationale behind this recommendation is the AMLC's support for both direct marketing and the auction system. Recent oral history reveals that even those producers who turn off prime fat bullocks which they sell to a particular abattoir, without paddock inspection, believe that in a free enterprise system marketing options must remain open.

Ownership of saleyards varies from local authority, pastoral house, show society, private ownership to special public boards. Gracemere, as already indicated, is owned and administered by the Rockhampton District Saleyards Board. While in the past large numbers of cattle from the Fitzroy Region have been railed to South-east Queensland (Cannon Hill in particular), by the late 1970s the situation had changed. The high cost of transport and improved local selling facilities, such as liveweight selling, resulted in a decline. (By 1981-82 Gracemere was the state's largest individual yard with a throughput of 9.8 per cent of the total market. Toowoomba, with three large saleyards, had a combined market share of 12 per cent to make it the largest selling centre.) The saleyard industry itself, like producers and processors, has experienced cost pressures, while operators' and commission agents' returns have declined. Interlotting (that is, the combination of small lots from different producers) may reduce costs, but this is not

161. 'A Review of Livestock Marketing', AMLC, March 1980, p. 2. (Duplicated booklet)
practised at Gracemere; producers generally object to the price average. Hall found that operating efficiency can be improved through saleyard design. Priem, manager of Rockhampton District Saleyards, says that most saleyards have been designed by graziers, and while these may be quite suited to station needs, they do not satisfy the special needs of the auction system. Saleyards should be designed by engineers to suit drafting requirements and assist in eliminating bruising. Gracemere Yards are part-grazier, part-engineer designed.

In recent years three governmental inquiries (1972, 1973 and 1978) have investigated the saleyard auction system. Their conclusions (in two instances) supported the contention of Hall and Todd that saleyard costs are unacceptably high. The Prices Justification Tribunal (1978) suggested a rationalisation of costs by phasing out some of the smaller saleyards. This has now occurred in the Fitzroy Region. Among the necessary costs of the auction system is the agent's fee which is based on a percentage of the total value of the transaction rather than on the cost of the service provided. This 'cost sharing' is seen as a source of economic efficiency. Small lots of cattle cost more per head in handling costs and charges than large consignments, but in prices paid by meat processors there is no significant relationship to lot size.

Regarding criticism levelled at the cost to the industry of saleyard selling, Hall points out:

163. Personal interview with Peter Priem.
164. Hall and Todd, 'Farm Gate to Abattoir', p. 256.
165. Personal interview with Peter Priem.
166. Hall and Todd, 'Farm Gate to Abattoir', pp. 254-57.
Rejection of the saleyard system may be akin to throwing the baby out with the bathwater. In exchange for its costs, the saleyards system provides an openly competitive trading environment where buyers and sellers can see the commodity that is being transacted. It provides a method of marketing small lots of cattle which are sometimes difficult to absorb into the weight and grade system. 167

In addition, it provides a marketing 'intelligence system' which certainly does not emanate from the more secretive methods of meatworks buyers. It also creates jobs within the industry and has a direct impact on towns and cities where saleyards are located. 168

In relation to cattle sold for domestic consumption (local butchers or abattoirs) there appears to be a different approach as this market tends to be 'more discerning in terms of quality'. 169 The so-called paddock sale in which buyer and seller negotiate a price, in the same way that Archibald Archer (or Ned Cross) and William Pattison did in the 1860s, is the simplest form of marketing. The chief disadvantage is a possible price inefficiency because there is no objective measurement of the method, other than by the cattle producer and the cattle buyer. Another form of selling is 'over the hook' in which weight and grade are assessed after slaughter; some producers accuse processors of variations in carcase trimming and weighing procedures, others who have a good relationship with the abattoir believe this to be a very fair method. A feasibility study conducted by the QMTO & MA throughout all sections of the industry showed that 'the carcase

168. Personal interview with Peter Priem.
169. Hall and Todd, 'Farm Gate to Abattoir', p. 257.
auction alone has no apparent potential' either to improve
the price for producer, wholesaler, retailer or processor. 170
This method differs from 'over the hook' selling in that
auctions take place after slaughter.

In recent times the BAE has suggested that the main
avenues for improving livestock selling and reducing costs is
to return to direct selling methods and, in the long term,
'sight unseen trading'. 171 Some of the Fitzroy Region's
newest cattlemen, the bragalow settlers, have already adopted
this method and can produce figures to prove its efficiency.
[See Chapter VI.] Undoubtedly their success stems from their
ability to supply prime young fat bullocks year after year
from their superior improved pastures. The larger beef cattle
producers, especially pastoral companies with a 'string' of
stations, also use the direct selling method. The Stanbroke
Pastoral Company with eighteen stations in Queensland undoubtedly
has a better bargaining position than the small producer.
As seven of these stations are in the Fitzroy Region, their
costs are most relevant. Their central properties include the
historic Waverley Station at St Lawrence, and in the Central
Highlands they own Frankfield, Banchory, Peak Vale, Islay Plains,
Beresford and Consuelo. 172 (Sir) James Balderson, Chairman
of Directors, told the IBC in Rockhampton in 1983 that his firm
sells its slaughter cattle direct to the meatworks on a dressed
weight per kilogramme basis. Even so, its overall marketing

170. John D. Jeffery, Carcass Auctions in South East Queensland,
A Feasibility Study, Research Series Report No. 3, QMIO &
171. Livestock and Meat Marketing in Australia, p. 16.
172. Annual Report and Accounts, Stanbroke Pastoral Company
costs including slaughter charges, levies and associated costs can total $208 a head. He commented also on transport costs:

Costs beyond the "farm gate" represent a major problem for profitable cattle operations anywhere in Australia, and in the remoter areas of Northern Australia this problem is even more so. Stanbroke's average road-rail freight for bullocks to Meat Works in 1982 was $34 a head [ranging from $14 to $50 per head]. 173

(Sir) William Gunn argues that among these costs are 'some inefficiencies' which can be removed by cooperation between all sectors of the industry. 174

The direct selling method in providing transfer of cattle from point of production to point of slaughter minimises transport and handling costs. 175 It is also beneficial to the end product (beef) in less handling and therefore less bruising. Producer's returns sighted recently (Arcadia Valley) for cattle marketed under this system showed no losses from bruising. The cattle were loaded on the property after their morning feed and drink into a road train which took them direct to Oakey Abattoir. 176 Those who oppose this method argue that its chief disadvantage is its inability to compete in the market place for the highest price; some meatworks are known to disadvantage producers. Its proponents maintain that if the grazer 'does his homework' on the current market he will achieve results superior to those obtained under the auction system. 177 A saleyards entrepreneur, on the other hand, argues that without the auction 'yardstick', processors 'would walk

175. Hall and Todd, 'Farm Gate to Abattoir', p. 258.
176. Personal interview with Owen Benn.
177. Personal interview with Robin Sparkes (Brigalow Scheme settler), 12 April 1984.
all over the industry. Meatworks buyers traditionally hate the graziers'. Undoubtedly there are merits in both arguments: without the choices existing within the free enterprise system to protect the producer, the processor could control the market; but if all slaughter cattle were forced through saleyards, costs to the entire industry could be prohibitive.

When the immediate shock of the 1973-74 slump had passed, producers and entrepreneurs again looked for new methods of marketing. One of these, the Sydney Live Cattle Futures Exchange established in July 1975, at least took producers' minds away from the depressing state of current markets, even though most admitted the complexities were beyond them. The scheme was supposed to benefit the purchasers of store cattle, breeders who fattened their own weaners, also lot feeders. Through the system they could 'eliminate highs and lows of income by attempting to guarantee their price'. It is still too early to assess its significance. Various suggestions put forward by the BAE such as price stabilisation, assistance to low income producers, improvements in the livestock marketing system, have not (on its own admission) provided long term beneficial results. Other proposed schemes would result in some changes in the marketing system. While it is not the role of the historian to prophesy future trends, two new selling methods already tested (in 1984 just beyond the period of this study) were video selling and computer selling. Under both

178. Personal interview with Peter Priem.
these methods cattle remain in the producer's paddock 'chewing grass' while buyers throughout the state compete by means of the television screen (video) or by computer link-ups.\textsuperscript{181} The latter scheme, particularly, demands a standard live cattle classification.

The basic aim of any marketing system is to transform physically the product (cattle) into the commodity consumers buy (beef). Cattlemen sometimes argue that in this process the producer does not receive a fair share of the consumer dollar, and that he is more disadvantaged by price fluctuations than the processor. The question has been asked from time to time whether a statutory marketing authority would perform more adequately in the market place. The first peace-time marketing board in Queensland was created under the Wheat Pool Act of 1920. In the period 1922-26, under a Labor government, there were eight marketing boards; six were in existence in 1972. Despite early enthusiasm these have not been an unqualified success. A study undertaken in this aspect of the industry in 1972 simply concludes: 'A marketing board is obviously no panacea'.\textsuperscript{182} Even if it were, it would be difficult to persuade cattlemen to abandon the free enterprise system which allows them to retain their independence in marketing. In the long term, the efficiency of the marketing system is more significant in controlling industry costs than prices paid to the producer. It is obvious that influences external to Australia, both economic and political, are the key

\textsuperscript{181} Personal interview with Peter Priem.
element in determining cattle prices. [See Chapter V.]

Looking back over the development of the Fitzroy Region beef cattle industry from the 1860s to the 1970s, it is apparent that the marketing system itself has remained basically unchanged as a free enterprise system with a minimum of government interference. During the worst periods of depression, producers have sought new markets. In the colonial period they walked cattle to New South Wales or shipped them to New Caledonia. In the twentieth century the status quo has been acceptable in 'boom' years, but new forms of selling have been introduced in the last decade: emphasis on live-weight selling, variations on direct selling, 'over the hook', carcase auctions and electronic selling. None of these has changed the basic free market system. Cattlemen have stopped short of accepting a statutory marketing authority. As one entrepreneur said: 'Tradition means everything to the cattleman'.

183. Personal interview with Peter Priem.
Meatworks and meat marketing together provide the keystone of the beef industry structure: if the keystone 'cracks' the whole industry is in danger of collapse. This occurred in the Fitzroy Region in the late 1870s and during the 1880s when the meatworks were closed for long periods. The situation was much more acute for both processors and producers when the central processing works remained closed, 1923-28. As a general rule when cattle prices are low meatworks prosper, but in the 1920s the circumstances were obviously too complex to allow normal marketing. Even so, from its simplest beginnings in the 1860s from several 'boiling-downs' to the ultra sophistication of Lakes Creek Meatworks in the 1970s, the central processing industry has been a Queensland leader both in initiative (first freezing works in Queensland) and in export capacity. Ownership of works has gone full circle from 'London speculator' through grazier co-operative to multi-national. Whatever the ownership, it has been a continuing struggle to find stable meat markets and to relate in economic terms prices paid for cattle to prices received for beef, especially on world markets. Problems have multiplied in the post war period with inflationary pressures and even more subtle external political influences on meat marketing. One aspect does not
change: antipathy between beef processor and cattle producer, although neither can exist without the other.

1. Colonial Beginnings

The location and distribution of today's major meat processing works in Queensland were established during the colonial period: Brisbane (south-east), Rockhampton (central) and Townsville (northern). This pattern was set by growing cattle populations in the coastal hinterland, by developing urban centres, by the three early parallel railway systems and, most importantly, by port facilities for overseas shipping. Within the Fitzroy Region, Rockhampton was both port and railway terminus by the late 1860s and already dominated a pastoral region rapidly converting from sheep to beef cattle. Lakes Creek Works (1871) ultimately became the processing giant of today, with a second large company operating a few kilometres away. Of the small regional colonial works, only Gladstone provided a continuing service in the twentieth century (to 1963).

Meat processing in the pioneer phase began modestly with some pastoralists boiling down surplus or diseased stock on the stations. As early as 1865 Ned Cross (Archer Brothers' overseer at the Fifteen Mile) delivered two casks of tallow and twenty hides to a Rockhampton agent. As he requested Archibald Archer to send more nails and barrel hoops, also 'a driver to drive the hoops', it appears the industry was to continue. ¹ Albert Norton of Rodds Bay adopted the practice

¹ E. Cross to Archibald Archer, 8 April 1865. See Appendix for copy of Cross's letter.
of boiling tuberculosisis infected fat cattle during the 1860s.\textsuperscript{2} Others, like Beardmore, sent 'lumpies' and unmarketable cattle 'to the pots' operated by enterprising local butchers. An important public outlet was established at Rockhampton in 1868 when Laurel Bank Steam Boiling Works commenced operations. A small mob of cattle were 'put through the coppers' on 1 July.\textsuperscript{3} In 1870 William Pattison, a retail butcher, opened a second steam boiling works in Rockhampton, forever after known as 'Pattison's Boiling-down'. He operated this until his death in 1896 when his son, J.G. ("Battler") Pattison, acquired it.\textsuperscript{4}

The Pattisons, who also had wholesale and retail butcher shops in Rockhampton, were major cattle buyers for more than half a century. Although the location of the boiling-down changed from Dawson Road to Gavial Creek, and later adopted a more grandiose name, it did not branch out into any form of meat preserving, only tallow production, under Pattison ownership. Laurel Bank, which had begun as a boiling-down, was an exporter of canned meats by 1870, while Baffle Creek (near Gladstone) produced both tallow and meat extract. The following production figures for 1870 reveal the importance of tallow, but also show Laurel Bank's small experimental consignment of canned meat:

<table>
<thead>
<tr>
<th>Place</th>
<th>Sheep</th>
<th>Cattle</th>
<th>Pres. Meat</th>
<th>Extract</th>
<th>Tallow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockhampton (Laurel Bank)</td>
<td>-</td>
<td>615</td>
<td>184,500 lbs</td>
<td>-</td>
<td>46 tons</td>
</tr>
<tr>
<td>Gladstone (Baffle Creek)</td>
<td>5,100</td>
<td>1,100</td>
<td>-</td>
<td>8,000 lbs</td>
<td>122 tons</td>
</tr>
</tbody>
</table>

\textsuperscript{2} Capricornian, 24 October 1891.
\textsuperscript{3} RB, 2 July 1868.
\textsuperscript{4} Capricornian, 8 May 1897.
Boiling Down Establishments

<table>
<thead>
<tr>
<th>Place</th>
<th>Sheep</th>
<th>Cattle</th>
<th>Tallow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockhampton (Laurel Bank)</td>
<td>122,229</td>
<td>1,803</td>
<td>1,026 tons</td>
</tr>
<tr>
<td>Gladstone (Baffle Creek)</td>
<td>17,000</td>
<td>58</td>
<td>99 tons</td>
</tr>
</tbody>
</table>

Even though boiling-down was a wasteful process, it provided a small return for both producer and processor. A visitor to Rockhampton in 1868 commented, 'When there is no feed for the cattle they send them to the boiling down establishment to be made into tallow, but with all this, meat is very cheap'. Boiling down continued as an alternative to freezing or preserving throughout the colonial period, even by large works such as Lakes Creek. Its wastefulness was deplored in 1878:

...unless some means of utilising the carcase can be found, the boiling pot must be reverted to. This means that vast quantities of flesh meat will be destroyed every year in Australia.

Meat markets were purely local and very small prior to the commencement of canning in 1870. (Rockhampton in 1861 had a population of only 698. By 1871 it had increased to 6,464.) During that decade Queensland's cattle population increased from under half a million to over one million, while its human population grew from 28,056 to 115,567. Even though this

6. Tallow was used in the manufacture of candles and soap.
7. G. Stead to L. Stead, 23 October 1868. (Letter privately held.)
8. RB, 28 May 1878.
number had trebled by 1890, domestic meat markets could not possibly absorb the finished product of a cattle herd racing towards its colonial peak of seven million. The export market was small and unstable, while inter-colonial live cattle markets were glutted by 1890. The tremendous increase in the use of the boiling-down when other markets closed is evident in the value (in pounds sterling) of Rockhampton's tallow exports 1889-93:

<table>
<thead>
<tr>
<th>Year</th>
<th>Value (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1889</td>
<td>24,677</td>
</tr>
<tr>
<td>1890</td>
<td>38,141</td>
</tr>
<tr>
<td>1891</td>
<td>47,167</td>
</tr>
<tr>
<td>1892</td>
<td>81,808</td>
</tr>
<tr>
<td>1893</td>
<td>159,006</td>
</tr>
</tbody>
</table>

Despite its commercial uses, the environmental pollution from tallow manufacture is revealed in A.H. Paterson's recollections of Lakes Creek Works where he began as a junior in 1891:

...one has to remember that in those days most of the insides of the beasts went into the river, as little was known about processing them. It was a common sight to see rafts of about 100 or so distended ox bladders moving up and down with the tide as far as the rocks on one side of the town and the quarry on the other. Since those days we have learned to make use of every scrap of the animal....

Colonial meat preserving works (a step up from tallow production) proved to be a hazardous capital investment. There were more failures than financial gains in the Fitzroy Region. While there was always a market for tallow, the same did not apply to preserved meat. Even so, the two earliest works, Laurel Bank and Lakes Creek, each recorded a 'first' in industry history. Laurel Bank exported the first canned beef from

Central Queensland in 1870 and Lakes Creek established Queensland's first freezing works in 1883. Yet within a decade of its founding in 1868, Laurel Bank had had two separate ownerships and permanently ceased operations. Except for permanent closure, Lakes Creek had a similar record; during the 30 years of its colonial existence it changed hands four times and only occasionally (when cattle prices were low) did it make a modest profit. Of the three new meatworks established in the region in the 1890s, Broadsound, Gladstone and Emerald, only Gladstone survived the great drought.

Berkelman & Co., which founded the meat preserving industry at Laurel Bank, was a producer-processor company. Two of the partners, Berkelman and Lambert, owned Fitzroy Vale Station (Rockhampton) and Listowel Downs near Tambo. The third partner, Hugh Miles Milman, purchased Marlborough Station from Biddulph Henning. Anthony Trollope, visiting Rockhampton in 1871, expressed surprise that this baronet's son should be engaged in 'the distressing occupation of boiling down tallow'.¹² The famous novelist ignored the fact that Berkelman & Co. were pioneers in the meat preserving process within Australia. Canned meats had entered the British market about 1867 with 129 tons of meat and meat extract from Australia. This had followed a call for overseas supplies of meat owing to the 'dwindling flocks and herds of Britain'.¹³ Berkelman & Co. used the Hogarth process in which the meat was immersed in a

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PRODUCTION—continued.

LIVE STOCK.

Table No. CXXXV.

RETURN of the Number of Horses, Horned Cattle, Sheep, and Pigs, in the several Police Districts of the Colony, on the 31st December, 1870.

<table>
<thead>
<tr>
<th>Police District</th>
<th>Horses</th>
<th>Horned Cattle</th>
<th>Sheep</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana</td>
<td>1,220</td>
<td>11,591</td>
<td>284,480</td>
<td>147</td>
</tr>
<tr>
<td>Bowen</td>
<td>1,410</td>
<td>59,356</td>
<td>24,330</td>
<td>346</td>
</tr>
<tr>
<td>Brisbane (Brisbane)</td>
<td>3,078</td>
<td>10,374</td>
<td>1,952</td>
<td>3,021</td>
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<tr>
<td>Caboolture</td>
<td>778</td>
<td>15,245</td>
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<tr>
<td>Cleveland</td>
<td>608</td>
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<td>Logan</td>
<td>3,639</td>
<td>37,736</td>
<td>702</td>
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<td>Sandgate</td>
<td>829</td>
<td>3,003</td>
<td>1,327</td>
<td>840</td>
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<td>Woogaroo</td>
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<td>4,609</td>
<td>639</td>
<td>861</td>
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<td>Durie</td>
<td>315</td>
<td>11,707</td>
<td>28,634</td>
<td>61</td>
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<tr>
<td>Cape River</td>
<td>203</td>
<td>5,236</td>
<td>375</td>
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<td>Cardwell</td>
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<td>17,002</td>
<td>88</td>
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<td>Charleville</td>
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<td>71,843</td>
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<td>665,386</td>
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<td>Condunine</td>
<td>892</td>
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<td>151,287</td>
<td>155</td>
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<tr>
<td>Dalby</td>
<td>2,635</td>
<td>16,850</td>
<td>723,091</td>
<td>1,083</td>
</tr>
<tr>
<td>Drayton and Toowoomba</td>
<td>5,146</td>
<td>15,157</td>
<td>577,903</td>
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</tr>
<tr>
<td>Gayndah</td>
<td>4,298</td>
<td>70,229</td>
<td>650,392</td>
<td>257</td>
</tr>
<tr>
<td>Gilford</td>
<td>1,103</td>
<td>10,359</td>
<td>891</td>
<td>190</td>
</tr>
<tr>
<td>Gladstone</td>
<td>1,703</td>
<td>65,279</td>
<td>65,142</td>
<td>576</td>
</tr>
<tr>
<td>Goondiwindi</td>
<td>3,636</td>
<td>14,067</td>
<td>188,802</td>
<td>342</td>
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<tr>
<td>Gympie</td>
<td>2,094</td>
<td>13,788</td>
<td>29,913</td>
<td>790</td>
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<tr>
<td>Ipswich</td>
<td>2,516</td>
<td>79,812</td>
<td>151,703</td>
<td>4,512</td>
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<tr>
<td>Leyburn</td>
<td>2,597</td>
<td>27,640</td>
<td>431,259</td>
<td>273</td>
</tr>
<tr>
<td>Mackay</td>
<td>673</td>
<td>14,931</td>
<td>606</td>
<td>188</td>
</tr>
<tr>
<td>Maryborough</td>
<td>2,681</td>
<td>70,202</td>
<td>7,788</td>
<td>1,638</td>
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<tr>
<td>Mitchell</td>
<td>1,396</td>
<td>32,205</td>
<td>432,754</td>
<td>266</td>
</tr>
<tr>
<td>Nanango</td>
<td>1,463</td>
<td>16,245</td>
<td>143,728</td>
<td>84</td>
</tr>
<tr>
<td>Nebo</td>
<td>1,013</td>
<td>16,359</td>
<td>244,167</td>
<td>65</td>
</tr>
<tr>
<td>Rockhampton</td>
<td>6,651</td>
<td>91,684</td>
<td>213,309</td>
<td>3,203</td>
</tr>
<tr>
<td>Roma</td>
<td>1,980</td>
<td>18,719</td>
<td>668,356</td>
<td>437</td>
</tr>
<tr>
<td>Springsure</td>
<td>1,913</td>
<td>11,522</td>
<td>703,921</td>
<td>229</td>
</tr>
<tr>
<td>St. George</td>
<td>3,617</td>
<td>64,722</td>
<td>146,767</td>
<td>498</td>
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<tr>
<td>St. Lawrence</td>
<td>1,107</td>
<td>28,481</td>
<td>240</td>
<td>227</td>
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<td>Surat</td>
<td>1,311</td>
<td>20,948</td>
<td>174,609</td>
<td>236</td>
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<tr>
<td>Taroom</td>
<td>1,294</td>
<td>11,663</td>
<td>366,314</td>
<td>69</td>
</tr>
<tr>
<td>Townsville</td>
<td>1,094</td>
<td>42,117</td>
<td>26,480</td>
<td>339</td>
</tr>
<tr>
<td>Warwick</td>
<td>4,577</td>
<td>19,472</td>
<td>556,360</td>
<td>2,162</td>
</tr>
<tr>
<td>Total, 1870</td>
<td>73,530</td>
<td>804,900</td>
<td>8,163,818</td>
<td>30,902</td>
</tr>
<tr>
<td>Total, 1869</td>
<td>71,530</td>
<td>804,900</td>
<td>8,462,213</td>
<td>29,466</td>
</tr>
<tr>
<td>Increase in 1870</td>
<td>11,828</td>
<td>82,030</td>
<td>3,092</td>
<td>1,520</td>
</tr>
<tr>
<td>Decrease in 1870</td>
<td>483,425</td>
<td></td>
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</tr>
</tbody>
</table>

LIVE STOCK SLAUGHTERED.

Table No. CXXXVI.

RETURN of LIVE STOCK SLAUGHTERED for Preservation as Food and for Tallow, &c., respectively, during the Year 1870, together with the QUANTITY of PRESERVED MEAT, EXTRACT, and TALLOW, &c., produced.

<table>
<thead>
<tr>
<th>Police District</th>
<th>Number of Beast-Slaughtered</th>
<th>Number of Lamb-Slaughtered</th>
<th>Number of Sheep-Slaughtered</th>
<th>Quality of Meat Preserved</th>
<th>Extract of Meat Preserved</th>
<th>Number of Tallow Preserved</th>
<th>Quality of Tallow Preserved</th>
<th>Number of Beast-Slaughtered</th>
<th>Number of Sheep-Slaughtered</th>
<th>Quality of Meat Preserved</th>
<th>Extract of Meat Preserved</th>
<th>Number of Tallow Preserved</th>
<th>Quality of Tallow Preserved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brisbane (Rockbank)</td>
<td>14,257</td>
<td>65</td>
<td>207,004</td>
<td>1</td>
<td>1,232</td>
<td>12</td>
<td>80</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dalby</td>
<td>12</td>
<td>3</td>
<td>300,900</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drayton and Toowoomba</td>
<td>14,257</td>
<td>65</td>
<td>207,004</td>
<td>1</td>
<td>1,232</td>
<td>12</td>
<td>80</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gladstone</td>
<td>1,000</td>
<td>300</td>
<td>316,800</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mackay</td>
<td>1,000</td>
<td>300</td>
<td>316,800</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Maryborough</td>
<td>1,000</td>
<td>300</td>
<td>316,800</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
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<tr>
<td>Rockhampton</td>
<td>1,000</td>
<td>300</td>
<td>316,800</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Townsville</td>
<td>1,000</td>
<td>300</td>
<td>316,800</td>
<td>1,000</td>
<td>800</td>
<td>10</td>
<td>60</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>7,514</td>
<td>7,079,744</td>
<td>216,412</td>
<td>1,861</td>
<td>1,594</td>
<td>130</td>
<td>5,100</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
vat containing solutions of sodium salt and then packed in sealed, hand-made cans each holding six pounds (2.7 kg). Their experimental shipment in 1870 sold for five pence a pound (c. ten cents a kg). This was followed by further shipments in 1871. Already the market was becoming oversupplied and prices were falling.

Berkelman & Co. sold Laurel Bank in 1873. A combination of poor location (three phases of water transport and transshipment between the works and London), inexperienced management and high prices for stock motivated the sale. The new owners, Whitehead & Co., already operated works in New South Wales but bought Laurel Bank to complete a contract with the French Government for two million pounds of canned meat. They also found the works (seventeen km upstream from Rockhampton) badly located and so when Lakes Creek Works became available in 1877 they purchased it and closed Laurel Bank. Whiteheads' problems then became part of the history of Lakes Creek.

Rockhampton's second meatworks, built at Lakes Creek in 1871, not only provoked a contemporary prophecy of 'the early advent of good times' for the district, but in the long term proved to be an auspicious event for the industry. An English firm, the Queensland Meat Preserving Co., founded by former prominent colonial legislator, Sir Charles Nicholson, was the ancestor of the CQME Co. whose present principal is

14. RB, 28 January 1871.
15. Ibid., 26 August 1871.
17. Ibid.
18. RB, 17 October 1870.
Lord Vestey. Between these two titled personages lies a span of more than a century and a history involving seven distinct ownerships. Yet, despite environmental and economic hazards which have intermittently bankrupted the processing companies, Lakes Creek Meatworks ultimately became the largest export meatworks in the southern hemisphere.

In the face of claims that Sir Charles Nicholson (Rockhampton's greatest speculator in suburban lands) had floated the company in order to sell his parcel of flood prone land at Lakes Creek, there was an extensive capital investment in the works themselves and the adjoining workers' village. By December 1870, Lakes Creek (seven km downstream from Rockhampton) was the scene of 'bustle and activity'. A wharf was completed, a large store built, also a house for the manager on a scenic stretch of the river, though not too close to the works and associated odours. Building contractor, John Ferguson, later famous as one of the Mount Morgan millionaires and later still as an expelled Australian senator, also left his mark on Lakes Creek's history. By the time processing operations commenced in June 1871 (with eleven bullocks from Macartney's Waverley Station) and the first consignment of canned meat was despatched to England, the company already had its second (English) manager. Over-capitalisation, processing delayed beyond the peak killing season, and inexperienced English management plunged the company into financial depression. Not even the favourable publicity

21. Ibid., 3 June, 28 August 1871.
surrounding visits to the works by Anthony Trollope and the Marquis of Normanby could disguise the company's dire financial straits.22

The English owners persuaded 'old colonist' Thomas Archer to attempt a rescue operation and to strengthen 'the confidence of the colonial public in the company'.23 Back in England Sir Charles Nicholson was doing his best also by declaring that 'without question Lakes Creek preserved meat was the very best that has yet reached England'.24 But neither Nicholson's praise nor Thomas Archer's colonial experience could save the venture. By 1872 the London market was glutted with canned meat. Locally the high demand for cattle had forced prices beyond an economic operational level. By the end of 1873 the works had closed.25 Thomas Archer's letter to shareholders (1 May 1874) gives the most damning reason for failure: '...mismanagement at home - mismanagement gross, palpable, and in violation of the fundamental rules of business'.26

When Lakes Creek Works were advertised for sale in 1874 local pastoralists attempted to acquire the property; Archibald Archer, C.B. Dutton and John McFarlane were appointed as a committee of inspection.27 The scheme began grandly with promises of 70,000 cattle for processing, but collapsed for want of adequate capital.28 Whitehead & Co. then made their

22. Ibid., 31 July 1872.
23. Ibid.
24. Ibid., 24 May 1872.
27. RB, 3 July 1875.
28. Ibid., 30 September 1876.
move and by May 1877 had 'made the wilderness to blossom' with remodelled works, the employees back in the township, and 56 cattle a day being processed. Optimism was short-lived; Whiteheads refused to open for the 1878 killing season. In a confrontation in which processor and producer disagreed on cattle prices, there were no winners. William Pattison's reference to the stockowners as 'dumb dogs' who could be awakened only 'by touching their pockets' provided not only a mixed metaphor, but increasing antagonism. Despite manager Andrew Bertram's assurance of resumption, and producer suggestions for preserving beef by 'salting it down' or selling it as 'spiced Beef', the inevitable result was Whiteheads' insolvency. Contemporary evidence suggests that some of the complexities of today's beef marketing already existed in microcosm in colonial times, especially the problem of producing beef in Queensland at a competitive price on world markets and, at the same time, returning a fair price to the producer.

After Lakes Creek's closure in 1879 another group of cattle owners took more positive action than their predecessors. The CQME Co. was formed in 1880 under the organisational skills of John Living of Wooroona Station (Dawson River) and Roderick Travers of Beaufort Station (Belyando River). Living personally rode throughout the region canvassing stockowners and addressing meetings. The CQME Co. planned to export beef 'in the frozen state'. One of the directors, Albert Wright of Nulalbin Station (Dawson River), by 1883 had neither the time nor money

29. MB, 26 May, 28 June 1877.  
30. Capricornian, 1 February 1879.  
31. Ibid., 11 January, 18 January, 1 February, 9 February 1879.  
32. MB, 4 October 1879; 28 August, 4 September 1880. CQME Co.: Central Queensland Meat Export Company.
to attend meetings. This demonstrates one of the problems of the producer cum processor.

The CQME Co., having purchased Lakes Creek Works for the modest sum of £12,000 ($24,000), commenced operations on 11 July 1881 with Andrew Bertram as manager. Bell-Colman refrigerating machinery was purchased in England by Thomas Archer on the company's behalf. In 1883 the new producer-processors began operating the first meat freezing works in Queensland. This had been the dream of some central cattlemen since 1876.

Australia was a world leader in the development of the freezing process as it had been in canning. Thomas Sutcliffe Mort established the first freezing works in the world at Darling Harbour, Sydney, in 1861. The idea captured the imagination of the newest colonials - Queenslanders. Following Britain's call for overseas supplies of meat, the Hon. F.E. Bigge had moved in the Legislative Council in 1869 that 3,000 acres (1,214 ha.) of coastal land be offered to any person or company who, within two years, could export a minimum of 25 tons of 'fresh uncooked meat' to Britain, provided it was fit to eat on arrival. Council President, Maurice O'Connell (formerly Government Resident, Port Curtis), believed this should be 'in the frozen state'. If successful this could 'divert disaster, and...occasion benefit to the colony generally'. While this suggestion was a little premature in

34. *MB*, 1 September 1881; 9 February 1882.
1869, it was a distinct possibility by April 1876 when a meeting of 'gentlemen favourable to the shipment of frozen meat to England by Mort and Nicholls' process' was held in Rockhampton. The stockowners hoped to raise £1,000 ($2,000) to assist Mort in bringing his scheme to fruition.\textsuperscript{38} Unfortunately this support was in vain; while the experimental shipment was still in Sydney Harbour the ammonia pipes burst and the meat was destroyed.\textsuperscript{39} The possibilities were again stressed by leading articles in the Rockhampton press in 1878, and in the following year the first cargo of frozen goods was shipped from Sydney to London with complete success. It was a joint enterprise of Queensland, New South Wales and Victorian pastoralists.\textsuperscript{40}

The Lakes Creek freezing plant began operation in 1883; a contract had already been signed with the Australian Fresh Meat Co. to supply beef to Batavia.\textsuperscript{41} It was at this key point that life provided a mirror-image for melodrama: the \textit{Fioda}, which was to take on the frozen cargo, arrived one week late; what was to have been Queensland's first shipment of frozen beef was destroyed by fire in the early hours of 13 September 1883.\textsuperscript{42} The fatal delay of the \textit{Fioda} ultimately wrecked the CQME Co. even though rebuilding commenced immediately.\textsuperscript{43} The day after the fire, Robert Archer commented in a letter to his

\begin{itemize}
  \item \textsuperscript{38} \textit{RB}, 12 April, 15 April 1876.
  \item \textsuperscript{39} Critchell and Raymond, \textit{A History of the Frozen Meat Trade}, p. 21.
  \item \textsuperscript{40} Duncan, 'The Australian Export Trade', \textit{Business Archives and History}, pp. 153-65.
  \item \textsuperscript{41} G. Westacott, Lakes Creek, MS, n.d., RDHS Library; \textit{MB}, 18 August 1883.
  \item \textsuperscript{42} \textit{MB}, 14 September 1883.
  \item \textsuperscript{43} \textit{Town and Country Journal}, Vol. 28, No. 719, 20 October 1883.
\end{itemize}
TOWN AND COUNTRY JOURNAL.

LARGE CREEK MEAT PRESERVING WORKS, SLEAH DOLLHAMTON.

Captain,...

ruins after the fire.—see page 746.
It will take the company a long time to get over it, if it ever does - the strange thing was that in a model establishment like that where everything was worked out so well there wasn't a steam fire-engine for they had plenty of steam power & any amount of water.... 44

Almost a year passed before slaughtering at 'the Creek' recommenced and so 1884 ended with a financial deficit. On 24 October 1885 the CQME Co. ceased to function. The directors partly blamed local producers for lack of support: 55 local cattlemen who owned 77,304 cattle had not subscribed one penny to the company; eight men with only 38,150 cattle had invested fifteen cents per head of stock. 45 (These numbers applied to slaughter cattle, not total herds.) This was not the only irony to beset Lakes Creek during this time of crisis: a young English migrant who unsuccessfully sought work at Lakes Creek in 1884 became its owner in 1928. His name was William Angliss. 46

A Melbourne syndicate bought Lakes Creek Works late in 1886. It included George Fairbairn (whose family owned Peak Downs Station), Andrew Rowan (Chairman) and the resourceful John Living. The syndicate also acquired the nearby station of Fitzroy Vale, originally owned by Berkelman & Lambert. This purchase was also to be significant in 1928 in relation to William Angliss. The new owners in 1886 continued operations under the name of CQME Co., a name it has retained through all subsequent ownerships. Bertram was succeeded as manager in 1890

44. Robert Archer to David Archer, 14 September 1883.
45. Westacott and Gill, Lakes Creek Meatworks, p. 2.
by Alexander Paterson who then began a three-generation family association with the works. When he entered into his term of management there were only two meat-freezing works in Queensland: Lakes Creek and the newly formed Queensland Freezing and Export Co. of Brisbane. (This company was launched by the ‘big names’ in Queensland politics, including Thomas McIlwraith and Samuel Griffiths.) By 1895 there were eighteen meat processing plants in the colony, but only three with freezing works. The third was in Townsville. Lakes Creek was by far the largest; with an annual processing capacity of 100,000 cattle, it had twice the capacity of Eagle Farm (Queensland Freezing and Export Co.) and Townsville works.

Lakes Creek operated profitably during the first half of the 1890s because of low cattle prices and a higher domestic demand following the opening of the West Australian goldfields. In 1896-97, processing was drastically curtailed owing to the tick quarantine which kept thousands of cattle on the stations and caused the works to close temporarily. As estimated profits depended on 'produce afloat and in London' there was not much hope. There were problems at home too. When Paterson retired in 1899 he warned that Lakes Creek machinery was obsolete and if not replaced the works would run down.

By the time the old century ended, the company had again changed ownership. Coincidentally, both Paterson and Fairbairn

47. *Capricornian*, 31 May 1890.
48. Ibid., 21 December 1895. See Appendix for Queensland Meat Processing Works and their capacity.
who had been associated as manager and director during the
last decade were to enter politics: Paterson as MHR for
Capricornia, 1901-03; Fairbairn as MLA for Toorak, 1903-06,
MHR for Fawkner, 1906-13.\(^\text{51}\)

The 1890s, with their calendar of disasters such as the
bank crash of 1893 and subsequent general depression, were
less traumatic to processors because of low cattle prices.
This period actually provided a 'rash' of new meatworks in the
region (and elsewhere). These were established at Broadsound
(St Lawrence), Emerald and Gladstone. The catalyst was the
Meat and Dairy Produce Encouragement Act of 1893 which offered
a ten year, low-interest loan to companies establishing
meatworks. The fund was financed by a stock tax of one shilling
and six pence (fifteen cents) per hundred head of sheep and
fifteen shillings ($1.50) per hundred head of cattle.\(^\text{52}\) The
Act was an attempt to solve the problem of too many cattle,
though it seems to have ignored the parallel one of too few
markets for beef.

The Broadsound Boiling Down and Meat Export Co. which
came into existence in 1893 was first off the mark in Central
Queensland. It was floated by about 30 district cattlemen 'in
the face of the terrible financial smash',\(^\text{53}\) with the ridiculously
low capital of £3,000 ($6,000). Without the Meat and Dairy
Board's advance of £5,000 ($10,000) the project could not have
been possible. The works were badly located on Waverley Creek
and commenced operations, initially as a boiling-down, on

\(^{51}\) Joan Rydon, *A Bibliographical Register of the Commonwealth
Parliament 1901-1972* (Canberra, Australian National
University, 1975).

\(^{52}\) Queensland Government Gazette (*QGG*), September-December 1893.

\(^{53}\) Capricornian, 6 January 1894.
Lakes Creek Meatworks c. 1880. (RDHS Library)
All that remains of the Broadsound Packing Company's meatworks adjacent to Waverley Creek, St Lawrence.
(L. McDonald)
22 January 1894. The fat was refined as oleomargarine, salt meat and tongues were canned and offal was converted to fertilizer. Within six months the company was in financial trouble. A new concern, the Broadsound Packing Co. with £20,000 ($40,000) capital purchased the works in 1895 and installed freezing machinery (used only for chilling meat to be canned). An American with Australian experience, Clem Allcutt, was appointed manager and introduced the practice of processing on the owner's behalf. Within a year he was negotiating to buy the works. They reached peak production in 1899 with 14,183 cattle slaughtered and treated by 180 employees; beef was transported to Rockhampton weekly in the company's own small steamer Tarshaw. High marketing costs, higher cattle prices and, finally, drought sounded Broadsound's death knell. The Meat and Dairy Board later repossessed the works and the plant was sold. Poor location and lack of fresh water had made the works too costly to operate. Allcutt, the 'bustling Yankee', took over Pattison's old Boiling-down, giving it the grandiose name of Gavial Park. With new machinery installed he began the production of beef extract, a process wrongly claimed to have been developed by an Englishman in 1874 to provide nutritious food for the French Army. As indicated earlier, 8,000 pounds (3,628.8 kg) of beef extract

54. Ibid., 23 June 1894.
55. Ibid., 10 August 1895.
56. Ibid., 29 May 1897; Queensland Country Life, 22 September 1900.
57. MB, 14 June, 22 July 1899; Government Stock Returns 1898; 1899.
59. Capricornian, 19 January 1901. Gladstone is not in the Fitzroy Basin, but is included because a high percentage of cattle processed there came from the Dawson and Callide Valleys and from properties south of Rockhampton, all within the Fitzroy Region.
was produced in Central Queensland (Baffle Creek) in 1870; the first shipment from Australia to the United Kingdom took place in 1867.

The decision of half a dozen cattlemen in 1894 to establish owner-producer meatworks in Gladstone was to prove much more significant than the Broadsound venture. The 1893 Meat Act was again the motivation, although the idea had been mooted by W.B. Shaw of Rawbelle Station in the 1880s. The Gladstone Meatworks of Queensland Ltd. was registered in the last week of 1894 with a capital of £20,000 ($40,000), but did not commence operations until June 1896. The site chosen at Parsons Point was an excellent one; it was convenient to its own wharf on Port Curtis Harbour, and economical to operate through use of natural gravitation to move slaughtered bullocks to the processing floor. (This site was given supreme approval when purchased in 1963 for the establishment of an alumina refinery.) At the end of its first slaughter season, W.B. Shaw (Managing Director) reported high quality preserved meat and a 'sound market abroad'. So fickle was this export trade that by the time the first shipment of frozen hindquarters was despatched in May 1897, the meat export trade was in 'an unsatisfactory state'. A controversial decision by the company to process on behalf of the international firm, Bergl & Co. (in addition to local stockowners' cattle), enabled the young company to survive financially in the crucial first three years. Gladstone Meatworks finished the old century

60. Ibid., 5 January 1895.
61. Ibid., 5 December 1896.
62. Ibid., 29 May 1897.
with a credit balance after paying its annual instalment on the Meat and Dairy Board loan. It had processed 18,500 cattle at owners' expense, of which 17,000 were frozen and exported. Even so, production for 1900 had been almost double this number.

The third regional processing works established in the 1890s was, like Broadsound, small, isolated and incapable of surviving the great drought. The Selma Meat Extract and Boiling Down Works was built by Bergl & Co. near Emerald (Central Highlands) and commenced operations in 1898 with the assistance of a Meat and Dairy Board loan of £1,300 ($2,600). By the following year it was processing 100 head a day. This was achieved with difficulty, partly through water shortage, but also because the tick quarantine line ran within three kilometres of the works. The regulations were so arbitrary that management was not permitted to bring the 5,400 bullocks awaiting treatment across the line. Camm confirms that 'plans for the works from the outset were ill-conceived', even though not a self-help scheme like Broadsound. Bergl & Co. also owned processing plants at Bowen and Hughenden, as well as a contract agreement with the Gladstone company. They worked through the Houlder Shipping Line with its eleven refrigerated vessels calling at southern and Queensland ports and returning to Britain via South America. Undoubtedly this early multinational firm took advantage of the 1893 Act to expand in Queensland, but very obviously knew nothing about the

63. Ibid., 1 November 1901.
64. Ibid., 14 October 1899.
66. Capricornian, 1 July 1899.
environmental hazards. The name disappeared from Central Queensland newspapers during the great drought.

The last decade of the nineteenth century was a significant one for processors. Queensland had only six meatworks in 1890, but by 1895 there were eighteen, with two more under construction at Bowen and Gladstone. Despite this trebling of colonial processing plants, Queensland was still unable in 1898 to cope with its 'cast' of fat cattle—that is, the number available for slaughter:

Queensland cattle cast (1898): 557,130
Slaughtered for Aus. consumption: 129,000
Surplus for beef export: 427,530

Even though Australia's meat exports trebled between 1890 and 1900, it commanded only a 20 per cent share of British meat imports (including sheep and pig meats); South America supplied 37 per cent and New Zealand 43 per cent. The unequal ratio between herd numbers and meat exports in that decade is evident:

<table>
<thead>
<tr>
<th>Australian Herd</th>
<th>Australian Frozen Meat Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890: 10,300,000</td>
<td>1890: c. 3,000 tons</td>
</tr>
<tr>
<td>1900: 8,640,000</td>
<td>1900: 43,000 tons</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Queensland Herd</th>
<th>Queensland Frozen Meat Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890: 5,558,000</td>
<td>1890: 1,021 tons</td>
</tr>
<tr>
<td>1900: 4,078,000</td>
<td>1900: 3,324 tons</td>
</tr>
</tbody>
</table>

The decline in the Australian herd in 1900 was directly related to the depletion of the Queensland herd from 6.8 million in 1895 to four million in 1900 as the result of redwater fever.

67. Statistical Returns, Queensland, 1898.
69. Figures extracted from Statistical Returns, 1890; 1900. See Appendix for Queensland exports 1901-02.
(tick infection) and the onset of drought. Perversely, in this ten year comparison the ratio between cattle production and beef production appears irrational, but demand applies to conditions in the importing country.

In assessing the colonial meat processing industry in the Fitzroy Region it is obvious that its uneasy development was affected by a combination of factors: remoteness and inadequacy of markets, unrealistic financial expectations, under-utilisation of slaughtering capacity, problems of supply during recurring droughts and (latterly) the tick plague. It is unlikely that Broadsound and Emerald would have survived even if the seasons had been favourable. Lakes Creek and Gladstone, suitably located and with greater capital, were able to ride out drought and depression. By 1901, when the colonies became states within the Federation of Australia, the problems for the industry were about to change dramatically: from having too many cattle and too few markets, the herd was to be decimated and cattle prices to escalate in relation to overseas meat market returns.

The rationalisation which occurred in the number and location of regional meatworks after the drought enabled the survivors to struggle on towards the 1930s. While markets were assured under the Imperial Meat Act of World War I, financial returns were disappointing. The catastrophic industry slump in the 1920s found processors (especially the CQME Co.) as unprepared for it as producers. At the point of 'rescue' in 1934 (the Ottawa Agreement and improved chilling techniques), owners of both Lakes Creek and Gladstone works sold out to powerful multi-national firms. After the Second World War the industry drifted into apathy until stimulated by the profitable American hamburger beef trade. While one old firm (Gladstone) closed down, Lakes Creek soon had to compete with two new works at Biloela and Rockhampton. By 1979 these three meatworks processed more than half the cast of the region's two million cattle. Despite 'high-tech' developments such as computerisation, modern machinery and other improvements in processing, environmental and cost factors continued to affect production from time to time. More importantly, the search for world markets became even more complex in the second half of the last decade.

A more sophisticated era began for Lakes Creek Meatworks at the end of 1901 with the purchase of the CQME Co. by wealthy London interests. The old name was retained though the company was registered in London. The principal proprietors were Sir Montague Nelson, George Mackenzie, Sir James Caird, the British India Steam Navigation Co. (BISN Co.)
and the Scottish Shore Line. An American trained in the great Chicago meat industry, G.B. Hopper, replaced W.S. Lambe as manager. Four years earlier while in charge of processing at the Ross River Meatworks (Townsville) he had been at the centre of a 'revelation' concerning the secret midnight burial of tens of thousands of cans of bad meat. The sinister suggestion that 'one of the American meat rings' was attempting to keep Queensland out of the British market was later denied vehemently. Even so, the rumour highlights industry tension.

Hopper, manager of Lakes Creek Meatworks 1901-18, brought his 'Yankee bustle' with him, a characteristic not always appreciated in Rockhampton. In 1907, for example, he came into conflict with two very different bodies: the newly formed Lakes Creek Butchers' Union, and the Rockhampton Harbour Board. Nor did Hopper's innovations on behalf of the company please small farmers and businessmen, even though introduced 'to tide the Works over the slack season'. He established an agricultural farm, a poultry farm, twelve retail butcher shops, a butter factory and a ham and bacon factory. These properties, although a failure in the long-term, provided additional employment which was reflected in the city's economy. All were abandoned in the post World War I depression years.

In 1911 cattle producers accused processors of operating a buying ring. There were attempts to form a stockowners'...
defence committee, also to establish independent processing
works. While nothing came of these, unease within the
industry led to a Royal Commission in 1912. Hopper
emphatically denied the charge of a buying ring, claiming that
prices paid to producers were directly related to meat prices
on the London market. While the Meat Commission might not
have solved the problems or dissolved inter-industry distrust,
it at least gave the public a rare early insight on both
sectors.

Lakes Creek, by 1912, had become one of the largest meat
preserving and freezing works in Australia, with a cold storage
capacity of 2,000 tons. During the first twenty of this
company's 26 years of ownership, 1901-28, it not only expanded
export facilities but became a cattle producer as well. On
29 May 1914 a second company, Fitzroy Estates, was registered
in London to purchase beef cattle and leasehold stations in
Central Queensland. Shareholders were practically identical
with those of the CQME Co., with only 12 per cent being held
by another interest, Inslay Kerr & Co. Fitzroy Estates
appointed the British India and Queensland Agency Co. as its
managing agents in Australia; this company had had the
oversight of the CQME since 1909.

Fitzroy Estates bought Malvern Downs Station from J. & R.
Scott in 1914. This had been owned by Roderick Travers, one of
the founders of the original CQME Co., in the 1860s. Even in

76. Edward Archer to Robert Archer, 29 July 1911.
77. 'Royal Commission on the Meat Industry of Queensland',
78. Ibid.; MB, 30 October 1912.
79. 'Royal Commission on the Meat Industry of Queensland'.

1914 it comprised 1,200 square miles and carried 16,925 cattle; it was purchased on a 'walk in, walk out' basis for $145,638. The significance of this firm and its pastoral properties to the CQME (apart from supplying the meatworks with its 'own' cattle) is that when Macdonald, Hamilton & Co. took over as managing agents in 1915, they also acquired the oversight of Lakes Creek Works. Also, when Fitzroy Estates purchased Beaufort Station from R.H. Logan in 1919 while cattle prices and property values were still high, the purchase money was provided (at 6 per cent interest) by the three chief shareholding interests in the CQME Co. This debt was a significant factor in the meat company's demise during the industry crisis of the 1920s.

In 1917, Lord Inchcape sent his nephew, W.A. Mackay, to Lakes Creek Works to gain business experience. When Hopper resigned in the following year, Mackay became manager. He was instructed to increase production of canned meats for allied use in Europe while also supplying frozen meat to British government cold stores in the United Kingdom. While 1919 was the least productive year statewide, Lakes Creek recorded its second highest kill in the six years:

81. D.G.M. Mackay to L. McDonald, 22 March 1982.
Queensland Cattle Slaughterings 1914-19:

<table>
<thead>
<tr>
<th>Year</th>
<th>Lakes Creek</th>
<th>Gladstone</th>
<th>Queensland Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>51,918</td>
<td>25,708</td>
<td>546,748</td>
</tr>
<tr>
<td>1915</td>
<td>30,174</td>
<td>25,662</td>
<td>435,871</td>
</tr>
<tr>
<td>1916</td>
<td>31,655</td>
<td>17,885</td>
<td>391,623</td>
</tr>
<tr>
<td>1917</td>
<td>35,921</td>
<td>36,082</td>
<td>413,435</td>
</tr>
<tr>
<td>1918</td>
<td>35,793</td>
<td>28,047</td>
<td>329,622</td>
</tr>
<tr>
<td>1919</td>
<td>47,237</td>
<td>26,254</td>
<td>284,760</td>
</tr>
</tbody>
</table>

Lakes Creek's extraordinary departure from the overall decline reflects not only Mackay's instructions to increase production, but without doubt it includes also the cost of the 28,348 cattle purchased by Fitzroy Estates in 1919.83

When the British market was closed to Australia in 1921, the CQME Co. had a large consignment of frozen beef in English cold stores awaiting a virtually non-existent market; at the same time its financially dependent company, Fitzroy Estates, had thousands of cattle (bought in 1919 at high prices) grazing on its Central Queensland properties. This firm was bankrupt when prices fell 'almost overnight' by 30 shillings ($3) per hundred pounds (45.35 kg).84 Mackay was in an intolerable position but he was never in any doubt about its cause: the Vestey family and its Argentine interests. He believed 'that Vesteys underpaid their labour in Argentina, produced very cheap beef as a consequence, and by organizing a monopoly in Europe, froze the Australian producers out of the market'.85

It might be argued that Mackay's judgement was biased because of his personal involvement, but it was publicly stated in 1922 that the Queensland cattle industry was at the mercy

82. Figures extracted from, Queensland Killing Returns, Correspondence, Imperial Meat Act of 1914, MS, CRS/328, QSA.
84. Ibid.
85. D.G.M. Mackay to L. McDonald, 22 March 1982.
of the Argentine, and that the London beef market was also in that country's hands. It was certainly no coincidence that in 1922 the Vestey brothers bought the British & Argentine Meat Co., 'a thriving meat packer and exporter with plant in Argentina and considerable assets in Britain'. Meanwhile practically all the meatworks in northern Australia had closed and the whole industry was at a standstill at a time when 'fully half the cattle in Queensland' were ready for the meatworks.

The CQME Co. struggled on for a year or two, assisted by a federal subsidy on slaughter cattle (c. seventeen cents per 45.36 kg). In 1923, A.H. Paterson who had joined the Lakes Creek staff as a junior clerk in 1891 was appointed manager. It must have been a depressing promotion as his first task was to close down the works. The buildings were leased to the Union Cold Storage Co. Ltd. in 1924 for one year, and later to Weddell & Co. Ironically, these were subsidiary companies of the Vestey organisation. By 1927 the CQME overdraft had reached its limit. Its position was so bad that Paterson had to borrow his fare to Sydney and Melbourne to seek a buyer for the works. In the following year William Angliss & Co. paid £80,000 ($160,000) for the meatworks and all its housing and equipment, also the two freehold properties of Fitzroy Vale and Balnagowan. William Angliss told Paterson in 1951 why he bought the concern at such an unpropitious time:

I remember Mr F.J. Walker writing to me asking would I purchase the Lakes Creek Works, and I wrote back and told him that, at that period

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86. MB, 29 October 1922.
88. Capricornian, 8 April 1922.
Meat Works were a liability and not an asset and I would not consider purchasing same. He paid a visit to Melbourne and explained that apart from the Meat Works they had some cattle properties that interested me and I agreed to pay a visit and while the Works did not appeal to me, Fitzroy Vale on the other hand very much interested me, and it was because of the Station Property that I agreed to purchase same. 91

This was the same William Angliss who as a young migrant in 1884 had been refused a job at Lakes Creek.

Prior to his purchase of Lakes Creek, Angliss had become the owner of Redbank Meatworks (Brisbane) which he considered a liability. The Moore Government persuaded him to sell to Swifts so they could then buy Swifts out 'and close Redbank down'. This left Angliss with Bayne Bros. Works (Brisbane) and Lakes Creek. 92 This strange series of events could only have been an excuse to expel the American firm from Brisbane and to give the government-controlled abattoir a monopoly. 93

By yet another of the recurring ironies associated with the history of Lakes Creek Works, Vestey's, the firm held responsible for its closure in 1923, became its owner in 1934. Sir Edmund Vestey personally 'charmed' cattlemen whom he invited to meet him at the Criterion Hotel, Rockhampton, on this occasion. (Thirty-seven years later his grandson, John, brother of the third generation Lord Vestey, was host at the Lakes Creek Meatworks centenary dinner in Rockhampton.) Sir

92. Ibid.
93. This 1930 legislation controlling slaughter and supply of meat to Brisbane was still in force in 1960 when Borthwick & Co., with meatworks at Moreton and Bowen, protested against their exclusion from the Brisbane market.
Edmund told his listeners in 1934 that the British restrictions on the import of meat from foreign countries (the Ottawa Agreement) had forced his firm to seek supplies from the Dominions. They were also obliged to obtain freight for their Blue Star Line of refrigerated ships and maintain supplies for their large wholesale and retail trade in Britain. Lakes Creek, he said, would be retained and adapted 'to the new developments arising out of the chilled beef trade'. ⁹⁴ Not all local cattlemen were charmed by Vestey. Alister Archer wrote to Robert Beak in March 1934: 'The chilled business, I am afraid, will be a slow process getting going. I am afraid I do not fancy the name "Vestey" very much'. ⁹⁵ Nor did Archer think it worthwhile trucking cattle from Torsdale to 'the Creek' for 'the wretched price' Vestey's were paying (eighteen shillings per hundred pounds - $1.80 per 45.36 kg). ⁹⁶

Vestey's retained Paterson as manager, erected a large, modern chiller, a three-storey cannery and enlarged the killing floor to treat 700 cattle daily. Lakes Creek was the first regional works to announce all-the-year operations. Modification of the chilling process which enabled Australia to sell this superior form of preserved beef on the London market was, like the Ottawa Agreement, a key factor in attracting Vestey's (and Swifts) to Central Queensland. Even so, by 1936-67 when the Queensland cattle industry had, to a limited extent, recovered from the terrible depression of 1921-34, Australia's chilled beef exports amounted to only 22,598 tons.

⁹⁴.  CQR, 29 March 1934.
⁹⁶.  Alister Archer to Nicholai Aagard, 14 March 1934.
The steamer Chicago Branch loading at Lakes Creek Metcalfe warehouse.

C. 1907. (RPHS)
Above: Lakes Creek Heatworks c. 1938  (RM Library)
Below: Aerial view of Works c. 1975.   (Vesteys)
In the same period Argentina exported 344,072 tons to the same United Kingdom markets. Edmund Vestey had warned producers in 1934 that only a percentage of their cattle were suited to the chilling process. Without improved pastures these cattle could not match the alfalfa fattened Argentinian animals. CSIR pasture experiments on Fitzroy Vale in 1938 were a first step in improving the quality of Queensland beef.

Vesteys, having bought the CQME Co. at a carefully calculated and advantageous time, also reaped the benefits of wartime government purchases of processed meat. In 1940 their daily kill reached 846 head and there were 2,200 employees in the protected industry. When USA troops entered the Pacific Zone in 1942, Lakes Creek Works were almost entirely occupied in supplying both canned and frozen beef to them. The latter was boned and packed in boxes as a means of conserving shipping space, a new development which was to become significant in the future. By 1944 Queensland Government authorities had already begun planning increased meat (and other food) supplies for war-devastated countries. The future seemed bright, but this novel situation of world demand was to lead to industry apathy. The Royal Commission on Abattoirs (1945) concluded that 'a somewhat moribund state' existed. The Commission excused the processors on the grounds that they had suffered

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98. MB, 1 January, 28 January 1938.  
100. QAJ, Vol. 58, March 1944.
depression and droughts between wars and manpower shortages during the recent war. 101

Developments from the mid 1950s at Lakes Creek Works are closely linked with its expanding overseas meat marketing. [Part 3.] Physical modification and expansion of the plant in the 1962-66 period were undertaken to meet US regulations regarding buildings, processing and inspection. These became even more demanding in the 1970s. In 1979 Vesteys carried out a vast expansionary programme which cost nine million dollars and lifted the daily slaughter and treatment to 1,450 cattle. 102 This made 'the Creek' one of the largest and most modern meatworks in the world. On the same site as the tiny pioneering meat processing plant, the modern giant shared the same basic purpose: to slaughter the region's 'fats' and to preserve and market the meat at a profit to its owners.

Gladstone Meatworks also experienced changes after emerging from the great drought. In 1903 it still operated on the system of killing on producers' behalf, but without the Bergl & Co. contract. This was transacted under the name of W.P. Bayne & Co., Meat Shippers, Gladstone. 103 The system which classified cattle for freezing or boiling, then passed on processing costs (and profits, if any) to the producer, as illustrated by a 1903 invoice issued to Archer & Co.:

8 June 1903: 201 head of bullocks (Torsdale) sold Gladstone Meatworks @ 20/6 per 100 pounds: £1364.3.0

103. Inward Correspondence, 1902-03, Archer Papers.
Charges of Boiling Down:
13 bullocks @ 4/6 a head: £2.18.6
8 cows @ 4/- a head: £1.12.0

Casks for 17 cwt 12 lbs tallow @ 45/- a ton: £1.18.6
Insurance on tallow to Sydney (worth £26): £ 3.3
" " hides " " (worth £22): £ 2.9

Cost bringing in lamed bullock with horse & dray: £ 8.6

The years 1905-09 were uneasy ones for the company.

After operating at a loss in the previous year, directors decided not to open the works in 1906. W.P. Bayne, who was one of the original directors, resigned in 1909 and this was followed by the dissolution of W.P. Bayne & Co. With a new and experienced manager, W. Kingdon, and a new name, Gladstone Meat Works Co., there began a more progressive phase with enlarged and improved facilities and slaughtering and processing carried out on the company's behalf. Producers themselves had rejected the old system. Good management and low production costs ensured survival for Gladstone Meatworks. Gladstone was the natural outlet for the Boyne and Callide valleys, but also attracted vendors from the Dawson and Rockhampton areas. This provided competition for Lakes Creek. On one occasion when 'the Creek' rejected a mob of Gracemere bullocks, John Archer thought the Gladstone Works 'would jump at them & give us an early date'.

A problem shared by all Queensland processors during the First World War was that of relating prices paid for cattle to

104. Ibid.
105. Capricornian, 28 August 1906.
106. Ibid., 7 August 1909.
107. MB, 10 October 1910.
108. John Archer to Robert Archer, 10 April 1902.
the price fixing under the Imperial Meat Act. J.W. Fletcher, manager of the Gladstone Works in 1918, revealed the processor's point of view:

...we assure you that our price of 40/6 [$4.05] per hundred pounds is the fullest market rate, and it leaves very little margin for the Meatworks, but we rely on the quantity of cattle we put through to make our profit.

There are all sorts of rumours about as to the price of cattle, but they are unfounded and create a very difficult position as far as the Works buying is concerned....

The slaughter figures quoted [p. 296] show clearly how well Fletcher maintained his production rate in comparison with State and Lakes Creek figures. Only in 1916, a year of severe drought, did it drop below 20,000. Fletcher maintained a friendly, personal approach to producers, a factor which probably assisted in maintaining his firm's small profit in the last two years of the war. He told Robert Archer that all the Brisbane companies had lost money in 1917, with the American companies losing an estimated £200,000 ($400,000). Fletcher's comment on this is of extreme significance in the history of the industry:

The American's profit in America and the Argentine for 1917 was, I believe, something like £4,000,000 sterling. What they lose in Australia is quite a bagatelle to them, but other companies have practically no reserves to withstand such losses. Though worded in an unostentatious manner, I am firmly of the belief that their policy is to gradually control all the World's beef, and any loss they make in Australia is the least of their considerations.

Fletcher's words were indeed prophetic and would be confirmed throughout the following two decades, but with the assistance of one British firm which adopted the tactics of the Americans and in the end outplayed them.

American capital had been introduced to the Queensland meat industry in 1912 and a meatworks constructed at Cannon Hill in 1914 by the Australian Meat Export Co. (later changed to Swift Australia Co. Ltd.). Swifts also bought and expanded existing works at Alligator Creek, Townsville. This was the first expansion in the processing industry since the drought. While initially the new American works were welcomed by producers as providing more competition, there were some who already 'deplored trusts and combines'. The Gladstone Meatworks, having 'limped' through the lean years of the 1921-34 period, bowed to the inevitable. In 1934 the company sold to Swifts, the firm condemned by Fletcher years earlier. Like Vesteys, Swifts grasped the improved financial opportunities available.

There were seven major meatworks in Queensland in 1945: Brisbane (Cannon Hill and Murrarie), Gladstone (Swifts), Rockhampton (Lakes Creek), Bowen, Townsville (Ross River and Alligator Creek). Almost the entire production (except Cannon Hill) went to the export market. These processors, all on the coast, dominated the industry, with production figures practically unchanged until 1956. Industrial troubles and

seasonal conditions, as well as the old bugbear of cattle prices, often prevented the theoretical capacity of the meatworks being achieved. Even so, it was a far cry from the depression years of the 1920s and early 1930s during which Lakes Creek had closed for five years and Gladstone operated for only about four months each year.

The 'moribund' state of the processing industry changed rapidly after 1956. Many new abattoirs sprang up including the two in the Fitzroy Region. Because of the approximately 50,000 head of cattle being railed annually to southern abattoirs, Fitzroy Region producers and the UGA had been pressing since 1950 for a public abattoir in Rockhampton.115 This was not allowed, but in 1956 impatient producers formed a co-operative in Biloela, initially the Callide-Dawson Co-operative Bacon Association (CALDAWS). It took them six years to raise funds to construct a building which, before completion in 1962, was taken over by the Australian Meat & Grazing Co. (Amagraze). The first cattle were slaughtered on 3 April 1963. F.J. Walker Ltd. bought the Biloela Works in 1973 as part of a chain operating throughout Queensland and interstate.116 The works proved non-viable and were closed after industrial troubles. (New owners, Teys Bros. Ltd., again opened the plant in 1984.)117 Failure to establish the planned co-operative and the thrice recurring ten year changes in ownership simply repeated, in the modern age, the experience of small colonial processing

115. **Case for the Establishment of a Public Abattoir at Rockhampton, July 1950.** Typescript held by John Oxley Library.

116. **The Big Valley Story** (Gympie, Reid Printery, 1974).

117. Teys Bros. to L. McDonald, 5 March 1985.
plants.

The most significant stimulus to the post-war meat industry was the boneless meat trade to the USA after 1956. Lakes Creek made its first shipment in 1957. While this trade led to improvements in slaughtering methods, processing and transport, it also demanded considerable capital expenditure to bring meatworks to the required standard. This has already been noted in relation to Lakes Creek, but its effect was more drastic on the smaller works. Gladstone Meatworks which closed at the end of 1963 must be seen as a victim of this trade, for the plant and buildings were old and obsolete and would have required high capital expenditure. Management found a fortuitous 'way out' when Comalco, seeking a good deep-water port on which to establish an alumina refinery, made an attractive offer for the prime site at Parsons Point on Port Curtis Harbour. 118 Perhaps encouraged by the closure of Lakes Creek's only significant opposition, another company announced its intention to establish works in the region.

Rockhampton's long-awaited second plant became reality in 1965 with the opening of T.C. Fields Fitzroy River Abattoir at Nerimbera, just a few kilometres downstream from Lakes Creek. Built and equipped to conform with the requirements of the American market, and with a daily capacity of 600 head, it appeared to have an advantage over older works. In fact its operations were hampered almost from the outset by poor industrial relations. The fact that it worked under a less

profitable industrial award than Lakes Creek (which also has had problems in this area)\textsuperscript{119} made economic viability more difficult to obtain. A recent study reveals that slaughtering rates at Australian meatworks are less favourable than those overseas. Comparisons with Europe, for example, indicate that Australian 'cattle equivalent units per man day' are 4.4 head while European are 9.2 to 10.6 head.\textsuperscript{120} Naturally, this raises production costs. Industrial issues, such as the tally system which determines basis of payment and maximum daily throughput, have also exacerbated industrial relations.\textsuperscript{121}

When Amatil Ltd. acquired T.A. Fields' two Queensland meatworks, also its retail butcher shops (including one in Rockhampton) in 1977 it inherited not only these general production problems, but also the same industrial award. (Amatil sold to Metro Meats in 1984, claiming it could no longer operate profitably under the current award. Metro announced from the outset that it would adopt the same award as most other Queensland meatworks.) The proliferation of awards within the industry has led to criticism of the arbitration system in contributing to poor industrial relations and rising costs.\textsuperscript{122} By the 1970s slaughtering charges absorbed 20 per cent of the saleyard

\begin{footnotesize}
\begin{enumerate}
\item 'Submission to Industries Assistance Commission (IAC) Inquiry into the Meat Processing Industry', Cattle Council of Australia, October 1982, p. 20. (Duplicated booklet)
\item Ibid., pp. 23-26.
\item Ibid., pp. 15-28.
\end{enumerate}
\end{footnotesize}
value of cattle, with wages and salaries accounting for two-thirds of this cost. Operating costs of export abattoirs are also influenced by two external factors: variability of throughput owing to seasonal conditions, and the level of use of processing facilities. While processors can (and do) pass on to the producer a high percentage of costs, the effect on the industry as a whole is reflected in loss of markets and consumer resistance to high priced meat.

While industrial action first affected the local industry in 1907 with the formation of the Lakes Creek Butchers Union, the majority of production problems briefly referred to above belong to the expansionary period, 1956-74. Queensland cattle abattoirs increased from ten in 1956 to 37 by the end of the 1970s; the total daily slaughter capacity rose from 5,400 to 16,500. There were 113 meatworks in Australia in 1976-77, about half of these controlled by large companies. When the slump came, small sub-standard works were forced to close, while export works had to meet even greater financial demands stipulated by USA and Japan. Within the Fitzroy Region the expansionary period had led to the closure of one old, obsolete meatworks, the establishment of two new plants, and the extension and upgrading of the oldest meatworks to make it 'world class'.

In Queensland the 'big six' meat companies (including Lakes Creek and Fitzroy River Abattoir) have had over-capacity

Figure 2. Queensland cattle abattoirs in 1981-82.
processing problems since 1975. Unless meatworks operate at 80 per cent of their capacity they cannot make a profit.126 This particularly applies to export works which have to estimate overseas meat prices six weeks in advance when fixing prices to be paid for slaughter cattle. They need a higher profit margin to compensate for lost 'gambles' on world markets.127 The Cattlemen's Union of Australia argued before the Prices Justification Tribunal (PJT) in 1978 that processor profitability was too high. They maintained that the nine meat processing firms listed on the Sydney Stock Exchange (including T.A. Fields but not Vesteys) had a combined annual turnover of $500 million; these firms represented only about 25 per cent of total meat production.128 While these opposing attitudes continue the old argument of the 1870s between producer and processor, (Sir) William Gunn maintains that the producer, the processor, the live-stock selling agent, the retailer and the trade union movement 'have to recognize that we are all part of one industry'.129 Trade unionists, however, disagree. The AMIEU sees its role as a manufacturing industry:

Our members take a raw material that has a limited demand, that is livestock and convert it into a product that has mass demand, almost universal....Our job is to manufacture a product and that product is meat, it is a secondary industry. 130

126. Personal interview with Warwick Hinksman (AMLC), 13 July 1982.
127. Ibid.
128. Submission to the Prices Justification Tribunal (PJT), MS, Cattlemen's Union of Australia, 1978. (Copy)
From the wastefulness of the boiling-down system, with its production of tallow and hides, to the sophistication of modern meatworks, the Fitzroy Region has provided a continuing, though sometimes controversial, service to the cattle industry. A pioneer in canned meats, a Queensland 'first' in freezing works, Rockhampton has in the modern age achieved distinction as 'beef capital' of Australia. While the regional cattle population is largely responsible, the world-wide reputation of Lakes Creek Meatworks also contributes to the title. Other meatworks have come and gone; Lakes Creek, like the phoenix, has on several occasions risen from the ashes of its own funeral pyre under ownership ranging from local cattlemen to the multinational Vestey Organisation. Despite intermittent droughts, economic depressions, over-production or under-production of cattle, industrial problems in processing, and diminution of world markets, Lakes Creek has remained the keystone of the Fitzroy Region beef cattle industry.

Australia in general and Queensland in particular have faced two basic meat marketing problems since the 1870s: lack of profitable domestic markets owing to comparatively small population; and geographic isolation from major world markets. Geoffrey Blainey's title, *The Tyranny of Distance*, could well be applied to Central Queensland's beef export industry. It is only in the last 50 years that major markets, first in Britain and later in the USA and Japan, have been open to large quantities of Queensland beef; even then, these have proved to be unstable. New and more baffling stresses have affected these markets in the post World War II era: the loss of Australia's traditional market when Britain joined the EEC in 1973; and powerful political influences in the major importing countries since the late 1950s, the USA and Japan.

The early problems of preserving meat in a palatable state were believed to have been overcome with the advent of Mort's freezing process. While this was so (at least until chilled beef received customer preference) it did not necessarily lead to the 'natural step' of meat marketing. Some cynicism was expressed in a leading article in the *Capricornian* in 1890:

Many will remember with what feelings of satisfaction and jubilant expressions the telegram was received [in 1880] announcing that the cargo of meat in the Strathleven had reached the Thames in marketable condition....Queenslanders especially were joyful, because it opened up a vista of open markets and fair returns for surplus stock....Whether the stockowners have received so much benefit by the erection of the dead meat trade as they anticipated, is very problematical.... 131

131. *Capricornian*, 26 April 1890.
As early as 1886 Andrew Bertram (manager, Lakes Creek) told the Rockhampton Chamber of Commerce that the colonies had to compete with immense shipments of foreign and colonial beef 'which kept pouring in from all sides' on the British market. He had recently undertaken what must have been one of the earliest promotional tours by a Queensland meat exporter. In Edinburgh he saw 'unprincipled dealers' selling inferior American canned meat labelled as the Lakes Creek product.132

There are frequent comments on the frozen beef market in the correspondence of David Archer (London) to his son Robert at Gracemere in the 1890s. These usually reflect the gloom enveloping 'the Australian frozen' as he called it. In 1897 the agents told him, 'The frozen beef trade is so very bad, and prices unsatisfactory, that we have not sold any of your parcel at present'.133 This was producer‐marketing, the method tried by Beardmore. Ross Duncan confirms the problems faced by colonial processors on the London market. In 1896, for example, 35 separate consignees handled Australian beef, while the much larger American consignments were marketed by only four firms, and Argentine beef by three. The cost of marketing Queensland beef was also higher, and not merely in freight charges. The multiplicity of ports for loading (Gladstone, Broadmount and Broadsound in Central Queensland in 1898), and insurance rates as high as 7 per cent per £100 ($200). Because of 'the tyranny of distance' freight charges

132. Andrew Bertram, 'Overseas Meat Trade in the 80s', original newspaper report of 1886, copied and read at meeting of Rockhampton and District Historical Society, 4 May 1955.
133. David Archer to Robert Archer, 13 August 1897.
absorbed between 20 and 30 per cent of the London price for prime beef.\textsuperscript{134} There was also a shortage of direct shipping between Queensland ports and Britain. A representative of the great American meat processing firm, Armour & Co., told Rockhampton industry leaders in 1897 two things they already knew: that 'from cattle to meatworks was a natural step', and that it was difficult for Australia to 'break into' the European market.\textsuperscript{135}

Significantly in 1901, the year in which British mercantile interests acquired the CQME Co., Argentinian chilled beef entered United Kingdom markets.\textsuperscript{136} By 1910 this had increased from 75,000 tons in 1901 to 325,000 tons in 1910.\textsuperscript{137} Beef prices at Smithfield varied little in the first decade and in 1911 averaged three and five-eighths pence per pound (c. six cents a kg). Dealers speculated on the upward or downward trend of the market, operating accordingly as buyers or sellers.

Britain's declaration of war against Germany on 4 August 1914, disastrous as it was for the western world, seemed certain to provide viable markets for Queensland beef. Just one week after the declaration of war, the Queensland Government (under Denham's premiership) enacted 'The Meat Supply for Imperial Uses Act of 1914'.\textsuperscript{138} All meat and stock

\textsuperscript{134} Duncan, 'The Australian Export Trade', \textit{Business Archives and History}, pp. 115-16.
\textsuperscript{135} \textit{Capricornian}, 19 June 1897.
\textsuperscript{136} A trial shipment of chilled Queensland beef left Brisbane in the Marathon in 1909, but had to be frozen \textit{en route} to save it from going bad. (\textit{Capricornian}, 20 November, 1909.)
\textsuperscript{137} Critchell and Raymond, \textit{A History of the Frozen Meat Trade}, p. 255.
\textsuperscript{138} \textit{QGG}, No. 58, 12 August 1914.
in the state were to be 'kept for the disposal of His Majesty's armies in the present war'. Private transactions were suspended and prices fixed by a board. The Act was passed despite a telegram from Agent-General, Sir Thomas Robinson, on 3 August: 'Owing to excessive imports meat it fortunately happens all refrigerated stores chock full of meat....' Queensland replied that 6,972 tons of frozen beef were being loaded for the United Kingdom. The Agent-General had the last word: 'Government do not at present contemplate purchasing meat, both American and Australian meat interests show great willingness to co-operate'. Thus the small charade of Queensland patriotism was deflated by American pragmatism.

Queensland possibly acted precipitately to avoid repeating her experience in the Boer War when 'all beef processing companies in Queensland' were excluded by the British War Office from tendering. The 1914 Act was, in effect, notification that in this war Queensland should not be excluded from British Army contracts for beef. There was an additional factor when the Ryan Government took office in 1915; Premier T.J. Ryan worked closely with Agent-General Robinson who had previously managed Queensland merchant firms. Both Robinson and the Imperial Meat Officer (Ross) 'joined in the unlikely role of assisting a Labor government to break the power

139. Ibid.
140. Ibid.
141. H. Tozer to Director, Army Contract, 28 February 1902, PRE/50, QSA.
142. Even though excluded from Army contracts during the Boer War, export returns show that processors privately sent more beef to South Africa in 1902 than to the United Kingdom. See Appendix.
of the meat export companies and ensure there was a sufficient supply of meat for the local market'.

This was significant in the administration of the Meat Act (also the Stock Embargo legislation), though it provoked litigation by powerful meat and grazing interests.

The British Board of Trade took advantage of the Queensland Meat Supply Act in January 1915. The 'Home Government' agreed to finance the scheme. Robinson advised Ryan to consider making meat export 'a state monopoly' through a joint venture between the two governments. This was to prevent American companies already in Australia from taking control. Significantly, it was the Legislative Council's rejection of Ryan's Meatworks Bill (to acquire these meatworks) which prompted the premier to prepare a further bill for the abolition of the Upper House.

The 1914 Meat Supply Act was, in the long term, the source of disputation between the meat companies and the government, of minor dispute between Queensland and Britain regarding legal costs, and the source of litigation by private interests against the Queensland Government. There was also conflict between T.J. Ryan and Prime Minister, W.M. Hughes, when the latter tried to take control of all meat contracts with Britain in 1916. Pastoralists also objected to regulations preventing livestock crossing the border to New South Wales. The most

143. Murphy, T.J. Ryan, A Political Biography, p. 109.
144. General Correspondence relative to the Imperial Meat Contract, 1915-22, PRE/74, QSA.
145. Agent-General Robinson to T.J. Ryan, 31 July 1915, Quoted by Murphy, T.J. Ryan, A Political Biography, p. 111.
146. Ibid., pp. 128-30.
147. Ibid., pp. 218-19.
148. General Correspondence, Imperial Meat Contract.
famous of the 'meat cases' was the Mooraberrie Cattle Case which ended in an appeal to the Privy Council and was not resolved until 1919.\(^{149}\)

The meat companies had two major grievances against the government: non-payment of sums claimed under the new agreement of April 1916; and their claim that the government was selling in its own shops, beef purchased at a special price under the agreement. The CQME Co. was so incensed that in November 1919 it took the grievance to Premier E.J. Theodore.

A private and confidential document maintains that in 1918-19 the government had ordered large quantities of beef

\[\text{...regardless of the proportion due to you; apparently the policy of the Government being to extend the State Butcher Shops without due consideration being given to the quantity of beef at your disposal at 3d and 3\(\frac{1}{2}\)d. This certainly is your own business. The Meat Companies, however, notified you...that as long as existing contracts were in force you would have to pay 4\(\frac{1}{6}\)d or equivalent to Imperial price, plus other charges...for all beef ordered in excess of the 10% to which you were entitled.}\] \(^{150}\)

The inference was that the State was using both the Local and Imperial Agreements to obtain cheap beef for State retail butcher shops. The earlier grievance dragged on until 1922 when the Imperial Meat Officer suggested that unpaid accounts be put in the hands of the Crown Solicitor.\(^{151}\) By this time the British meat market had collapsed and the meat companies were as despondent as the producers. Some, including Lakes Creek,

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149. Memorandum, Mooraberrie and Privy Council Appeal, 10 April 1922, General Correspondence, Imperial Meat Contract.
150. Memorandum of Proposed Interview with E.G. Theodore, p. 3, General Correspondence, Imperial Meat Contract.
151. Correspondence between CQME Co. and Queensland Government, 1921, Memorandum, Imperial Meat Officer to Under-Secretary 24 May 1922, General Correspondence, Imperial Meat Contract.
were to be bankrupt within a few years.

By the end of the decade, economic depression had bitten deeply into every industry and its dehumanising social effects were already apparent. In 1931-32 Australia's share of the British meat market (beef and mutton) was only 7.9 per cent, while the Argentine supplied 31.8 per cent of all beef.\textsuperscript{152} Australia had lost her frozen beef trade on the open market and was increasingly restricted to naval, military and institutional supplies at cut rates.\textsuperscript{153} William Angliss on a visit to Rockhampton in 1931 compared the fickle meat export trade to the occupation of a miner: 'We are always happy to strike it', he said.\textsuperscript{154} Another depressing year had just begun with increased supplies to the United Kingdom from Argentina, the closing of the German market to Australian meat, and prohibitive duties in France and the USA.\textsuperscript{155} Small wonder that Angliss grasped the opportunity to sell the CQME Co. and Lakes Creek Meatworks to Vesteys in 1934.

Vesteys' acquisition of the Angliss meat interests in Australia for £1.5 million ($3,000,000) was apparently their last line of defence. At the Ottawa Conference in 1932 'the bitterest antagonism to Britain granting Dominion preference on meat was uttered by the Vesteys'.\textsuperscript{156} Their policy then fundamentally changed, during the two year interim, to enable the company to take advantage of Empire concessions. As already indicated, Sir Edmund Vestey made no secret of the fact.

\textsuperscript{152} Commonwealth Parliamentary Papers, Part 3, 1935-36, p. 311.
\textsuperscript{153} J.R. Vickery (CSIRO), Quoted in CQH, 15 September 1932.
\textsuperscript{154} CQH, 29 January 1931.
\textsuperscript{155} Ibid.
\textsuperscript{156} Ibid., 1 February 1934.
While some observers saw benefits for the Australian meat trade through the Vestey organisation's chilled beef outlets in England, others were uneasy from the outset. Frank Forde (MHR for Capricornia) expressed his apprehension by asking the pertinent question as to why, when Vestey subsidiary companies leased the Lakes Creek Works 1924-28, the works were closed for a considerable period; yet when Angliss & Co. purchased the company in 1928 Lakes Creek re-opened, though working on a reduced kill owing to lack of markets.157

In order to understand the full ramifications of the Vestey 'change of heart' it is necessary to recall the history of the firm in Australia up to this period. The Fisher Government (defeated in 1913) had encouraged two British meat export firms, Vesteys and Bovril, with extensive pastoral and meatworks interests in South America, to acquire large cattle properties in the Northern Territory. Bovril Australian Estates purchased Victoria River Downs in 1909 and in 1914 Vesteys acquired Wave Hill Station.158 By 1916 the Vestey land-holdings in the Northern Territory, Queensland and Western Australia comprised 27,670 square miles, to make the company the largest landholder in Australia.159 When the Cook Conservative Government took office in 1913 it supported privately owned meatworks in the north. As a consequence, in 1914 Vesteys signed an agreement to establish meatworks in Darwin. Although building commenced in 1914, these works operated only from 1917 to 1920.160

157. Ibid.
158. Knightley, The Vestey Affair, p. 133.
160. Ibid.
Darwin Meatworks closed just prior to the collapse of the British meat market. Vesteys would have had no regrets about building an Australian plant which operated only briefly; it achieved its purpose of keeping competitors out.

The manner and effectiveness of the Vestey organisation's control of British meat markets, and its mounting wealth through almost a century of tax evasion, was the subject of a recent British publication, but confirmation also lies in primary sources. Lord Vestey, giving evidence before a British Royal Commission in 1925, said it was more profitable to let their 60,000 Northern Territory cattle die than sell them to meatworks 'owing to the excessive cost of labour and other handling conditions'. While denying his firm's control over the price of meat (in British butcher shops), he admitted they owned meatworks in Australia, New Zealand, Venezuela, Brazil, the Argentine, Uruguay and Madagascar. They also owned several other meat companies and 2,356 retail butcher shops in Britain. As Knightley says in reference to the Vestey method of tax evasion:

If, like the Vesteys, you own not only the packing houses, but the ranches that raise the cattle, not only the freezing works that store the carcases but the refrigerated ships that carry them abroad, not only the docks that unload them, but the companies that insure them, not only the wholesalers that distribute them, but the butchers who sell them, then you can take your profit at the most convenient stage down the line.

Recent research by Bruce Gates on the Vestey companies has revealed that by the 1970s this family controlled the largest private fortune in the United Kingdom; it was also believed to be the largest privately owned multi-national company in the world. Since World War I it had continued to avoid death duties and personal and corporate income tax by means of its 'unique structure'. These facts have relevance to its operations as a Central Queensland beef exporter. The CQME Co. (incorporated in London) is one of 116 companies throughout the world owned by Vesteys' Union International Co. Ltd. According to Gates, Lord Vestey and E.H. Vestey have complete control of the Vestey group – its 256 companies operating in 28 countries, its $1,500 million assets and its 70,000 employees. This is a key element in the success of their tax avoidance. Gates describes how this affects the Australian meat and livestock industry:

...Vestey is much more profitable than its competitors for the simple reason that other processors operating in Australia do not have the tax advantages that Vestey does. This means that in the good years, and for the processors the mid to late 1970s were good years, companies like P.J. Walker, Tancred, Anderson and Borthwicks are paying out a much higher proportion of their profits in taxes. When things get tough for processors as they were in 1974...Vestey have the cash reserve to tide them through. Vestey still has the cash to undertake an expansion programme at Lakes Creek in Rockhampton.

Gates' findings (part of which were used by Knightley in...)

164. Bruce Gates, Vesteys - Britain's Most Successful Tax Avoiders, MS, 2 July 1981. (Copies of Gates' original papers supplied by author.)


The Vestey Affair) also show why Vestey wholly-owned companies are able to utilise profits as capital investment. In everyday trading they can sell beef to one of their own companies in Hong Kong, for example, for $1.40 a kilogramme and resell it to another of their companies in the USA for $2 a kilogramme. Low profits in Australia mean low income tax; high profits in Hong Kong mean low income tax. While all these factors give Vesteys an advantage over competitors, there is another aspect to be considered. In the opinion of an officer of the AMLC, Vesteys contribute significantly to the meat industry. He points out that meatworks have to remain viable, otherwise cattlemen themselves would go broke. The truth of this has already been demonstrated, particularly in the 1920s. It is the timing of the Vestey exit (1920) and re-entry (1934) which clearly confirms whose interests are paramount. The Ottawa Agreement and ability to enter the chilled beef trade combined to increase Australian beef exports in 1938-39 by 134 per cent since 1931-32. By 1939 Argentinian exports had fallen by 12 per cent. The question arises, how much did Vesteys influence the Australian increase?

Meat exporting during the Second World War appears to have been controlled in a more rational manner than in 1914-19. The British Ministry of Food was the sole purchaser of all Australian exports to the United Kingdom from 1 October 1939.

167. Personal interview with Bruce Gates (then lecturer in Economics, CIAE), 7 December 1983.
Under a Fifteen Year Agreement, 1939-54, prices were negotiated annually. When Britain decontrolled its meat imports (rationing ceased on 5 July 1954) there was again an over-supply of frozen beef and a consequent fall in prices. For Queensland processors this was virtually the end of the 'moribund state' into which they had drifted.

The dramatic changes which occurred with entry to USA and Japanese beef markets in the late 1950s and early 1960s tended to obscure what was happening in Europe as the EEC imposed its protectionist policies. In Britain also, imports of beef declined between 1958 and 1961 as a result of increased home production (subsidised). Australia's share of this market in 1961-62 was 35,000 tons compared with 81,000 tons two years earlier. In the euphoria of the American 'hamburger market' this serious decline in what was still Australia's second most important beef market scarcely warranted a comment.

Australia's entry to the American market was due to the discovery of foot and mouth virus in lightly salted beef imported from the Argentine. There seems to be some kind of divine justice in this reverse situation of export conditions applying to Australia and Argentina in the 1921-34 period. Even though the American market was dominated by home production in 1961, it imported 665 million pounds of beef and veal - 4 per cent of its total production. Japan, which provided a new market for high grade beef during the 1960s, had in-built danger signs for those astute enough to read them. When

Australian exports reached 84,000 tons in 1972, the fact that Japan had made no long-term commitments was ignored. As the *Pastoral Review* commented after the debacle of 1974:

> It was the Australian assessment of future prospects which led to expectations which did not materialise. It is still good business practice in times of boom conditions to hedge against a "bust". 174

While the beef industry's optimism prior to 1974 was unrealistic (given changing conditions in importing countries) the reasons are obvious. Total beef exports in 1972 were 700,000 tons; in 1955, just before the opening of the American market, they had been 156,000 tons. 175 By June 1973 the so-called 'demand explosion' in the export market accounted for 61.6 per cent of total beef production. Australia was the leading exporter in world markets. 176 While meat processors did not share the financial bonanza of producers owing to the high price of cattle, future markets appeared promising. Beef and veal exports to the three chief markets in 1972-73 were:

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<th>Country</th>
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<tr>
<td>USA</td>
<td>302,600</td>
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<tr>
<td>UK</td>
<td>100,000</td>
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<td>Japan</td>
<td>84,000</td>
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Total beef exports in 1972-73 were valued at $654.7 million, as against $388.9 million in the previous year. 178 In January 1973, President Nixon's suspension of beef quotas was described

173. *The Pastoral Review* itself contributed to unrealistic expectations prior to 1974, for example Vol. 84, February 1974, which quoted Colonel McArthur's (Chairman, AMB) assurance that 'the world is short of beef'.


175. Ibid., Vol. 84, February 1974.


177. Dalgety's, *Beef Digest*.

178. Ibid.
as 'all the Australian meat and livestock interests could ask as a Christmas box'. Japan's second beef quota for that year was seen as a sign that 'Japanese meat importers...will be seeking to establish joint interests with Australian processors to secure, process and ship beef back to Japan'.

Even Britain's entry to the EEC in 1973 produced few qualms; the *Pastoral Review* saw this as an opportunity to market beef and veal to the 'enlarged market' of the EEC. Increased demand was forecast. This was dangerous optimism in its encouragement of herd increase. Reality was that by the end of 1979 the EEC had become a major exporter of beef (subsidised), competing with Australia on some world markets.

As already shown in relation to cattle marketing, when major export markets collapsed almost simultaneously, there was shocked disbelief. An industry symposium in Melbourne on 22 September 1974 was appropriately titled, 'What Happened to Beef?' Colonel McArthur, Chairman of the AMB, told delegates that Australia's dependence on the international meat market 'highlighted its vulnerability to short term changes in importing countries'. A Department of Agriculture spokesman asked a pertinent though rhetorical question:

'Why, in this day of sophisticated planning and forecasting were we unable to foresee such a drastic slump?' asked Mr Ives. 'My view is that the answer lies almost entirely in the fact that the slump was sparked off by a series of major political circumstances which were utterly unpredictable.'

180. Ibid.
183. Ibid.
Were they utterly unpredictable? Australian organisations such as the Meat Board surely should have been aware of events overseas likely to affect beef imports. If not, 'How can export beef processors plan their cash flows and capital investment programmes?' asks Gates.\(^{184}\) He also criticises the AMB for its failure to research the production potential of each importing country, failure to identify 'who needs what' and who can supply it. If these functions were carried out, never again would Colonel McArthur (or his successors) have to ask, 'what happened to beef?'

The 'political circumstances' within the USA, Japan and the EEC, and the internal pressures which led to the banning or restriction of Australian exports may be summarised as follows:

1. Over-production in the EEC had resulted in a stockpile of frozen beef. An indefinite ban was placed on all imports.

2. In Japan a high level of domestic beef production coincided with a slump in consumption. The energy crisis of 1973-74 had a tremendous impact on the Japanese economy. In May 1974 the government 'deferred' the Australian beef quota.

3. Price controls imposed on the USA beef industry in mid 1973 affected trading stability, industry confidence and consumer response. Oil price inflation also affected the domestic economy. This market was not completely closed, but greatly reduced. \(^{185}\)

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\(^{184}\) Bruce Gates, The Export Marketing of Australian Beef, MS, Paper presented to the Central Queensland Beef Producers Liaison Committee, 30 May 1975. (Gates' original papers are now held by the Cattlemens Union, Rockhampton.)

\(^{185}\) Summary based on article by Colonel McArthur, Chairman, AMB, titled, 'The Outlook for Beef', Pastoral Review, Vol. 85, February 1975, pp. 95-97. When McArthur claimed that 'nobody foresaw the sharp slump in world beef markets last year', he possibly referred to his own forecast early in 1974 of a world beef shortage.
One very significant factor in the USA affecting beef imports is the degree of prosperity in the feedlot industry. In the early 1970s about 95 per cent of slaughter cattle were grain fed. Since then rising prices for cattle have decreased the percentage. Dr Robert Bain maintains that the prosperity of the feedlot industry influences the proportion of breeders, thus affecting the culling rate in herds. It is the cow beef market (manufacturing beef) with which Australia competes; when prices fall in the US market, the lobbyists pressure the government to limit outside access to it. In effect, this kind of change affecting world markets has upset the most elementary economic truth; as one industry organisation leader commented: 'Supply and demand no longer work - now we have political markets'. In addition to political factors, the energy crisis of 1973 was generally blamed for economic crises in all three importing countries, with its resulting shock waves felt so acutely in Australia. (With the advantage of hindsight, it appears that this 'crisis' was artificially applied to dampen inflation in all western countries.)

By the end of the 1970s, all major beef importing countries had attempted to insulate their home industry from 'world instability' by placing more stringent restrictions (or quotas) on beef imports. The USA Meat Import Act became law on 31 December 1979. This 'countercyclical' law is much more severe than the previous Act of 1964 and is less flexible as the President is not so free to modify quotas. The GATT code

187. Personal interview with Warwick Hinksman.
is also included in the US Trade Agreement of 1979; this provides for dumping duties to be imposed when foreign goods are sold in the USA for less than 'fair value'. Japan's beef trade policy is inexorably tied to its domestic livestock policy.\footnote{189} As one industry leader expressed it, 'The Japanese know how to look after Japan'.\footnote{190} Central Queensland processors (and producers) know to their sorrow that Japanese import quotas are not only imposed, but sometimes cancelled before filled.

This series of events, described at the Melbourne symposium as a 'triple dose of traumatic happenings', forced processors to search for new world markets. T.A. Fields, for example, suffered a drop from 60 to 40 per cent in their beef exports to the USA. Export Marketing Manager, J. Mulherrin, was obliged to 'telex around the world' every morning, tendering on beef at the lowest possible price in an attempt to capture markets. He found markets in Asia, particularly in Malaysia, Hong Kong and Singapore for the restaurant and supermarket trade, but also in Korea (opened to imports only in 1976) and Taiwan. These are specialised meat markets for particular cuts of beef. Taiwan, for example, purchased 13,000 tons of shin and stewing beef in 1975. Most meat exported to Asia is CRYVAC packed, that is, boned meat vacuum packed in clear synthetic coating. Other markets which have shown growth since 1975 are in the Middle East. In order to retain this valuable trade, a Moslem slaughter man was employed at Fitzroy River Abattoir to comply

\footnotesize{\begin{itemize}
\item \footnote{189} Ibid.
\item \footnote{190} Gunn, 'Political Influences on Beef Marketing', \textit{Proceedings, IBC}, p. 102.
\end{itemize}}
with Moslem law which decrees that a beast must be killed with a knife and this prayer offered to Allah:

\[
\text{Allah gives} \\
\text{In Allah's name I take.} \quad 191
\]

Despite new problems for all processors in the 1970s, because of low cattle prices 1974-78, they were affected economically far less than producers. Ironically, the value of beef and veal exports rose between 1976 and 1978 by $200 million,\(^{192}\) a significant factor in recovery in 1978. In the previous two years domestic consumption had begun to rise in response to lower retail prices; this market remained high until rapid price rises in 1979 caused an inevitable decline. New world markets, such as those found by T.A. Field, assisted in raising total production of beef and veal to its highest level (1972-81) in the years 1977 and 1978.\(^{193}\) Altogether these trends confirm the statement that low prices for producers usually mean higher profits for processors. This is one of the basic factors in cattlemen's claims of exploitation by processors, but in reality it is a fact of economic life. As already indicated, it is over-production in the cattle herd which, combined with declining meat markets, reduces competition and causes low cattle prices. When this situation is exacerbated by political and economic pressures external to Australia, processors are obliged to reduce beef production which, in turn, means a reduction in cattle buying.

During the 1960s and 1970s the beef industry was subject to unending advice from economists, some of whom were forecasting increasing Japanese imports on the eve of the 'crash'. Since 1974 they have been more numerous and also more realistic in their assessment of world markets. The BAE, for example, has assisted in guiding the industry into the modern age with its in-depth economic surveys. Other economists who tried to 'probe the future' of world beef markets warn that only a small percentage of change in production or consumption in importing countries could have a major effect on world markets. Recognition that political lobbyists could overturn the old factors of supply and demand was finally accepted as a 'fact of life'. The profound effect of this on world beef markets meant that the problem had to be attacked at government level, either ministerial or departmental.

In discussing beef marketing, the problems of processors within the Fitzroy Region are synonymous with those of the Australian processing industry generally. While some parallels might be drawn between Fields' export manager 'telexing around the world' in search of markets, with Andrew Bertram seeking markets in Britain for Lakes Creek canned beef in 1886, the scale and circumstances are poles apart. Even though Lakes Creek has been an export works for most of its existence, it is obvious that Australian processors generally played a minor role in world markets prior to the Second World War. The effect of the American and Japanese trade has been both beneficial and traumatic to the industry as a whole, with one sector's

gain becoming the other's loss. While some processors, notably the Vestey family, have taken deliberate advantage of producers and governments to achieve massive financial gains, the irrefutable fact is that processors must remain viable to prevent the industry from collapsing as it did in the 1920s. Mounting world pressures on the free market system in the post-war period have in recent years led to a more realistic approach to beef marketing. Even so, the history of the industry warns that 'the natural step' from beef cattle to beef marketing is subject to stumbling and occasional downfall.
CHAPTER VI
THE FITZROY BASIN BRIGALOW LAND DEVELOPMENT SCHEME
1962-1984

1. Brigalow: Planning and Action
2. The Brigalow Ballot: A Case Study
3. Brigalow Settlers: The Last Pioneers

1. Brigalow: Planning and Action

Brigalow is a type of acacia (*Acacia harpophylla*) which is found predominantly in eastern Queensland, from south of Collinsville to Narrabri in northern New South Wales. In its natural state it grows profusely, often with other timber types, in scrubs so thick that there is generally little grass of any fodder value. It has no commercial value. It originally covered a belt about 1,126 kilometres long and extended inland for up to 700 kilometres in places. In 1953 P.J. Skerman estimated the area of the brigalow belt as 23 million acres (9.3 million hectares). This included pure brigalow in thick scrub formation, scattered clumps in open grasslands, or in associated communities with belah, wilga, box, softwood scrubs, bottle-tree, tea-tree, gidgee, yellowwood and other less frequent species. Brigalow occurs in five main soil types, four of which are clays making up 86 per cent of the total area. These are generally grey and brown and all

(The Economics of Brigalow Land Development in the Fitzroy Basin, Queensland, p. 6.)
have pronounced swelling and shrinking properties. They are often referred to as 'cracking clays' and are extremely difficult to negotiate in wet weather. The Fitzroy Basin brigalow is within the 20-30 inch annual rainfall isohyet (500-750 mm), with most precipitation occurring in the summer, November to March.3

The usually high natural fertility of brigalow land was recognised in earlier days, but the problem of hand clearing made the task almost impossible. The earliest method of clearing scrubs was by felling with axes and then burning and sowing either cash crops such as cotton, or by planting Rhodes grass in the ashes.4 A Central Queensland man who earned a pittance for several years during the 1930s by clearing brigalow scrub in the Wandoan area by this method describes the sheer hard work. He and his mate each received five shillings (50 cents) an acre with free meat supplied. They needed to complete three acres a day, six days a week, in order to make a frugal living.5 Another method of clearing was by frill ringbarking and then leaving the timber to stand for a few years without burning. Both these methods were slow, limited, labour intensive, and, by the 1950s, too costly at $5 an acre.6 As early as 1884, when Dutton, as Minister for Lands, introduced a new Land Bill, a Blackall selector published a 'poem' titled, 'King Brigalow and Mr Dutton'. While its

6. 'The Brigalow Scheme in Central Queensland', p. 2.
literary merits are doubtful, it successfully depicts the character of brigalow in the second stanza:

Friend Dutton, I'm called an acacia,
A case you might well leave alone,
There are tough plants throughout Australasia,
But I am the toughest that's known.
I laugh at your promised invasion,
Your clauses are wasted on me,
From the seed I can shoot, or spring from the root,
You can't kill a brigalow tree. 7

It was the introduction of the bulldozer to Australia by American forces during the Second World War which brought such dramatic changes to scrub clearing. One third generation cattleman in the Fitzroy Region said of this innovation: 'Its magnificent potential almost revolutionised the beef cattle industry' in the clearing and development of brigalow country and in establishing the dams and facilitating pasture improvement.8 Pioneer cattlemen despised the brigalow scrubs in which their cattle took refuge in dry times and so made mustering an unpleasant task.9 In the early years of the twentieth century, when prickly pear infested the already dense brigalow scrubs, only the wild scrubber cattle appreciated it. The only method of capturing cattle was by 'moon-lighting', that is, trapping the cattle when they emerged on moonlight nights to seek watering holes.10 The eradication of prickly

7. Anthos, 'King Brigalow and Mr Dutton', Capricornian, 13 September 1884. (Copied from Blackall Champion. See Appendix for complete verse.)
9. P.F. MacDonald to A.L. MacDonald, 20 November 1903, in which he refers to the almost impossible task of finding in the Mackenzie River scrubs the few cattle to survive the 1902 drought.
10. 'Moonlighting' is described by Vic Priddle, Dung on His Boots, pp. 113-15; and in Judith Wright, Cry for the Dead, pp. 162-63.
pear in the 1930s by cactoblastis simply returned the brigalow scrubs to their former condition. Skerman estimated in 1953 that of the 23 million acres (9.3 million ha.) in the brigalow lands, about 16 million acres remained untouched. He attributed the slow rate of development to: low ruling prices for cattle, with consequent lack of capital for development; and the insufficient supply of labour for ring-barking and clearing. At the same time, interest was growing in the possibility of new methods of control. At a meeting in Brisbane of the Queensland Producers' Animal Health Committee (QPAHC) in 1949, J.L. Wilson asked about Department of Agriculture and Stock experiments being carried out at Biloela on 'eradication of brigalow trees and suckers'. He was told the work was 'not regarded as being entirely successful; but a new method of "pushing over" suckers' was being tried: 'If suckers are chopped off they regenerated, but if pushed over and only a small connection left between the upper and lower part they died of slow starvation'. These two early instances of false optimism were to be repeated many times in the following 25 years.

The Australian Government in the period of the Second World War had again become concerned with the problem of the nation's empty spaces and its relatively small population. This 'populate or perish' syndrome had been an intermittent obsession since colonial times, as had land settlement itself. But in the 1940s the problem was attacked in a more scientific manner, even though fear of Asian invasion was still a

11. QPAHC Minutes, 15 August 1949.
motivation. Various estimates of population potentialities were made. These ranged from Warren Thompson's 'eight million by the end of the present century' (postulated in 1945) to Gentill's 1949 estimate of 13 million white people as Australia's maximum. The more optimistic of these estimates had been overtaken within two decades through a combination of post-war immigration and a rising birth rate. But the immediate problem in the 1940s was not only to increase the population, but to settle at least some of these people in the empty spaces.

The Federal Government took the initiative in 1950 by establishing the Royal Commission on Pastoral Lands Settlement. In giving evidence to the Queensland Sitting of the Commission on 17 October 1950, economist Colin Clark quoted the Queensland Premier (E.M. Hanlon) as stating 'simply and emphatically' that 'if we do not quickly settle all the available land in Queensland to its fullest capacity somebody else will come and do it for us'. Clark himself stressed the traditional fear of the 'yellow peril' by prophesying that Australia would face a military challenge from Asia within twenty years unless it had the support of the USA, the British Commonwealth and Europe. He believed public opinion in these countries would be against Australia if it did not make 'every possible effort to settle our lands as quickly as possible'. If not, he said, 'there is a case for handing them over to Asiatic settlers'. Clark's proposed order of development involved a total of

14. Ibid.
421 million acres throughout Queensland and a potential of 337,000 new settlers.

According to the findings of the 1950 Royal Commission, Queensland, Western Australia and South Australia provided the most promising possibilities for converting scrublands to agricultural land pastoral use. In the southeast of South Australia and on the Eyre Peninsula, and in the Esperance area of Western Australia, schemes were launched which ultimately cleared the dry, scrubby vegetation from what had been sandy wastes. By the use of trace elements and super-phosphate these lands were successfully converted to wheat country. Queensland, meanwhile, was left with Clark's grandiose solution.

P.J. Skerman's presidential address to the Queensland Branch of the Australian Institute of Agricultural Science on 11 March 1953 provided a much more balanced, in-depth assessment of one particular environment and the advantages (and problems) in developing it. His address was titled, 'The Brigalow Country and its Importance to Queensland'. Recognising that costs involved were beyond the scope of individual cattlemen, Skerman recommended that:

The development of this fertile brigalow belt should be a national undertaking in the interests of greater production and greater population....Why not provide public finance for these major works and recoup the outlay if necessary by increased rentals spread over a longer term....

I believe that the brigalow belt provides the greatest single potential for development of any land in Queensland and we must push ahead with plans for its successful settlement. 15

Skerman's address was published in the Institute's *Journal* in September 1953 and proved to be extremely influential. Most agricultural scientists, cattle husbandry officers and also economists writing on specific subjects related to the brisalow lands referred to it in published articles during the following years. Following as it did the recommendations of the 1950 Royal Commission, it suggested a possibility more readily attainable than Clark's suggested 421 million acres.

As early as 1944, H.W. Herbert had been released from the Royal Australian Air Force at the request of the Premier (F.A. Cooper) to prepare a report on post-war prospects for land utilisation in Queensland. The initial outcome was the establishment of the Queensland British Food Corporation (1948) which commenced broadacre grain production in the Central Highlands between Clermont and Springsure. While in the short term this was a financial failure, its ultimate effect on land use in the Fitzroy Basin was revolutionary. The attention of the Department of Lands was captured by the 'land rush' which occurred following the collapse of the Scheme in 1954 and the re-allocation of leasehold lands. This had taken place partly through unfavourable seasons and partly through inept administration (from Brisbane). Clearing sales of farm machinery at bargain prices provided the means for local cattlemen to become grain growers as well. One old cattleman, Vic Priddle, described the event as 'the turning point from stagnation to progress in Central Queensland'. Land hungry Victorian farmers eagerly took up homestead and grazing leases

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17. Priddle, *Dung on His Boots*, p. 46.
made available by the sub-division of QBFC lands.\textsuperscript{18} By 1969, 20 per cent of the Emerald Shire was occupied by 26 combination beef and grain enterprises, with a similar pattern in the adjoining shires of Peak Downs and Bauhinia.\textsuperscript{19}

A combination of the Royal Commission findings, Skerman's assessment of brigalow country, and the Central Highlands land rush caused the Lands Department to undertake preliminary investigations of brigalow lands in the Fitzroy Basin. The potential carrying capacity was appraised and estimates made of adequate block sizes.\textsuperscript{20} This inquiry proved so promising that in August 1961 the Premier asked the Prime Minister to allow the BAE to investigate the economic possibility of developing a portion of the Queensland brigalow belt. This was agreed to and in 1961-62 the BAE undertook a thorough economic assessment of 9.5 million acres (3.8 million ha.) of brigalow and forest country located in the Fitzroy Basin.\textsuperscript{21}

The Bureau found that the region was in 1962 used almost exclusively in the production of beef, estimated at about 13,100 tons per annum for the total area. Nor did it advise any immediate change in primary production:

Under the present conditions and proven technical knowledge applicable to the region, it is considered that beef cattle production is the most desirable enterprise on which to base the initial development. 22

\textsuperscript{19} \textit{Emerald Shire Handbook}, August 1972.
\textsuperscript{21} D.H. McKay, 'Foreword', \textit{The Economics of Brigalow Land Development in the Fitzroy Basin}.
\textsuperscript{22} Ibid., p. 40.
It divided the region into three distinct zones identified as Brigalow Areas I, II and III. Area I extended west from the Dawson River to the Expedition Range; Area II, west from the Expedition Range to the Comet River; Area III, north of the Capricorn Highway to Nebo. In 1965 the Scheme was extended southwards of Area I to Wandoan and Injune and identified as Area IA. This brought the total area in the Fitzroy Basin Brigalow Land Development Scheme to 11 million acres (4 million ha.).

In its report, the BAE estimated that the development capital necessary for Areas I, II and III from their present level of development to the grazing and stocking of cleared brigalow lands and the limited development of eucalypt forest lands would be £33.8 ($67.2) million. This included property improvements, equipment, breeding stock and purchased cattle. An additional £16.9 million ($33.8 million) would be required to develop one-fifth of the unflooded brigalow area for winter crops. In addition to capital funds for land development, the Bureau stressed that it would also be necessary to provide arterial and feeder roads to provide adequate means of transporting cattle.

The Bureau then provided the encouraging news: the annual increase in beef production for the total area after the first stage of development was estimated at 44,920 tons of beef. This would provide a dramatic 345 per cent increase over production in 1962. A further 45 per cent, or 26,000 tons would be added after the third stage of development. Despite these startling figures, the Bureau assured the government that its

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Fitzroy Region showing Brigalow Areas I, IA, II and III.
('The Brigalow Scheme in Central Queensland 1962-1978',
LAC, 1978.)
The report had not attempted to maximise net income in the area, but was 'a conservative development plan which is considered feasible'. The report concluded:

This investigation by the Bureau of Agricultural Economics concludes that under the input-output relationships made, which include brigalow clearing carried out carefully in accordance with scientific knowledge, the brigalow land development in the Fitzroy Basin is a sound economic proposition. Even if the full cost of road construction and maintenance is charged directly to brigalow development the analysis shows that the proposals for development are sound. 25

On receiving this encouraging report, the Queensland Government decided to proceed with the Scheme, providing it could obtain financial assistance from the Commonwealth. This was a rational decision, culminating in the Brigalow and Other Lands Development Act of 1962. Prior to this, the government had set up a Land Development Committee consisting of the Co-ordinator General of Public Works, the Chief Commissioner of Lands and the Director General of Primary Industries (then the Department of Agriculture and Stock). Their case for Commonwealth financial assistance, based on a firm plan of development of Areas I and II over five years, was then put to the Federal Government. The Commonwealth, recognising the importance of this scheme to the nation, agreed to provide a long-term interest-bearing loan of $14.5 million to the Queensland Government, commencing on 1 July 1962. 26

The Department of Lands must be credited with foresight and wisdom in appraising the potential carrying capacity of the Fitzroy Basin brigalow lands and then establishing (almost

25. Ibid.
for the first time) adequate living areas for lessees of blocks. These ranged from a minimum of 8,000 acres (3,276.6 ha.) in Areas I, IA and II (with the best soil and moisture retention) to 30,000 acres (12,141 ha.) in the lighter northern country of Area III. The Scheme is administered by the Lands Administration Commission (LAC), a corporation within the Lands Department. In the speed with which the economic survey was carried out by the BAE, the Scheme established by the Lands Department and, not least in importance, the co-operation between state and federal governments, the Fitzroy Basin (Brigalow) Land Development Scheme emerges as a rare example of non-political action. It was also 'one of the most carefully researched projects in the history of Commonwealth Government involvement with land development'.

In 1965, with the addition of Area IA in the Taroom and Springsure Lands Districts, some two million hectares south of the Capricorn Highway were within the Scheme's 'umbrella'. The first blocks in Area I were balloted for in April and May 1963. [See Part 2.] By 1 September 1968, of the 142 blocks occupied in Areas I, IA and II, 103 were allotted by ballot and 37 sold by auction. The average size was about 10,000 acres (4,047 ha.), with the smallest being capable of carrying 800 adult cattle. Because much leasehold land had to be resumed in order to carry out the Scheme, key aspects in the

27. Ibid.
Agreement between the Commonwealth and State in relation to the acquisition and sub-division of the total area of 11.2 million acres (4 million ha.) were:

(i) Existing leaseholders to be offered new leases in respect of part of their existing holding on conditions requiring reasonable development without provision of financial assistance under the Scheme.

(ii) At least one quarter of the new blocks to be sold at auction with appropriate development conditions without provision of financial assistance under the Scheme.

(iii) All other blocks to be allotted under selection methods determined by the State. In relation to these blocks the State was to provide financial assistance to develop or to develop and partly stock each block subject to the allottee repaying the outlays plus interest. Blocks under 10,000 acres were to be made available on a freehold purchase basis, but no Deed of Grant was to issue until development was completed. Areas over 10,000 acres were made available as Grazing Selections.

(iv) Adequate roads were to be provided. 30

Implementation of the Scheme, as in its establishment, made the best use of other specialist government or semi-government departments and local authorities through co-operation. The QDPI provided technical advice, while the Irrigation and Water Supply Commission assisted in the selection of dam sites and in their construction. Road access to new blocks was designed and constructed by Shire Councils, while main highways were up-graded by the Main Roads Department. 31

Applications for blocks in Area III, north of the Capricorn Highway and extending over the Isaac-Mackenzie River basins were first called in 1968 and were completed by

31. Ibid., pp. 4-5.
1974. This is the largest of the three brigalow areas, comprising 2.4 million hectares. Although the carrying capacity of this land is lower than the southern brigalow lands, the smallest block was still capable of carrying 800 adult cattle without cultivation. Acreages ranged from 13,000 (5,261 ha.) to 31,000 (12,545 ha.) with a purchasing price of $1.35 to $1.80 an acre. Sixty-nine blocks were allotted by ballot, 37 sold at auction. A new development in Area III was the pulling (clearing) by the LAC of about 55,000 acres (22,258 ha.) before allocation. As will be shown in Parts 2 and 3 of this chapter, this did not apply to development south of the Capricorn Highway. The reason for the change was to accelerate development by lessees and so avoid some of the problems experienced by settlers in Areas I and II. Also, there was less brigalow and more associated forest country in Area III, thus making it possible for settlers to stock their blocks immediately. When the Scheme was completed, a total of 3,023 approved persons had applied for the available 170 blocks allocated by ballot between 19 April 1963 and 11 October 1974. Another 77 blocks were sold at auction between 14 May 1964 and 4 June 1975. Retention areas for original Crown lessees numbered 113, while eight blocks were retained by the Lands Department as reserves.

The Brigalow and Other Lands Development Act of 1962 might be ranked with the Crown Lands Act, 1868, and the Crown Lands Act, 1884, as among the most significant land legislation

32. Ibid., p. 15.
33. Turner, The Use of Land Resource Data, pp. 8-9. [See Appendix for full details on allocation of Areas I-III.]
34. Department of Lands to L.L. McDonald, 29 March 1984; 'The Brigalow Scheme in Central Queensland', pp. 15-16.
in Queensland's history. Unlike the many Acts of the 1890s and also in the early years of the twentieth century, which attempted to develop the State's agricultural lands, the 1962 Act provided adequate living areas and finance for the new settlers. It avoided, for instance, the 'political considerations' evident in the Discharged Soldiers' Settlement Act, 1917, which placed men on minuscule and uneconomic agricultural blocks as small as 320 acres (129.5 ha.). With an equally tiny loan of £625 ($1,250), very few survived. In the Ridgelands area near Rockhampton, of the original 80 soldier settlers, all but ten walked off their blocks within several years.\textsuperscript{35} Brigalow blocks allotted by ballot (because of the great number of qualified applicants for each block) in 1963, 1965 and 1968 ranged in area from 8,000 acres (3,238 ha.) in Area I to 31,000 acres (40,873 ha.) in Area III. Block sizes varied according to soil types, vegetation and rainfall. The Brigalow and Other Lands Development Act of 1962 established the type of land development which Colin Clark had envisaged in 1950 when he asked the Royal Commission on Pastoral Lands Settlement (Queensland) to ignore political considerations:

\begin{quote}
I am asking it to do something much higher, namely, recommend an act of statesmanship. What is the distinction? It is this, that while politics is concerned with the next election, statesmanship is concerned with the next generation. \textsuperscript{36}
\end{quote}

From the outset (1962) a great deal of interest was

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35. Personal interview with J.E. Harding, son of a World War I settler in Rockhampton district, 19 August 1977.
\end{flushright}
generated in the community by the concept of the Fitzroy Basin (Brigalow) Land Development Scheme. As early as January 1963 the Hon. O.O. Madsen, MLA, boldly announced: 'We can supply the answers on brigalow'. Even though he was unaware of the problems ahead in developing brigalow lands, he was correct in his assessment of government merit in implementing it. He referred to articles in the December issue of the QAJ (1962) as

...tangible evidence that the State Government has not been standing by, idly contemplating brigalow development, but has rolled up its sleeves and tackled the problem with enterprise and vigour. 37

There were no less than thirteen articles in the Journal referred to, dealing with the brigalow lands. Their subjects ranged from developing the property to producing beef. Perhaps the government, having brought the Scheme to fruition on paper, feared a shortage of applicants. In the event, most ballots produced ten times as many qualified applicants as blocks.

The successful 'allottees' (as the LAC originally designated the new settlers) soon discovered one problem on which the experts had no answer: how to control brigalow regrowth. When the old problem reappeared in 1964-65, both the DPI and the CSIRO immediately began researching methods of control. Cooperation between government departments, scientists and their liaison with brigalow settlers, has been a key factor in the ultimate success of the whole Scheme. Such publications as the DPI's Brigalow Development (1968) subtitled, 'A handbook for the use of developers of Queensland's brigalow lands', is

virtually a 'brigalow bible'. The new settlers could consult it on a range of problems from planning their clearing to regrowth control, from pasture establishment to cattle management and tick control, and also on financial management. In addition, officers of the Department were available for consultation and advice, both in their offices and in the field. Practical aspects of this co-operation are shown in Parts 2 and 3 of this chapter. Even so, by the end of the 1970s there was still no easy method of controlling brigalow regrowth.

Yet another indication of forward planning was the establishment in 1963 of the Brigalow Research Station. Again, the Department appears to have acted on Skerman's recommendation of 1953:

...I believe the importance of these areas is such that all plant industry and animal husbandry investigations should be centralised on one well equipped research station located in the heart of the brigalow country. 38

The chosen location between Biloela and Moura, adjacent to the Dawson River, occupies 8,888 acres (c. 3,500 ha.) of 'reasonably representative' brigalow country in the Fitzroy River Basin. Scientific research projects include the mechanism of brigalow sucker development and control, land productivity studies and pasture and cropping experiments. 39 The first field day was held at the station on 4 April 1967. 40 When the station was established it had a breeding herd of Hereford cattle in which breeder performance and growth rate of progeny were

Clearing the brigelay with crawler tractor and chain, 1965. (OPF, Rockhampton)
Bulldozer clearing brigalow in Area I, 1960s. Note home-made 'tree guard' on dozer. (QDPI, Rockhampton)

Brigalow regrowth. Modern method of control with bulldozer and heavy duty plough. (QDPI, Rockhampton)
observed. *Bos indicus* cattle were later introduced and comparative trials carried out. Fundamental studies of data relating to climate, soils and vegetation, also rainfall run-off, are continuing projects. Representatives of station staff, field officers and graziers are included on the station committee. Two brigalow settlers from Areas I and IA, Robin Spark of Moura and Owen Benn of Injune, both interviewed for this study [Part 3], have served as grazier representatives. No longer are new settlers 'dumped' on selection blocks to fight for survival in depressing isolation as they were in earlier years.

As part of its on-going interest in the lands of the Fitzroy Region, the Queensland Government in the 1960s requested the CSIRO to research their geophysical nature. This resulted in three book-length reports (published in 1967-68) on the environment, climate, geology, soils, vegetation and land use in each of three areas: the Isaac-Comet, the Dawson-Fitzroy (both relevant to brigalow development) and the Nogoa-Belyando areas.\(^{41}\) Although not specifically related to the Fitzroy Basin (Brigalow) Land Development Scheme, the three research zones included the land already settled and that about to be occupied in Area III in 1968. Reporting on land use in the Dawson-Fitzroy area, it was estimated that the carrying capacity of these lands had been increased six-fold by the establishment of improved pastures.\(^{42}\) Although within the tropics, the climate

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was found to have some affinities with that of south-eastern Queensland and northern New South Wales in its low minimum temperatures during winter and some (though usually negligible) winter rain. While summer is the period of most frequent and heaviest rainfall, the variability is higher than in the northern tropics. The range is between 23 and 38 inches (575 and 950 mm). Rockhampton's mean annual rainfall is about 37 inches (925 mm).\(^\text{43}\)

Most significant to the theme of this chapter, is the CSIRO report, *Lands of the Isaac-Comet Areas* (1967). In a reference to Brigalow Area III in which the first blocks were not allotted until 1968, the report states:

> Large holdings in this part of Queensland are being sub-divided as the leases expire, closer settlement is being encouraged and assisted, brigalow is being cleared, and investigations by private companies and Government departments are in progress. Most of the brigalow lands investigated by the Bureau of Agricultural Economics (1962) are in the Isaac-Comet catchment. \(^\text{44}\)

In its unimproved condition the average stocking rate of this country is one beast to 30 or 40 acres (12-16 ha.). This ranges from one beast to eleven acres (5 ha.) on the downs country to a beast to 100 acres (40.4 ha.) in dense scrub country. The low stocking rate on unimproved pastures stemmed from the old problem on native pastures: too much grass for the cattle in the wet season, too little nutrition in the dry season. While herbage is wasted in the wet season, enough cattle to utilise this would mean overstocking and starvation for the rest of the year.

\(^{43}\) Ibid., pp. 89-92.
\(^{44}\) *Lands of the Isaac-Comet Area*, p. 9.
The positive advantages of brigalow development are recognised in improved pastures and increased carrying capacity; the disadvantages, that even newly cleared brigalow land 'is sometimes infested with weeds and suckers and threatens to become an economic burden in the future'.\(^{45}\) In this region, the beef cattle industry was acknowledged as the most important. The opinion that 'because of natural limitations' it is likely to be so in the future, refers principally to the nature of the land.\(^{46}\) This has proved correct. Much of the land on the Isaac River and its basin is unsuited to cultivation.

South of the Capricorn Highway, a wide range of grain and fodder crops are now grown over the whole area included in the Brigalow Development Scheme, with the exception of the Arcadia Valley, where soils are too prone to erosion. These include wheat, grain and forage sorghum, sunflower and safflower. Oats are grown mainly as a forage crop, barley also. Both dryland and irrigated cotton have proved successful, particularly in the Biloela and Emerald districts. While rainfall is higher in the northern areas, evaporation is also higher and so cropping tends to be more successful in Areas I and II. Brigalow soils usually have adequate supplies of nitrogen in initial years of cropping, for brigalow is a legume. There are widespread deficiencies of phosphorus. Agricultural scientists warn of deteriorating soil fertility under intensive cultivation. Fortunately in the Fitzroy Basin cropping is usually carried out in conjunction with cattle breeding or fattening; pasture

\(^{45}\) Ibid., pp. 136-37.
\(^{46}\) Ibid., p. 139.
rotation is often practised and this helps prevent loss of soil fertility. On the other hand, because of climatic conditions, rotation of summer and winter grain crops is practised widely. More recent developments in establishing new crops in stubble mulch helps prevent deterioration of soils. 47

While it might appear that the original aim of the Fitzroy Basin Scheme, to increase beef production, has been lost sight of in this increased grain production, this is not so. According to the LAC, in 1962 there were 235 properties occupying this vast area of 11 million acres (4 million hectares) and running approximately 295,000 cattle. By 1979 there were over 500 properties running in the vicinity of 750,000 vastly superior beef cattle, plus a network of roads which had been built to serve these formerly isolated areas. 48 While some older cattlemen in the brigalow belt blamed the Scheme for over-production and the subsequent drastic price fall, 49 the causes of over-production have been shown as affecting all Australian beef production, and the price slump as the result of complex factors. Its effect, on the other hand, was more severely felt by those only recently settled on brigalow blocks. The LAC itself suffered some embarrassment in the years 1975 to 1979 through the sheer inability of many settlers to keep up their loan repayments. [Part 3.] At the same time, cattle numbers were increasing for the simple reason that they were

49. Personal interview with P.G. Dowe, Brigalow Settler, Area III, 12 March 1984.
not worth selling. The Commission admitted this problem in 1978 when modestly summing up its success:

In general the Scheme has been unique in Australia as it indicated that large-scale redesign with development and closer settlement is possible even using capital intensive land clearing techniques. The only major problem for selectors is that at a time when they have built up stock numbers to desirable levels, they have to compete in an over-supplied market for sales; however, this type of market situation can change fairly quickly as has occurred in the past. 50

It is interesting and informative to compare the official assessment of the Scheme with that of the old Central Queensland cattleman, Vic Priddle, who describes the 'revolutionary change' from a personal viewpoint:

To see this country today, and then endeavour to visualize what it looked like half a century ago, makes one stand in amazement and wonder if it's a dream or a nightmare. The general transformation is unbelievable. The country more or less resembles nature's open black soil downs, with pastures of green panic, Rhodes and buffel grass growing profusely....

Around my old home town of Rolleston, we had scores of thousands of acres of brigalow, wilga and prickly pear scrub, absolutely useless and full of unbranded cattle. Cattle were born and died of old age in these scrubs, without ever having a brand on them.

On the eastern side of the Expedition Range, large areas of leasehold land, practically all brigalow scrub, were considered so useless that the Lands Department couldn't even get anyone interested enough to select it. 51

At the same time, Priddle was conscious of a feeling of sadness 'to see such destruction'. He was conscious also of the continuing problem of sucker regrowth. In 1972 he thought

50. 'The Brigalow Scheme in Central Queensland', p. 13.
that after ten years of trial and error 'the brigalow is still on top'. He was also concerned about 'the way we are throwing poisons around' and the effect of this on the balance of nature. He was an old cattleman with vision, for he also saw the possibility of fine country becoming 'semidust bowls' with topsoil polluting streams and insecticides threatening not only the birds and animals, but perhaps man himself. He believed that the Fitzroy Basin Scheme should remain tied to the cattle industry; should the beef industry fail, 'it would be frightening to see the result of this brigalow talking back to us'. But having expressed the basis of his 'nightmare he added that if 70 per cent of the brigalow lands were utilised in grain growing, crop fattening for livestock, and improved pastures for grazing, then it would be an outstanding success. The importance of the Scheme would then match the miracle that occurred with the introduction of \textit{cactoblastis}. It would be a credit to the Lands Department and to the agricultural scientists who watch over it.\textsuperscript{52}

The confirmed success of the Scheme by the end of the 1970s does not depend on official opinion alone, but is supported unanimously by the representative cross-section of eleven brigalow settlers interviewed for the purpose of this study. Even so, several admitted that two of Priddle's fears still had great relevance: in the problem of regrowth his predictions were correct, brigalow continues to 'talk back'; and the close relationship which he believed essential between the Scheme and the cattle industry suffered some disruption

\textsuperscript{52} Ibid., pp. 203-08.
following the price slump in 1974-75. Wherever possible, brigalow settlers had turned to broadacre grain growing to complement beef production by 1980. While this in itself is a major factor in regrowth control, it also poses the threat of erosion by wind and water. Thousands of acres of crop also bring an increase in the use of insecticides for aerial spraying. The threat to man and his natural environment is intensified. Less emphasis on cropping and more on pasture improvement and beef production depends to a certain extent on the availability of world markets for Queensland beef. The combination of environmentally adapted beef cattle, and the improvement in stocking rates and herd numbers as a result of the Fitzroy Basin (Brigalow) Land Development Scheme, makes a stable marketing system more than ever necessary.
2. The Brigalow Ballot: A Case Study

The success or failure of any land development scheme is reflected in the lives of those who become its new settlers. While the physical environment, annual rainfall, the size of the block and the economic state of rural industry are all contributing factors in the individual settler's degree of satisfaction, the Fitzroy Basin (Brigalow) Land Development Scheme provided another key element: meaningful communication with the settler. Co-operation between the LAC and the DPI also ensured practical advice on animal husbandry, pasture improvement, cropping and, not least, brigalow regrowth.

A case study based on the experiences of one particular cattleman who drew a block in Area I in May 1963 allows a microscopic view of the Brigalow Scheme in action. Barry Glennie Collins of 'Unumgar', Moura, is an appropriate subject; both his father's and his mother's families were associated with the beef cattle industry in the Dawson Valley since pioneering days. Various branches of the two families had owned Coorada Station (Taroom), Greycliffe Station (Banana), also Thomby and Oaklands. His maternal grandfather, Robert Ernest Davey, bought Roundstone Station, Moura, in 1902; it was part of the crown lease (or one of the several associated leases held by Davey) which ultimately became Portion 11, Parish of Rhydding, in the Fitzroy Basin (Brigalow) Scheme. Collins drew this block on 28 May 1963. It is now known as 'Unumgar', meaning 'place of lizards'.

53. 'Unumgar' was named after the Glennie family property in northern New South Wales, the meaning of the name being appropriate to both properties.
Barry Glennie Collins was born in Rockhampton on 18 April 1941, the son of Stanley Glennie Collins and his wife Mona, née Davey. He was educated privately and at Gatton Agricultural College. Collins was just twenty-two years of age when he applied for a brigalow block on 28 March 1963. Since leaving school he had worked on his father's Marlborough cattle property. The Brigalow Scheme, publicised widely at the end of 1962, provided a chance to obtain land of his own. Although acceptance in a ballot required the applicant to have had experience on the land and current assets (cash, livestock or other convertible assets to the value of $24,000), Collins competed with 43 others in the second ballot. As the Scheme became more widely known, so the number of applicants in each ballot increased. Between 1970 and 1974 the number of approved applications (Area III) ranged from a 'low' of 149 to a 'high' of 386; there were seven ballots in this period.

As indicated in Part 1, ballots accounted for 70 per cent of brigalow settlement blocks. Of the remainder, 25 per cent were sold at auction. Applications for each ballot were considered by a Committee of Review. Applicants had to be males aged eighteen to fifty-five years and capable of developing their blocks. Women were eligible to apply jointly with their husbands, but not individually. All were required to have at least three years farming or pastoral experience within the previous decade, or be able 'to convince the Committee of their

55. Department of Lands to L.L. McDonald, 29 March 1984.
56. Ibid.
capabilities'. In Areas I and II there was practically no pre-development by the Commission.

The first ballot under the Brigalow Scheme was held in Brisbane on 19 April 1963 and the second on 28 May. On that day, Collins received a telegram from the Land Commissioner: 'You were successful at Ballot today for Portion 11 Parish of Rhydding'. 'It was like winning the Casket', he recalled later. The 'winners' of the eleven blocks drawn in the second ballot included two jackaroos, two station hands, several farmers and graziers, one station manager and one branch manager. Nine were Queenslanders, two from Victoria. Only two were Central Queenslanders: Barry Collins and Noel Patric Bryson of Baralaba. Bryson drew a 4,711 acre (1,637.8 ha.) block, part of which had been resumed from his father's adjoining Rosedale Station. Collins' block contained 8,500 acres (2,630.5 ha.) comprising brigalow and blackbutt country. All eleven blocks were in the Moura area and within the Rockhampton Land Agent's District; five were in the Parish of Pegunny, three in Oombabeer and one each in the parishes of Spottiswood, Perch and Rhydding.

Collins, having received written notification of success, still had to satisfy the Commission that he was likely to be a satisfactory borrower from the Corporation, that he had not made false or misleading statements in his application, and that within three months he would take up 'bona fide personal

57. 'The Brigalow Scheme in Central Queensland', p. 7.
60. Plan of Block, Portion 11 Parish of Rhydding, Lands Department.
61. Land Development (Fitzroy Basin), Department of Public Lands, 28 March 1963, MS.
Plan of Unumgar, showing block cut by the Dawson Highway. (B.G. Collins)
residence on the land allotted to him'. His first commitment was to pay £44.14.0 ($89.40), the first of five equal instalments of the survey fee. He was also required to confer with an officer from the Department of Public Lands and one from the Department of Agriculture and Stock (DPI) to arrange a programme for the block's development.

Under Section 23 of the Brigalow and Other Lands Development Act of 1962 he was entitled to an advance of £17,944.0.0 ($35,888) to develop his land for beef production. The period of the loan was 25 years. Collins applied for his first advance as follows:

<table>
<thead>
<tr>
<th>(1) PURPOSE</th>
<th>(2) AMOUNT</th>
<th>(3) DATE REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timber treatment</td>
<td>£1300</td>
<td>Jan 1964</td>
</tr>
<tr>
<td>pulling 1000 acres</td>
<td>£750</td>
<td>Dec 1964</td>
</tr>
<tr>
<td>Seed &amp; seeding 1000 acres</td>
<td>£750</td>
<td>Dec 1965</td>
</tr>
<tr>
<td>Seed &amp; seeding 1000 acres</td>
<td>£1250</td>
<td>June-Dec 1965</td>
</tr>
<tr>
<td>Water facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing Price</td>
<td>£13894</td>
<td>TOTAL: £17,944.64</td>
</tr>
</tbody>
</table>

The term of the lease commenced 1 October 1963, even though Collins was required to take up personal residence by 28 August 1963. This allowed a brief 'breathing space' to organise both developmental work and if necessary arrange for private loans before compulsory repayments began. The first of these (other than the survey fee) was the £1,433 ($2,866)

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63. Ibid.
64. Application for a Purchase Lease on Grazing Homestead, 29 May 1963.
which had to be paid within one month of the commencement of the lease. The Corporation set up a stores depot at Theodore and installed Land Agents there and at Zamia Creek.

Collins' plan for the first year included (in addition to scrub pulling) fencing and sowing pastures, building two 6,000 cubic feet dams, a cattle dip and cattle yards. His equipment (on occupation) comprised a crawler tractor TD 20 with post-hole digger and blade, a chain-saw, fencing plant, utility truck and jeep. He also had stock mustering equipment - horses, saddles and bridles. On occupation, at the end of June 1963, scrub pulling was given first priority. He engaged Australian Land Clearing Services at the approved rate of 27/6 per acre ($2.75). Two large bulldozers drawing a heavy chain and cable can pull up to 16.19 hectares of scrub an hour. When the heaped scrub is sufficiently dry it is burned - a fierce burn helps prevent regrowth. When weather conditions are right, aerial seeding then takes place, usually with mixtures of Rhodes grass, green panic, buffel and sorghum alnum. Collins was able to use his loan money for all developmental work, but for temporary living quarters estimated to cost £600 ($1,200) there was no government finance available.

His first request for funding for aerial seeding was approved 6 November 1963, but when the contractor exceeded the approved 2,400 acres (971.3 ha.), the Commission reminded him that no advance had been granted for this work:

66. LAC to Collins, 26 August 1963.
67. LAC to Collins, 4 June 1963.
I am directed to say that no adverse action will be taken provided prompt payment is made of the sum of £2079.0.7 as detailed above, or alternatively you should submit an application, if you so desire, for an advance from the Corporation for repayment of the amount. 69

Inevitably there were controls and restrictions, also the usual 'red tape' involved in communication with government departments. Looking back on this early period, Collins admits that he found it irksome until he adjusted to the system, but believes it was beneficial to the settler in the long run. 70

On 15 July 1963, for instance, he was advised that within 21 days he was required to sign a prescribed form of agreement identified as 'The Schedule'. This obliged him to spend not less than £5,000 ($10,000) within two years on stocking the property, and not less than £4,000 ($8,000) on buildings and improvements within three years. 'Living quarters or buildings capable of being used for such a purpose' had to be completed within one year at the expense of the landholder. Most were galvanised iron structures (tin sheds). Conditions of the mortgage naturally favoured the LAC which secured the purchase loan by a first mortgage on the lease. 71 Pulling and burning of scrub could be carried out only at such times 'as allowed by the Corporation of the Land Administration Commission'. 72

It is fair to say at the outset that many of these regulations were relaxed within several years and that by the time Area III was settled (1968-1975) all unnecessary strictures had been removed. In that first year, the LAC, like the brigalow

71. 'The Brigalow Scheme in Central Queensland', LAC, p. 8.
settlers, was facing a new experience and was a little uncertain how to proceed.

It is apparent from these detailed requirements set down by the Commission that drawing a brigalow block was far removed from winning the Casket. With little initial income possible from the resources of his block, the 'allottee' had to find money either from his family or private lending institutions. Even so, the advantages of being part of the Fitzroy Basin (Brigalow) Land Development Scheme were many. Low interest (5 per cent) government loans and controlled development provided the necessary incentive to attract young, energetic men with moderate savings. The Scheme allowed them to obtain scarce land well below ruling auction prices. In Areas I, IA and II blocks acquired through the ballot cost $1.35 to $4 an acre. 73 Better quality land in Area I was the most expensive; Barry Collins paid $3.25 an acre. The same type of land was sold for $35 an acre uncleared in 1977, while cleared land brought $70 to $90 an acre. The highest price paid for a block in Collins' district was approximately $132 an acre during the 1980-82 'boom' period. This land was in demand from Victorian and New South Wales farmers who, from experience, realised its potential for grain growing. 74 The LAC had shown how near-unproductive scrubs could be turned into prime pasture and cropping land. Very few older cattlemen in the Fitzroy Basin had taken advantage of the bulldozer (after World War II) to clear brigalow.

73. 'The Brigalow Scheme in Central Queensland', LAC, p. 15.
While the 'allottee' of the ballot system might have found it difficult to make repayments during the first years, the LAC itself had repayments to make to the Commonwealth Government on its initial interest bearing loan of $14,500,000. In 1968 an additional loan of $8,500,000 was made available by the Commonwealth to allow the development of Area III.\(^{75}\) The Commission reminded settlers of its own financial indebtedness when stressing how essential it was that their own payments should not fall behind. Settlers were also circularised towards the end of each year to remind them that they must insure against loss or damage 'all improvements capable of insurance'.\(^{76}\)

In addition to the developmental costs, Collins was required to pay his first instalment on the purchase money in the following month, December 1963. This amounted to £319.17.6 ($639.75); but when the survey of his land was completed at the end of that amazing year, he discovered that he had three acres (1.214 ha.) more than the original estimate. The purchase price of 32 shillings and sixpence ($3.25) an acre was adjusted accordingly, with a similar proportion added to the loan repayments. The amended purchase price of his block was £13,898.12.6 ($27,697.25) made up as follows:

\[
\begin{align*}
8,553 \text{ acres @ 32/6 ($3.25) per acre} & = \£13,898.12.6 \\
\text{Less preliminary deposit paid with application} & = \\£100.00 \\
\text{Total} & = \£13,798.12.6 \\
\end{align*}
\]

75. 'The Fitzroy Basin (Brigalow) Land Development Scheme', QDPI, p. 1.
76. LAC to Collins, 11 November 1963.
77. LAC to Collins, 30 December 1963.
Early in his second year (though only four months after occupation), Collins applied for permission to conduct share-farming operations on 2,000 acres (809.4 ha.). He was already experiencing problems with sucker regrowth on cleared land and so proposed cultivation as a means of bringing it under control. An experienced sharefarmer with suitable heavy equipment was available. Permission was granted verbally by the land agent at Zamia Creek. Time has proved Collins correct in his assumption that cultivation would most effectively control regrowth, but at that time he also saw share-farming as a means of providing much needed cash income. Ploughing as a means of regrowth control took second place to aerial spraying in a handbook published by the DPI in 1968. The advice, however, does stress the necessity of ploughing to a depth of at least four inches (10 cm) for a period of two or three years with a very heavy plough. By 1976 the DPI considered annual cropping for three years the most effective method. A heavy duty disc plough was recommended. Winter cropping and summer ploughing then appeared to achieve the best results as brigalow suckers grow mainly between September and March. More recently it has been found that a heavy blade plough or offset disc plough to cut the brigalow roots gives even better results. Some brigalow cattlemen now claim that one treatment with a blade plough will permanently kill the brigalow. One thing has

78. Collins to LAC, 6 January 1964.
80. Brigalow Development, QDPI, p. 34.
been proven beyond doubt: regrowth on cleared land, if allowed to get out of control, is a far greater problem than the original brigalow scrubs which worried European pioneers from Leichhardt to the early squatters. A pasture with 6,000 suckers per acre can be less productive than the original scrub within four years.  

Collins availed himself of every opportunity to extend his knowledge on brigalow control and pasture improvement by attending district field days. He was also among those present at the official opening of the Brigalow Research Station in May 1965. Queensland Country Life said of him:

Mr Barry Collins is a young man with a future. He came to his 8550 acre block in May 1963, and now 4000 acres are cleared. Mr Collins said lack of water and sucker regrowth were his big problems. He now has 400 Herefords, mostly breeders, with some fattening cattle. . . . He has planted Rhodes grass, green panic and Biloela buffel . . . and has ploughed 200 acres and planted it to milo. . . .

Two months later at a cattle field day at Roundstone Station he was one of 70 new brigalow settlers who were said to be 'a giant step nearer solving their beef production problems after hearing departmental and practical men pooling their knowledge' on that day. Unfortunately they were only a tiny step nearer solving their regrowth problems.

In April 1965, Collins was particularly concerned about regrowth in 500 acres (202.3 ha.) of pulled brigalow. In requesting the services of aerial sprayer, A.K. Barlow of

86. Ibid., 22 July 1965.
Taroom, he described the regrowth as about eighteen months old and varying in height up to two feet (0.610 metre). Aerial spraying for sucker control used 2,4,5-T in distillate, a spray which has since been reviled as the 'Agent Orange' used in Vietnam during the 1960s. A letter from Collins to the LAC in 1970 reveals the strength of the mixture: Cropcair Aviation Pty. Ltd. agreed to spray 1,500 acres (607 ha.) with '2/3 lb. active ingredient 245T butyl ester in 2½ glns [gallons] of distillate per acre'. The quoted price was $2 ($4) an acre, more than the original cost of the land.

In 1981 an inter-departmental committee appointed by the Queensland Cabinet reported on 2,4-D and 2,4,5-T and its effect upon human health. After reviewing hundreds of previous articles on the herbicide, considering known human exposure to the chemicals (including military use in Vietnam), the report concluded that 'no evidence exists' to suggest the chemicals would harm 'the health and well-being of any members of the general public'. The committee blamed the media for reporting adverse speculation 'which has consistently been found to be unsubstantiated'. The chemicals were not developed as an adjunct to jungle warfare; both had been used in Queensland for 30 years for weed control and in the agricultural, pastoral and forestry industries. 2,4,5-T in particular has been used extensively in brigalow regrowth control. Collins, and other brigalow settlers who have adopted aerial spraying, say they

87. 'The Fitzroy Basin (Brigalow) Land Development Scheme', p. 2.
90. Ibid., p. 31.
have not been aware of toxicity as the chemical is well
diluted.

The seriousness of the regrowth problem and its recognition
by the LAC was apparent as early as 1966 when it broadened its
original rules regarding loan money for control. Loan advances
in excess of $48,000 (originally the limit) would be made for
aerial spraying and re-seeding under this new agreement.
Pulling, burning and grassing 'of more than 6,000 acres'
(2,428 ha.), ringbarking forest country, providing more than
two watering facilities and more than twenty miles (32.19 km)
of fencing could also be financed with loan money. In addition,
a maximum of $6,000 was made available for the purchase of
breeding cattle.91 These amendments confirm the 'human face'
of the Commission and its degree of concern for the problems of
settlers. In reminding them that they were expected to use 'as
much of their own assets as possible', the secretary concluded:

The corporation feels the above amendments mark
an important step forward in the financing
provisions of the Scheme and has instructed me
to convey to you its best wishes for successful
development of your property. 92

Despite its occasional 'Big Brother' attitude to brigalow
settlers, the Commission appears to have given wise advice.
In 1964 when Collins applied for an advance to construct a
5,000 cubic yard dam and a 'turkey nest' dam, he was advised
to increase the size to 6,000 cubic yards as the smaller size
'may not be permanent' without a very good catchment. He also

91. LAC to Collins, 28 February 1966.
92. Ibid.
had to submit a written quote, arrange for inspection of
the site by a DPI officer, ensure the work was carried out
'in a proper and workmanlike manner' and, finally, agree to
the standard conditions of loans laid down by the Commission.\textsuperscript{93}

The LAC itself relied on advice from the DPI in such
matters as scrub pulling, and so circularised the new settlers,
advising 'the most favourable time to pull scrub is during the
summer months and up to the commencement of winter'.\textsuperscript{94} Even
so, when Collins sought permission to pull scattered brigalow
with patches of blackbutt at the end of August, loan money
was made available.\textsuperscript{95} By this time a total of 102,000 acres
of scrub within Areas I and II had been pulled at a cost of
$364,264; about 38,370 acres had been sown with buffel, green
panic and Rhodes grass at a cost of $56,688.\textsuperscript{96} Already the
LAC was praising the 'ready acceptance' of existing lessees
and new settlers to 'the concept of quick development'. It also
acknowledged appreciation (and perhaps surprise) at the number
of young men prepared to 'battle hard' on their brigalow
blocks.\textsuperscript{97}

Barry Collins had originally planned to run Hereford and
mixed breed cattle, beginning with the 250 head he already
owned. In April 1964 he purchased a mob of 300 bullocks from
his uncle, C.R. Davey of Roundstone Station, Moura.\textsuperscript{98} This
historic station had originally comprised two pastoral leasehold

\textsuperscript{93} Ibid., 10 March 1964.
\textsuperscript{94} Ibid., 20 March 1964.
\textsuperscript{95} Ibid., 24 August 1964.
\textsuperscript{96} 'A Resume of the Fitzroy Basin Land Development Scheme',
Department of Lands, 10 July 1964, p. 7. Roneoed paper.
\textsuperscript{97} Ibid., p. 9.
\textsuperscript{98} QDPI Stock Inspector, Permit to Travel Stock, 24 April
1964.
blocks, Toombul and Rhyddings, both of 50 square miles. After changing hands several times in the 1860s and 1870s, the two runs were consolidated in 1889 to form Roundstone Holding. A considerable portion of this, other than the Unumgar block, was resumed in 1962 to become part of the Brigalow Scheme.\textsuperscript{99} As in the case of the Bryson family, it was appropriate that Collins should have drawn a block on what had been part of his grandfather's run in 1902. Perhaps it was divine justice that in May 1964 Collins should request permission to take 150 head of his uncle's Hereford cattle on agistment for two shillings (twenty cents) per head per week.\textsuperscript{100} This income assisted him in making the half yearly repayment on 30 June, the second instalment on the purchase money, interest on his loan, and an instalment on the loan for dam sinking.\textsuperscript{101} By mid 1965 when the agistment agreement was extended, Central Queensland was entering into one of its most severe droughts since 1902. Mercifully unaware of this at the end of 1965, Collins increased his own herd by the purchase of 200 Zebu-Hereford cross cows, 100 calves and weaners, two Droughtmaster bulls, one third-cross Santa Gertrudis bull and two yearling bulls.\textsuperscript{102} These had been purchased as a result of the LAC's amendment, allowing a maximum of $6,000 for the purchase of breeding cattle. The cows and heifers cost $40 a head, the bulls $410 and $205 respectively.\textsuperscript{103} By the end of the 1970s, Collins bred only \textit{Taurindicus} cattle, putting pure-breed Zebu

\textsuperscript{99} \textit{Banana Yesterday and Today} (Biloela, Central Telegraph, 1974), pp. 118-19.
\textsuperscript{100} Collins to LAC, 1 May 1964.
\textsuperscript{101} Land Development (Fitzroy Basin) Scheme: Statement of Purchase Advances, 22 May 1964. (See Appendix for Statement, 30 May 1965.)
\textsuperscript{102} B.C. Collins, Statement, Annual Returns, 8 November 1965.
\textsuperscript{103} Ibid.
bulls over Polled Hereford cows with 'amazing results'. He turns off 150 prime three to four year old bullocks each year.\textsuperscript{104}

Despite the amount of careful planning between the State and Commonwealth Governments which resulted in the original agreement to develop the Fitzroy Basin brigalow lands, practice proved the general plan to be too inflexible. The problems experienced by Collins during those first two years were shared by the majority of early 'allottees'. The settlers themselves, working on the principle that \textit{unity is strength}, in 1965 formed the Dawson Highway Brigalow Association with a membership of 60. They met under a clump of bauhinia trees on Little Roundstone Creek.\textsuperscript{105} These people, who included Collins, had all drawn blocks in 1963 and were already faced with two major problems: shortage of finance, and shortage of water. The Association's spokesperson, Mrs Elsie Elias, said the Commonwealth Development Bank was not able to cope with the flood of requests, while financial and pastoral houses were also limited in their available funds.\textsuperscript{106} One of these settlers, J.W. Anderson, had estimated as early as February 1964 that by the time he paid off his block (the same acreage as Collins' land), plus interest on borrowed money, had purchased 800 head of cattle, and paid for plant and improvements, he would have committed himself to 'roughly double official estimates of the cost of establishing a brigalow block as a working operation'.\textsuperscript{107}

\textsuperscript{104} Personal interview with Collins, 14 May 1984.
\textsuperscript{105} Personal interview with Mrs Elsie Elias, wife and partner of Brigalow settler Area I, 15 April 1984.
\textsuperscript{106} QCL, 22 July 1965.
\textsuperscript{107} Courier Mail, 28 February 1964.
The urgent necessity among the settlers for additional finance was, in part, due to several unrealistic conditions originally laid down by the Commission, especially those relating to specific areas to be cleared and fenced within a limited time:

- the enclosure of the selection with 'a good and substantial cattle fence within two years'
- the development of the whole brigalow and softwood scrub on the selection, within three years by destroying the timber growth
- the maintenance of all cleared areas 'free from regrowth, suckers and undergrowth'
- the provision of satisfactory watering facilities within two years from the commencement of the lease
- the provision within one year of 'a good substantial dip and yards'
- the completion within three years of the necessary sub-divisional fencing 'to provide for efficient working of the property'. 108

There was also an added financial burden in 1965. Due to an increase in the Commonwealth long term bond rate towards the end of 1964, which applied to the Fitzroy Brigalow Development Trust Fund, the interest rate charged settlers on development works was raised one quarter per cent to 5¼ per cent. Before any advances could be made under the new rate, settlers had to lodge a new mortgage application. By the end of 1964 Collins' developmental loan (at 5 per cent) already totalled £3,954.0.7 ($7,908.07).109 In view of all these factors, it is not surprising that the Dawson Highway settlers united in an attempt to obtain some relief.

It is surely not mere coincidence that in 1965 the Queensland Government, recognising some defects in the Scheme,

asked the Commonwealth to agree to various amendments. Consequently, in February 1966 brigalow settlers were advised of greater flexibility in the new agreement. The amended agreement, to commence 1 February 1966, while maintaining the original aim in developing each block, no longer stipulated the number of acres, miles of fencing, the number of watering facilities to be provided. Nor did it specify any set term during which the work must be completed.

Drought conditions acutely increased the financial hardships of the settlers, as indicated by Collins' returns for 1969-70:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of feeding cattle</th>
<th>Total costs (including repayments)</th>
<th>Net income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>$1,400.00</td>
<td>$11,249.00</td>
<td>$15,151.00</td>
</tr>
<tr>
<td>1970</td>
<td>$4,000.00</td>
<td>$13,036.00</td>
<td>$4,066.00</td>
</tr>
</tbody>
</table>

Despite seasonal and financial stresses, developmental work had to proceed. By the time he applied to spray another 1,500 acres (607 ha.) of suckers in January 1970, the cost had risen from twenty cents an acre (1963) to $2.45. Increased loan money from the LAC for this purpose and for pulling scrub enabled him to treat another 3,054 acres (1,235 ha.). As this exceeded the estimated area he had to pay $494 from his own funds.111 Finance, even for housing, was unobtainable through normal sources. 'The banks didn't want to know us', recalls Collins. 'In those early years they were convinced the Scheme

111. LAC to Collins, 29 December 1970.
would fail.\footnote{112}

After seven years on his block, Collins was able to assess his chief problems. He recognised 'a serious blackbutt and associated woody weeds problem' and so proposed that the balance of his developmental loan money be spent as follows:

(a) aerial spraying about 1500 acres very soon - within the next month

(b) seek approval for cultivation advances\footnote{113}

From this sum he required $25,754 for sucker control alone. To assist in sucker control he intended to cultivate 'vast areas'. He maintained that:

(a) cultivation is the best and perhaps most economic way of controlling dirty areas on my property

(b) (i) Blackbutt and sandal regrowths are a problem and cannot be controlled by aerial spraying
(ii) Cultivation, as an alternative, is a long-term process.\footnote{114}

Although Collins did not immediately abandon aerial spraying, he was in the process of proving himself correct in the effectiveness of the plough. DPI scientist, Eric Anderson, after defining native woody weeds, confirms the efficacy of the plough:

By definition a weed is "a plant growing where man does not want it to grow". Hence without man there can be no weeds - only plants. "Native woody weeds" then are simply unwanted native trees and shrubs....

In brigalow lands the woody weed problems have been generated by the modifications imposed on the original brigalow communities by man....

\footnote{112. Personal interview with Collins, 11 April 1984.}
\footnote{113. Collins to Field Supervisor, LAC, 25 November 1970.}
\footnote{114. Ibid.}
Much of this problem has been overcome in the southern and central parts of the brigalow belt as this valuable land has been progressively converted from pastures to crops. 115

The 'good years' in the beef cattle industry, 1970-74, enabled brigalow settlers in Areas I and II to progress financially. Then came the dramatic 'crash' in cattle prices. Settlers, with their twice yearly interest and redemption payments, were in an unenviable position. Fortunately the LAC continued its humane policy. In March 1975 it advised landholders within the Brigalow Scheme that, owing to the depressed state of the cattle market, it would not expect them to fully repay their instalments during that year. 116 This was seen as 'an interim measure of relief' while both the Corporation and the landholders waited for the expected recovery in the cattle market. When this had not occurred by early 1976, the Corporation decided to conduct a survey among settlers...

...to establish the overall financial structure of the Scheme, and to assess the assistance and or Concession that may be required to re-establish those settlers seeking assistance. 117

In addition to the enclosed questionnaire (confidential), the Secretary promised Collins (and each settler) in a personal letter that an experienced officer would call in three or four weeks 'to discuss your particular problem'. This communication with settlers proved fruitful in achieving a moratorium on repayments; perhaps it was even more significant in increasing the LAC's understanding of how impossible it was to proceed

with developmental work without an income. During the beef depression Collins had continued to market fat bullocks, his lowest price being nine cents a pound (nineteen cents a kg). This was well under the cost of production.¹¹⁸

In recalling his total experience as a brigalow settler, Collins believes his youthfulness at the time of the ballot was an advantage in facing the hardships of the pioneering phase, even though he made mistakes through lack of experience. For instance, he regrets the money spent on aerial spraying; he wishes he had commenced ploughing ten years earlier. At that time, however, he was too busy establishing his cattle herd and all the other tasks associated with cattle husbandry. After twenty years' experience, particularly that of the unstable 1970s, he is convinced that, where possible, cattle raising and fattening needs to be combined with grain growing as the best means of contending with unstable beef markets. Brigalow soils in the Moura-Bauhinia area are generally so fertile that the capital value of properties is too high for beef production alone to provide an adequate return. In his case, with cattle production an integral part of the family tradition, he has no wish to become a specialist grain grower.¹¹⁹

Like many other brigalow settlers who produce uniformly good quality bullocks, Collins finds direct sales to the meatworks most satisfactory. Selling 'over the scales' on weight and grade allows the producer 'to know pretty well what he'll get' from a 730 pound bullock (dressed weight), after

¹¹⁸. Personal interview with Collins, 14 April 1984. (Tape Recording.)
¹¹⁹. Ibid.
deducting government charges (about $12 in 1984) and transport costs. While there can be advantages in saleyard selling on a rising market, he dislikes the multiple handling of cattle involved and the added risk of bruising. His own sales have been chiefly to the F.J. Walker (Amagraze) Works at Biloela (these works were bought by Teys Bros. in 1983), or T.A. Fields' Fitzroy River Abattoir. 'If the meatworks know your article, they'll pay two cents a pound extra to keep you', he says. He has tried Lakes Creek which 'always had a reputation of being mean. They really give you the short edge of the wedge'. On one occasion he sent two semi-trailer loads of prime young bullocks to Lakes Creek and personally watched each beast being classified in four different categories: one quarter 'Jap ox' (top grade), the other three respectively first grade, second grade and canning ox. His invoiced returns showed no premium for Jap ox or first grade ox; the entire consignment was paid for as second grade ox.\textsuperscript{120}

Collins' understanding of the needs of cattle extends beyond the pastures and watering points (seven dams by 1979) to the provision of shade. Clumps of brigalow have been left (even though the DPI thinks this unnecessary) because 'a beast knows when he's comfortable'. This makes for better temperament. Shade clumps also make mustering easier, as the cattle move from one to the other without fear. While the LAC originally recognised the need for shade, its 'shade lines' were 100 metres wide and so dense that it was impossible to see cattle through them. While Collins has seen some deterioration in soil fertility in 'pulled' cattle country, caused by trampling down

\textsuperscript{120} Ibid.
with hooves and over-grazing in dry times, he has found that ploughing successfully renovates pastures. Of the original grasses sown, buffel grass now predominates and has proven the most beneficial. Rhodes grass survives in the melon hole country, but loses nutrition in winter.

Collins recalls that the pioneering phase on his block was 'tough', but not so bad for himself as for married men with children. He and his father (who helped establish Unumgar) camped in a tent for three months before building the ubiquitous tin shed. About a year after occupation they built a house in which he lived with his parents until his marriage in 1968. A modest cottage was built for the young couple on the other side of the Dawson Highway. (Unumgar is the only brigalow block cut by the highway.) By the time Jennifer Collins came to live at Unumgar, the 'tin shed' phase was in the past for most settlers; there were no more meetings under the bauhinia trees. All the other women already knew one another; she 'had to wait for a tupper-ware party to meet them', a rare social event in the scattered community. Even though she disclaims pioneering hardships, she waited until July 1973 for the telephone which was installed the day her second son was born. Power was connected in 1980, while subsequent extensions to the original cottage have converted it to a comfortable home. As each of her three children reached school age they had to face a 48 kilometre bus trip to and from Moura each day. This is very hard on young children who must

121. Ibid. Collins' parents sold their Marlborough property and built on Unumgar in order to assist him to become established.
Unumgar homestead, now extended from the original modest cottage. (L. McDonald)

Bulldozer bogged during scrub-pulling, 1984. (B.G. Collins)
Cross-breed bullocks on Unumgar, 1985. (B.G. Collins)
leave home about 7.30 am and return about 4.30 pm.

Jennifer Collins has observed the social changes which came with the beef cattle depression. By 1978 a number of experienced farmers from Victoria and New South Wales had purchased blocks from some original settlers and commenced broadacre grain growing. With adequate capital (having sold their southern farms for $300 an acre and bought brigalow blocks for $70 an acre), they built solid brick homes, installed swimming pools and some bought aeroplanes. This has divided the rural community into social stratas - according to capital investment and income. Originally, all were fighting for survival and there were no social distinctions. While new people have brought new life and new ideas to this fertile brigalow belt, in most instances they have contributed little to the cattle industry; they are farmers, not cattlemen. Nor can they appreciate the shared joys of the earlier settlers and their wives in the very gradual acquisition of modest modern conveniences such as hot water systems and automatic washing machines. While Jennifer Collins is fully supportive of her husband's continuing development of his block and improvement of his herd, she has no wish 'to retire in the brigalow'.

Although the difficulties experienced by Collins in converting virgin brigalow scrub and blackbutt country to a viable beef and grain producing property were legion, he confirms that the Scheme has been most successful. Like many of the 170 brigalow 'allottees', he admits it would have been

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122. Personal interview with Mrs Jennifer Collins, 14 April 1984 (Tape Recording).
difficult to obtain similarly productive land through private purchase. Under the Fitzroy Basin (Brigalow) Land Development Scheme, the purchase price for ballot blocks ranged from $20,000 to $30,000 while successful bidders for similar blocks through the Scheme's auction system paid an average of $77,000. During the two decades since the Scheme was introduced in Area I, there have been two major set-backs: the severe drought of 1965-70, and the collapse of the beef cattle market in the mid 1970s. All beef producers shared the economic effects of these disasters; only the Brigalow Scheme cattlemen were assisted by a moratorium on financial repayments. Collins is most appreciative of having shared the advantages of being under the Scheme's 'umbrella', despite his early frustrations.

The LAC, in carrying out the aims of the Scheme, has demonstrated its flexibility in both developmental plans and financial agreements. Most importantly, this case study on one brigalow settler has shown the Commission to have a 'human face'. This factor, combined with the Scheme's viable areas of land and reasonable loan arrangements, makes it unique in the history of Australian land development schemes.

123. 'The Brigalow Scheme in Central Queensland', p. 8.
3. The Last Pioneers: Oral History

The Fitzroy Basin (Brigalow) Land Development Scheme is part of contemporary history of the beef cattle industry in Central Queensland. As one of the women who has lived through it said, 'We were absolutely the last pioneers'.

This enables oral history to be used as source material and so, in a manner, record and interpret living history. Published sources are also contemporary, the earliest being dated December 1963. In order to obtain a representative account of the scheme in action, questionnaires were sent to eleven original brigalow settlers in Areas I, IA, II and III. Several names and addresses were given by people within the industry, the remainder were supplied by the LAC. All but one settler returned the completed form or agreed to provide the information orally; each one invited me to visit the property and indicated willingness to take part in a tape recorded interview. In visiting these widely separated brigalow blocks, from Wandoan and Taroom in the south-east and the Arcadia Valley in the south-west, to the Isaac River and Apis Creek-Mount Gardiner in the north, a deeper understanding of both problems and achievements has emerged.

On the concept of the Brigalow Scheme and its administration, it was generally agreed that this was the most successful land development scheme ever devised in Australia. Only one settler expressed the view that the brigalow would have been cleared

124. Tape recorded interview with Mrs Elsie Elias, 12 April 1984.
125. The Economics of Brigalow Land Development in the Fitzroy Basin of Queensland (Canberra, BAE, 1963).
126. See Appendix for copy of questionnaire, also names and addresses of participants.
eventually by private enterprise. I had expected criticism of this government planned scheme in relation to bureaucratic 'red tape' or inflexibility, but only one man was mildly critical and that concerned financial arrangements following the beef depression. Only those who drew blocks in 1963 or 1964 found, as Collins did, that too much 'paper work' was expected of them. That the LAC (and other government authorities) heeded the settlers is confirmed by Elsie Elias's account of the Dawson Highway Brigalow Settlers Association and its successful outcome. Another example of flexibility occurs in the response to the Isaac River settlers' submission to both State and Federal governments during the beef depression.

The only consistent criticism of the scheme itself concerned the provision which excluded housing from the loan money. While nobody complained about the initial few weeks under canvas, the next phase in housing - the tin shed - had little to commend it. (One of the young bachelors admitted it had advantages for him - no housework.) While the quality of these makeshift dwellings varied from rough bush construction with second-hand galvanised iron to lined structures with timber flooring, they were generally more suited to housing machinery than human beings. In the early years banks refused to lend money to any brigalow settlers for housing because they were convinced the scheme would fail. The young single men deplored the loneliness more than the discomforts, but such living conditions were very hard on those with wives and young children. The ordinary amenities of modern life were not available to most of these people for many years. When
Ray Braithwaite, MHR for Dawson, described to the National Parliament in 1976 the conditions under which settlers in Area III were living, Mr McVeigh interjected: 'They are the salt of the earth!' While settlers expressed some embarrassment when reminded of this, they believed their wives were worthy of such praise.

Isolation and lack of communications placed severe stress on wives and mothers: younger children had to be educated by correspondence or domiciled with their mothers in the nearest town in order to attend school. In cases of sickness or accident, medical assistance was difficult to obtain; even telephones were not connected in some areas until the late 1970s. Despite these pressures shared by all, marriage break-up did not occur among those taking part in this survey. In Area III where the majority of applicants had to face the trauma of the beef cattle 'crash' of 1974 so soon after occupation, some other marriages did not withstand the strain.

The physical environment within the Fitzroy Basin brigalow belt varies considerably. In the south the brigalow and softwood scrubs are more dense, the soils more fertile and the rainfall more reliable. North of the Tropic of Capricorn, in Area III, the typically dry-tropics climate is harsher and the brigalow more scattered. On properties fronting the Mackenzie and Isaac rivers the terrain is rugged and the former scrub country interspersed with hardwood, especially ironbark. Variations in personal experience among

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127. Hansard, House of Representatives, 1 April 1976, p. 1328.
settlers tend to be influenced by two factors: the type of terrain and its particular problems such as brigalow regrowth in the better soils, or cattle breeding problems in the larger northern blocks; the second variation relates to the time span of the ballots - the experiences of those established during the 1960s faced the severe drought in the second half of the decade; those who drew blocks in the early 1970s bought cattle at high prices and, if forced to sell during the beef depression, suffered financially.

Reasons given for entering the ballots scarcely vary: to obtain a viable area for beef cattle production. The very young men were either working on their fathers' properties in Queensland or New South Wales or were jackaroos. Two of the older applicants already owned small, uneconomic farms in Central Queensland, while another (although only 26) had extensive experience on his small grain, sheep and cattle property in north-western New South Wales. Only one man among the ten was a reluctant applicant who gave way to family pressure; he held a Bachelor of Agricultural Science degree from the University of Queensland and was on the staff of the DPI and liked his work. The reactions of the others in receiving telegrams from the LAC advising success ranged from disbelief to elation tempered by some apprehension at the enormity of the task ahead.

Among the ten brigalow settlers interviewed for this survey, the experiences (as already indicated) do not contrast significantly with those of Barry Collins. To avoid repetition, therefore, each will 'speak' for himself or herself on a
different theme related to the Brigalow Scheme and settlement. Individual settlers are identified, also the subject of discussion. All other relevant details appear in footnotes. Direct speech, transcribed from the taped interviews (edited where necessary, with punctuation added) is used in nine instances; one settler's replies to the questionnaire have been summarised to illustrate this form of response.
Overall, I think it's been a tremendous success. For one reason I've heard very few reports of people being forced off their blocks, or forced to sell their block because of financial hardship.... This itself shows the viability of the brigalow block scheme. I would think [this is one of the most successful land schemes in Australia.] My experience doesn't go back into the blocks established after the war, but I believe that they were very small and that there was disaster on every hand and that they lived in poverty and ultimately a lot of them had to leave their blocks.... Probably from these lessons the Lands Department may have learned something... and when this Scheme was established they cut the blocks to a size that proved to be a reasonable living area.

I think the LAC were determined to see that this Brigalow Scheme was a success, and so they financed it...[also] oversaw the improvements, the development of the blocks to such an extent they were heavily involved. They made sure that work was carried out to a reasonable standard, dams and things had to be built to their improved specifications and so on. And I think the injection of finance, plus their supervision, did add to the success of the Brigalow Settlement Scheme.

I didn't find [the LAC] too bad [in the initial stage.] My biggest problem was that I was found not living on the block because I was only nineteen when I drew the block and I didn't fancy just sitting here on my own, and I used to go out working... before the pulling stage. When I started pulling the scrub I was here driving a tractor with the scrub pulling plant....

[First impressions?] I knew a little bit about brigalow country, I had seen quite a bit of development in the brigalow so I knew fairly much what the country could be turned into. Of course on first sight it was just a whole heap of scrub, some burnt out patches in it, but nowhere very much where you could get above the trees and look at the lie of the land unless you went up the range at the back, which I can't remember doing on my first visit. I came over here on a horse and had a look around, brought a pack-horse, my dad came with me and we rode around,

128. David Kirk, Hilltop, Injune, Area II. Kirk drew his block in the Arcadia Valley on 5 July 1963. It comprises 9,868 acres (3,993 ha.) on which he runs a maximum herd of 1,100-1,500 Hereford cattle.
we could ride through this country...very little bonewood scrub just here, it was mostly an open type brigalow scrub....My northern boundary was the old Arcadia Station northern boundary.

There was probably two or three hundred head of scrub cattle on my block....They were cleanskins. No, [I couldn't claim them.] There was a lot of controversy in the early days about cleanskin cattle. Because we were selectors and came on to the blocks we had no cattle and we had no pieces of paper to say that we'd brought cattle on to our properties...and if we were to round up cattle and sell them it was said we would have been in trouble...I went to the people that owned Arcadia Station before it was cut up into blocks and we just came to an agreement about the cattle and we went half shares. We pulled the scrub and made it so they could get at them and they came with their horses and a few quiet cattle and went out and caught them all, and what they couldn't get, I just shot them. They were a nuisance once I started to bring cattle in, heifers and things, I didn't want scrub bulls around the place....

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OWEN BENN: 129  The Brigalow Environment (Arcadia Valley).

This country was very fertile in its initial stages when it had brigalow scrub on it, and that has been attributed to the leaf fall from the brigalow...it is essentially brigalow country that grew brigalow in its natural state and if you remove it entirely you remove something that has been adding to the fertility of the soil over many, many generations. If you leave it there, cultivate it, make sure that it never gets in charge but is constantly dropping its leaves in the soil, I believe you can maintain this country in its present state of fertility from here onwards.... We don't have shade clumps as such, we've got tree communities, maybe ten or twelve trees, but they're separated, you could actually run a machine between them and the cattle camp in these....

129. Owen Benn, Mt. Kingsley, Injune, Area II. Benn drew the adjoining block to Kirk on 5 July 1963. The area of his block is 9,273 acres (3,753 ha.) and he runs about 1,250 predominantly Angus cattle, but with an infusion of Brahman blood.
The Lands Department dictated the terms, we had to pull 6,000 acres and develop it within three years, which is I think what daunted me more than anything else. Big tractors don't worry about a few shade clumps or isolated trees and so it was just destruction. Then the whole lot was burned in one day...hundreds of bottle trees all dead, there were no birds left, there were no marsupials, all the old carpet snakes were gone, there was nothing....Then, after aerial seeding with green panic and a kind season, the grass just jumped up and bit us, it was incredible, the country looked absolutely magnificent, the suckers had grown, but the grass was up above them....

When we decided the only way we were going to control our suckers was by ploughing, it gave us the opportunity that...whenever we saw suckers that looked as though they were going to grow into nice trees, we would leave them...and in a few years they were six or eight feet high. Well now they are fairly attractive trees and they are getting better each year. One tree can offer shade to ten or a dozen animals now, but generally where we've got them in communities of 20 or 30 at a time, they offer a fairly dense canopy and very good shade and very good shelter. By having them interspersed throughout the paddocks it gives the cattle the opportunity to have a feed, go to the shade without having to walk far. Now the great desire is that the cattle never walk more than half a mile to water, preferably never have to walk more than a few hundred yards to have a lie down in the shade. You find that even in the winter time they do their feeding in the morning, they lie in the shade even if they don't need the shade...they get some sort of comfort and security out of the clumps of timber. I suppose it offers them some sort of protection against predators or imaginary enemies....I think it goes without saying that there's been enough evidence that contented cattle, well looked after cattle, will treat you a lot better [commercially] than something that is frightened of you, that's never contented, they just will not do well....
Park-like effect of pastures and brigalow tree communities on Mt Kingsley, Arcadia Valley. (L. McDonald)

Benn's herd is predominantly Angus. A contented mob of breeders. (L. McDonald)
Cattle utilising tree communities on Mt Kingsley. (L. McDonald)

One of the five dams on Mt Kingsley.
(L. McDonald)
PHILLIP DOWE: Housing and Living Conditions.

I came here in the spring of '72 and lived in the back of a truck for a while, then in a tent while we built a modest sort of bush shed from second-hand galvanised iron I brought with me. A chap from New South Wales came up with me...we built that shed and then lived in a caravan beside it for a while, and attached the caravan to the shed, slowly, and had a very primitive showering situation. Originally the bathing situation was in the creek...when you'd come home dirty at night, you'd run down there, you got in and out again as quickly as you could....

[I lived] in the shed with the caravan attached, for five years I suppose, but then I got married in April '78 and Marg and I both lived there through that winter. We borrowed a caravan also and slept in it and cooked in the other one. We moved up here in October '78. I built [this superior shed] myself....I built the shed first, before I was married and put a tank on it so we'd have water....People have come here and visited us in the years that have gone by slowly, can see the difference, they sit there and reminisce, but I don't want to hear about it.

I had initially a very helpful [telephone] operator at Dingo, I'd give her some money and if I wanted to ring through the Dingo Exchange, from a neighbour or someone, through her generosity I could do so. We didn't get the telephone here till the exchange went automatic, '79 I think. We had the power before we had the phone. I didn't have a lighting plant...I used to start the tractor...you couldn't run a television or electrical appliances, I still had a kerosene fridge.

Basically, people that take on a situation like this are realists that want an independent way of life and just want to be self employed I think, and be prepared to battle to achieve it. I don't think anyone wants any more than anyone else in the community...and the hardships that do occur, we put up with a fair few things. I don't think any help that's given to people on brigalow blocks, or on the land, is what you'd call a hand-out...it's not charity. You have to be subsidised to a

130. Phillip Dowe, Eldeebar, Dingo, Area III. Dowe drew his 11,191 acre block (4,124 ha.) on 29 June 1972. He runs a Droughtmaster herd of about 900-1,000 head.
Dowe's 'modest sort of bush shed' and second-hand caravan on Eldeebar. (P.G. Dowe)

Phase 2 of temporary house is a large machinery shed incorporating living quarters. The attractive extension was built by Dowe, but a permanent home is planned in the adjacent garden area. (L. McDonald)
Brahman-cross steers and cattle yards on Eldeebar. (L. McDonald)
certain extent because people on the land are subsidising a lot of other people too, in a lot of other ways....I don't think we're the salt of the earth, No!

ROBIN SPARK: Regrowth and Sucker Control.

This area [Dawson Valley], and the Arcadia Valley too, was particularly hit by the fact that we went straight into the '65 drought when such a big percentage of the country had just been pulled and seeded...we got very little grass away, and we had a tremendous sucker problem coming away with it and no money to cope with it....We had a bit of developed scrub on the place when we came here, well that was already fairly well suckered, so in fact we started stick-raking and ploughing in 1967... we never had enough time to start making money before we had to start spending money on it....

Regrowth has been a continuing problem....Most of our country was suckered, we've had to control suckers on something like 85 to 90 percent of the place...well we sprayed in '69, the country we could spray, a lot of other country was a mixture of brigalow and blackbutt, we made a decision it wasn't worth spraying, we still had to control the blackbutt anyhow. The pure brigalow country we had...we sprayed it in '69 and got fairly good results and we sprayed a bit more since, and have had a couple of good fires in it and we've got the paddocks reasonably under control....Blackbutt is not affected by spray, it suckers and seeds too and in some cases it is worse than brigalow, we've had to stick-rake and plough the blackbutt country....Your guaranteed method is your most expensive one, but you'll still get rid of your suckers if you plough for three or four years... a lot of sucker control is just basically simply a matter of buying time, keeping yourself in production to a certain extent until you've got enough money to go round and do the job properly.

131. Robin Spark, Wirranda, Moura, Area I, drew his 7,000 acre (2,832 ha.) block on 5 July 1963. Since purchasing an adjoining block in 1978 he runs about 2,000 head of Brahman-cross cattle, using pure Brahman bulls.
This is what we've done, we've used chains, we used fires, we've just stick-raked country and got another three or four years until we've ploughed it, or we've put the chain over it again and knocked the suckers down so we can muster the cattle without any hassles, knowing you've still got to come back as soon as you've got a chance to go the rest of the way....We started stick-raking and farming to beat the suckers and at that stage didn't have any money to buy cattle, so we cash farmed for a few years while the cattle numbers went up. We stopped farming in 1970-71 and have only started again the last few years....As far as I'm concerned, if it wasn't for suckers I don't think we'd have bothered about grain....

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ELSIE ELIAS: The Dawson Brigalow Settlers Association.

It started very, very soon, because the first day my husband arrived in Moura in his landrover and trailer with all his camping gear, a gentleman rushed out from the shade of the verandah over the store and said, 'You must be a settler', and he said, 'Yes, I am. My name's Elias.' 'My name's Bert Enwich. How many children do you have, Lou?' 'None.' 'Oh! You're no good! We're trying to get a school bus going.'

That, right on the first day my husband arrived, established the need for some organisation for the settlers....And then there was the fact that people were coming on to their blocks and didn't have a proper access road....There was no communication, there was one old [telephone] line that went out to Rolleston, and one line that went into Moura and sometimes they worked and sometimes they didn't, it was a very bad area for reception....

I can't remember the actual date the Brigalow Settlers Association was formed, but the first meeting we ever had was held on the banks of Little Roundstone Creek. I travelled to Moura

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132. Louis and Elsie Elias are partners in Yanina, Moura, the Area I block they drew on 5 July 1963. It comprises 12,697 acres (5,136 ha.). Normally they run 1,350 breeders and their progeny, Brahman-cross cattle obtained by putting Brahman bulls over Hereford cows.
that day and I managed to get the ABC, I rang from a public phone in Moura and asked could they possibly broadcast it [the meeting] because I didn't have names and addresses and the once a week mail service from Theodore was totally inadequate....We did get an announcement over the ABC that this meeting was going to be held on the banks of Little Roundstone Creek and we sat on logs which we pulled up to form a circle, and the first meeting was chaired by one of the first settlers to come up...I was elected by the meeting to be foundation secretary....

Right back on that very first day we were overwhelmed by the number of things to be done, absolutely everything was urgent....It was the very last of the pioneering efforts...we were absolutely the last pioneers....Apart from the physical difficulty of living in a new area, it was clear that the biggest problem had to do with our communication and relationship with one another. That was to be an ongoing problem for four or five years....

We all leant very heavily on the Lands Department and we were all accommodated. It did indeed have a human face. Without that I don't think any of us would have survived. The initial agreement, like all agreements, it was impossible to cover everything on paper and what the bureaucrats didn't take into account, first and foremost, was that no two pieces of country are the same....As we gradually cleared up the problems with the Lands Department and the Federal Government, and we moved on to things like telephones, schooling, the roads and ongoing and permanent communication was set up with the shires and various government bodies in the area, then the Association just sort of tapered off. The meetings were less frequent, there wasn't the same need. We met once or twice at Little Roundstone Creek and then Mr Dawson of Cadell Plains said we could meet in his paddock under the bauhinia trees, and that became the permanent meeting place. Again we sat on logs or brought our own chairs....We did have occasional meetings with government officials...at Zamia Creek...where the Lands Department had a depot. Also we had deputations at times to go to meet people when they couldn't come to us....

Although the Brigalow Settlers Association just faded when the need was no longer there, we had a couple of Christmas parties on the money that was left. It served a very valuable purpose in the six or seven years it existed. Most of the
work that was originally done by the Brigalow Settlers Association is now done by the Cattlemens Union and the Graingrowers Association and the UGA....

CLIFF GREENUP: Breeding Cattle on a 'Rough Block'.

[I first saw my block] about a fortnight after I drew it. We [my father and I] flew up in an aeroplane, Mr Johnny Beak picked us up at Apis Creek, he drove us round in a landcruiser. It was very dry, most of the country, and just looked like a lot of rocks. But there was a lot of cattle on it and it was very eaten out, it didn't look very impressive at all....Seeing this was one of the first blocks drawn [in Area III] there was no clearing. The LAC changed their policy after the next lot [were drawn]. My father asked me when we finished looking at it...'Do you want it?' and I said 'Oh, it's got a lot of cattle on it, I may as well take it!' I was only twenty-one, I'd only been left school for four years. I wouldn't have what we've got today if I hadn't drawn a block.

We went straight into buying cattle...my father came up with me and nearly died of the heat.... We trapped most of the wild cattle here. It was in the '68-'69 drought and there was no [surface] water anywhere...only two windmills. Once we'd finished fencing the block it wasn't very hard to shut the water off, put the water in the yards with spear traps on them, they just had to walk through the spears for water or they'd die. Some of them wouldn't come in for water, they just died outside. Beaks owned them. A lot of them were scrubber cattle, but a lot weren't too bad, they were Brahman crossed with Angus... about 300 altogether. To get the numbers we had to buy some British breed cows when we came here, there weren't a lot of Brahmans around then in 1968-69. The problems with drought and ticks, we had to get a dip in and dip the cattle.

133. Cliff Greenup, Santa Fe, Marlborough, Area III, drew his 24,000 acre (9,712 ha.) block on 10 October 1968. His crossbred commercial cattle are the progeny of Brahman cows and Santa Gertrudis bulls. He has a small Santa Gertrudis stud.
We are using mainly Brahmans [now]. We've got a small Santa Gertrudis stud, we use the Santas over the top of the Brahmans just for beef purposes, but we don't use any of their progeny in our herd...we just use pure bred Brahmans and pure bred Santa Gertrudis....The Brahmans are tick resistant, they've improved a lot too, a lot more meat on them than there used to be. A lot of people have culled Brahmans for temperament and they've become a lot quieter. I find them easier to handle than any other cattle and they're more intelligent. When we wean them we leave them in the yards with all the gates open and they just file through and run through the gates by themselves....

Our biggest problem has been the calving rate. We haven't been able to get our calving rate high enough. [The reason?] Diseases in the cattle carried by wild pigs which breed down by the river. We got up to 80 wild pigs last year in one trap, that is quite remarkable. Leptospirosis is the disease. [It causes the cows] to lose their calves after they're born. The type of country is another problem, the bulls don't get out with the cows, it's so rough.... See those mountains up there? You can ride up there, see cattle up there, but there'll be no bulls...maybe if you had 10 or 12 per cent bulls it would be all right, but that would cost you a fortune. On the flat country we run all our money-making cattle...spayed heifers, meatworks bullocks. Breeders we run on the ironbark ridges. We've only got a few studs running on the softwood scrub country. Maybe 10 per cent is brigalow country, we've cleared all the high productive country....

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COLIN KEHL: Marketing Beef and Beef Cattle.

I don't think there will always be booms and busts. Up to the present time this system has worked fairly successfully. But now we're in the computer world and the jet set world and it's completely different. I think now today

134. Colin Kehl, Kolane, Wandoan, Area IA, has one of the smallest blocks in the Scheme, 8,500 acres (3,447 ha.) on which he runs a basically Hereford herd with a slight infusion of Zebu blood. His maximum herd was 2,300 in 1973.
we've got the AMLC set up with the power to single-sell and I think if we had an Australian standard classification, because there's no way in the world the AMLC can single-sell if they haven't got some standard classification. But I think if that was done our marketing expertise could be put into practice....I think a standard classification is the answer to our export beef and eventually we've got to get a classification for the housewife. You can buy a piece of steak today and you don't know what you're getting....Years ago when you had beef, potatoes and pumpkin for a meal that was alright, but today we've got a big choice of the food we can eat....We've got to look at our industry. You've started in the 1850s haven't you, and our system of marketing hasn't changed....

[Marketing cattle?] Culled females we normally sell in Wandoan, it's a good saleyard, they sell about 1,000 head a week....There is very little difference in the rate you get there and Dalby or Toowoomba, less your freight. But bullocks, normally we sell direct to the meatworks on weight, Keongs at Oakey and Downs in Toowoomba and Beef City in Toowoomba. It doesn't pay us to go over the range to Brisbane, but it pays us to go as far as Oakey and Toowoomba. They normally send a buyer out to have a look at the cattle, assess the cattle, and pay you so much per pound. Sometimes they have bought a few mobs of cattle [without inspection], they've said, 'Just send them down....'

Everyone's got their own system of selling. My system is when my cattle are right...I just sit and wait for the saleyards price to rise, and when the saleyards price rises, then I get the buyer out to inspect the cattle or I offer them on weight...[recently] we picked up five to eight cents [per kg] just by holding and selling them at the right time....We are in a fairly good position here where we can deal with the meatworks [direct], once they get to know your cattle. I think we've got to produce the right article. I'd say all of our bullocks would go to Japan as chiller bullocks. We sell them at two and a half to three years....

[Transport?] If you get a contract with the railways you get a cheaper freight rate...but the meatworks have a contract with the railways and they'll book your cattle....We have to go to Wandoan by road transport and they have to be off-loaded and cleared for ticks....Cattle going
away to be killed on weight can be visually inspected, so long as there are no visual ticks they just go through the crush....Badly handled cattle bruise a lot...it's something you've got to watch very carefully, even your truck drivers. You've got to say, 'These are weight cattle, don't knock them around....'

............... 

CLIVE JOHNSON: The Beef Recession in Area III.

I remember quite long periods when I couldn't even write out a cheque for one dollar....It was hard then. We called a meeting of brigalow settlers at that stage trying to get some help from the government. It was very well attended. We ended in making up a submission and we took it to Doug Anthony and Bjelke-Petersen. They actually did help us quite substantially. They gave us I think one or two years moratorium on all interest rates. The government, they really did bend over backwards to help people stay on their blocks. I think there's been a pretty fair turnover of blocks since then, but it's been thirteen years....[During the recession] most people stayed. A lot took outside work. A lot stayed on the properties. I know we stayed there....

[The government] gave us extra loans and they gave us extra funds as well to carry us on, which I think was really good. Now it wasn't actually the help that they gave that saved a lot of property owners...what the government did was to give people the encouragement to stay long enough for the economic conditions to improve....I think the Scheme was quite embarrassing to them during and after the beef recession. The only way the Queensland Government could pass the moratorium on to us was the way the Federal Government passed it on to them....

Basically, cropping was giving us a fair amount of profit. We mainly grew summer crops because we had a fair amount of summer rainfall. I think cropping is more determined by soil types than the

135. Clive Johnson, Indicus, Isaac River, Area III. Johnson sold his block in 1983 for health reasons. He drew it on 3 December 1970 and its acreage was 14,683 (5,944 ha.). His maximum herd was 2,500 during the beef recession.
136. See Appendix for extract from the submission compiled by Johnson.
economics of beef cattle. If you work it out in very rough economics...beef cattle may give you say $100 per beast per year. You could run these, say, on ten acres. We can grow sunflower up here and...get a third of a ton [per acre], that's $100 to $150 an acre. But you can only do that on good country....

We had too many cattle after the beef recession because it wasn't worth selling them, it was better to keep them till things got better.... Farmers and graziers have not forgotten that beef slump, they don't trust the meatworks any more. The meatworks might be crying there's not enough cattle coming in...but the meatworks did very well, thank you very much, during the beef recession....

...............  

COWAN KEYS:137 A Mild Criticism.

I think perhaps too much emphasis is put on the Lands Department and this Fitzroy Brigalow Development Scheme developing the brigalow. I personally think free enterprise was slowly realising the benefits of brigalow and would have developed most of it by now anyway, probably not as fast as this. Once the ball starts to roll, it would have kept going for sure....Finance would have been difficult....

We got married just at the beginning of the slump, if we'd been married twelve months earlier we would have built the house. We felt obliged to keep our payments up, so we just felt we couldn't afford the house and lived in the shed for about six years. When we had one child and the second one was due, we built the house and moved in a week before it came. Other people built their house and just never made any payments to the LAC...that's what I felt a bit sour about. We kept our payments up and after the depression the Lands Department officers

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137. Cowan Keys, Yurnga, Taroom, Area IA, drew his 16,048 acre (6,464 ha.) block on 24 January 1968. He prefers to understock and his maximum herd was 1,300 in 1974. Although he has a Brahman infusion in his herd, he planned to return to Hereford bulls. Yurnga is virtually tick free.
came around and they had a plan for extending the terms, the length of the loan and what not to help [settlers] out. They told us that because we'd kept our payments up that we were in a sound financial position so we didn't need help.... [In the end] we got half the benefits others got.... They did give us a bit, but it was sort of rather disappointing....

............... 

IVAN AND ROSEMARY PHILLIS:138 The Questionnaire.

Ivan and Rosemary Phillis were husband and wife applicants who wished to acquire a reasonable living area for beef production. They were successful in their third brigalow ballot, drawing a 17,355 acre (7,023 ha.) block in Area III in 1971. They experienced the usual initial difficulties in keeping payments up and freely admit that they survived the beef slump through 'excellent co-operation and tolerance from the LAC and the Development Bank'.139 Ivan Phillis did small contract jobs for the Utah Mining Company on the Saraji pipeline (in their vicinity) 'to earn money to eat and run the property'. Neither the cattle nor the property were neglected. Phillis and his wife did all the work, being unable to afford hired labour.140

The following figures supplied by Phillis (and quoted with his permission) starkly reveal the plight of those who drew blocks in 1971-72:

138. Ivan and Rosemary Phillis were joint applicants in the Brigalow ballot. They drew their 17,355 acre (7,023 ha.) block in Area III on 2 June 1971. They run Brahman crossed with Hereford and Shorthorn cattle, with a maximum herd of 1,750 in 1978-79.
139. I. and R. Phillis, Questionnaire.
140. Ibid.
Assets quoted on application for block, early 1971 (land, cattle, vehicle, etc.) $41,000
Assets realised (sale of land, valuation on cattle), October 1971 $36,000

Liabilities (taken from taxation figures):
30 June 1973 $136,000
30 June 1974 $135,500
30 June 1975 $139,800 ($6,500 LAC Arrear)
30 June 1976 $141,400 ($13,000 LAC Arrear)
30 June 1977 $119,900
(Reduction of debt in this year accounted for by sale of 1½ years turnover of cattle in slightly rising market.)
30 June 1978 $127,700 [with home loan $13,800]
30 June 1979 $117,500. 141

These figures confirm 1976 as the nadir of the economic depression for cattlemen. Although 1977 appears to indicate a dramatic financial upsurge, this was not a true reflection of the market place. Because of his necessary outside employment, Phillis had an artificially high cattle throughput in that year. On the other hand, the cattle which would have been marketed in 1976 in a normal trading year would not, on the prevailing very low prices, have reduced their liability greatly. Despite the trauma of the recession, Phillis believes some instability in the market place is not a bad thing. He prefers this to price controls.142

As a brigalow block, Carlo Creek was unusual in several respects: it already had its name; there was not a lot of brigalow; there were six or seven existing dams and much of the area was already fenced. Nor has brigalow been a problem except in melon-hole and bad gilgai country; in thirteen years they have sprayed only 800 acres. Other 'pluses' for

141. Ibid.
the Phillis's included the short duration of the isolation phase. Initially they had a one and a half hour trip to Dingo for supplies, but shortly after occupation the coal mining town of Middlemount was established nearby with all the usual 'instant social facilities' of contemporary mining towns. The year before their first child was school age, the Mackenzie River 'brigalow school' was opened. Although their two children had to be sent to boarding school in Rockhampton for secondary education, this is only a three and a half hour drive from Carlo Creek. Nor did the Phillis's mind the seven years they spent in their tin shed before a housing loan in 1978 brought them a permanent home. Like every settler interviewed, Ivan and Rosemary Phillis are grateful for the opportunity afforded them by the Brigalow Scheme to obtain a living area of rural land and, in turn, to offer it to their children. If the Scheme has a fault, Phillis believes this to be the way 'it has hastened the development of large scale farming in the area, regardless of soil type'. He believes a balance of farming and grazing should be required. No farming (grain growing) has been carried out on Carlo Creek.

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143. Ibid.
144. Phillis, Questionnaire.
Unsealed roads in brigalow country are notoriously treacherous after rain. This is the road to Yuronga from Taroom, a distance of 50 kilometres. (L. McDonald)

Some brigalow families still experience problems of isolation. The Keyes children of Yuronga must be educated by correspondence. (L. McDonald)
Clifford Greenup and the second tin shed residence on Santa Fe (Marlborough) which is now stockman's quarters. The permanent home is on a nearby hill. (L. McDonald)

After living in a tin shed for many years (with curtained divisions for 'rooms'), Colin Kehl built this permanent home on Kolane (Wandoan) in 1982. (L. McDonald)
Having 'heard' each of nine brigalow settlers speaking on a different aspect of their common experience, and considered the response of the tenth couple to the questionnaire, it appears that these men and women are rugged individualists. This is true, but it relates more to their attitudes than their actual experiences. These did not vary greatly from those of Barry Collins (except in time of settlement or area selected), but their attitudes were their own. This is illustrated by their conclusions on the most persistent problem of all - woody regrowth in brigalow and associated softwoods. While the majority now believe the blade plough to be the most successful means of control, it is also the most costly, and is not feasible in rough terrain. For some, stick-raking and the firestick are favoured. Keys confessed he was still experimenting. Even in the matter of burning there are some differences. While most like a fierce burn, Kehl believes this seals off the sap and encourages suckering. Aerial spraying has been abandoned by most; but Kirk thinks it still has possibilities if all the conditions are right. All agree that sucker control is the biggest cost in producing cattle in brigalow country. For this reason some who dislike farming persevere with it to offset costs and, at the same time, control regrowth. Dowe, who has never used the plough, was about to engage a share-farmer for the basic purpose of sucker control on a difficult portion of his block. Scientists now confirm that the blade plough is the best means of controlling woody regrowth. But the country must be ploughed to a depth of 20 to 30 centimetres. Trials carried out in Central
Queensland in 1981 provided practical proof of the effectiveness of a single ploughing. Kirk commented on the various methods tried over the years: 'We've had all the professors over the years telling us how to control suckers and even their ideas have changed'.

Johnson, Phillis and Benn all expressed some environmental concern about clearing large areas of brigalow scrub, especially if broad acreages were farmed for grain. In fact all ten settlers thought cropping posed problems in wind and water erosion. Johnson, trained in agricultural science, had this to say:

...a lot of people would query whether it's a good thing to cut up all that land and destroy all that brigalow. It is a resource which is not there for future generations. There's going to be quite possibly massive soil erosion, especially with people going into cropping. That soil would have been kept stable by the covering of timber. From a national point of view it isn't the right thing to have done.

From the settlers' point of view, he says, it was 'a gift from heaven'. Although they had to work hard to make it a success, this was achieved in the majority of cases; the end result was a viable property. He maintains that even without cropping the brigalow blocks would function well as cattle properties. From his own experience Johnson believes the Scheme itself and the system of administration was 'pretty well perfect'. It was the beef slump which was responsible for subsequent

146. Tape recorded interview with David Kirk, 11 April 1984.
147. Tape recorded interview with Clive Johnson, 8 March 1984.
problems such as over-grazing because it was uneconomic to sell cattle. Over-grazed country and diminution of pastures meant that sucker regrowth increased.

Benn emerged as the most dedicated conservationist in a realistic and balanced manner. He is aware that if cattle are to be produced, man must control the brigalow. His views on the need to retain tree communities not only as cattle shade and shelter, but also to return nitrogen to the soil, are not widely accepted among settlers. For this reason he stressed that his was not the conventional attitude. It is therefore significant to note that recent opinions of ecologists and agricultural scientists confirm and complement Benn's views. Eric Anderson, an ecologist on the staff of the DPI in Rockhampton, says that after years of trying to find a suitable legume for brigalow country, it seems that this 'may prove to be brigalow'. In searching for a forage legume to supplement winter pasture nutrition (always a problem in the dry tropics), the *stylothamnes* species which first appeared so promising, declined due to anthracnose - first recorded in Queensland in 1972. Robin Spark has been personally involved in these trials, both in a practical sense and as a producer representative on the Brigalow Research Station committee.

The most outstanding conclusion reached at the end of the survey was the settlers' unanimity on the Scheme's success from a personal viewpoint. Even though Keys was

mildly critical of one aspect of administration and thought the Lands Department received too much 'kudos', he had no regrets in having drawn a block. He acknowledged his own responsibility as custodian of the land: 'You can listen to all the advice in the world', he said, 'but when you make a decision it's yours'.

Most settlers adopted the realistic attitude that some mistakes are bound to be made, but having experienced the flexibility of the LAC in modifying financial and some other aspects which initially were too rigid, they wanted their appreciation recorded. This flexibility, according to Spark, was evident 'right down the line':

I never had any real hassles...I would say the manner in which the Scheme was administered was what led to [it] being a success....Alan Fletcher was Minister for Lands at the time [it started], he was a reasonable sort of man...and every other Lands Minister has been a similar type of man, a man with practical experience....Nev Hewitt, who was our Member here then, he had a lot to do with the original conception of the Scheme, the initial work...he just knew there was a vast area of undeveloped scrub just sitting here doing nothing....

Undoubtedly, in relation to earlier Australian land settlement schemes, the Fitzroy Basin (Brigalow) Land Development Scheme is a credit to the Lands Department, to the agricultural scientists who watch over it, and to the survey sample of brigalow settlers. Even so, there is no room for complacency.

Has man come to an equilibrium with brigalow? Oral history suggests that this is achieved only through continuing control of regrowth and pasture improvement. Even though this

149. Tape recorded interview with Cowan Keys, 9 April 1984.
150. Tape recorded interview with Robin Spark, 12 April 1984.
is costly, economic viability has been achieved by those who drew blocks in the 1960s; later 'allottees' were fast approaching this situation. The fact that these settlers are aware of the dangers of over-cultivation and over-stocking appears to augur well for the future. It must be added, however, that the eleven (including Collins) who were interviewed occupy only about 4 per cent of brigalow blocks obtained through ballot and bought at auction. Human nature, being erratic, makes it probable that not all these other cattlemen have the same responsible attitude. This is where the danger lies.

Johnson's comments on the Scheme from a national viewpoint possibly need modification. Improved pastures, if not denuded by over-stocking, especially in drought times, are themselves an anti-erosion measure. Where tree communities, such as those nurtured by Benn, are scattered throughout the pastures and ploughing is used about every seven years to control regrowth, there is little danger of excessive erosion. Where all the brigalow has been pulled, as in the Mackenzie River sector of Area III, the result is a dreary landscape. On the other hand, controlled conservation of brigalow as on Benn's property has produced a most attractive, park-like environment. Within the Fitzroy Region severe water erosion problems have occurred in the grain growing country on the natural downs of the Central Highlands, outside the brigalow belt. Geological evidence also confirms that long before human settlement, the Fitzroy River changed course to empty into Keppel Bay instead of Broadsound, about 150 kilometres to the north.

The balanced conclusion to be drawn from these facts is that with responsible management the areas from which brigalow has been cleared are no more likely to be subject to erosion than other areas of Central Queensland are subject to the ferocity of man or nature. It is relevant to recall Priddle's description of the brigalow scrubs around Rolleston before 1963 as 'absolutely useless and full of wild, unbranded cattle'. This does not suggest a national asset. But it is also timely to heed his warning that should the cattle industry fail, 'it would be frightening to see the result of this brigalow talking back to us'.

The positive effect of the Brigalow Scheme on the Queensland beef cattle industry in tripling cattle numbers within the Fitzroy Region has already been mentioned. In northern parts of the region settlers have without exception changed to Brahman or Brahman-cross cattle; by so doing they have almost eliminated the trauma of drought losses referred to in Chapter I. They have also reduced production costs by not having to dip for tick control and they are able to market younger cattle fattened on improved pastures for the chiller market. While some British breed cattle are retained in the Wandoan and Arcadia Valley areas, this 'softer' country enables the choice to be made without economic disaster.

Although increased cattle production within the region in the 1970s was part of national over-production, a glance at the production chart (on the following page) shows how rapidly rationalisation took place.

This brief history of the Brigalow Scheme cannot conclude without recognition of the extremely important contribution made by women. Their moral support and assistance to husbands engaged in hard physical work and harassed at times by money worries is perhaps typical of any successful marriage. It is their patience and fortitude in enduring for years (in most cases) extremely uncomfortable living conditions without modern conveniences that is remarkable. In some instances they have assisted physically in mustering cattle, drafting, branding and marking calves. The majority have supervised their children's correspondence lessons at primary level and parted with them for secondary schooling in distant cities. When recalling the primitive conditions of the 'tin shed' phase, they laugh at shared memories rather than see themselves as martyrs to a cause. While the 'brigalow wives' deny they are 'the salt of the earth', they and their husbands and children share many of the characteristics traditionally associated with Australia's pioneers. In the post-war period the brigalow families were 'absolutely the last pioneers'.
The significance of the Fitzroy Region to the beef cattle industry of Australia did not achieve general recognition until the mid twentieth century, even though its earlier contribution was considerable. The reason for this lies partly in the early ignoring of geographical identity and partly in modern developments affecting the industry. In colonial times statistical returns were at first recorded by police districts, thus breaking the region's cattle numbers into small component parts. Then, after the Divisional Boards were established in 1879, and a policy of decentralisation adopted through the three Divisions of Queensland, the Fitzroy River Basin was merely an unidentified part of the Central Division extending westward to the Northern Territory border. Not until the post World War II period was the term Fitzroy Region used by the Department of National Development to identify Australia's second most important river basin with its valuable pastoral, agricultural and mineral resources.

These resources, which first attracted pioneer pastoralists and provided grazing for their flocks and herds, have been subject to colossal development in the post war period, notably the Fitzroy Basin (Brigalow) Land Development Scheme and broadacre grain production. Concurrent development of the mighty Bowen Basin coal resources, mainly within the region, has also provided additional markets for beef. During the developmental period regional importance was confirmed by the establishment of two beef cattle research stations. While
these factors all assisted in increasing beef production, the most significant development has been the creation both by scientists and practising cattlemen of environmentally adapted *Taurindicus* beef cattle. All these post-war developments combined to focus attention on the Fitzroy Region.

The two historic 'curses' upon the Queensland cattle industry, intermittent drought and unstable beef markets, have been felt more acutely in the Fitzroy Region right through to modern times. In the first instance the annual rainfall is lower than in northern and southern divisions; secondly, regional meatworks traditionally have been export oriented owing to lack of domestic markets and therefore are more vulnerable to overseas economic influences. The Tooloombah cattle books reveal, in microcosm, both these factors in the early history of the industry. The merciless nature of severe drought, experienced by all cattlemen, has been depicted with startling clarity by Beardmore in that climactic year, 1902: 'Trees all dying. Nothing seems left alive'. His comment on lack of markets in 1886 is equally applicable to price slumps in any period: 'Impossible to sell anything. No money in the country'.

The Archer Papers provide a much broader spectrum for industry assessment through letter books and company reports in addition to normal herd records. These reveal that both Robert and Alister Archer's motives in importing high quality stock extended far beyond the needs of their own herds to that of the northern Australian cattle industry. Both men were also respected beef cattle judges in Central Queensland and Brisbane
and were committee men in grazier organisations, show societies and breed societies. Likewise, several generations of the Wilson family have given freely of their time in the wider interests of the industry. The fact that J.L. Wilson used his influence negatively within the United Graziers Association to delay the development of *Taurindicus* cattle does not negate his contribution in raising industry standards generally. Similar ability and responsibility have been shown by his son and grandson in the next two generations.

The greatest weakness among stud breeders prior to the Second World War was their concern with appearance rather than potential beef quality. At times their obsession with 'coat colour' or 'masculine heads' seemed to ignore the fact that breeding beef cattle is a means to an end - and that end is the abattoir. Since the Second World War, however, the role of breed societies has changed; instead of promotion of the breed, emphasis is now on education in new breeding techniques and co-operation with scientific institutions.

The two great post-war developments, the production of environmentally adapted cattle and the Brigalow Scheme, have brought a fluctuating measure of economic viability to producers. Experiments carried out in the 1930s and 1940s by scientists and practising cattlemen, largely independent of one another, revolutionised the industry. By the end of the 1970s it was apparent that the 'new Bakewell era' had produced hardy *Taurindicus* cattle which enabled many cattlemen to survive the drastic slump of that decade. Changing attitudes to the breeding structure have been demonstrated most clearly
in the Wilson family, with 'revolt' in the fourth generation by Richard Wilson. In seeking commercial perfection in his brindled *Taurindicus* cattle, he has rejected continuing family tradition in maintaining a pure Hereford stud and herd. His striking success in breeding to attain 'weight for age' confirms the less spectacular experiences of more than 80 per cent of regional cattlemen. Without doubt, the introduction of *Bos indicus* blood has been the most significant development within the tropics in the entire history of the beef cattle industry.

Despite some fears of detrimental effects on the environment, the Fitzroy Basin (Brigalow) Land Development Scheme has produced positive advantages to the region and its people as well as to the cattle industry. Clearing previously unproductive scrublands and making these areas available to young men with limited capital, through the ballot system, has brought social as well as economic advantages to formerly isolated areas. If warnings are heeded to avoid over-cultivation or, conversely, uncontrolled brigalow regrowth, posterity will confirm the original brigalow settlers' opinion that this is the most successful land development scheme ever undertaken in Australia. Another fear among some older cattlemen is that trebling cattle production on former scrublands simply exacerbates over-supply in the market place. This can be refuted on past evidence that demand, like the market economy, rises and falls at the dictates of external influences. It is also relevant to point out that by 1984 the Australian beef herd had fallen from its peak of 33 million in 1978 to about 21 million. One half million extra cattle in the Fitzroy
Region had little effect on the overall market economy.

The constant struggle to attain economic viability, illustrated so clearly in station records from the 1860s to the 1940s, did not disappear in the post World War II period, even though American and Japanese beef markets brought, for a time, a measure of stability. When beef markets are scarce, so are cattle markets. This was demonstrated in the decade to 1896 when tens of thousands of live cattle were overlanded to New South Wales or shipped to New Caledonia. This was necessary despite the introduction of the freezing process to meatworks and their ability to provide British markets with frozen (or canned) beef. Ironically it was the 1890s, with their doubly disastrous inflictions upon producers of low prices and the cattle tick, which enabled meatworks for the first time to compete economically in British markets. This normal industry situation of producers' loss becoming processors' gain (basic to the tension between the two sections of the industry) did not apply in the 1920s. This decade was equally traumatic to both sectors, with Lakes Creek Works closed for several years. The part played by the Vestey family organisation in the almost total exclusion of Queensland beef from British markets introduced another ironic twist to industry history. This was again emphasised with their acquisition of Lakes Creek Meatworks in 1934 as a result of Empire preference under the Ottawa Agreement. The rare periods of processor profit before this are illustrated by the half dozen ownerships of the Fitzroy Region's major processing works at Lakes Creek, and by the failure of small regional works to survive the great drought.
During and after the Second World War, beef markets were more stable than those of 1914-20. Even the impact of Britain's entry to the European Economic Community was shielded by compensatory new markets in North America and Japan. When these crashed (allegedly without warning) in 1974, producers were affected much more adversely than processors. The most complex phase for both sectors in the modern period has been the unsettling effect of politico-economic factors such as 'farm lobbys' in importing countries or the world 'oil crisis'. As one industry spokesman expressed it: 'A ripple over there means a tidal wave here'. The uncertainty of world markets has forced crisis-selling upon beef exporters who are obliged to 'telex around the world' tendering on limited quantities. Industry problems, despite the opinion of many cattlemen, are not confined to producers. While the beef cattle industry has advanced tremendously in relation to genetic factors, cattle husbandry, pasture improvement and live cattle marketing, its economic structure is almost as uncertain as in colonial times.

The question arises: Why have cattle producers persevered for more than a century in an industry which poses apparently insoluble economic problems? Robert Archer, towards the end of his life, provided a probable answer when commenting on his firm's losses in the stud cattle business: 'I fear the microbe is in our blood'. There were no 'cattle barons' in the Fitzroy Region, but many families such as the Archers, Wilsons, Beaks, McCamleys and Creeds who in successive generations have worked to advance the cattle industry.
Financially the good years were few, but it was a way of life which cattlemen traditionally have been proud to pass on to their sons. Until recent years social convention denied this 'way of life' to women. When Hugh Neill of Galloway Plains (Calliope) died in 1894 without a son and heir, he left the property to trustees who were to provide an income for his wife and only daughter. Ironically, his daughter took over the management of Galloway Plains, ultimately buying it back from the trustees. As recently as the 1960s women were allowed participation in the Brigalow Scheme only in partnership with their husbands, not as individuals. Tradition is not easily abandoned in rural circles.

Oral sources confirm continuing attachment to the land despite economic uncertainty. Most brigalow settlers clearly revealed that 'the microbe' was also in their blood. Despite the demands of long hours and hard physical work, this was their chosen way of life. An Australian novelist ironically perceives their outlook: 'Their sweat was proprietorial sweat, their laughter owned the towns and pastures'. There is basic truth in his irony. Faced with financial ruin in the mid 1970s, these new settlers clung to the land and endured their tin shed dwellings with stoicism, preferring this to the life of a wage earner. Their strength to withstand seems to have been nurtured by the land itself in the sense of drawing spiritual nourishment from it. This is a relationship which might be compared with that of the Aborigine for his tribal

land. European 'interlopers' have also revealed an instinctive primitive dependence on the earth (and its waters) for sustenance and life, a dependence which Aborigines of the Fitzroy Region had accepted realistically for about 30,000 years.

Given the overwhelming evidence of this attachment to the land among cattlemen of the past and present, and their will to persevere in times of drought and financial recession, the search for stable beef markets appears to be of greatest importance to those who speculate in cattle properties or whose interest is purely financial, such as the Stanbroke Pastoral Co. This is not to argue that profits are denigrated by other types of cattlemen, simply that they do not assume the same significance. These men (and women) are aware of the historic pitfalls; having survived those of the present era, they accept with realism the certainty of future droughts and depressions. The relationship between past and present is captured in the words of Dawson Valley balladist, Lex McLennan, with reference to Kroombit Station, first taken up by Colin Archer in 1854:

Beyond the broken bloodwoods, over the timbered rise,
And past the range and river the ghost of Kroombit lies;
And when the bush winds whisper it seems as though one hears
The echoing of hoof-beats and songs of vanished years. 2

The history of the beef cattle industry in the Fitzroy Region confirms the view that no matter how excellent the breed

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of cattle, nor how beneficial the seasonal conditions, if stable markets for beef do not exist, the individual producer's work is economically in vain. An overall view of the industry, however, reveals that the regional contribution to the national industry has brought it pre-eminence in Australia and overseas. In the considered opinion of Graham McCamley, a national industry leader with roots going back three generations in the Fitzroy Region:

Historically, the beef industry has always been a big contributor to the Australian economy. In some respects it is a barometer of national prosperity. It remains so today....the beef industry has an obvious and significant economic impact on the lives of all Australians. But it is an industry which has been subject to booms and devastating 'busts'.

APPENDIX I
Letter: P.F. MacDonald to A. MacDonald, 4 September 1862.

"Yaamba"
September 4th 1862.

My Dear Alic,

The enclosed plan of "Columbra" is as nearly correct as I can make it and if you can find a good purchaser for the Station and Stock at the prices which I shall name you have my Authority to do so. The Station has been formed for about 12 months and the Cattle are looking very well and breeding fast. They are well bred and quiet Cattle and the Bulls are the best that could be purchased in the Darling Downs District. The improvements are very substantial and complete. The paddock of posts and Rails just finished, The Store is built entirely of (8 feet) Tppers (?) with galvanised Iron 20 feet by 12, in fact the improvements alone I find have cost me about £300, however to be brief the late Land Bill compels us to stock every Run without delay and as you are perhaps aware I have still a few unstocked which I must make an effort to secure, I am quite willing to sell unstocked Country and would prefer doing so rather than part with "Columbra" for it has many advantages and would pay very well. The demand for beef at 4s per lb keeps Callen busy slaughtering and although it is in contemplation to change the Road so as to avoid a piece of bad Country on Macsford and Plate Creek the traffic must still come through a portion of the Run and when our great Copper mine is once opened at the Peak Downs it would be well worth while to erect a Butchers Shop at Honeycomb Creek. The nearest Station to "Columbra" in a westerly direction is Caldwell's upwards of 30 miles, Fyfe's W.S.W. Thirty-five miles, Bruce's East about 15 miles, & Apis Creek 30 miles. All these are Sheep Stations and cannot depreciate the value of "Columbra" as a Cattle Run by taking away any portion of the demand for beef. Another great advantage which Columbra has is the fact of its being so well adapted for Sheep. The Country is sound, well grassed with abundance of herbs and Salt bush and during the time that I had Sheep on the Run they improved very much. On the whole I do not think that I am doing right by parting with it But I do not like to have too many irons in the fire and by selling this I shall be better enabled to attend to others. The expense that I have been at in forming so many Runs is enormous, and a thousand or two at the present time would be acceptable, so I must not be too covetous. If I should get a purchaser for an unstocked Run or two, I should then withdraw "Columbra" from Sale but unless I meet with a purchaser very shortly I think it would be better to sell "Columbra" than sacrifice other Runs merely because they are far out and at present not so saleable. The time will come round when people will learn their value till then I must be patient.
"Columbra" Station Rent paid up till September 1863 - Fifty Pounds.

"Columbra" Block 35 square miles
"Fulham" D° 35 " £1250 . " . "
"Green" D° 35 " £300 . " . "
"Honeycomb" D° 36 " £1522 . 10 . 0

As tendered for 141 square miles
Improvements on Station £ 300 . " . "
Mixed Cattle about 580 head at 52/6 £1522 . 10 . 0
Steers fit for yoking or fattening for Butcher about 140 head at 80/- £ 560 . " . "

£3632 . 10 . 0

(3) Three well bred Bulls (Durham) Bred by "Westbrook" (Darling Downs) counted in with Mixed Cattle. Stores and moveable articles, Tools & Sundries may either be taken at valuation by the purchaser or removed by the vendor. A Team of Bullocks and Dray with Tackling complete will be furnished if required First Class about £200. Stock Horses may either be taken at a valuation or removed. The Steers above mentioned (at) 80/- will be taken away if required and not included in the purchase. Terms half cash the balance at twelve and twenty four months bearing interest at the rate of ten per centum per annum and secured as follows upon the Station Stock but when the twelve months Bill has been paid the Station alone with improvements will be deemed sufficient security for the last Bill.

To prevent any humbugging I should not entertain any offer unless the party visiting to purchase pays a Deposit of £500 Cash, and the balance amounting in all to one half of the purchase money when Delivery is taken say not later than 1st of December next or on any Time in November after the end of October. If it was any inconvenience to a purchaser to take delivery so soon I would arrange to carry it on at his expense till about the middle of January, after that time I should require the manager's services to form another Station.

The place is quite safe for any family. I have never heard of the Blacks being on the Run, a Lieutenant & the Native Police are stationed within 35 miles and pay regular monthly visits. A fortnightly mail will pass the Station to and from Rockhampton in and after the first of January next by Government. If not sold within two months from this date I reserve the power to withdraw it from sale, no sale to be binding until notice of such reaches me when (if not disposed of previously) the same shall take effect.

P.F. MacDonald.

Source: MacDonald Papers, Rockhampton Municipal Library.
## Accounts of the Society of FRIENDS at Newington Green, 1864

### General Account

#### Receipts

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<thead>
<tr>
<th>Item</th>
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<tr>
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<td>03</td>
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#### Payments

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<td>05</td>
<td>Utilities</td>
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<td>06</td>
<td>Travel</td>
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### Income and Expenditure

#### Income

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<tr>
<td>Bequests</td>
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#### Expenditure

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<tr>
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<tr>
<td>Utilities</td>
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</tr>
<tr>
<td>Travel</td>
<td>£50</td>
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### Balance Sheet

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<tr>
<td>Total Income</td>
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<td>Total Expenditure</td>
<td>£350</td>
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<tr>
<td>Balance</td>
<td>£100</td>
</tr>
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</table>

### Notes

- All funds are managed by the Committee of the Society.
- All transactions are recorded in the General Account.

(Birkbeck Papers)
...I have still another instance to the credit of the Herefords, the truth of which I can vouch for. I mention it as collateral evidence to show that I am not singular in my experience of the two breeds. The owners of a scrubby run on the Mackenzie, in the beginning of 1883, purchased twenty pure Shorthorn bulls bred by a well-known southern breeder, and turned them into their herd. Six months later they also purchased ten grade Hereford bulls, and also turned them out. The droughts then came on and for three years beyond branding up, they left the cattle to themselves in the scrub as much as possible. After the droughts were over a bang-tailed muster was made, when the ten Herefords all turned up, but only one Shorthorn appeared, the balance having all died off in the three dry years.

In the end of 1888 and beginning of 1889 our bullocks suffered very severely, as a great deal of the country was burnt during the drought by travellers, &c. We had on hand at that time about 2,500 bullocks, about 2,000 of them being purchased Shorthorns and the balance Herefords and grade Herefords of our own breeding. Although the Shorthorns had been twelve months on the place and were well settled before the drought began from 250 to 300 of them died, not from bogging but from sheer weakness. As far as I know not one of our Hereford bullocks running among the Shorthorns in the same paddocks died from the drought. It was also very noticeable that whenever a mob of ration bullocks were sent from the out-station six or seven Herefords were invariably sent up, they being the only cattle with enough condition to kill. I also noticed that the big, coarse, badly-bred Shorthorns were the first to die and did not as a rule pull through as well as the more nuggety well-bred animals of the same breed, and I am sure it is a mistake to think, as many breeders do, that because an animal is hard-skinned and rough it is necessarily hardy. In discussing this question of constitution with breeders, different men in this and other coastal districts, who complained of the delicacy of the well-bred Shorthorn, have more than once said to me something to this effect: "I believe in Shorthorns, and don't care to try any other breed, but don't believe in having them too well bred, the stock of pure-bred bulls being too fine for me. What I want are big strong half-bred bulls." Now I have seen numbers of these "big strong half-bred bulls"; as a rule they are good looking herd calves kept out of ordinary (often very ordinary) herd cows, generally good milkers that rear their calves well -
the good looks of the bull in most cases disappearing with the milk flesh and never returning again. Most of those I have seen were big and coarse enough for anything, and would doubtless get big hard skinned bullocks, quite unfit for the freezing trade, but I am sure pure Shorthorn bulls could be selected from many of the stud herds in this colony with quite as much and more constitution than these ugly unprofitable brutes. If these men would only use pure Hereford bulls in their Shorthorn herds instead of their half-bred Shorthorn bulls they would have from the progeny, the half-breds, useful cattle with both quality and constitution, and in a few years would work into good Hereford herds giving them far better returns than their badly-bred Shorthorns. I am quite unable to account for the superior hardiness and vigor shown by the Herefords in comparison to the Shorthorns and conclusively proved to me by the instances I have here mentioned and many others, which I have neither time nor space to enumerate. Of course in England the cattle are kept under such utterly different conditions that, fortunately both for the owners and the animals, these qualities are rarely or never tested by such terrible trials of slow starvation as those I have mentioned. There, however, the Herefords, although they always hold their own at both breeding and fat stock shows, are chiefly known as one of the best grazing breeds, their grass-fed beef in company with that of their Welsh cousins, the Runts topping the London market all through the summer months. The Shorthorns, on the other hand, show to best advantage when stall or yard fed, their combined qualities of milkers and beef producers making them the most popular and useful cattle among both farmers and dairymen. Unfortunately in this country it is a moral certainty that droughts will recur again from time to time, and until cattle become much more valuable than at present it will not pay to feed the general run artificially. I am sure, therefore, that it is of the utmost importance not only to cattle-breeders, but to the colony generally, a large proportion of the wealth of the country consisting of cattle, that the drought-resisting capabilities of the different breeds should be tested, and the only way of testing such a point is to observe the breeds side by side under the same conditions, as has been done here. Vague statements of the way cattle thrive hundreds of miles apart and without reliable figures being of no real value.

B - THEIR COMPARATIVE POWERS OF REPRODUCTION.

For fruitfulness my experience again compels me to decide in favour of the Herefords. This is proved by the following table carefully prepared from our stud books, giving the average number of calves branded to each of our best stud bulls of each breed for the past eight years 1883 to 1890 inclusive.
1883 - Shorthorns 2 bulls averaged 6 calves branded.
Herefords 2 " " 20 " " 
1884 - Shorthorns 2 " " 18 " " 
Herefords 2 " " 32\frac{1}{2} " " 
1885 - Shorthorns 2 " " 15 " " 
Herefords 2 " " 20 " " 
1886 - Shorthorns 2 " " 16 " " 
Herefords 2 " " 30\frac{1}{2} " " 
1887 - Shorthorns 2 " " 26 " " 
Herefords 2 " " 29\frac{1}{2} " " 
1888 - Shorthorns 3 " " 7 " " 
Herefords 3 " " 19 " " 
1889 - Shorthorns 3 " " 29\frac{2}{3} " " 
Herefords 3 " " 45 " " 
1890 - Shorthorns 3 " " 25\frac{2}{3} " " 
Herefords 3 " " 43 " " 

Average number of calves branded per bull per annum for the above eight years.

### QVP Statistical Register for Queensland for 1863, p. 11.

#### Livestock

<table>
<thead>
<tr>
<th>Place</th>
<th>Horses</th>
<th>Cattle</th>
<th>Sheep</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rockhampton (1860)</td>
<td>1,365</td>
<td>13,132</td>
<td>303,849</td>
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<tr>
<td>Leichhardt District</td>
<td>859</td>
<td>4,337</td>
<td>282,548</td>
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<tr>
<td>Gladstone</td>
<td>662</td>
<td>19,983</td>
<td>98,507</td>
</tr>
<tr>
<td>Rockhampton (1861)</td>
<td>724</td>
<td>26,321</td>
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<tr>
<td>Leichhardt District</td>
<td>2,461</td>
<td>48,928</td>
<td>847,797</td>
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<tr>
<td>Gladstone</td>
<td>1,294</td>
<td>17,421</td>
<td>117,593</td>
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<tr>
<td>Rockhampton (1862)</td>
<td>1,170</td>
<td>44,302</td>
<td>154,203</td>
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<tr>
<td>Leichhardt District</td>
<td>2,704</td>
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<tr>
<td>Gladstone</td>
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<td>23,377</td>
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<tr>
<td>Rockhampton (1863)</td>
<td>1,598</td>
<td>21,356</td>
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<tr>
<td>Leichhardt District</td>
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<td>Gladstone</td>
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<td>36,256</td>
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### QVP Statistics for Colony of Queensland for 1869, (1870), pp. 415 ff.

#### Livestock

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<tr>
<td>Rockhampton</td>
<td>5,461</td>
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<td>1,128</td>
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<td>58,559</td>
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<td>Springsure</td>
<td>1,371</td>
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<tr>
<td>St. Lawrence</td>
<td>1,959</td>
<td>57,225</td>
<td>76,497</td>
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<tr>
<td>Taroom</td>
<td>1,525</td>
<td>11,399</td>
<td>467,650</td>
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### Livestock

<table>
<thead>
<tr>
<th>Place</th>
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<th>Cattle</th>
<th>Sheep</th>
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<tr>
<td>31 December 1879</td>
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<tr>
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<td>43,390</td>
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<td>St. Lawrence</td>
<td>3,504</td>
<td>68,694</td>
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<tr>
<td>Taroom</td>
<td>2,547</td>
<td>41,112</td>
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### Livestock

<table>
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<th>Place</th>
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<th>Cattle</th>
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<tr>
<td>1886</td>
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<tr>
<td>Rockhampton</td>
<td>15,916</td>
<td>173,843</td>
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<td>2,448</td>
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<td>-</td>
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<td>Clermont</td>
<td>6,706</td>
<td>102,223</td>
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<td>Emerald</td>
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<td>5,607</td>
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<tr>
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Source: Queensland Votes and Proceedings, Statistical Returns for Livestock, Selected years 1860-86, Central Queensland, Livestock per Police District.
<table>
<thead>
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<th>No.</th>
<th>Date</th>
<th>Site</th>
<th>Year</th>
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<tr>
<td>35</td>
<td>17/2/18</td>
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<td>71</td>
<td>B. R.</td>
<td>Fermeon Lodge</td>
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<td>41</td>
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<td>B. R.</td>
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<td>42</td>
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<td>68</td>
<td>B. R.</td>
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<td>Blagdon House</td>
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<tr>
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<td>B. R.</td>
<td>Blagdon House</td>
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<td>68</td>
<td>19/9/18</td>
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<td>65</td>
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**Exsuits**

<table>
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<tr>
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</thead>
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<tr>
<td>152</td>
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<td>33</td>
<td>B. R.</td>
<td>Lord EdwardI</td>
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<tr>
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<td>37</td>
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<td>1/18</td>
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<td>321</td>
<td>B. R.</td>
<td>Prince CharlesI</td>
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<td>22</td>
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<td>B. R.</td>
<td>Blonde Hand</td>
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<td>78</td>
<td>B. R.</td>
<td>Lady Edward</td>
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<td>B. R.</td>
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<td>2/18</td>
<td>P. Regent</td>
<td>169</td>
<td>B. R.</td>
<td>Orphan 5th</td>
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<tr>
<td>181</td>
<td>2/18</td>
<td>5th Regent</td>
<td>169</td>
<td>B. R.</td>
<td>Orphan 5th</td>
</tr>
</tbody>
</table>

Note: The list contains details of horses and their dam, along with additional information about their status and location.
Previous retail price indexes

Five series of retail price indexes were compiled by the ABS at various times prior to the introduction of the Consumer Price Index in 1960. These indexes are described in Year Book, No. 64.

An index of retail price movements from 1901 onwards has been derived by linking together the following indexes: from 1901 to 1914, the "A" Series Retail Price Index; from 1914 to 1916-17, the "C" Series Retail Price Index; from 1916-17 to 1948-49, a composite of Consumer Price Index Housing Group (partly estimated) and "C" Series Index excluding Rent; and from 1948-49 onwards, the Consumer Price Index. The continuous series derived in this way is shown in the table below. As the indexes differ greatly in scope, the resulting series is only a broad indication of long-term trends in retail prices.

### RETAIL PRICE INDEX NUMBERS: SIX STATE CAPITAL CITIES COMBINED, 1901 TO 1977

<table>
<thead>
<tr>
<th>Year</th>
<th>Index number</th>
<th>Year</th>
<th>Index number</th>
<th>Year</th>
<th>Index number</th>
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<td>100</td>
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<td>110</td>
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<td>149</td>
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<td>110</td>
<td>1939</td>
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<td>502</td>
</tr>
<tr>
<td>1914(a)</td>
<td>113</td>
<td>1940</td>
<td>151</td>
<td>1966</td>
<td>517</td>
</tr>
<tr>
<td>1915(a)</td>
<td>110</td>
<td>1941</td>
<td>161</td>
<td>1967</td>
<td>554</td>
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<td>112</td>
<td>1942</td>
<td>155</td>
<td>1968</td>
<td>548</td>
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<td>114</td>
<td>1943</td>
<td>158</td>
<td>1969</td>
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<td>150</td>
<td>1944</td>
<td>187</td>
<td>1970</td>
<td>586</td>
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<tr>
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<td>150</td>
<td>1945</td>
<td>187</td>
<td>1971</td>
<td>621</td>
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<tr>
<td>1920(a)</td>
<td>150</td>
<td>1946</td>
<td>187</td>
<td>1972</td>
<td>658</td>
</tr>
<tr>
<td>1921(a)</td>
<td>188</td>
<td>1947</td>
<td>198</td>
<td>1973</td>
<td>720</td>
</tr>
<tr>
<td>1922(a)</td>
<td>188</td>
<td>1948</td>
<td>218</td>
<td>1974</td>
<td>839</td>
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<tr>
<td>1923</td>
<td>160</td>
<td>1949</td>
<td>210</td>
<td>1975</td>
<td>854</td>
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<tr>
<td>1924</td>
<td>160</td>
<td>1950</td>
<td>252</td>
<td>1976</td>
<td>1064</td>
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<tr>
<td>1925</td>
<td>165</td>
<td>1951</td>
<td>271</td>
<td>1977</td>
<td>1216</td>
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<tr>
<td>1926</td>
<td>168</td>
<td>1952</td>
<td>367</td>
<td>1978</td>
<td>1363</td>
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</table>

(a) November.
### Archer Bros. Financial Statement 1927

30 June 1927: ARCHER BROS. GRACEMERE

#### LIABILITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>£</th>
<th>s</th>
<th>d</th>
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</thead>
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<tr>
<td>Capital: Nominal Capital - 75,000 shares at £1 each less unallotted shares</td>
<td>74,756</td>
<td>0</td>
<td>0</td>
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<tr>
<td>BANK NSW Gen Acct.</td>
<td>72,296</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Torsdale</td>
<td>301</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Less securities realised</td>
<td>72,597</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>26,401</td>
<td>7</td>
<td>5</td>
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</tbody>
</table>

#### Sundry Creditors

- [Family members & Whealcroft] 6,520.2.8
- Wages outstanding 388.7.10
- Interest Suspense Acc. 2.18.1
- Total £108,069.6.0

#### ASSETS

<table>
<thead>
<tr>
<th>Description</th>
<th>£</th>
<th>s</th>
<th>d</th>
</tr>
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<tr>
<td>Town Lands</td>
<td>607.16</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Country Lands</td>
<td>29,580.13</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IMPROVEMENTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Gracemere] Station Farm Scoria Torsdale 15 Mile</td>
<td>3,163</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Leases &amp; Improvements Laleham Terang Plant Cattle</td>
<td>5,929</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>[@ 3.19.10] Horses</td>
<td>2,401</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>31,028</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>1,580</td>
<td>18</td>
<td>6</td>
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</table>
Sundry Debtors
[Port Curtis Dairy Co. Ltd.]
[Glądstone Meat Works]
[Q'ld Primary Producers Co op. Agency Ltd.]

<table>
<thead>
<tr>
<th>Investments</th>
<th>£</th>
<th>s</th>
<th>d</th>
</tr>
</thead>
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<tr>
<td>Port Curtis Dairy Co. Ltd.</td>
<td>3,647</td>
<td>5</td>
<td>9</td>
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<tr>
<td>Gladstone Meat Works</td>
<td>330</td>
<td>15</td>
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Cash in Hand

<table>
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<tr>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
</tr>
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<tbody>
<tr>
<td>PROFIT</td>
<td>LOSS</td>
<td>LOSS</td>
<td>LOSS</td>
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<tr>
<td>£1156</td>
<td>£4712</td>
<td>£5483</td>
<td>£4474</td>
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</tbody>
</table>

August 1933. Accumulated Loss, £32,236. 4. 9.

Archer Bros. Sales 1922-33, excluding Laleham

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER SOLD</th>
<th>NET PROCEEDS</th>
<th>AVERAGE PER BEAST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>£</td>
<td>£ s d</td>
</tr>
<tr>
<td>1922</td>
<td>689</td>
<td>4,220</td>
<td>6. 2. 6</td>
</tr>
<tr>
<td>1923</td>
<td>718</td>
<td>3,452</td>
<td>4. 16. 2</td>
</tr>
<tr>
<td>1924</td>
<td>1,417</td>
<td>9,189</td>
<td>6. 9. 8</td>
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<tr>
<td>1925</td>
<td>1,789</td>
<td>16,675</td>
<td>9. 6. 5</td>
</tr>
<tr>
<td>1926</td>
<td>1,814</td>
<td>14,366</td>
<td>7. 18. 5</td>
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<tr>
<td>1927</td>
<td>1,701</td>
<td>16,676</td>
<td>9. 9. 8</td>
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<tr>
<td>1928</td>
<td>1,392</td>
<td>12,337</td>
<td>8. 17. 3</td>
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<tr>
<td>1929</td>
<td>1,353</td>
<td>15,412</td>
<td>11. 8. 0</td>
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<tr>
<td>1930</td>
<td>1,572</td>
<td>16,711</td>
<td>10. 12. 7</td>
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<tr>
<td>1931</td>
<td>1,816</td>
<td>8,622</td>
<td>4. 15. 0</td>
</tr>
<tr>
<td>1932</td>
<td>1,553</td>
<td>7,980</td>
<td>5. 2. 9</td>
</tr>
<tr>
<td>1933</td>
<td>1,543</td>
<td>6,564</td>
<td>4. 5. 1</td>
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</table>
The Directors herewith submit the twenty-eighth Annual Report of the Company, together with Financial Statements for the year ended 30th June, 1934.

I am pleased to report an improvement in trading operations compared with the previous three years; the Nett Loss for 1934 being £86.11.11, compared with losses of £4712.9.10, £5483.17.4 and £4474.5.5 in 1931, 1932 and 1933 respectively.

The Auditors' Report explains fully and clearly the movement in the various accounts, as well as the stock figures.

Seasonal conditions for the year under review were very good indeed, as shown by the stock figures. Unfortunately since the end of the financial year very little rain has fallen in the Central District, which is now very dry. Generally speaking, Torsdale is in fair order, and the cattle in good condition. Gracemere and 15 Mile are very dry, but on the whole the cattle are still in fair order. Given early storms, the country would soon recover.

This dry period is a disappointment, as after the drought of 1932-33, I looked forward to some good seasons with a steady turnover in fat cattle. However, I am hopeful that the dry period is only of a temporary nature, and that in a short time good storms will come.

Our approximate sales were as under:-

<table>
<thead>
<tr>
<th>Number</th>
<th>Amount Realised</th>
<th>Average per Beast</th>
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<tbody>
<tr>
<td></td>
<td>£   s. d.</td>
<td>£   s. d.</td>
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<tr>
<td>347 bulls for</td>
<td>3913.2.2</td>
<td>11.5.5 (9.14.1)</td>
</tr>
<tr>
<td>591 cows</td>
<td>2128.12.9</td>
<td>5.12.0 (3.4.4)</td>
</tr>
<tr>
<td>247 bullocks and steers for</td>
<td>1018.8.0</td>
<td>4.2.5 (3.0.8)</td>
</tr>
<tr>
<td>12 vealers for</td>
<td>16.4.6</td>
<td>1.7.0 (1.3.4)</td>
</tr>
<tr>
<td>55 stags for</td>
<td>291.18.9</td>
<td>5.6.2 (3.8.1)</td>
</tr>
<tr>
<td>46 stud heifers for</td>
<td>291.4.0</td>
<td>6.6.7</td>
</tr>
</tbody>
</table>

Bull Sales increased by 66 over the previous year, the average price being £11.5.5, or about £1.11.0 above previous year's average.
Fat cattle prices were a disappointment, showing little improvement on the previous year; storestock, however, improved somewhat.

In the present state of world affairs, the beef industry seems to have received more than its share of set-backs, and it is difficult to make any forecasts. There were two significant happenings during the year, which should allow of some optimism; the first being the several successful shipments of chilled beef to England, together with the erection of chilling chambers at practically every works in Queensland, showing that exporters are entering the market in earnest. The second feature was the purchase by Vestey's of England of very large meat export interests in Australia, including the C.Q.M.E. works at Rockhampton; Swifts, America have purchased the Gladstone Works, and other interests are reported as being on the lookout for openings.

So far, only a start has been made in this trade, but judging from prices received in England to date, substantial benefit should accrue when the chilled meat business gets into full swing.

Although prices were low during the year, and the upward trend hardly noticeable, there is a feeling that the bottom has been reached, and that prices will gradually improve.

Under present conditions I think the wisest course is to carry on the business, hoping that an improvement in the industry will lead to an appreciation of land values.

Regarding the question of reducing Paid-Up Capital: Up to the present your Directors have seen no advantage in doing so, but further consideration will be given this matter.

The Laleham Pastoral Company: Although a small loss is disclosed in the Balance Sheet, it will be noticed that the liability to the Bank was reduced by £380.

The season was good until New Year, since when very little rain has fallen. The Cattle are losing condition, but with our reserve country, which has been put to use the last month, we hope to carry on without much loss until rain comes. The Company is now in a good position to take advantage of any rise in values.

Alister Archer,
MANAGING DIRECTOR.

GRACEMERE.
27 September, 1934.
Archer Bros. Ltd.

Sale list of pure bred bulls, supplied to Martin Snelling & Co., 30 October 1929

100 Hereford bulls No 7s - few 6s
120 Shorthorn " No 6s & 7s
70 Red Polls " Majority 6s

Herd bulls, price 20 guineas [$42] on trucks.

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<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Site</th>
<th>Dam</th>
<th>Sire</th>
<th>Color</th>
<th>Brand</th>
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<td>Regent</td>
<td>Train</td>
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<tr>
<td>107</td>
<td>Regent</td>
<td>Farm</td>
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<tr>
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<td></td>
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</tr>
<tr>
<td>546</td>
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<td>Farm</td>
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<td></td>
<td></td>
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<tr>
<td>566</td>
<td>Regent</td>
<td>Farm</td>
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<tr>
<td>570</td>
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<td>Regent</td>
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</table>
APPENDIX II
Construnctive Programme.

(1) Establishment of Initial Families.

Group I. (Millungera) Families: A. A₁ A₂ B₁ B₂

" II. (Waverley) " C. C₁ C₂ D₁ D₂

" III. (Glen Prairie) " E. E₁ F₁ F₂

" IV. (Wealwandangie) " G. G₁ G₂ H₁ H₂

(Note: Each family takes its initial letter from that given the Zebu bull and his cows. Each group of British bred females used in an experimental herd constitutes a family, e.g., Hutchins (110) in Group I is the founder of "A" family with Short-horn cows and the founder of family "A₁" with red poll cows. All his progeny will be fire branded with the prefix A or A₁).

(ii) Matings subsequent to 1936-37.

(a) To stabilise on 50% Zebu with inter family and group matings :-

1st Matings:

Zebu bull A x British females → F₁ A in Group I

" B x " " " " → F₁ B " " "

Zebu bull C x British females → F₁ C " " II

" D x " " " → F₁ D " " "

Zebu bull E x British females → F₁ E " " III

" F x " " " → F₁ F " " "

Zebu bull G x British females → F₁ G " " IV

1st inter family mating:

F₁ A x F₁ B → F₂ A₁ B₁ (reciprocal).

1st inter group mating:

F₂ AB x F₂ CD → F₃ ABCD (reciprocal).

2nd inter group mating:

F₃ ABCD x F₃ EFGH → F₄ ABCDEFGH (reciprocal).

1st recurrent mating:

F₁ A x F₁ ABCDEFGH → F₅.

(Note: Each mating can be for the breeding life of the animals if desired. Inbreeding to any desired extent is possible by intra-group and intra-family matings. Inter-family matings are possible within the station groups, e.g., F₁ C x F₁ C₁).

The Agreement between the Australian Meat Board, C.S.I.R.O. and Queensland Department of Agriculture & Stock provides that the Board will be responsible for capital costs including equipment and livestock.

C.S.I.R.O. and Q.D.S.S. will be responsible for technical and other staff required for research, the conduct of the properties and for the costs of maintenance and operation.

Any revenue will be used for the purpose of meeting marketing costs and providing reserves for:

(a) Replacement of cattle sold.
(b) Replacement of stud cattle.
(c) Replacement of improvements.

Any balance during the first five years to revert to C.S.I.R.O. and Q.D.S.S. to be used in furthering the Research Programme.

After the first five years any balance shall be divided between the Board and C.S.I.R.O. and Q.D.S.S., but the amount received by the Board will not exceed the then current rate of Bank interest. Amounts to C.S.I.R.O. and Q.D.S.S. will be

Breeding Research: Responsibility of Co-operating Organisations. ('Memorandum of Agreement', CSIRO, 1951, pp. 8, 9)
Numbers of Beef Cattle According to Breeds, 
Fitzroy Region, 1973 and 1982

1973: Rockhampton Statistical Division

<table>
<thead>
<tr>
<th>Breed</th>
<th>Number</th>
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<tbody>
<tr>
<td>Braford</td>
<td>60,184</td>
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<tr>
<td>Brahman</td>
<td>87,427</td>
</tr>
<tr>
<td>Droughtmaster</td>
<td>27,524</td>
</tr>
<tr>
<td>Hereford (inc. polled)</td>
<td>513,119</td>
</tr>
<tr>
<td>Santa Gertrudis</td>
<td>74,410</td>
</tr>
<tr>
<td>Shorthorn (inc. polled)</td>
<td>43,878</td>
</tr>
<tr>
<td>Other</td>
<td>23,950</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>830,492</strong></td>
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</table>

Cross Breeds

<table>
<thead>
<tr>
<th>Breed</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>British x British</td>
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<tr>
<td>Brahman x British</td>
<td>476,021</td>
</tr>
<tr>
<td>Other Tropical x British</td>
<td>165,730</td>
</tr>
<tr>
<td>European x Other</td>
<td>2,106</td>
</tr>
<tr>
<td>Beef x Dairy Breeds</td>
<td>47,225</td>
</tr>
<tr>
<td>Other</td>
<td>56,375</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>825,518</strong></td>
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</table>

Grand Total (Fitzroy) 1,656,010
" " (Queensland) 9,190,667

1982: Fitzroy Statistical Division

<table>
<thead>
<tr>
<th>Breed</th>
<th>Number</th>
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<tbody>
<tr>
<td>Africander</td>
<td>1,498</td>
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<tr>
<td>Braford</td>
<td>107,978</td>
</tr>
<tr>
<td>Brahman</td>
<td>164,891</td>
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<tr>
<td>Brangus</td>
<td>4,848</td>
</tr>
<tr>
<td>Droughtmaster</td>
<td>44,647</td>
</tr>
<tr>
<td>Sahiwal</td>
<td>238</td>
</tr>
<tr>
<td>Santa Gertrudis</td>
<td>133,036</td>
</tr>
<tr>
<td><strong>Total Tropical</strong></td>
<td><strong>457,136</strong></td>
</tr>
</tbody>
</table>

### British and European (meat)

<table>
<thead>
<tr>
<th>Breed</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angus</td>
<td>6,533</td>
</tr>
<tr>
<td>Charolais</td>
<td>1,981</td>
</tr>
<tr>
<td>Chianina</td>
<td>122</td>
</tr>
<tr>
<td>Devon (inc. polled)</td>
<td>181</td>
</tr>
<tr>
<td>Hereford (inc. polled)</td>
<td>243,860</td>
</tr>
<tr>
<td>Limousin</td>
<td>130</td>
</tr>
<tr>
<td>Murray Grey</td>
<td>6,244</td>
</tr>
<tr>
<td>Red Poll</td>
<td>127</td>
</tr>
<tr>
<td>Shorthorn (inc. polled)</td>
<td>22,712</td>
</tr>
<tr>
<td>Simmental</td>
<td>615</td>
</tr>
</tbody>
</table>

**Total British and European**: 282,505

### Total Dairy Breeds

- **Total Dairy Breeds**: 10,070

### Other Straight Breeds

- **Other Straight Breeds**: 4,919

### Cross Breeds

<table>
<thead>
<tr>
<th>Breed</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahman x British</td>
<td>516,948</td>
</tr>
<tr>
<td>British x British</td>
<td>51,045</td>
</tr>
<tr>
<td>Other Tropical x British</td>
<td>181,560</td>
</tr>
<tr>
<td>Tropical x Tropical</td>
<td>58,005</td>
</tr>
<tr>
<td>European x Other</td>
<td>9,709</td>
</tr>
<tr>
<td>Beef x Dairy</td>
<td>7,294</td>
</tr>
<tr>
<td>Other (inc. unspecified)</td>
<td>28,189</td>
</tr>
</tbody>
</table>

**Total Cross Breeds**: 852,277

### Total All Breeds

- **Total All Breeds**: 1,607,380

### Grand Total (Queensland)

- **Grand Total (Queensland)**: 9,758,201

---

**N.B.** Between 1973 and 1982 the ABS changed the name of the Rockhampton Statistical Division to Fitzroy Statistical Division. They are roughly parallel.

---

## PERFORMANCE

### C.S.I.R.O./Q.D.P.I. TRIALS

#### 1983

Comparative Weaning Weights at 160 days for 459 No. 3 calves.

<table>
<thead>
<tr>
<th>Breed Combination</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charbray — Brahman/Hereford</td>
<td>203</td>
</tr>
<tr>
<td>Brahman — Brahman/Hereford</td>
<td>198</td>
</tr>
<tr>
<td>Brahman/Hereford F2</td>
<td>194</td>
</tr>
<tr>
<td>Africander/Hereford — Brahman/Hereford</td>
<td>192</td>
</tr>
<tr>
<td>Brahman — Africander/Hereford</td>
<td>184</td>
</tr>
<tr>
<td>Charbray — Africander/Hereford</td>
<td>177</td>
</tr>
<tr>
<td>Africander/Hereford F2</td>
<td>176</td>
</tr>
</tbody>
</table>

#### 1983

Comparative Weaning Weights at 176 days for 642 calves over 3 years.

<table>
<thead>
<tr>
<th>Breed Combination</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahman/Hereford F2's</td>
<td>213</td>
</tr>
<tr>
<td>Africander/Hereford — Brahman/Hereford</td>
<td>209</td>
</tr>
<tr>
<td>Africander/Hereford F2's</td>
<td>198</td>
</tr>
</tbody>
</table>

#### 1980

Relative Growth Rates of Banana Bulls at 18 Months of Age.

<table>
<thead>
<tr>
<th>Breed</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hereford</td>
<td>100</td>
</tr>
<tr>
<td>Africander/Hereford</td>
<td>121</td>
</tr>
<tr>
<td>Brahman/Hereford F2</td>
<td>137</td>
</tr>
</tbody>
</table>

#### 1980

Relative Tick Counts of Banana Bulls

<table>
<thead>
<tr>
<th>Breed</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hereford</td>
<td>100</td>
</tr>
<tr>
<td>Africander/Hereford</td>
<td>15</td>
</tr>
<tr>
<td>Brahman/Hereford F2</td>
<td>6</td>
</tr>
</tbody>
</table>

#### 1981

Relative Weaning Weights of F1 & F2 Brahman/Hereford calves

<table>
<thead>
<tr>
<th>Breed</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1 calves ex 3 yo. Hereford cows</td>
<td>100</td>
</tr>
<tr>
<td>F2 calves ex 3 yo. F1 Brahman/Hereford cows</td>
<td>116</td>
</tr>
</tbody>
</table>

#### 1982

Selling Brahman/Hereford Bullocks

<table>
<thead>
<tr>
<th>Breed</th>
<th>Age (yo.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years younger than Herefords and at heavier weights.</td>
<td></td>
</tr>
</tbody>
</table>

#### 1983

GATTON COLLEGE FEEDLOT TRIALS.

<table>
<thead>
<tr>
<th>Breed</th>
<th>Daily gain (kg)</th>
<th>% Ready to market in 80 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brahman</td>
<td>100</td>
<td>33</td>
</tr>
<tr>
<td>Hereford</td>
<td>125</td>
<td>60</td>
</tr>
<tr>
<td>Brahman/A.I.S.</td>
<td>131</td>
<td>20</td>
</tr>
<tr>
<td>Banana Brahman/Hereford</td>
<td>172</td>
<td>87</td>
</tr>
</tbody>
</table>

(72% higher daily gain than Brahman)
Extract from TCB, June 1865, during Armstrong’s management.
General Muster, July 1868. (TCB, 1868)
Tooloombah Cattle Books: Cattle prices as recorded by Beardmore. In some years numbers were recorded but not prices. His system also changed to record average price for all cattle sold.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TYPE OF CATTLE</th>
<th>PRICE PER HEAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1874</td>
<td>Bullocks</td>
<td>£5.10.0 (£11)</td>
</tr>
<tr>
<td>1875</td>
<td>Old Cows</td>
<td>£2.00.0 (£8)</td>
</tr>
<tr>
<td>1876</td>
<td>Bullocks</td>
<td>£6.00.0 (£12)</td>
</tr>
<tr>
<td>1881</td>
<td>Cows</td>
<td>£3.8.9 (£6.88)</td>
</tr>
<tr>
<td>1882</td>
<td>Average all Cattle</td>
<td>£4.13.10 (£9.39)</td>
</tr>
<tr>
<td>1883</td>
<td>&quot; &quot; &quot;</td>
<td>£5.6.9 (£10.68)</td>
</tr>
<tr>
<td>1884</td>
<td>&quot; &quot; &quot;</td>
<td>£5.00.0 (£10)</td>
</tr>
<tr>
<td>1885</td>
<td>&quot; &quot; &quot;</td>
<td>£4.3.6 (£8.35)</td>
</tr>
<tr>
<td>1887</td>
<td>&quot; &quot; &quot;</td>
<td>£3.6.6 (£6.60)</td>
</tr>
<tr>
<td>1889</td>
<td>&quot; &quot; &quot;</td>
<td>£3.14.0 (£7.40)</td>
</tr>
<tr>
<td>1893</td>
<td>&quot; &quot; &quot;</td>
<td>£2.1.0 (£4.10)</td>
</tr>
<tr>
<td>1894</td>
<td>&quot; &quot; &quot;</td>
<td>£2.00.6 (£4.05)</td>
</tr>
<tr>
<td>1895</td>
<td>&quot; &quot; &quot;</td>
<td>£1.15.3 (£2.52)</td>
</tr>
<tr>
<td>1896</td>
<td>&quot; &quot; &quot;</td>
<td>£2.6.0 (£4.60)</td>
</tr>
<tr>
<td>1897</td>
<td>&quot; &quot; &quot;</td>
<td>£2.0.0 (£4)</td>
</tr>
<tr>
<td>1898</td>
<td>&quot; &quot; &quot;</td>
<td>£2.5.11 (£2.59)</td>
</tr>
<tr>
<td>1899</td>
<td>&quot; &quot; &quot;</td>
<td>£2.16.0 (£5.60)</td>
</tr>
<tr>
<td>1900</td>
<td>&quot; &quot; &quot;</td>
<td>£3.8.3 (£6.82)</td>
</tr>
<tr>
<td>1901</td>
<td>&quot; &quot; &quot;</td>
<td>£4.5.3 (£8.52)</td>
</tr>
<tr>
<td>1902-03</td>
<td>&quot; &quot; &quot;</td>
<td>£6.11.0 (£13.10)</td>
</tr>
<tr>
<td>1903-04</td>
<td>&quot; &quot; &quot;</td>
<td>£6.18.0 (£13.80)</td>
</tr>
</tbody>
</table>

 TOOLOOMBAH CATTLE BOOKS. RDHS LIBRARY.
STATION WAGES, 1868 and 1911

Gracemere Station Wages, July 1868. (Selection only)

<table>
<thead>
<tr>
<th>Name</th>
<th>£</th>
<th>s</th>
<th>d</th>
<th>$</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belz, C.</td>
<td>7</td>
<td>2</td>
<td>10</td>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Brett, R.H.</td>
<td>7</td>
<td>12</td>
<td>2</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>Conway, H.</td>
<td>11</td>
<td>11</td>
<td>4</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Conaghan, W.A.</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>86</td>
</tr>
<tr>
<td>Cronin, G.</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Duggan, J.</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Fulton, H.</td>
<td>8</td>
<td>4</td>
<td>7</td>
<td>16</td>
<td>46</td>
</tr>
<tr>
<td>Ferguson, J.</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>16</td>
</tr>
</tbody>
</table>

[Smaller sums were probably paid to day labourers.]

Source: Archer Papers, Financial Returns, July 1868.

P.F. MacDonald, Yaamba, Wages paid in 1911.

Stockmen: 20-25 shillings a week $2.00-$2.50
Horse Drivers: 30 shillings " " $3.00
Station Hands: 15-25 shillings " " $1.50-$2.50
Rough Carpenters: 25-30 shillings " " $2.50-$3.00
Handy Youths: 15-20 shillings " " $1.50-$2.00
Station Cooks (female): 10 shillings " " $1.00
Cattle Drovers: 30 shillings " " $3.00
Contract Droving: one shilling per head per hundred miles.

Source: P.F. MacDonald, Letter Book 1910-11. Letter, P.F. MacDonald to Secretary, Pastoral Employees Association of Central and North Queensland, 5 August 1911.

N.B. While an accurate comparison between wages in 1868 and 1911 cannot be made on these figures (which suggest higher wages in 1868), a Diary entry by P.F. MacDonald, 9 October 1861, reveals a startling parallel: 'Engaged Holmes at 25/- ($2.50) per week, one week's notice to be given on either side'. (P.F. MacDonald Papers, RML.)
<table>
<thead>
<tr>
<th>Station</th>
<th>Dec 00</th>
<th>Jan 00</th>
<th>Feb 00</th>
<th>Mar 00</th>
<th>Apr 00</th>
<th>May 00</th>
<th>Jun 00</th>
<th>Jul 00</th>
<th>Aug 00</th>
<th>Sep 00</th>
<th>Oct 00</th>
<th>Nov 00</th>
<th>Dec 00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrinilla</td>
<td>5.1</td>
<td>4.7</td>
<td>3.2</td>
<td>4.5</td>
<td>2.5</td>
<td>2.2</td>
<td>2.7</td>
<td>3.7</td>
<td>1.1</td>
<td>2.1</td>
<td>3.4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Taroom</td>
<td>4.9</td>
<td>4.8</td>
<td>4.3</td>
<td>3.9</td>
<td>3.1</td>
<td>2.2</td>
<td>2.8</td>
<td>3.6</td>
<td>1.1</td>
<td>2.1</td>
<td>3.4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Twin Hill</td>
<td>4.9</td>
<td>4.8</td>
<td>4.3</td>
<td>3.9</td>
<td>3.1</td>
<td>2.2</td>
<td>2.8</td>
<td>3.6</td>
<td>1.1</td>
<td>2.1</td>
<td>3.4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>St Lawrence</td>
<td>5.1</td>
<td>4.7</td>
<td>3.2</td>
<td>4.5</td>
<td>2.5</td>
<td>2.2</td>
<td>2.7</td>
<td>3.7</td>
<td>1.1</td>
<td>2.1</td>
<td>3.4</td>
<td>4.3</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Table 2: Rainfall Probabilities—continued
APPENDIX IV
Information supplied to United Graziers for use in the Arbitration Court—number of employees for each year specified and wages paid:

To 30 June 1918: 60 employees - £8984.14.6
" 1919: 57 " - £8341.1.1
" 1920: 39 " - £7740.15.3
" 1921: 28 " - £5653.7.8

Amount spent on Improvements:

1913-14 : £1722.8.4
1916-17 : £3237.4.4
1920-21 : £767.4.11

No. of Unemployed: 500-600 men are estimated to be unemployed R'ton district, excluding Lakes Creek & Mt. Morgan.

RECESSION: In past 2 years our business has shown a heavy loss partly owing to the drought in 1919-20; this year to the complete collapse of the Cattle Market. We are obliged to discharge more men, as the Industry cannot pay present rate of wages.

Source: Archer Letter Books - Archer Papers, 8 September 1921.
## CATTLE NUMBERS AND SLAUGHTERINGS: AUSTRALIA AND QUEENSLAND

### 1963-1974

<table>
<thead>
<tr>
<th>Year</th>
<th>Queensland Cattle Numbers in Thousands</th>
<th>Australia Cattle Numbers in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-64</td>
<td>7 402</td>
<td>19 055</td>
</tr>
<tr>
<td>1964-65</td>
<td>7 393</td>
<td>18 816</td>
</tr>
<tr>
<td>1965-66</td>
<td>6 888</td>
<td>17 936</td>
</tr>
<tr>
<td>1966-67</td>
<td>6 919</td>
<td>18 270</td>
</tr>
<tr>
<td>1967-68</td>
<td>7 361</td>
<td>19 218</td>
</tr>
<tr>
<td>1968-69</td>
<td>7 668</td>
<td>20 611</td>
</tr>
<tr>
<td>1969-70</td>
<td>7 515</td>
<td>22 162</td>
</tr>
<tr>
<td>1970-71</td>
<td>7 944</td>
<td>24 273</td>
</tr>
<tr>
<td>1971-72</td>
<td>9 022</td>
<td>27 373</td>
</tr>
<tr>
<td>1972-73</td>
<td>9 795</td>
<td>29 101</td>
</tr>
<tr>
<td>1973-74</td>
<td>10 257</td>
<td>30 885</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Adult Cattle Slaughterings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963-64</td>
<td>1 455</td>
</tr>
<tr>
<td>1964-65</td>
<td>1 506</td>
</tr>
<tr>
<td>1965-66</td>
<td>1 515</td>
</tr>
<tr>
<td>1966-67</td>
<td>1 331</td>
</tr>
<tr>
<td>1967-68</td>
<td>1 343</td>
</tr>
<tr>
<td>1968-69</td>
<td>1 500</td>
</tr>
<tr>
<td>1969-70</td>
<td>1 405</td>
</tr>
<tr>
<td>1970-71</td>
<td>1 325</td>
</tr>
<tr>
<td>1971-72</td>
<td>1 457</td>
</tr>
<tr>
<td>1972-73</td>
<td>1 676</td>
</tr>
<tr>
<td>1973-74</td>
<td>1 482</td>
</tr>
</tbody>
</table>

## TOTAL CATTLE HERD 1860 - 1981 (Million)

|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

* Prior to 1942 published figures were those cattle on hand as at 31st December. Subsequently the published figures showed cattle on hand as at 31st March. (The Queensland Cattle Industry, QMIO & MA, 1981, Appendix ii)
Table 2.1: Selected characteristics of Australian beef cattle industry (meat cattle), 1970-71

<table>
<thead>
<tr>
<th>Item</th>
<th>N.S.W.</th>
<th>Vic.</th>
<th>Qld.</th>
<th>S.A.</th>
<th>W.A.</th>
<th>Kimberleys</th>
<th>N.T.</th>
<th>Tas.</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

85% of cross income from the beef enterprise (beef specialists)

Producers with more than 50 meat cattle and the producer component earnings
Australian beef cattle industry survey: 1970-71
Table No. 2

The Australian beef cattle industry, Canberra, 1975.
Queensland Statistical Summary, Local Authority Areas.
Cattle numbers and holdings per shire (within Fitzroy Region),
30 September 1976.

<table>
<thead>
<tr>
<th>Shire</th>
<th>Beef Cattle</th>
<th>Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana</td>
<td>435,495</td>
<td>932</td>
</tr>
<tr>
<td>Bauhinia</td>
<td>289,872</td>
<td>219</td>
</tr>
<tr>
<td>Belyando</td>
<td>266,590</td>
<td>187</td>
</tr>
<tr>
<td>Broadsound</td>
<td>254,782</td>
<td>205</td>
</tr>
<tr>
<td>Calliope</td>
<td>135,219</td>
<td>374</td>
</tr>
<tr>
<td>Duaringa</td>
<td>257,411</td>
<td>249</td>
</tr>
<tr>
<td>Emerald</td>
<td>127,829</td>
<td>147</td>
</tr>
<tr>
<td>Fitzroy</td>
<td>113,357</td>
<td>417</td>
</tr>
<tr>
<td>Livingstone</td>
<td>190,410</td>
<td>389</td>
</tr>
<tr>
<td>Mount Morgan</td>
<td>5,097</td>
<td>31</td>
</tr>
<tr>
<td>Peak Downs</td>
<td>94,651</td>
<td>125</td>
</tr>
</tbody>
</table>

N.B. The QDPI Capricornia Region differs only slightly in area from the Fitzroy Statistical Division or the Fitzroy Region in that its boundaries extend north to include the Shires of Nebo, Pioneer and Sarina. These are omitted above.

Source: T.H. Rudder, *Beef Production in the Capricornia Region*, Table 9, p. 27.
### STOCK NUMBERS - GRACEMERE SALEYARDS

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953/54</td>
<td>35,168</td>
</tr>
<tr>
<td>1954/55</td>
<td>61,369</td>
</tr>
<tr>
<td>1955/56</td>
<td>47,835</td>
</tr>
<tr>
<td>1956/57</td>
<td>60,756</td>
</tr>
<tr>
<td>1957/58</td>
<td>74,942</td>
</tr>
<tr>
<td>1958/59</td>
<td>97,116</td>
</tr>
<tr>
<td>1959/60</td>
<td>74,116</td>
</tr>
<tr>
<td>1960/61</td>
<td>69,648</td>
</tr>
<tr>
<td>1961/62</td>
<td>63,669</td>
</tr>
<tr>
<td>1962/63</td>
<td>68,184</td>
</tr>
<tr>
<td>1963/64</td>
<td>75,533</td>
</tr>
<tr>
<td>1964/65</td>
<td>92,307</td>
</tr>
<tr>
<td>1965/66</td>
<td>120,000</td>
</tr>
<tr>
<td>1966/67</td>
<td>94,494</td>
</tr>
<tr>
<td>1967/68</td>
<td>65,140</td>
</tr>
<tr>
<td>1968/69</td>
<td>66,445</td>
</tr>
<tr>
<td>1969/70</td>
<td>106,393</td>
</tr>
<tr>
<td>1970/71</td>
<td>58,914</td>
</tr>
<tr>
<td>1971/72</td>
<td>63,319</td>
</tr>
<tr>
<td>1972/73</td>
<td>78,233</td>
</tr>
<tr>
<td>1973/74</td>
<td>82,418</td>
</tr>
<tr>
<td>1974/75</td>
<td>54,085</td>
</tr>
<tr>
<td>1975/76</td>
<td>87,547</td>
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<td>1976/77</td>
<td>100,337</td>
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<td>1977/78</td>
<td>108,997</td>
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<tr>
<td>1978/79</td>
<td>248,711</td>
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<tr>
<td>1979/80</td>
<td>201,906</td>
</tr>
<tr>
<td>1980/81</td>
<td>188,312</td>
</tr>
<tr>
<td>1981/82</td>
<td>172,625</td>
</tr>
<tr>
<td>1982/83</td>
<td>158,758</td>
</tr>
<tr>
<td>1983/84</td>
<td>128,660 (To Date)</td>
</tr>
<tr>
<td>TOOLT QLD.</td>
<td>NORTHERN QLD.</td>
</tr>
<tr>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td>1,563.4/19</td>
<td>1,154.0/17</td>
</tr>
<tr>
<td>1,408.7/59</td>
<td>997.9/57</td>
</tr>
<tr>
<td>1,154.0/17</td>
<td>838.2/18</td>
</tr>
<tr>
<td>1,459.9/86</td>
<td>559.9/10</td>
</tr>
<tr>
<td>1,590.1/77</td>
<td>49,5/49</td>
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<tr>
<td>84,0/22</td>
<td>19,2/22</td>
</tr>
<tr>
<td>1,703.0/04</td>
<td>37,2/37</td>
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<td>2,433,4/22</td>
<td>83,9/83</td>
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<td>2,032,4/09</td>
<td>41,4/18</td>
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<td>1,756,8/36</td>
<td>26,2/26</td>
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<tr>
<td>1,768,4/17</td>
<td>24,6/24</td>
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</tbody>
</table>

**APPENDIX II**

Distribution of saleyard cattle throughout by statistical regions

(A Study into the Distribution of Queensland Saleyards, QMIO & MA, 1982, Appendix II)
APPENDIX V
Ned Cross's Letter to Archibald Archer, 8 April 1865.
(Archer Papers)
## Abattoir Operation 1895

<table>
<thead>
<tr>
<th>Abattoir</th>
<th>Yearly Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cattle</td>
</tr>
<tr>
<td>Eagle Farm (Brisbane) freezing</td>
<td>50,000</td>
</tr>
<tr>
<td>Townsville freezing</td>
<td>50,000</td>
</tr>
<tr>
<td>Lakes Creek freezing &amp; canning</td>
<td>100,000</td>
</tr>
<tr>
<td>Graziers Co., canning for export</td>
<td>40,000</td>
</tr>
<tr>
<td>Oakley Creek canning</td>
<td>10,000</td>
</tr>
<tr>
<td>Broadsound salting &amp; boiling</td>
<td>15,000</td>
</tr>
<tr>
<td>Alligator Creek, extract &amp; boiling</td>
<td>40,000</td>
</tr>
<tr>
<td>Burketown boiling</td>
<td>15,000</td>
</tr>
<tr>
<td>Normanton boiling</td>
<td>20,000</td>
</tr>
<tr>
<td>Cardwell boiling</td>
<td>15,000</td>
</tr>
<tr>
<td>Burdekin canning &amp; boiling</td>
<td>18,000</td>
</tr>
<tr>
<td>Emerald boiling</td>
<td>12,000</td>
</tr>
<tr>
<td>Torrens Creek boiling</td>
<td>5,900</td>
</tr>
<tr>
<td>Charleville boiling</td>
<td>1,000</td>
</tr>
<tr>
<td>Angellalah boiling</td>
<td></td>
</tr>
<tr>
<td>Barcaldine boiling</td>
<td></td>
</tr>
<tr>
<td>Westbourne, Barcaldine, boiling</td>
<td></td>
</tr>
<tr>
<td>Ramornie, Qld cattle</td>
<td>15,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>406,900</strong></td>
</tr>
</tbody>
</table>

**Works in Progress:**

- Gladstone (freezing, tinning & boiling) 50,000
- Bowen (freezing & tinning) 25,000

**Source:** *Capricornian*, 21 December 1895.
British Imports of Beef 1893-1894

<table>
<thead>
<tr>
<th>Where From</th>
<th>Jan-June 1893</th>
<th>Jan-June 1894</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>38,591</td>
<td>45,694</td>
</tr>
<tr>
<td>River Plate</td>
<td>665</td>
<td>180</td>
</tr>
<tr>
<td>Canada</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NSW &amp; Vic</td>
<td>82</td>
<td>97</td>
</tr>
<tr>
<td>New Zealand</td>
<td>647</td>
<td>30</td>
</tr>
<tr>
<td>Queensland</td>
<td>3,839</td>
<td>5,447</td>
</tr>
<tr>
<td>Holland</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Other Places</td>
<td>1,854</td>
<td>917</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45,690</strong></td>
<td><strong>52,374</strong></td>
</tr>
</tbody>
</table>

Source: *Capricornian*, 1 September 1894.
### QUEENSLAND EXPORTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Product</th>
<th>Weight</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1902</td>
<td>Preserved Meat</td>
<td>2,881,149 lbs</td>
<td>[1,286 tons]</td>
</tr>
<tr>
<td>1901</td>
<td>&quot; &quot;</td>
<td>1,282,593 &quot;</td>
<td>[ 572 tons]</td>
</tr>
<tr>
<td>1902</td>
<td>Frozen Beef</td>
<td>9,300,805 lbs</td>
<td>[4,152 tons]</td>
</tr>
<tr>
<td>1901</td>
<td>&quot; &quot;</td>
<td>8,491,243 lbs</td>
<td>[3,790 tons]</td>
</tr>
</tbody>
</table>

* Gladstone Meatworks regularly shipped frozen beef to South Africa at this time, for example, in August 1903 'another 880 tons'.

Source: *Capricornian*, 1 January 1903.
Figure 3: UTILISATION OF BEEF AND VEAL PRODUCTION: AUSTRALIA

Carcass weight

Exports to destinations other than the USA
Exports to the USA
Canning and change in stocks
Domestic consumption

Estimated.


(Meat, BAE, 1982, p. 12)
APPENDIX VI
King Brigalow and Mr Dutton

I grow in a scrub near the Bungil,  
I've lived here for many a year,  
True King of Australia's jungle,  
A monarch no Land Bill can clear;  
The wild-eyed Selectors have "axed" me  
To move, but I really don't see  
The right of Selector to jump up and hector  
A jolly old brigalow Tree.

Friend Dutton, I'm called an acacia,  
A case you might well leave alone.  
There are tough plants throughout Australasia,  
But I am the toughest that's known.  
I laugh at your promised invasion,  
Your clauses are wasted on me,  
From the seed I can shoot, or spring from the root,  
You can't kill a brigalow Tree.

Tho' ring-barking may make me wither,  
And chopping down stop me a while;  
Tho' bush fires into me slither,  
I always come up with a smile.  
To grub me would cost quite a fortune,  
And ruin a homestead lessee;  
I don't care a button for you, Mr Dutton,  
Tho' only a brigalow Tree...

You may kill the giedya, you may kill the oak  
The wattle and sandalwood too,  
(Destroying the latter is far from a joke,  
Tho' it may seem a trifle to you).  
Waltz into the mallee, my sonny,  
And chop the prolific pine tree;  
Then come on, my hearty old Liberal party,  
And tackle the brigalow Tree.

Anthos.

Source: Reprinted from Blackall Champion in Capricornian,  
13 September 1884.
FITZROY BASIN BRIGALOW LAND DEVELOPMENT SCHEME
Questionnaire (for research purposes only).

1. What was your reason for entering the ballot?

2. In which Ballot were you successful?
   Which block did you draw?
   Approximately how many applicants?

3. Was this your only application for a Brigalow block?

4. What was your reaction on receiving a telegram from the
   Land Administration Commission notifying you of success?

5. What was your previous work experience?
   How old were you when you drew your block?

6. Did you consider the conditions imposed by the Land
   Administration Commission reasonable (when applying)?

7. After occupation did you find it irksome to have to obtain
   permission from the LAC for each development planned?

8. In the first two or three years how difficult did you
   find it to keep up the twice yearly payments, plus
   interest?

9. Did you avail yourself to the full extent of government
   money for developmental work?

10. What was your first priority on occupying your block?

11. How long after your first scrub pulling did you encounter
    regrowth problems?

12. Has this (or some other) been your major problem?
13. How successful did you find aerial spraying?
    What percentage of your budget did it demand?

14. How long after occupation did you begin to stock your land?
    How many cattle and what breed(s)?
    What has been your maximum cattle herd and in which year?

15. What area is your block?
    Is yours a cattle breeding or fattening enterprise?

16. Do you grow grain as well as produce beef cattle?
    If so, what proportion of land is used for each?
    When did you first sow a crop and why?

17. With the collapse of the beef market in 1974, did you consider the subsequent 'interim measure of relief' by the Commission regarding loan repayments adequate, or did you have to find some other source of income?
    If so, what was it? An outside job?

18. By what percentage had your original indebtedness increased or decreased by the end of 1979?
    Where you at any time obliged to obtain loan money from banks or finance houses in addition to your purchase and development loans?

19. In retrospect, and from your own experience, do you consider the Fitzroy Basin Brigalow Land Development Scheme a success?
    What do you consider its best aspects (from the settler's point of view)?
    What faults, if any, does it have?

20. Are you prepared to enlarge on your experiences in an oral interview?
    If so, would you prefer me to visit your property (1984) or interview you in Rockhampton?
21. If you do not care for an oral interview, would you please write down some of your experiences, particularly those related to the production of beef cattle on a brigalow block?

22. Do you give permission for your name to be used, or do you prefer to remain anonymous?

N.B. At present this history is not for publication, but may be some time in the future.

Post script: How long after occupation until you built your permanent home? What were your living conditions prior to this?
Supplementary questions used in oral history interviews

1. Water supply
   : type and number of dams.

2. Cattle marketing
   : saleyards? meatworks? liveweight?
   : transport problems?
   : stocking rate per acre (hectare)?
   : annual average turnoff - fat cattle.

3. Any comments on current marketing system?
   : especially economic instability, processor 'manipulation' by meatworks, etc.

4. Beef depression of mid 1970s
   : how did it affect you in a personal sense?

5. Brigalow soils
   : have you noticed any evidence of deteriorating fertility?

6. Isolation
   : has this been a problem?
   : children's education?
   : how long did you have to wait for a telephone and power supply?

7. Any other comments?
LAND DEVELOPMENT (FITZROY BASIN) SCHEME

AREAS I, IA AND II

Class of Country - Mainly brigalow and associated scrubs in virgin state.

Allocation of Blocks - At ballot (494 023 ha)

<table>
<thead>
<tr>
<th>Blocks</th>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold at auction</td>
<td>146 293 ha</td>
<td>40</td>
</tr>
<tr>
<td>Retention areas</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td>Reserves</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Not affected</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>Total Blocks</td>
<td></td>
<td>254</td>
</tr>
</tbody>
</table>

Development of Ballot Blocks (to 30.6.76)

- Pulling of scrub: 229 932 ha for a total of $1 592 150
- Burning and grassing of scrub: 211 529 ha for a total of $779 170
- Sucker control: 59 779 ha for a total of $491 067
- Fencing: 2 120 km for a total of $572 641
- Water facilities: 142 excavated tanks, 54 bores and 22 reticulation schemes at a total cost of $844 548
- Dip and yards (tick control units): 110 at a total cost of $249 321
- Cattle: 3 938 head plus calves at a total cost of $317 304

Expenditure to 30.6.76 on Roads

- $5.4 million ($2.1 million on 711 km of access roads and $3.3 million on 208 km of main roads)

PRICES REALISED FOR AUCTION BLOCKS

<table>
<thead>
<tr>
<th>Sale No.</th>
<th>No. of Blocks</th>
<th>Survey Fee ($)</th>
<th>Improvements ($)</th>
<th>Upset Price</th>
<th>Price Realised ($)</th>
<th>Total Price Used ($)</th>
<th>Total Price Paid ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
<td>2 157</td>
<td>31 814</td>
<td>129 068</td>
<td>260 000</td>
<td>293 971</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>2 186</td>
<td>45 880</td>
<td>126 554</td>
<td>319 000</td>
<td>367 066</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>2 384</td>
<td>28 490</td>
<td>100 698</td>
<td>201 500</td>
<td>222 992</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2 384</td>
<td>19 068</td>
<td>94 824</td>
<td>201 500</td>
<td>213 454</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>2 384</td>
<td>10 070</td>
<td>94 940</td>
<td>201 000</td>
<td>223 992</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>1 788</td>
<td>39 406</td>
<td>75 351</td>
<td>87 043</td>
<td>128 237</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>2 384</td>
<td>18 416</td>
<td>100 970</td>
<td>357 500</td>
<td>378 300</td>
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</tr>
<tr>
<td>8</td>
<td>4</td>
<td>2 489</td>
<td>42 152</td>
<td>152 331</td>
<td>504 000</td>
<td>548 641</td>
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</tr>
<tr>
<td>9</td>
<td>4</td>
<td>2 318</td>
<td>18 511</td>
<td>182 626</td>
<td>345 000</td>
<td>365 829</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>596</td>
<td>6 917</td>
<td>37 792</td>
<td>79 000</td>
<td>86 513</td>
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</tr>
<tr>
<td>11</td>
<td>1</td>
<td>2 515</td>
<td>48 454</td>
<td>53 000</td>
<td>53 000</td>
<td>102 305</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>2 406</td>
<td>27 274</td>
<td>78 142</td>
<td>298 000</td>
<td>327 680</td>
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</tr>
</tbody>
</table>

The average price realised was $18.39 per ha ($7.44 per acre) unimproved and the average size of a block was 3 657.3 ha.
### AREA III

**Gross Area**
2.5 million ha

**Class of Country** - Mainly brigalow and association scrubs in virgin state but slightly inferior to Area I and II.

**Allocation of Blocks** - At ballot (562 143 ha)
- 69 blocks
  - Sold at auction (292 196 ha)
  - 37 blocks
  - Retention areas
  - 51 blocks
  - Reserves
  - 3 blocks
  - Not affected
  - 171 blocks

**Development of Ballot Blocks (to 30.6.76)**
- Pulling of scrub
  - 183 201 ha for a total of $1 140 136
- Burning and grassing of scrub
  - 141 326 ha for a total of $ 485 224
- Sucker control
  - 14 156 ha for a total of $ 93 910
- Fencing
  - 637 km for a total of $ 435 118
- Water facilities
  - 58 excavated tanks, 57 bores and 104 reticulation schemes at a total cost of $871 839
- Dip and yards (Tick control units)
  - 58 at a total of $114 703
- Cattle
  - 4 195 head plus calves at a total cost of $284 647

**Expenditure to 30.6.76 on Access Roads** - $1.84 million for a total length of 465.4 km

**Prices Realised for Auction**

<table>
<thead>
<tr>
<th>Sale No.</th>
<th>No. of Blocks</th>
<th>Survey Fee ($)</th>
<th>Improvements ($)</th>
<th>Upset Price ($)</th>
<th>Price Realised ($)</th>
<th>Total Price ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>3 991.00</td>
<td>63 105</td>
<td>177 524</td>
<td>317 500</td>
<td>384 596</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>3 355.00</td>
<td>31 488</td>
<td>163 847</td>
<td>312 000</td>
<td>346 843</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>2 377.00</td>
<td>29 241</td>
<td>102 543</td>
<td>144 500</td>
<td>176 118</td>
</tr>
<tr>
<td>13</td>
<td>3</td>
<td>2 442.50</td>
<td>12 822</td>
<td>120 550</td>
<td>160 000</td>
<td>176 264</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>2 363.50</td>
<td>21 416</td>
<td>143 839</td>
<td>300 500</td>
<td>344 280</td>
</tr>
<tr>
<td>15</td>
<td>4</td>
<td>3 193.50</td>
<td>33 603</td>
<td>151 051</td>
<td>360 000</td>
<td>396 796</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>4 284.00</td>
<td>24 857</td>
<td>158 899</td>
<td>384 000</td>
<td>413 141</td>
</tr>
<tr>
<td>17</td>
<td>4</td>
<td>4 698.00</td>
<td>27 973</td>
<td>181 278</td>
<td>429 000</td>
<td>461 671</td>
</tr>
<tr>
<td>18</td>
<td>5</td>
<td>7 041.00</td>
<td>81 633</td>
<td>204 041</td>
<td>628 500</td>
<td>718 174</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>984.00</td>
<td>7 917</td>
<td>32 310</td>
<td>92 000</td>
<td>100 901</td>
</tr>
<tr>
<td>20</td>
<td>3</td>
<td>4 267.00</td>
<td>60 263</td>
<td>147 210</td>
<td>286 000</td>
<td>350 530</td>
</tr>
<tr>
<td>21</td>
<td>4</td>
<td>2 278.00</td>
<td>140 295</td>
<td>75 614</td>
<td>148 500</td>
<td>291 073</td>
</tr>
</tbody>
</table>

**Total**
- 41 blocks
- 41 274.00
- 534 613
- 1666 706
- 3562 500
- 4138 387

**Less 4 sales**
- 4 blocks
- 3 913.00
- 45 610
- 160 308
- 301 000
- 350 523

**Total**
- 37 blocks
- 37 361.00
- 489 003
- 1506 398
- 3261 500
- 3787 864

The average price realised was $11.16 per ha ($4.52 per acre) unimproved and the average size of a block was 7 897 ha.


Name: Mr. B.G. Collins

Purchase Lease No. 9513, Rockhampton District.

Date of allotment: 29th May, 1963 Term commenced: 1st October, 1963

Advance for Purchasing Price - £13898.12.6
less deposit £100 - £13798.12.6

Debits under original terms of repayment

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Purchase Money</th>
<th>Interest at 5%</th>
<th>Interest at 5½%</th>
<th>Total Instalment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£ s. d.</td>
<td>£ s. d.</td>
<td>£ s. d.</td>
<td>£ s. d.</td>
</tr>
<tr>
<td>31.12.63</td>
<td>287 7 6</td>
<td>32 0 0</td>
<td></td>
<td>319 7 6</td>
</tr>
<tr>
<td>30.6.64</td>
<td>287 11 6</td>
<td>45 19 4</td>
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<td>333 10 10</td>
</tr>
<tr>
<td>31.12.64</td>
<td>287 9 6</td>
<td>71 5 0</td>
<td></td>
<td>358 14 6</td>
</tr>
<tr>
<td>30.6.65</td>
<td>287 9 6</td>
<td>79 9 8</td>
<td></td>
<td>366 19 2</td>
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<tr>
<td>31.12.65</td>
<td>287 9 6</td>
<td>78 0 1</td>
<td></td>
<td>365 9 7</td>
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TOTALS 1437 7 6 306 14 1 1744 1 7

Debits under new arrangements

<table>
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<tr>
<th>Due Date</th>
<th>Purchase Money</th>
<th>Interest at 5% (half)</th>
<th>Interest at 5½% (half)</th>
<th>Total Instalment</th>
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<tr>
<td></td>
<td>£ s. d.</td>
<td>£ s. d.</td>
<td>£ s. d.</td>
<td>£ s. d.</td>
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<tr>
<td>31.12.63</td>
<td>84 7 6</td>
<td>16 0 0</td>
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<td>84 7 6</td>
<td>22 19 8</td>
<td>107 7 2</td>
<td>22 19 8</td>
</tr>
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<td>31.12.64</td>
<td>84 7 6</td>
<td>35 12 6</td>
<td>120 0 0</td>
<td>35 12 6</td>
</tr>
<tr>
<td>30.6.65</td>
<td>84 7 6</td>
<td>39 14 10</td>
<td>124 2 4</td>
<td>39 14 10</td>
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<td>31.12.65</td>
<td>84 7 6</td>
<td>39 0 1</td>
<td>123 7 7</td>
<td>39 0 0</td>
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</table>

Total debits 421 17 6 153 7 1 575 4 7 153 7 0

Payments 1149 18 0 228 14 0 1378 12 0

Penalty credit

Amount due or Account in credit NO PAYMENT NECESSARY £803 7 5

Any amount due is payable on or before 31st December, 1965. Penalty for late payment of any instalment or interest is 5%.
Assets quoted on application for block, early 1971 $41,000
(house, cattle, vehicle etc) (asset required 36,000)

Assets realised (sale of land, valuation future cattle) Oct. 1971 $36,000

Liabilities (taken from taxation figures)
30/6/73 136,000
30/6/74 135,500
30/6/75 139,800 (6,500 L.P.G. containers)
30/6/76 141,400 (13,200 L.P.G. containers)
30/6/77 119,900 [Reduction in debt by year-
accounted for by sales of 700
cattle during the year, est. value $90]
30/6/78 127,700 (incl. home loan 13,800)
30/6/79 117,500

During the beef slump '74 we did not a
neglect our cattle or property, and did not withhold
cattle from sale. Our worst sale was of cows that
would have dressed 480 lbs. (DW) for $26 per head.
We continued to diph, obirch and inoculate cattle when
necessary. Rose and I did all the work and we
employed no labour. Luckily the seasons were very
good and allowed us to do the maximum with our
cattle. A drought like N.S.W. was known at that ti
would have been written a very different story.

From Phillis.

Supplementary information supplied by I.N. and R.
Phillis.
<table>
<thead>
<tr>
<th>Loan</th>
<th>Repayment</th>
<th>Rate</th>
<th>Interest of Repayment</th>
<th>Rate of Interest</th>
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<tr>
<td>L.A.C. Purchase Loan</td>
<td>30,000</td>
<td>20</td>
<td>1,500</td>
<td>-</td>
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<tr>
<td>L.A.C. Development Loan</td>
<td>70,000</td>
<td>20</td>
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<td>L.A.C. Arrears</td>
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<td>20</td>
<td>1,000</td>
<td>10.325%</td>
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<tr>
<td>C.D.B. Stock Loan</td>
<td>40,000</td>
<td>10</td>
<td>4,000</td>
<td>10%</td>
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<tr>
<td>C.D.B. Carry on Fin.</td>
<td>20,000</td>
<td>12</td>
<td>1,667</td>
<td>10.5%</td>
</tr>
<tr>
<td>C.D.B. Arrears</td>
<td>10,000</td>
<td>10</td>
<td>1,000</td>
<td>10%</td>
</tr>
<tr>
<td>Arrears, Sundry Creditors &amp; Pastoral Houses</td>
<td>10,000</td>
<td>10</td>
<td>1,000</td>
<td>10%</td>
</tr>
</tbody>
</table>

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<tr>
<th></th>
<th>Loan</th>
<th>Repayment</th>
<th>Rate</th>
<th>Interest of Repayment</th>
<th>Rate of Interest</th>
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</tbody>
</table>

This will give us an annual commitment resulting from loans of:

- Interest: 15,765
- Redemptions: 13,667
- Total: 29,432

If this average Area III brigalow property running 1,500 adult cattle was run on efficient and long term management techniques, I am afraid we would be making an annual loss of \( 15,406 \) when loan commitments were included. Just for a comparison, a property running 1,000 head would have an annual loss of \( 7,352 \) and a property with 2,000 head would have a loss of \( 3,457 \).

<table>
<thead>
<tr>
<th>Number of Cattle</th>
<th>1,000</th>
<th>1,500</th>
<th>2,000</th>
</tr>
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<tbody>
<tr>
<td>Costs</td>
<td>43,985</td>
<td>55,070</td>
<td>66,155</td>
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<tr>
<td>Returns</td>
<td>26,065</td>
<td>39,096</td>
<td>52,130</td>
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<tr>
<td>Loss</td>
<td>17,920</td>
<td>15,974</td>
<td>14,025</td>
</tr>
<tr>
<td>Redemptions</td>
<td>13,667</td>
<td>13,667</td>
<td>13,667</td>
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<tr>
<td>Interest</td>
<td>15,765</td>
<td>15,765</td>
<td>15,765</td>
</tr>
<tr>
<td>Total Loss</td>
<td>( 47,352 )</td>
<td>( 45,406 )</td>
<td>( 43,457 )</td>
</tr>
</tbody>
</table>

BRIGALOW SETTLERS: Oral History Interviews

AREA I

Barry Collins, Unumgar, Moura
Robin Spark, Wirranda, Moura
Louis and Elsie Elias, Yanina, Peguny

AREA IA

Colin J. Kehl, Kolane, Wandoan
Cowan W. Keys, Yurnga, Taroom

AREA II

W. David Kirk, Hilltop, Injune
Owen K. Benn, Mount Kingsley, Injune

AREA III

Clifford A. Greenup, Santa Fe, Marlborough
Clive Johnson, (formerly) Indicus, Clarke Creek
Ivan and Rosemary Phillis, Carlo Creek, Dingo
Philip G. Dowe, Eldebar, Dingo
ARCHER, ALISTER (1890-1965), pastoralist, born at Larvik, Norway, was the son of James Archer, the youngest of the nine brothers who became Australian pioneers. His mother was Louisa, daughter of Sir R.R. MacKenzie, Bart., one time Premier and first Treasurer of Queensland. Alister Archer was educated in Norway but at the age of eighteen came to Queensland and worked as a jackaroo on Torsdale Station. In 1910 he widened his experience in handling cattle by helping drive 200 stud cattle from Torsdale to Gilliat, North Queensland. He later worked as head stockman on a Gulf Country cattle station, Magouri.

In 1914 whilst visiting his parents in Norway, the outbreak of war prompted him to return to Australia to enlist in the Australian Infantry Forces (AIF). He served as an officer in the Imperial Camel Corps in the Middle East and later, when the Camel Corps was disbanded, in the Light Horse. He also served as aide-de-camp to Lieutenant General Sir Harry Chauvel, Commander of Anzac mounted troops.

On return from war service in 1919, Alister Archer married his cousin Joan (only daughter of Robert Stubbs Archer) and they had a daughter and two sons. He became secretary of the family company and manager of Gracemere Station. In 1932 he was made managing director of Archer Bros. During these two decades he represented Central Queensland in the UGA and was a member of both the Rockhampton Agricultural Society and the Royal National Association (Brisbane Exhibition). After the family company was liquidated in 1949, he and his wife bought Gracemere Station. He died in 1965 and was buried in the family graveyard at Gracemere. His two sons, Cedric and James, continue to breed cattle on Rockhampton's oldest pastoral property.

[Sources: Morning Bulletin, n.d. 1965 (news cutting); personal interview with Mrs Joan Archer, 19 April 1975; Archer Papers.]
ARCHER, ROBERT Stubbs (1858-1926), pastoralist and company
director, born 21 May 1858 at Croydon, Surrey, England, son
of David Archer and his wife Susan, née Stubbs. His father
was the eldest of the nine Archer brothers all of whom came
to Australia although none remained permanently. Robert
Archer was educated at Whitgift Grammar School. After working
in his father's firm of commission agents in London, he came
to Gracemere Station, Rockhampton, in 1880. He became
manager in 1881 and immediately began to improve the quality
of both Hereford and Shorthorn studs by importing well bred
cattle from the southern colonies. Archer experimented with
pasture improvement, irrigation and ensilage and the silo
which he designed in 1882 is said to have been the first in
Queensland. He pioneered cattle dipping for tick control in
Central Queensland and in 1898 was appointed by the government
to the Tick Commission to study methods to combat this menace
to the industry.

Archer was a director of Mount Morgan Gold Mining Co. Ltd.,
1896-1926, chairman of directors 1904-11, and managing
director and acting general manager in 1912. He was president
of the Rockhampton Agricultural Society, 1895-1903, 1905-26,
a trustee of Rockhampton Grammar School, 1899-1907, and
chairman of the Rockhampton Harbour Board, 1907-09, 1910-13,
1915-24.

During World War I, Robert Archer was prominent in forming
the Stockowners' Red Cross Fund and the Returned Men's Cattle
Committee. He personally wrote scores of letters to district
cattlemen persuading them to donate cattle to returned
soldiers settled on small blocks in the region. Archer
Bros. Ltd. gave pure bred bulls to local farmers' associations
to be used rotationally on the farms. He gave freely of his
time and talents to any cause which promoted the district or
assisted its people. He died in Rockhampton on 29 December
1926 and was buried in the family graveyard at Gracemere.
He had married Daisy Marion née Geh, of Toowoomba, in 1889
and their two sons and one daughter were all associated with
the pastoral industry.

Robert Archer's brothers, John and Edward, also contributed
substantially to the beef cattle industry in the Fitzroy
Region, John as manager of Torsdale and Scoria in the
Callide Valley and Edward as manager of the Fifteen Mile
and Coolibah. Edward was also chairman of the Port Curtis
Co-operative Dairy Co., 1904-07, and Member for Capricornia
1906-10, and for Normanby in the Queensland parliament 1914-15.
These three sons of David Archer continued the family
tradition begun by the original brothers in the 1850s, in
what was to become Central Queensland, of serving the wider
community as well as the pastoral industry.
BEAK, WILLIAM (c. 1878-1966), pastoralist, was the second son of Henry Beak, who took up Pennard, Mount Hedlow (near Rockhampton) in 1871. After primary schooling young William learned cattle husbandry from his father and in 1910 went to manage one of their newly acquired cattle stations, May Downs, in the Clermont district. Shortly after this he married Florence McKenzie of Calioran, daughter of another district pioneering family. They had four daughters. In 1905 the firm of Henry Beak & Sons had been formed, comprising Henry Senior and his sons Henry, William and Albert. This post-drought period provided a good opportunity to obtain leasehold stations for small sums of money. Apis Creek was also acquired about this time. Henry Beak & Sons was not dissolved until 1929. By the 1930s the three Beak brothers owned The Meadows and Broadmeadows on the marine plains near Rockhampton, also Lovandee, Charon's Ferry, Apis Creek, Yatton, Clive and May Downs. William Beak lived at The Meadows after coming down from May Downs, but about 1931 this property was sold to the CQME Co. at Lakes Creek (then owned by William Angliss).

As indicated in Chapter I, it was in 1913 that William Beak first saw the two 'freak' bulls at Waverley which led eventually to the formation of the Australian Polled Hereford Breeders Association in Rockhampton in 1922. In 1932 he was elected patron of the Society (then the Australian Poll Hereford Society), a position he retained for about thirty years. Some of William Beak's ideas on cattle breeding were decidedly eccentric; his self-published booklet, *The Key to Divine Designs and their guidance for the Improvement of Beef Quality*, has this dedication:

**Dedication to Divine Designs**

God's perfect provision for improving Beef quality and crowned with His endowment to mankind of capacity to comprehend them, and gather a mental harvest of a value beyond calculation.

As well as his interest in and contribution to the beef cattle industry, William Beak was a public spirited man who served as Chairman of the Livingstone Shire Council and on the Rockhampton Hospital Board and the Rockhampton Harbour Board. Three generations of the Beak family have served as councillors and chairmen of Livingstone Shire. William Beak died in Rockhampton on 5 June 1966.
It was another branch of the Beak family, the sons of Montague Beak, Henry Senior's brother, who brought the first Zebu-cross cattle to the Fitzroy Region.


BEARDMORE, OWEN CHARLES JOSEPH (c. 1827-1910), pastoralist, was born in Surrey, England, about 1827. He migrated to Canada while a youth and worked for the Hudson Bay Company. He later returned to England before migrating to Australia in 1853. He obtained a position with the government of New South Wales as a Clerk of Petty Sessions and an appraiser of stations. In 1868 Owen Beardmore and his nephews received a legacy of £5,000 ($10,000) from English relatives and they bought Toooolombah Station. As indicated in Chapter III, Owen Beardmore became the sole owner in 1871 and later bought Booroondara also. He sold Toooolombah in 1907 for £20,000 ($40,000), considered an excellent price at the time.

Beardmore was an original member of the Broadsound Divisional Board established in 1880. His service through local government was almost continuous until 1907 and he was Chairman of Broadsound Shire Council on two occasions. Scant contemporary references suggest that he was careful with his money and, if the local bard of the 1890s can be believed, he was 'a dour man' with stern countenance:

Old "Toooolombah" too was on the job, a brigant stout and brave,  
He matched his part with just one fault, his visage seemed too grave.

His obituary in the Brisbane Telegraph refers to his being 'generally admired for his strong opinions and his ability to give expression to them and frequently contribute to various newspapers on pastoral matters'.

Beardmore's first marriage was to Margaret Ann Lynch. A daughter of this marriage died at the age of forty-five in 1895, three years before her mother's death at the age of ninety. They are buried about one kilometre apart on Toooolombah Station. Beardmore's second marriage was to
Isabel Corser of Maryborough, Queensland. After selling Tooloombah he retired to Brisbane and died on 22 November 1910, aged eighty-three. He was buried in Toowong Cemetery.

[Sources: Thomas Hatfield, 'The Broadsound Pantomime', quoted in The Broadsound Story, p. 200; The Telegraph, 23 November 1910; Capricornian, 3 December 1910.]

*************************************************************************

DE LANDELLES, LIONEL (1916- ), born 13 June 1916, tenth and youngest child of Alfonzo St Clair De Landelles and his wife, Ellen Stella Douglas Fawcett, née Dudgeon. Raised on a district cattle property, De Landelles became a jackaroo on Calliope Station where he learned 'all he knows' about the structure of cattle breeding. He then worked for Colin Wright on Waverley Station, an admitted influence relative to De Landelles' later breeding of Bos indicus cattle. De Landelles' first cattle property was in the Marlborough district where 'the only cattle alive after the 1946 drought were cross-bred Brahmans'. He first bred Brangus because they were commercially viable cattle and he was responsible for forming the Brangus Breeders Association. He later helped form other breed societies, including the Droughtmaster and Braford.

After buying and selling 'a few properties', De Landelles repurchased Canomie (which had formerly belonged to his family) and began breeding pure bred Brahmans on his Cherokee Stud. He became known locally as 'Mr Brahman' and generally as 'the Hudgins of Australia'. De Landelles is proud that about 80 per cent of all stud Bos indicus or Taurindicus fixed breeds in Australia carry Cherokee blood. His influence on the northern beef cattle industry has been recognised by honorary life membership of the Droughtmaster Stud Breeders Society. Financially successful, De Landelles and his wife live at their Glenora Historical Complex, established on a hill top on Canomie which overlooks Keppel Bay.

[Sources: De Landelles family bible; personal interview with Lionel De Landelles, 16 August 1983.]

*************************************************************************

KELLEY, RALPH BODKIN (1890-1970), veterinary scientist and geneticist, was born in Melbourne in 1890 and educated at Caulfield Grammar School and the University of Melbourne, where he graduated in Veterinary Science in 1914. He received his doctorate in 1937. After four and a half years in the AIF in the First World War and several veterinary
appointments, he joined the CSIR as Animal Geneticist in 1931. As detailed in Chapter II, he selected and brought to Australia in 1933 the initial importation of nineteen head of *Bos indicus* cattle for breeding experiments within the tropics. It was on his recommendation that the later imports selected by him in 1952 were brought to Central Queensland; these included the foundation Africander stock for the CSIRO National Cattle Breeding Station at Belmont near Rockhampton.

During much of his career in the CSIRO, Dr Kelley was Officer-in-Charge of the McMaster Field Station, Badgery's Creek, New South Wales. This work involved sheep breeding and the breeding and training of sheep dogs, but he also supervised genetic work at other research centres.

Kelley retired from the CSIRO early in 1954. At this time he was one of four partners in Tropical Cattle Pty. Ltd. which had properties in the Ingham district. He resigned from this in 1955 to undertake work in Malaya connected with the Colombo Plan. He was then employed by the Singapore government and later became a lecturer at the University of Kuala Lumpur. He was the author of many scientific papers and three books. According to A.J. Vasey: 'Few research workers have left so complete an account of their work in popular form as Kelley did' in *Native and Adapted Cattle*, which was published in Sydney in 1959.

In fulfilling Gilruth's plan to introduce environmentally adapted cattle to the tropics, and in further implementing the scheme in the 1950s, Kelley contributed significantly to 'the greatest livestock revolution in history'. His son recalls that at the height of the industry controversy on cross breeding, Kelley maintained that 'half the cattlemen want to knight me, the other half to knife me'. R.B. Kelley died in Brisbane on 13 February 1970 at the age of seventy-nine. He was survived by his wife and one son.

[Sources: Obituary notes prepared by A.J. Vasey, 14 February 1970; personal interview with Brian Kelley (son), 25 September 1985.]

***************

Wilson purchased Calliope Station in 1905 in partnership with P.J.C. McDouall, whose daughter Jessie he married soon afterwards. Wilson and McDouall later bought Calliungal, Rannes and Balcomba stations. Balcomba, on the Mackenzie River, was formerly owned by Frank Beardmore and was 209 square miles in area. In the 1930s Calliope and associated stations ran 45,000 head of cattle and employed 200 men.

Calliope Hereford Stud was founded in 1919 and the Poll Hereford Stud in 1936. J.L. Wilson was a councillor of both breed societies. He served for 27 years on the executive of the United Graziers Association and was chairman of the Cattle Committee for many years. He and Edward Archer were responsible for the formation of the Central Coastal Graziers Association in 1936. Wilson was chairman of directors of the Port Curtis Co-operative Dairy Association Ltd. and was largely responsible for its expansion to seven butter factories in Central Queensland in the years between the two world wars. In 1925 he led a band of primary producers which broke a waterside workers' strike in Gladstone. He was a member of the Gladstone Harbour Board from its inception in 1914 until 1942, was a Calliope Shire Councillor for over twenty years and president of the Gladstone Show Society. As a member of the Royal National Association for 26 years, and president from 1948-51, he initiated many reforms relative to the showing of beef cattle. His contribution to the pastoral industry was recognised in 1955 when he was made a Commander of the British Empire. He died in Toowoomba in 1956, leaving one son and three daughters.

[Sources: 'James Lockie Wilson,, Cattle Authority', Calliope Herefords, c. 1969.]

***************

WILSON, RICHARD STRUTH, O.B.E. (1914- ), pastoralist, born 10 March 1914. He is a son of James Lockie Wilson and his wife Jessie, née McDouall, and was educated at The Armidale School. He returned to Calliope Station and eventually took over the stud founded by his father and the large commercial Hereford herd running on Calliope, Balcomba, Calliungal and Torsdale stations. R.S. Wilson was the first to hold on-property bull sales, commencing in 1948. They have been held annually ever since. In the post World War II period, Wilson decided against Bos indicus cattle and instead set about improving the pastures to suit Hereford cattle.

R.S. Wilson's involvement in the cattle industry includes the following influential positions: council member, Australian Hereford Society 1948-83, president 1961-64 and treasurer 1964-83; he was chairman of the fifth World Hereford Conference held in Sydney in 1968. He also served
on the council of the Australian Poll Hereford Society for twenty years, holding office both as president and treasurer; he was president of the Central Coastal Graziers Association 1953-63 and vice-president 1964-67. Like his father, he played a dominant role in the UGA executive and also the Cattle Committee which he chaired from 1960. He was founding president of the Australian National Cattlemen's Council which was later disbanded to form the National Farmers' Federation and Cattle Council of Australia. He is a trustee of the UGA and also the Capricornia Graziers Association (CGA), and a member of the Australian Meat Board selection committee. In 1960 he became a member of the Australian Cattle and Beef Research Committee, a position he held until his retirement in 1981. He was also a member of the Belmont Technical Committee (CSIRO) and Belmont/Brian Pastures Research Committee until retirement in 1983. He also served on the CSIRO State Committee and was chairman 1959-63. In private enterprise he was a director of Primaries and after its amalgamation with Mactaggart's was chairman of directors of Primac Holdings until 1983.

Richard Struth Wilson and his wife Barbara, née Coe, have three children. Mrs Wilson holds a Bachelor of Science degree. R.S. Wilson now lives in semi-retirement at Calliope Station which is managed by his son Rodney.

[Sources: Notes supplied by R.W.L. Wilson of Banana Station; personal interview with R.S. Wilson, 30 August 1985.]

WILSON, RICHARD WALTER LOCKIE (1944- ), pastoralist, born 8 July 1944 and raised at Calliope Station. He was educated at The Southport School. After his marriage in 1970 to Elizabeth Mann, B.Sc. (daughter of Sir Alan and Lady Mann, then Chief Justice of Papua New Guinea) they moved to Banana Station. They have three children.

As already indicated in Chapter II, Richard Wilson has broken with family tradition in abandoning the Hereford breed. He has developed a Brahman-cross herd of about 5,500 environmentally adapted beef cattle. Of these, about 3,000 are involved in various research trials conducted by the CSIRO, QDPI, University of Queensland and Gatton College. As well, he is currently developing and improving the 65,000 hectares in the combined properties of Banana, Rannes and Redcliffe stations.
Like his father and grandfather, Richard Wilson's contribution to the wider industry is formidable. He has been a show judge, including the Sydney Royal Show in 1980; he was the foundation chairman of the Central Queensland Hereford Association, chairman of the Cattle Committee of the Rockhampton Agricultural Association when it was the largest trade cattle show in Australia; chairman, CSIRO Division of Crops and Pastures, Narayan Advisory Committee; chairman, CSIRO Division of Tropical Animal Science Advisory Committee; member, Industry and Commerce Commission responsible for apprenticeship training in Queensland; board member, Emerald Pastoral College; treasurer, Capricornia Graziers Association; member, UGA Executive Committee and Cattle Committee; chairman, Central Queensland Beef Production Liaison Committee.

Within the Fitzroy Region, Richard Wilson is a trail blazer in selling bulls at his annual Banana Bull Sales which have no breed name. He sees no need to identify 'a parcel of genes'.

[Sources: Personal interview with R.W.L. Wilson, 25 August 1983; notes supplied by R.W.L. Wilson, 1984.]

WRIGHT, COLIN WILLIAM (c. 1867-1952), pastoralist, born at Oxley, Queensland, educated locally and spent his early life on his father's dairy farm. After making money as a cattle dealer at Kilcoy, he purchased Jellinbah Station on the Mackenzie River and commenced his career as a cattle breeder. In 1911 he sold Jellinbah and purchased a sheep property near Hughenden which he sold a year later. After a world tour he purchased Waverley Station in 1914; it then comprised 50,000 acres (20,234 ha.). Later land acquisitions brought its size to 150,000 acres (60,703 ha.) and its carrying capacity to 10,000 cattle. His involvement with the experimental breeding of Bos indicus-Bos taurus cross cattle in the 1930s has already been referred to in Chapter II. Wright never regretted this decision and in 1950 was one of those who imported a superior strain of American Brahman cattle. He was a person of authority within the cattle industry and his action in the early 1950s helped influence others to change breeds.

Wright was a member of Broadsound Shire Council for 23 years and chairman for three terms; he was a life member of the Rockhampton Agricultural Society. He was a generous benefactor of charitable causes including Legacy, patriotic funds, hospitals, ambulance and the Salvation Army. During the First World War he donated an aeroplane to the Australian Government for service use.
Colin Wright died at Waverley Station, St Lawrence, on 19 December 1952, aged eighty-five years. He had never married. His name lives on in the Colin Wright Laboratory, University of Queensland School of Veterinary Science, which was officially opened on 5 July 1963.

[Sources: Queensland Country Life, 24 December 1952; John Francis, Notes on Colin Wright, MS; personal interview with Lionel De Landelles, 16 August 1983.]
APPENDIX VIII
Published works by Lorna McDonald with relevance to Central Queensland history.

Rockhampton: A History of City and District (St Lucia, University of Queensland Press, 1981).

Sketches of Old Rockhampton (St Lucia, University of Queensland Press, 1981). Text only.

Henry Arthur Kellow 1881-1955 (Townsville, Foundation for Australia Literary Studies, James Cook University, 1981). Kellow was a noted headmaster of Rockhampton Grammar School.


Biographical articles (ten) for the Australian Dictionary of Biography.

Articles in Australian Literary Studies (October 1973); Queensland Heritage (May 1979); Journal of the Royal Australian Historical Society (October 1984), co-author, David Carment.
Sources listed were either used directly in acknowledged textual references, in Appendices, or as background reading during preparation of the thesis.

I. MANUSCRIPT SOURCES

1. Private

ARCHER PAPERS:


——— Inward Correspondence, 1858-90; 1896-1922.

——— Copy of Tenders for Runs on the Fitzroy, March 1854.

——— Correspondence, Consolidation of Runs, 1868.

——— Memorandum of Assessment for Renewed Leases, 1867.

Archers Bros. Ltd. Minute Books, 1907-30; 1930-49.

——— Annual Reports [Selected Years], 1919-39.


——— Family Letters and Papers, 1862-1904 [Selected Years].


Archers, James. Diary, February-May 1871.

Archers, Robert. Diary, January-September 1881; January-February 1898.


——— History of Gracemere Stud, 1925.

[Mitchell Library has a separate Catalogue of Archer Papers.]
BIRKBECK PAPERS:

Birkbeck, Samuel. Outward Correspondence, 1862-67.
Business Correspondence, Inward, 1862-67.
Balance Sheets, 1862-66.
Analysis of Accounts, 1862-66.

[Fisher Library, University of Sydney. Some copies, CIAE Library.]

KING PAPERS:


MAC DONALD PAPERS:

MacDonald, Peter Fitzallan. Diaries, 1858-59; 1860; 1862. RML.
Letter Books, 1861-63; 1876-77; 1878-81; 1881-94; 1901-02; 1909-13. RML.

MINUTE BOOKS - Pastoral Organisations:

Central Queensland Graziers and Farmers Society, 1876-77. RDHS.
Central Queensland Graziers Association, 1949-56. JOL.
Pitzroy Pastoral, Agricultural and Horticultural Society, 1878-90. JOL.
Rockhampton Agricultural Society, 1891-93; 1926-29. JOL.
United Graziers Association, 1939-31. UGA, Brisbane.

STATION PAPERS - Miscellaneous:

Broome, William. Journal, 1873-77. RDHS.
Cracow Station Diaries, 1887-92. JOL.
Creed, Thomas. Diaries, 1860-69; 1879; 1883. JOL.

Letters, 1872-77. Privately held.

Hobler, Francis. Pedigrees, 100 cows and heifers, 1890. Archer Papers.


Letter Book No. 19, March-August 1882.

Selected Letters, 1886. Privately held.


Raglan Station Papers. David Wilson, Diary, 1873.

Raglan Journal, 1897-1901.

MacDonald, John Murray, Agreements re Cattle Sales, 12 February 1920; 8 March 1920.

1911. CIAE.

MacDonald, John Murray, Diary, 1911. CIAE.

Shannon Papers. Diaries, 1879; 1883-99; 1905-15. JOL.

Tyson Papers. Diaries, 1869-98. JOL.

Waverley Station. Account Book, 1938-39. JOL.


2. Official

Correspondence, re Army Contracts, 1902. PRE/50.

re Imperial Meat Act of 1914. CRS/328.

QSA.

Crown Lands Registers.

Leichhardt District. Runs Register, 1848-68. CLO/13.

Runs Register [original lessees], April 1855-June 1860. CLO/N2.

Runs Register. CLO/14.

Port Curtis District. Runs Register, 1848-68. CLO/13.

_________________________________________ Runs Register [original lessees], CLO/N1. QSA.

Rockhampton Land Court. Minute Book, 1868-75. RDHS.

_________________________________________ Land Application Book, 1868-72.

CIAE.

II. UNPUBLISHED PAPERS

1. Semi-Official


_________________________________________ Correspondence, Collins to LAC, June 1963-November 1970.

_________________________________________ Miscellaneous material: Comparison Reports, Statements of Accounts, Plans for Aerial Spraying, Other Correspondence, Permits, Telegrams, 1963-76. Privately held.


— Gilruth, J.A. Confidential Report to Executive Committee, CSIR, on proposed establishment of Laboratory, Queensland. 1930.

— Kelley, R.B. Provisional Report upon visit to America to purchase Brahman Cattle. July 1933.


— Establishment of Humped Cattle in Australia, n.d.

Papers re Agreement between CSIR and property owners, experiment cross-breeding, 1933; Beef Cattle Research 1948-51; Northern Property Breeding Research Technical Committee, 1951.


These papers are held by CSIRO Archives, Canberra. Original Progress Reports (Kelley), tape transcriptions and copies of some papers are in the CSIRO Tropical Research Centre, Rockhampton. The ABBA Library and the CIAE Library (both in Rockhampton) also hold copies of some CSIRO papers.


Department of Primary Industries. The Fitzroy Basin Land Development Scheme. QDPI, September 1968.

Lloyd, P.L. Agricultural and Pastoral Land Use in the Brigalow Belt of Queensland. c. 1981. QDPI.

United Graziers Association. Minutes, Cattle Committee, 19 November 1930; 18 February 1931; 10 June 1931; 25 November 1931. UGA, Brisbane.

2. General


The Story of Zebu, Brahman and Taurindicus Cattle in Australia, April 1983. Copy supplied by author.


Plumb, Charles S. Types and Breeds of Farm Animals. n.d. CSIRO Archives, Canberra.

Ransom, Frederick M. History of the United Graziers Association of Queensland From 1890. Written 1932-33.


---------- The Beef Cattle Boom. n.d. RDHS Paper.


Wilson, R.W. and Rudder, T.H. Factors Influencing Adoption of Technological Innovations for Breeding Beef Cattle in Central Queensland. Rockhampton, 1982. QDPI.


3. Theses and Dissertations


III. PUBLISHED SOURCES

1. Parliamentary Papers


2. Semi-Official

i. Departmental Booklets, Industry Handbooks and Reports


Droughtmaster Stud Breeders' Society. The Droughtmaster, Australia's Foremost Tropical Breed. n.p.d.


Queensland Cabinet Committee. A Report on 2,4-D 2,4,5-T and Human Health. 9 June 1981.


ii. Reports, Submissions, Departmental Bulletins

[Source material in this section is basically typescript, multiple copy and lightly bound, for limited distribution. It is available only through the department or institution which produced it. Because it is not conventionally printed, titles are not italicised.]


Cattlemen's Union of Australia. 'Submission to the Prices Justification Tribunal'. Rockhampton, March 1978.


Packham, Angus. 'Cattle Breeding Research at Rockhampton'. CSIRO, January 1980.
Queensland Department of Primary Industries. 'Field Day Notes, Tartrus'. 29 June 1971.


United Graziers' Association of Queensland. 'Submission to the Committee of Inquiry into Matters Concerning the Development of the Livestock and Meat Industry'. Brisbane, April 1964.


3. Journal Articles


Halnan, C.R.E. and Francis, J. 'Bos taurus Y chromosome of Africander Cattle and the development of imported breeds for the tropics', The Veterinary Record, January 1976.


4. Newspapers and Periodicals


*Morning Bulletin*, 1873-1875; 1930-1940.

*Capricornian*, 1875-1929.


*Northern Argus*, 1866-1870.
[Bulletin, Capricornian and Northern Argus on microfilm, CIAE Library; Observer at Gladstone.]

Hereford in Australia, Vol. 5, 31 August 1929.


5. Books


Barker, H.M. Droving Days. Melbourne, Pitman, 1966. Depicts an important sector of the industry prior to World War II.


Collier, James. *The Pastoral Age in Australasia.* London, Whitcombe & Tombs, 1911. Includes an early tribute to the Archer family for their part in establishing the northern industry.


Kelley, R.B. *Native and Adapted Cattle in Australia.* Sydney, Angus and Robertson, 1959. This is probably the most significant of all Kelley's publications as he was then able to assess and describe the results of his genetic research.

---

Zebu (Brahman) Cross Cattle and their possibilities in North Australia. Melbourne, CSIR, 1932. An early work of great significance to the industry.

---


Macartney, J.A. *Rockhampton Fifty Years Ago: Reminiscences of a Pioneer.* Rockhampton, Capricornian, 1909. Macartney was the pioneer cattleman of the Broadsound area, Waverley Station.


---


Satge, Oscar de. *Pages from the Journal of a Queensland Squatter*. London, Hirst, 1901. de Satge was a pioneer squatter on the Peak Downs (Fitzroy Region).


Wright, Judith. *The Cry for the Dead*. Melbourne, Oxford University Press, 1981. Albert Wright was a Dawson River cattleman who struggled for economic survival in the 1880s.


IV. ORAL HISTORY SOURCES

1. **Brigalow Scheme Survey: Tape Recordings**

   Benn, O.K., Mt. Kingsley, Injune. 11 April 1984.
   Elias, L. and E., Yanina, Moura. 12 April 1984.
   Greenup, C., Santa Fe, Marlborough. 31 May 1984.
   Johnson, C., Indicus, Clarke Creek. 8 March 1984.
   Keys, C., Yurnga, Taroom. 9 April 1984.
   Spark, R., Wirranda, Moura. 12 April 1984.

   [Voice tapes held by L. McDonald, Rockhampton, were obtained for research purposes only.]
2. Personal Interviews


Brown, C., Faculty of Agriculture, University of Queensland. 21 July 1983.

Coombe, K., Manager, Waverley Station, St Lawrence and Pastoral Inspector, Stanbroke Pastoral Co. 30 May 1984.

Croker, J., Secretary, ABBA, Rockhampton. 26 May 1982.


Francis, J., Department of Veterinary Pathology and Public Health, University of Queensland. 19 July 1983.

Gates, B., Lecturer in Economics, CIAE, Rockhampton. 7 December 1983.

Granville, W., Manager, CQME Co. Ltd., Lakes Creek, Rockhampton. 7 June 1984.

Hinksman, W., AMLC, Brisbane. 13 July 1982.

Hutton, F., formerly Bingegang Station, Dingo. 23 March 1977.

McCamley, B., Retired Cattleman, Rockhampton. 27 May 1976.

McIntyre, R., Secretary, Capricornia Graziers Association, Rockhampton. 10 August 1983.


Priem, P., Manager, Rockhampton District Saleyards Board, Gracemere. 29 March 1984.

Purvis, W., Retired Cattleman, Clermont. 8 December 1976.


Smith, Mrs A., Manager's Wife, Tooooloombah Station, St Lawrence. 30 May 1984.
Stewart, G., Lecturer, School of Business, CIAE, Rockhampton. 7 April 1983.


Wilson, R.S., Calliope Station, Calliope. 30 August 1985.

Wilson, R.W.L., Banana Station, Banana. 25 August 1983.