

"BELMONT"
The National Cattle Breeding Station
Establishment and early History

By: Dr. G W Seifert. Ph.D. (Animal Genetics & Statistics). Iowa State University, USA:
M.Agric.Sci.(Parasitology). University of Qld, Australia: B.Sc.Agric.(Animal.Husb.). Pretoria
University, Republic of South Africa

During the droughts of the early and mid 1930's the Northern beef cattle herds, which were predominantly Herefords, suffered huge losses. In the Queensland coastal regions, tick infestations were also a major contributor to the losses in the drought affected cattle. It was reported that Waverly Station, north of Rockhampton, lost more than 30% of their entire herd. Many North Eastern graziers were therefore desperate to find a solution to the high mortalities and low productivity of their herds and lobbied the Government to assist them. Consequently, Dr R B Kelly, who had been a Veterinarian with the British mounted troops in India, was appointed to undertake an investigation into the problems facing the Northern Beef cattle industry.

During his time in India, Dr Kelly had observed the hardiness of the Indian cattle. He therefore suggested to Mr Wright the owner of Waverly Station to experiment with the use of some of these types of cattle. Wright was desperate and agreed to try these odd-looking animals. The results from the first crosses were astounding, and soon neighbours were following Waverly Stations lead, using mainly crossbred Zebu bulls.

Following the second World War there was a new push to accurately evaluate the role of exotic tropical cattle for the Northern Cattle Industry. This push came as much from the sceptical established Hereford and Shorthorn Breeders, as from the minority of producers who had experienced the tremendous improvement in production from using Indian cattle infusions.

Thus in 1954 Belmont was purchased by the Australian Meat Board (AMB). The objective was to scientifically investigate the role of Native and Adapted (Terms used by Dr. R BR Kelly during the 1950's) cattle for Beef production in the Australian Tropics. CSIRO was appointed as the organisation to undertake these investigations. Dr J M Rendle, Chief of the CSIRO Division of Animal Genetics formulated the basic breeding program to investigate the objective.

The program required that the two predominant British breeds being used by the northern beef industry at that time, Herefords (H) and Shorthorns (S) be used as the base female herds. Because of animal health restrictions and available credible documented information, the Brahman (B) as a representative of the Indian subcontinent breeds (genetics) and the Africander (A) as a representative of African breeds (genetics), were selected. Both breeds could be sourced from the USA, minimising disease risk.

All the breeding stock (bulls & cows), including the Africanders and Brahmans were selected and purchased by Grazier representatives of the AMB. The person most involved in the selections was Mr Dick Wilson of Calliope Station, one of the most prominent Hereford Breeders in Australia at that time.

The Shorthorns and Herefords were sourced from Queensland (Northern) herds. To validate that the northern breeding stock were not inferior to the Southern herds, a family of Southern Herefords from the Wright family Wallamumbi stud at Armidale was included as a separate line. Poll Shorthorns were selected, while all the Herefords were horned. The belief at that time being, that polled cattle were productively inferior to their horned counterparts.

Five Africander bulls and two cows were all sourced from King Ranch, Texas, USA. They were the remnants of a limited importation of Africanders during 1934 from two prominent Breeders in the Orange Free State of South Africa. Following their use in the formation breeding program of the Santa Gertrudis breed, they were maintained as a small novelty closed herd at King Ranch. At the time of their importation into Australia they were already highly inbred.

A much larger group of Brahmans from J D Hudgins herd, Texas and Frost herd in Florida were imported.

A total ban on livestock importations into Australia came into effect while these cattle were in transit from the USA. They were the last cattle to be imported in to Australia.

The Belmont Breeding Program;

- a. 1954 to 1957 Matings to Produce the first crosses: F1's

Breed of		Progeny
Bull	Cow	
Africander (A)	Hereford (H)	F ₁ (1/2Africander:1/2 Hereford) (AH)
	Shorthorn (S)	F ₁ (1/2Africander:1/2 Shorthorn)(AS)
Brahman (B)	Hereford (H)	F ₁ (1/2Brahman:1/2Hereford) (BH)
	Shorthorn (S)	F ₁ (1/2Brahman: 1/2Shorthorn) (BS)
Hereford (H)	Hereford	Pure Hereford (HH)
	Shorthorn	F ₁ (1/2Hereford:1/2Shorthorn) (HS)
Shorthorn (S)	Hereford	F ₁ (1/2Shorthorn:1/2Hereford) (SH)
	Shorthorn	Pure Shorthorn (SS)

- b. 1957 to 1963 Matings to Produce the second crosses: F2's

F ₁ AH	F ₁ AH	F ₂ AH
F ₁ AS	F ₁ AS	F ₂ AS
F ₁ BH	F ₁ BH	F ₂ BH
F ₁ BS	F ₁ BS	F ₂ BS
F ₁ HS	F ₁ HS	F ₂ HS
F ₁ SH	F ₁ SH	F ₂ SH

- c. 1960 to 1967 Matings to Produce the third crosses: F3's

F ₂ AH	F ₂ AS	F ₃ AAHS
F ₂ AS	F ₂ AH	F ₃ AASH
F ₂ BH	F ₂ BS	F ₃ BBHS
F ₂ BS	F ₂ BH	F ₃ BBSH
F ₂ HS	F ₂ SH	F ₃ HSSH
F ₂ SH	F ₂ HS	F ₃ SHHS

- d. 1964 to 1987 Breeding program simplified by amalgamation of lines. New line created

F ₃ AAHS	F ₃ AASH	F ₄ 1/2A1/4H1/4S (AX)
F ₃ AASH	F ₃ AAHS	
F ₃ BBHS	F ₃ BBSH	
F ₃ BBSH	F ₃ BBHS	F ₄ 1/2B1/4H1/4S (BX)
F ₃ HSSH	F ₃ SHHS	
F ₃ SHHS	F ₃ HSSH	F ₄ 1/2H1/2S (British)