

Belmonts



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Belmont Australia

PO Box 990

ARMIDALE NSW 2350

t: 02 6772 7720

f: 02 6772 9599

e: belmonts@bigpond.com.au

w: www.belmontred.com.au

Origins and History

Over time, natural and artificial selection pressures have resulted in different attributes being fixed in the older established cattle breeds. Thus Brahmans and Africanders (tropically adapted native breeds) are renowned for their heat tolerance and tick resistance, British breeds for their fertility and carcass traits, and the European breeds for their large size, lean carcasses and high growth rate. Conversely breed types also have production weaknesses, eg Brahmans have low fertility and less acceptable meat quality, British and European breeds have low tolerance to environmental stresses, such as high ambient temperatures, poor nutrition and high parasite burdens.

In Northern Australia, attempts to blend the various production and adaptive traits of the established breeds have resulted in the formation of Composite breeds from crosses between Adapted Tropical breeds and British and European breeds. In Australia the majority of Composite breeds have evolved from crossing the Brahman with temperate breeds, eg Droughtmaster (Brahman x Shorthorn), Brangus (Brahman x Angus), Braford (Brahman x Hereford), Charbray (Brahman x Charolaise) etc. and the Santa Gertrudis (Brahman x Shorthorn) in USA.

To increase productivity of the Northern herds, fertility needed to be increased. Improving fertility through selection is difficult and slow. Using the Africander Cross (Belmont) to increase the fertility of the predominantly Brahman infused Northern herds was considered to be a rapid and efficient means of improving production. Therefore the Belmont was released to the Industry in 1968. Three decades later this decision has been vindicated by CRC economic modelling, showing that African based composites such as the Belmont produce \$24 per head more profit than a systematic rotational crossbreeding programme using Brahmans.

The Belmont evolved as a result of crossbreeding experiments commenced at the National Cattle Breeding Station, 'Belmont' Rockhampton in 1954. The primary purpose of the Research programme was to evaluate the role of the Africander and Brahman breeds for beef production in Northern Australia. Imported Africander (A) and Brahman (B) bulls and Australian Hereford (H) and Polled Shorthorn (S) bulls were mated at random to Hereford and Polled Shorthorn cows. These matings produced essentially three distinct genetic lines of cattle based on the genetic differences between the sire breeds. From the outset of the Research programme at "Belmont", the high fertility of the Belmont (Africander Cross) distinguished it from the Brahman cross line and the British breeds.

Breed Society Regulations.

At its inception the objective for the Belmont was to blend an average of the genes from the Africander and from the British. Adaptive traits such as easy calving, parasite resistance, disease resistance, heat tolerance and hardiness, as well as meat quality traits and fertility were inherited from the Africander. Productive traits, such as fertility and growth, as well as carcass and meat quality were also inherited from the British. Genetically the Africander component distinguishes the Belmont from other Composite breeds based on the Brahman such as Santa Gertrudis, Droughtmaster, Brangus, Charbray and Braford.

The range and combinations of established breeds included in the Belmont provided it with all the desirable traits of the British, European and other Tropical breeds. The herd book remains open and grading up to pure Belmont can simply be accomplished in three back crosses. The Belmont can therefore be established by simply grading up from any base cow herd through three generations of mating to registered Belmont bulls, the fourth crop being registrable as pure Belmonts. This allows the Belmont Breeders to tap into a broad genetic pool and retain desirable gene combinations from the parent breeds. With the correct selection programmes, the productive desirable gene combinations can be accumulated and fixed.

In Australia the Belmont is the only Composite breed that has been developed from crossing the Africander breed with British breeds. The Africander genetic component makes the Belmont uniquely different from the Brahman composites. Belmonts are a tropically adapted *Bos Taurus*.

The Belmont Breed Society has based its standards on productive and adaptive traits that can be objectively measured and are known to be heritable. Selection is therefore based on accurate measurements of traits that are heritable and economically important in terms of beef production. Any Belmont animal must therefore be reared in a herd which has adopted a system of performance recording that has been approved by Council, such as Breedplan.

Traits of importance are:

- (a) **Performance:** (growth, fertility, carcass yield, meat quality),
- (b) **Adaptive:** (parasite and disease resistance, ease of calving, heat and drought tolerance),
- (c) **Managerial:** (temperament, polled), and
- (d) **Structural:** (soundness).

Although the colour is predominantly red, selection for this, or other aesthetic traits are generally not considered important. The Belmont is about a philosophy of breeding highly productive, easy care cattle, that are adapted to their environment. In this respect the Belmont differs significantly from ALL other breeds.

The Belmont Breed Society regulations specify the following breed (genetic) content:

- (1) African Sanga breeds (Africander or similar) - max. 1/2, min 1/4.
- (2) Temperate breeds (British or European) - max. 1/2, min. 1/2.
- (3) Indicus breeds (Brahman or similar) - max 1/4.



Evaluation

The Belmont has undergone extensive scientific and commercial objective comparative evaluations against many breeds in a wide range of environments, both domestically and overseas. Comparisons were based on reproduction, growth, carcass and meat characteristics, environmental adaptation and survival. At the National Cattle Breeding Station "Belmont", from which it derives its name, the Belmont has been comprehensively scientifically evaluated over three decades, in comparison to Brahman Cross (representing Brahman Infused Breeds) and British cross (representing the British Temperate breeds). The results have been extensively documented in Scientific Journals and popular publications. It has also been extensively evaluated under commercial management over a wide range of environments in comparison to a number of Tropical and Temperate breeds. All the information presented has been summarised from documented research and commercial trials.

Cattle production under grazing conditions is affected by environmental stress factors such as level (quality) of nutrition, temperature and humidity, and parasite burdens. These stresses vary across regions. Under certain circumstances stresses can be ameliorated by management practices. Supplementary feeding can alleviate the effects of poor nutrition, and dipping and drenching can reduce the effects of high parasite burdens. Other stressors such as high temperatures and humidity cannot be reduced. However, what is certain, is that reducing environmental stress is always costly and in many circumstances cannot be economically or environmentally sustained eg. tick control.

The main evaluation locations and environments in which Belmonts were evaluated are summarized below:

i. "Belmont" (Research):

Environment: Coastal Tropical; High summer temperatures and humidity; cool dry winters; Native pastures moderate to poor nutrition, high parasite burdens.

Management: No supplementary feed, No dipping or drenching.

ii. "Narayen" (Research):

Environment: Sub-tropical sub-coastal; High summer temperatures; cold dry winters; Improved and Native pastures, nutrition - moderate to good; parasite burdens - moderate.

Management - tick control through dipping.

iii. "Brigalow" (Research):

Environment and Management: Similar to "Narayen", pastures predominantly improved.

iv. "Mt Eugene" (Commercial):

Environment and Management: Similar to "Brigalow" except all native pastures (Spear grass) and dipping not as effective as under research management.

v. "CRC (co-operative research centre) for Meat Quality": (Research and Commercial Nationally).

vi. "Animal and Dairy Research Institute" Republic of South Africa: (Research and Commercial) Four diverse environments ranging from:

- a. High Mountain Country (1500m altitude); winter snow, cool summers.
- b. High Veld (1000m + altitude); Cold dry winters, hot to moderate summers.
- c. Low Veld; Mild dry Winters, Hot humid Summers. High tick burdens.
- d. Arid semi Desert; Cold winters, hot summers.

Under South African Management tick control is very important and all herds are regularly dipped.

Reproduction

a. Breeding Herd

i. Pregnancy, Calving & Weaning rates

Figure 1. Calving % (Belmont)

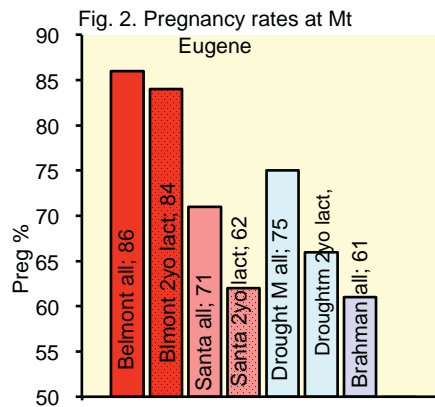
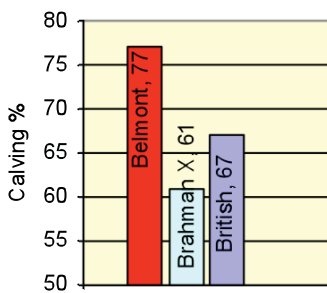
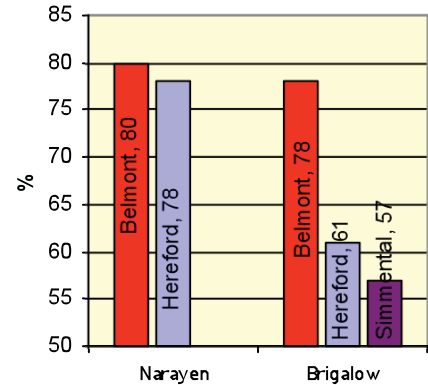


Figure 3. Calving (Narayen); Wean (Brigalow)



“Belmont” Fig. 1 shows that Belmonts were significantly more fertile than Brahman-cross and British Breed crosses. The differences in fertility between Belmonts and Brahman-cross were due to lower fertility in both the Brahman-cross females and bulls.

“Mt Eugene” Fig.2 illustrates the Pregnancy rates of daughters from Belmont, Santa Gertrudis, Droughtmaster and Brahman bulls, out of Brahman Cross dams. Belmonts were significantly more fertile than all the other breeds. Also the higher the Brahman content of the cows, the lower the fertility. It was also found that although pre-joining live weights were similar for all breeds, the largest advantage in fertility in favour of the Belmont occurred in the 2 yo lactating heifers, and that they conceived earlier than the other breeds, especially the Brahman.

“Narayen and Brigalow” Fig. 3 shows that even in the benign environment (“Narayen”), calving rates of Belmonts, were higher than Herefords. In a similar environment at “Brigalow”, weaning rates of Belmonts were much higher than those of Herefords and Simmentals. The lower weaning rates of the Herefords and Simmentals mainly reflected high pre-weaning calf losses in these breeds.

ii. Inter Calving Interval

“South Africa” The Inter Calving Interval of Belmonts were significantly shorter (14 days) than those of Bonsmara’s. The two breeds were essentially identical for all other measured production traits.

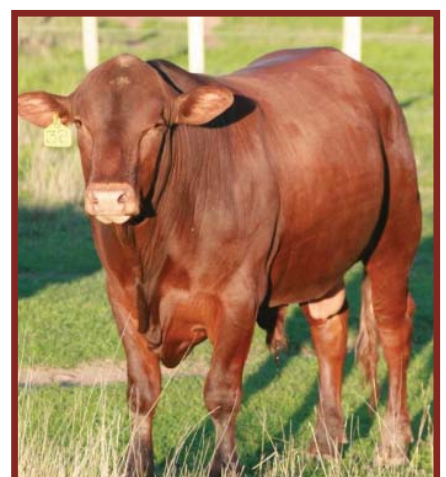
b. Bull Fertility

i. Semen Quality

“Belmont” Belmont bulls had a higher percentage live sperm (79%) and less minor abnormalities (9%), than Brahman Composites (71%) and (13%). In addition more Brahman Composite bulls than Belmont bulls produced sperm with less than 60% live sperm. A level of 60% live sperm has been suggested as the minimum acceptable level for normal bull semen.

ii. Testicle size and shape

“Belmont” At weaning (6mths of age and weighing 156kg) testicles of castrated culled bull calves of Belmonts were 41% heavier, 16% larger in diameter and 13% longer than those of the Brahman Composite. The ratio of length to width indicated that the Brahman-cross had very elongated testicles compared to Belmonts.



c. Conclusions on Reproduction

In stressful environments Belmonts have had higher reproductive rates than the Temperate breeds and represent a viable economic solution for improving fertility in these areas. Fertility traits are lowly heritable and difficult to select for. Therefore in any Breeding Program genetic progress selection to improve reproduction will be slow. In harsh environments using an adaptable breed which excels in both female and male fertility, such as the Belmont, therefore has a large economic benefit.

Growth

a. Weights & Gains

i. Birth Weight

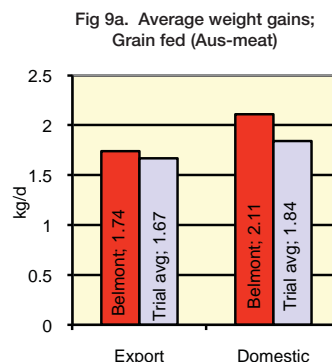
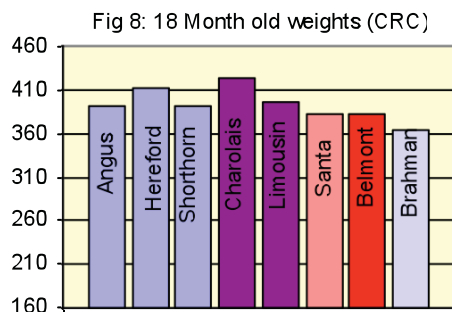
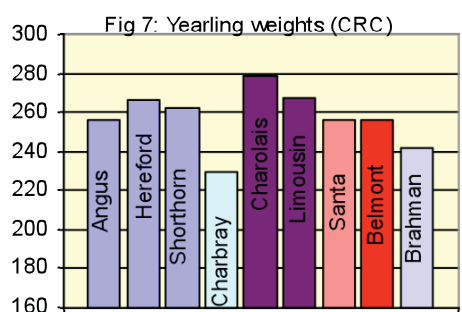
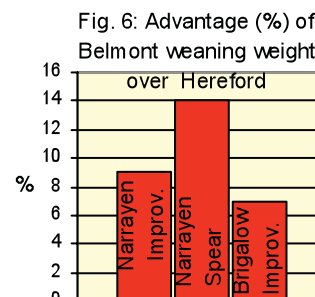
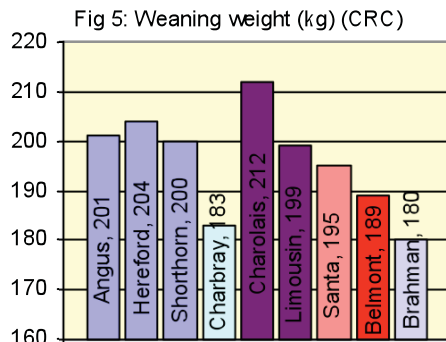
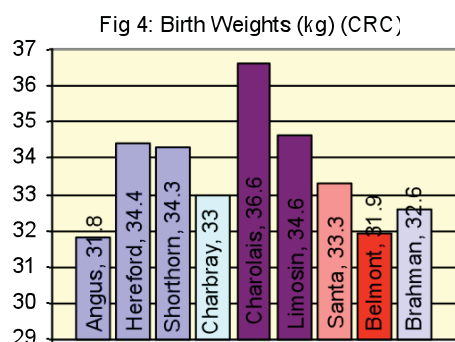
“CRC” Birth weights (fig 4) of Belmonts were amongst the lightest of all the breeds, indicating that calving difficulties would be low.

ii. Weaning Weight

“Narayan & Brigalow” Fig 6 illustrates the relative advantage of Belmonts weaning weights over Herefords on Improved and Native pastures. At ‘Narayan’ Belmonts were 9% and 14% heavier on Improved pastures and Native (Spear grass) pastures respectively, and at ‘Brigalow’ 7% Heavier. The Belmonts advantage was greatest on the poorer quality feed. At “Mt Eugene” weaning weights of calves by Belmonts, Santa Gertrudis and Droughtmaster bulls were similar.

iii. Post Weaning

“Aus-Meat trials” Fig. 9a gives the average weight gains from 9 trials held in Queensland & New South Wales, from 1988 – 1995 for grain-fed export and domestic classes. Grass fed export gains were; Belmonts 110.6 kg. and trial average 101.3 kg. At “Brigalow” yearling (379 days) weights of Belmonts were 13.5% heavier than Herefords.



iv. Cow Weights

“Narayan” Cow weights of Belmont’s and Herefords in October (post calving) and mid April (weaning) on improved pastures were similar. However, on Spear grass, Belmonts were 25kg and 17 kg heavier than Herefords, demonstrating the Belmonts ability to handle poorer quality feed better than the Herefords.

a. Metabolism

“Belmont” Experiments showed that when animals were losing weight on poor quality feed, the metabolism of Belmonts and the Brahman-cross were much lower than that of the British resulting in slower weight loss. However, when animals were gaining weight fast on good quality feed, the Belmont and British had higher metabolism than the Brahman-cross resulting in higher weight gains for the Belmont and British animals. In practical terms this means that under drought conditions Belmonts and Brahman-cross will survive better than British, but under good conditions (eg. feedlot), Belmonts and British breeds will gain weight faster than Brahman-cross. These experiments explain why the Belmont does well on good pastures and feedlots, yet has drought tolerance similar to Brahman crosses.

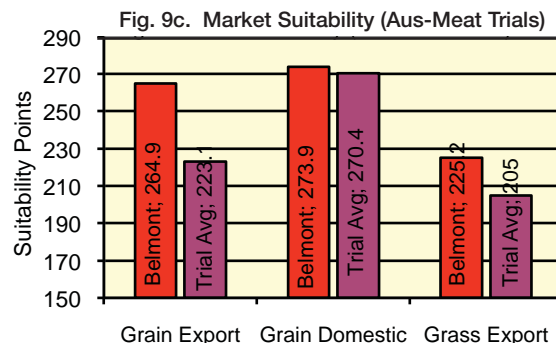
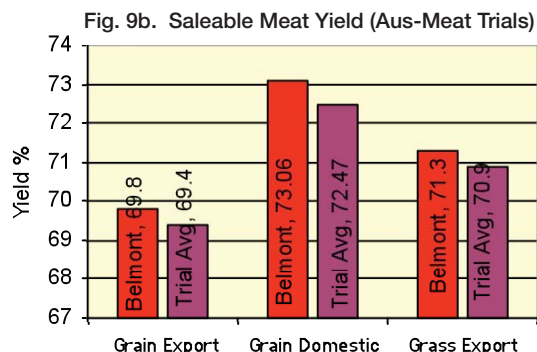
b. Conclusions on Growth

Weights and weight gains of the Belmont are comparable and in some cases exceed those of the Brahman infused breeds, and the pure Brahman, especially at market target weights (Figs. 5 & 7). Even in benign sub-tropical environments, Belmont weights have been better than Herefords (Fig.6). They have also performed very well under feedlot conditions (Fig 9a). The low birth weight of the Belmont is an advantage in relation to ease of calving (Fig.4).

III. Carcasse

a. Saleable meat yield and Market Suitability

“Aus-Meat trials” Fig 9b. and 9c. show that Belmonts performed better than the trial average on all the carcasse traits.



b. Live weight, Carcasse weight, Fat thickness and Dressing percentage

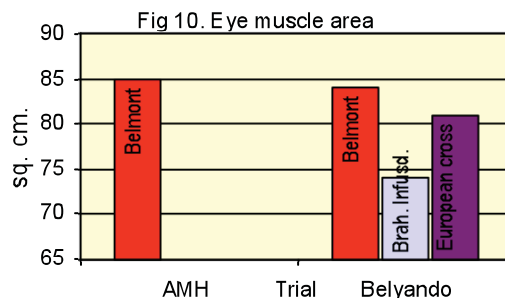
“Brigalow” Table 1 below illustrates that on grass Belmonts also produced superior carcasses to Herefords.

c. Eye Muscle Area

“AMH (1994) and Belyando Feedlot Trials” At the AMH feedlot trial Belmonts yielded second largest eye muscle area of 85 sq cm. and at the ‘Belyando’ trial their average eye muscle area was well above the other breeds as seen in Fig.10.

Table 1. Carcasse data (Brigalow)

	Live weight	Carcasse weight	Fat thickness	Dressing percent
Belmont	577	304	11.7	52.7
Hereford	491	251	7.3	51.1



d. “Feedback and Feedlot trials” Belmonts from commercial properties, (Tremere, Emerald Pastoral College & Mt Eugene), dominated carcasse competitions (250 – 400 entries), with wins Australia wide. The results also showed that Belmonts produced carcasses equal to British and European crosses and in some areas surpassed them.

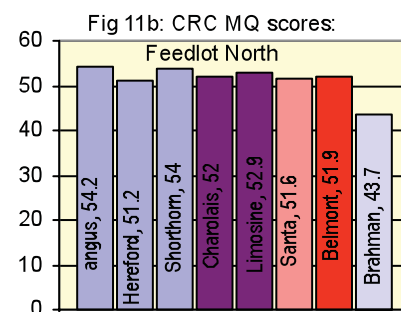
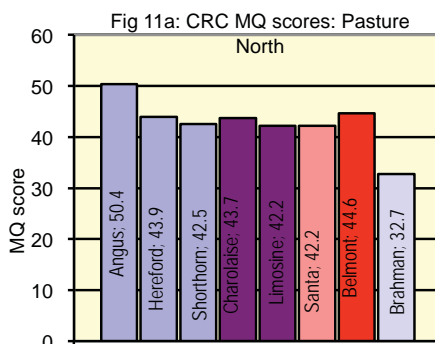
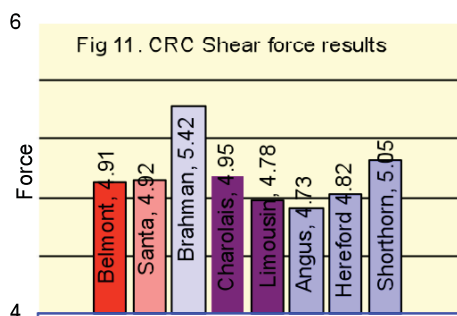
e. Conclusions on Carcasses

The Belmont produces very high quality carcasses off Grass and under Feedlot conditions. This has been demonstrated in comparative trials against both Temperate and Topical breeds in a number of different environments.

IV. Meat Quality

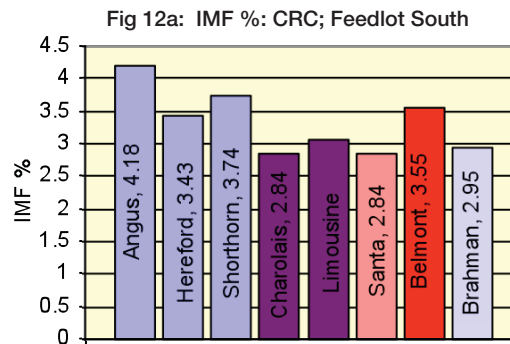
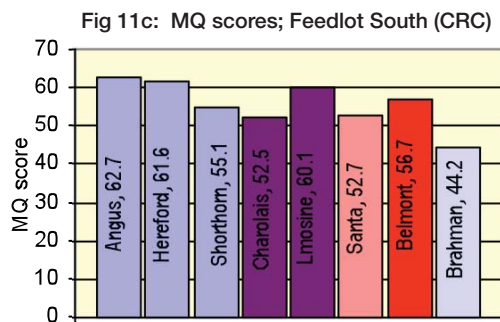
a. Meat Tenderness

“CRC Meat Quality tests” Fig. 11 presents the CRC Shear Force results. The Shear Force is the amount of force required to shear a piece of steak. The higher the force, the tougher the meat. It can be seen that Belmonts rated very favourably when compared to temperate breeds.



Taste Panel test rated meat from Belmont’s significantly more tender than that of Shorthorn, Brahman, and Brahman x Shorthorn steers raised in the Kimberley and slaughtered in Perth.

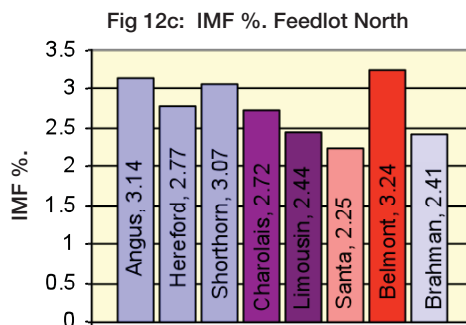
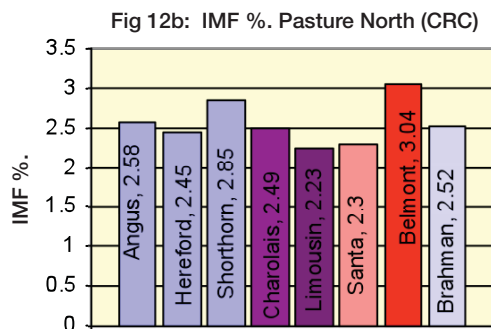
b. CRC Meat Quality Scores (MQ)



The higher the Meat Quality Score is, the more desirable the beef is. From figs. 11 a,b,& c it can be seen that the beef from all breeds finished on Northern Pasture and Northern Feedlots have lower scores than those from Southern Feedlots. While the Angus is the most consistent breed for Meat Quality, the Belmont compares very favourably to all the other breeds in all three environments.

c. Marbling (IMF %)

“CRC” Figs. 12 a,b,c show the Intra Muscular Fat percentage (IMF%) for breeds in three environments. Intra Muscular Fat % (IMF%) is an accurate measure of marbling. Under Northern Pasture and Feedlot conditions, Belmonts had the best marbling and surpassed even the Angus.



d. Exceptional Sire “Narayan Graduate” (Pictured below). Of all breeds tested (Angus, Hereford, Shorthorn, Charolaise, Limousin, Santa Gertrudis, Brahman), in the CRC I, “Graduate” was the only sire to have High Marbling (2nd for marbling), High carcass yield, very Tender meat, and marbling score of 2 & 3 off grass and grain in the North and South (Armidale). His progeny were unique having high marbling but low fat cover, thus producing high yielding carcasses.



“Graduate”



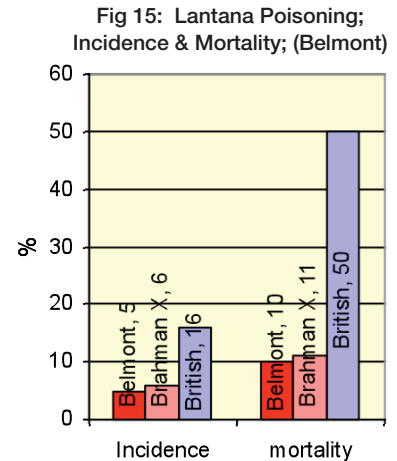
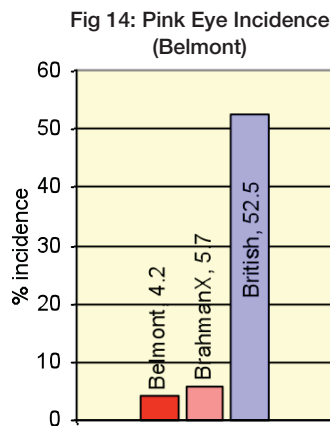
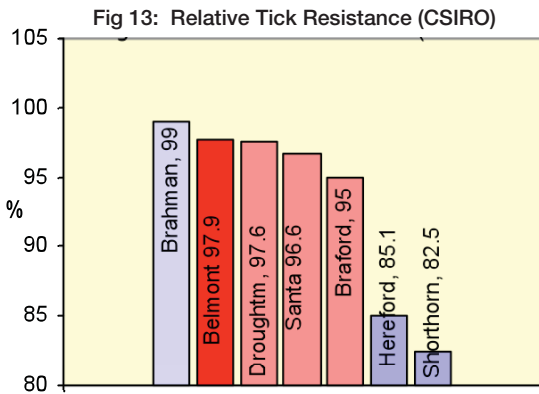
Steer by “Graduate”

e. Conclusions on Meat Quality

Belmonts have excelled in Meat Quality traits, demonstrating their ability to produce high quality beef in a variety of environments.

V. Adaptation

a. Tick Resistance



The Belmonts tick resistance of 98% (Fig. 13) means that only 2 of 100 seed ticks complete their lifecycle, while 82% resistance of the Shorthorn means that 18 out of 100 seed ticks survive. The Belmont is therefore 9 times more resistant than the Shorthorn. Using the Belmont is therefore an effective and sustainable method of controlling ticks.

“Brigalow” It required four to six less dipping’s to control cattle tick on Belmonts than for the Herefords and Simmentals. At the time of this study chemical costs were 30 cents per head and represented a saving of \$1350 to \$2030 for a herd of 1000 adult equivalents. This did not include the value of labour which could be directed towards income earning tasks. In present day terms these figures would be significantly higher.

b. Tick Fever

Belmonts are relatively resistant to the most important blood parasite causing tick fever, Babesia Argentina.

c. Heat Tolerance

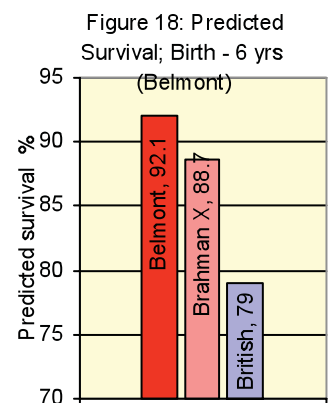
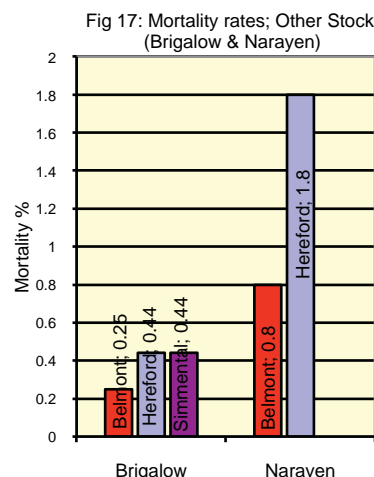
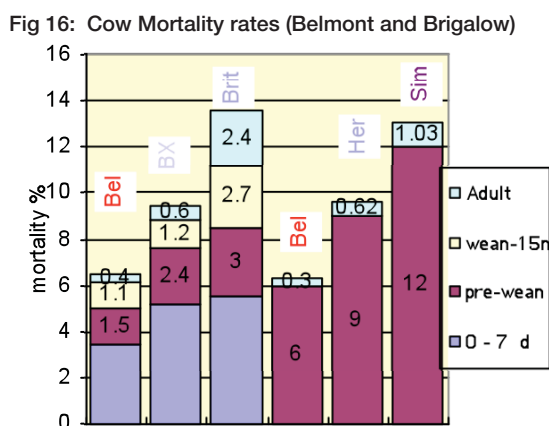
“Belmont” Heat stress raises body temperature and respiration rates and depresses food intake. When compared to British breeds, about 25% of the higher growth of Belmonts was accounted for by their heat tolerance. The superior heat tolerance of Belmonts was largely due to their higher sweating capacity and sleeker coats.

d. Drought Tolerance

“Belmont” In drought years mortality rates of adult cows rose from 2.4 to 5.6 % in the British, 0.4 to 2.0% in Belmonts and 0.6 to 1.5% in Brahman-cross. Belmonts and Brahman-cross heifers lost less weight during drought conditions, and gained weight faster than the British when conditions improved. Weight changes in dry pregnant cows were; British -33 kg, Belmonts -8.7kg, and Brahman-cross +5.8kg. All lactating pregnant cows from all three breeds lost -33kg. During drought Brahman-cross cows were therefore most affected by lactation.

e. Disease Resistance

“Belmont” Pink Eye (bovine infectious keratoconjunctivitis) infections at 8m of age in the Belmont’s was 4.2%, Brahman Composite 5.7% and British 52.5%. Infection was much more severe in the British breed. Infections significantly affected live weight of all breeds.



f. Survival and Mortalities

“Belmont” Mortalities of Belmonts (Fig.16) in most age groups were less than half those of the British cross, and slightly less than the Brahman cross. The lower mortalities resulted in a 13% higher survival of cows to 6 years of age for the Belmonts (Fig 18) This gives them a large economic advantage over the British crosses.

“Brigalow” Calf losses from pregnancy to weaning were Belmonts 6%, Herefords 9% and Simmental 12% (Fig 16). In addition cost of calving supervision to avoid excessive cow and calf deaths and for animal welfare considerations, was nil for Belmonts but high for Herefords and very high for Simmental. In the breeding cows (Fig 16) death rates were; Belmonts 0.30%, Herefords 0.62% and Simmental 1.03% i.e. mortality rates of Belmonts were less than half that of Herefords and 1/3 that of Simmentals. Similarly in the other classes of stock (Fig 17), mortalities were nearly half those of the Herefords and Simmentals.

“Narayan” Calf losses from conception to calving of Belmonts (7% and 2%), were approximately half of that of Herefords (12% and 6%) on Brigalow and Spear grass pastures respectively. Cow mortalities of Belmont’s (0.8%) were also less than half of Herefords (1.8%) (Fig.17)

g. Lantana Poisoning

“Belmont”. 5% of Belmonts, 6% of Brahman Composites and 16% of British were affected by lantana poisoning. In addition, of the affected animals, 10% of Belmonts, 11% of Brahman-cross and 50% of British died. It was postulated that environmental stress may cause the British to eat more Lantana.

h. Conclusions on Adaptation

The superior adaptability of the Belmont results in low mortalities. This gives it a large economic advantage over the Temperate breeds in the Tropics and Sub-tropics.

VI. Management

a. Calving Ease

“Brigalow” The calving ease and high calf survival of Belmonts, reduced the need for supervision and allowed large labour savings as compared to Herefords and Simmental. This also resulted in higher turnoff rates for the Belmonts, making them significantly more profitable and easier to manage than the Hereford and Simmental.

b. Temperament

“Belmont” Crush and bail assessments of temperament showed that Belmonts reacted significantly less violently than the Brahman Composites to handling and constraint.

c. Conclusions on Management

Belmonts are renowned for their docility and ease of handling. This important trait has large cost benefits. It reduces the time, stress, labour and injuries to man and beast during mustering and in the cattle yards. Direct benefits are that bruising is minimized and meat tenderness significantly improved, resulting in much higher \$\$ returns.

VII. Crossbreeding

a. “Midken” Moree, (temperate – north west plains of NSW).

In a crossbreeding programme to evaluate, Aquitaine d’Blond, Main Anjou, Chianina, Limousin x Shorthorns, Simmental x Herefords, and Belmont and Brahman x F1 Brahman/Shorthorn, weaning weight per day of age of Belmont’s were better than pure Shorthorns (17%), Simmental x Hereford (12%), Brahmans x F1 Brahman/Shorthorn (4%) and Limousin (1%). In this trial Belmonts were mated to 2 yo heifers, while all other breeds were mated to mature cows, and this would have disadvantaged the Belmonts weaning weights by as much as 15%.

b. Conclusions on Crossbreeding

In feedlot and feedback trials, on grass and on grain, growth rates of Belmont Crosses have been consistently 14% above the average. Carcase yields and Meat Quality have been equal to British breeds and always better than Brahman or Breeds derived from it. The exceptional Fertility and Docility of Belmonts is also passed on to the Crossbred progeny, leading to large productive and management advantages. The adaptability of Belmonts, together with all their other traits, make them an excellent sire breed for crossbreeding.

VIII. Herd Production and Profitability

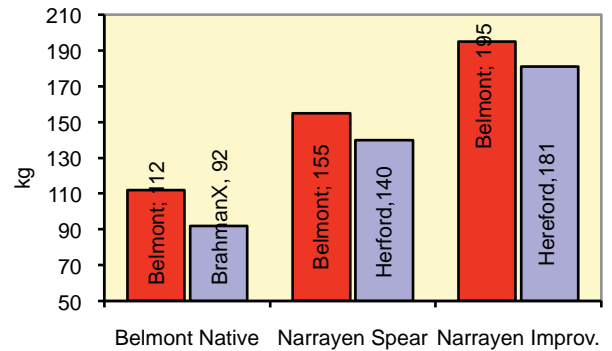
a. Cow Production

“Belmont” In the harsh Belmont environment, Belmonts produced 20kg of weaning weight per cow mated more than the Brahman Cross (Fig 19).

“Narayan” In a more benign environment Belmont cows produced 15kg more than the Herefords on both Spear grass and Improved pastures (Fig 19).



Fig 19. Weight of Calf weaned per cow mated.



b. Earning Capacity

“Brigalow” Economic analysis demonstrated that the Belmont herd produced 20% more income than the Hereford herd and 12% more than the Simmental herd.

c. Economic Value

“CRC” An economic analysis showed that replacing Brahmans in the Northern herds with a highly adapted Composite with high fertility, high carcass and meat quality, and docility like the Belmont, would increase gross margins by up to \$24 per adult equivalent when grass fed, and up to \$76/adult equivalent when grain finished. In contrast a rotational crossbreeding programme using Brahmans would only increase gross margins by \$7.

d. Conclusions on Herd Production and Profitability

In harsh and benign environments Belmont cows were more efficient for weaning weight production than British and Brahman crosses. In the North using the Belmont would be less complicated and more profitable than a rotational crossbreeding programme.

IX. Conformation and Type

An analysis of conformation and type scores given to bulls by breed association Inspectors showed that:

- The most important factors affecting conformation was body condition (degree of fatness) and age.
- There were large differences between the Inspectors. That is, the score given was highly dependant on who was doing the judging.



Steer



Bull

When selecting their cattle the majority of Australian Beef producers still rely heavily on visually evaluating cattle on their appearance and conformation i.e. the standard set in the Show Ring.

Breeders of Belmonts have concentrated on objective selection for productive traits.

The success of Belmonts in objectively measured carcass trials has demonstrated that they produce high yielding carcasses and high quality beef. This proves that they have an excellent **beef** conformation.

X. Summary & Conclusions

- Belmonts have undergone rigorous and exhaustive evaluations. They have been compared both in their own right and in crossbreeding to traditional British, European, and Brahman derived breeds in Tropical and Temperate environments. The results have proven that they have the ability to produce beef efficiently under a wide range of environments.
- As a sire breed for crossbreeding programmes with the Brahman and Brahman derived Composites, Belmonts have many advantages over the British and European breeds. Belmonts confer all the production and beef quality of temperate breeds without requiring special treatment that would be required for temperate breed sires. Because of their adaptation and temperament, ease of management and high calving rates are assured.
- Of particular importance is the CRC findings that demonstrate using a composite with Belmont characteristics would result in a \$24 per AE (Adult Equivalent) higher gross margin, grass finished, relative to the Brahman. Using a composite like the Belmont was also significantly more advantageous than the \$7 gross margin benefit of using crossbreeding. In addition, there is the advantage of managing a simple straight breeding program in contrast to a complex rotational cross breeding program. Under a grain finished scenario, the extra gross margin at the individual herd level of using a composite like the Belmont was \$52 per AE (on top of the \$24 from the base grass fed model) ie. a premium of \$76 per AE.
- Predicted Climate change indicates that regions in which British and European breeds are currently being successfully run, will become more harsh i.e. hotter and drier, making them less suitable for temperate breeds. The Belmont with all the qualities of the temperate breeds such as fertility, growth, carcass and meat quality and docility, in addition to heat, drought, disease and parasite tolerance, survival, and ease of calving, makes them the logical replacement for temperate breeds in the regions that are or will be adversely impacted by climate change. Belmonts can therefore also replace many existing temperate breeds in the temperate regions and improve productivity without the risk of losing production and meat quality.
- All results from scientific and commercial trials have proved conclusively that the Belmont has;
 - (1) High **Fertility**
 - (2) Excellent **Docility**
 - (3) High **Weight gains**
 - (4) High yielding **Carcases**
 - (5) High **Quality Beef** in feedlots and on pasture in the northern and temperate environments.



17 month Bull



Feedlot Steer



Belmont Australia

PO Box 990

ARMIDALE NSW 2350

t: 02 6772 7720

f: 02 6772 9599

e: belmonts@bigpond.com.au

w: www.belmontred.com.au