

**Pastures for Prosperity —
Proceedings of Beef Inland Forum:
Tough decisions in tough
environments**

Pastures for prosperity — Beef inland forum.

1. Crossbreeding to maximise production on 'Bendemeer'

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To achieve in this industry you must first have a goal — what will you produce and how will you do it?

With this in mind, I have laid down our present breeding objectives. These are the minimum standards I consider we should achieve to remain profitable. This will vary as the state of the industry changes.

From Table 1, it is clear that there are areas where our program is above or below target. The low spots can then be identified for extra attention, particularly as economic pressures increase.

Table 1. Present breeding objectives of Bendemeer Pastoral Company.

	Target	1994
Fertility:	85%	85%
Production:		
Steers	90% > 300 kg dressed wt	85%
	10–25 mm P8 fat	80%
	< 6 permanent incisors	75%
Cull heifers	90% > 230 kg dressed wt	95%
	7–18 mm P8 fat	80%
	< 6 permanent incisors	90%
Cull cows	> 240 kg dressed wt	90%
	7–25 mm P8 fat	

Hormonal growth promotants have been promoted as one way to increase returns from cattle. We have identified our own "HGPS" to achieve this result (Table 2).

Table 2. HGPS for the future.

Hybrid vigour	3-way crossbreeding program
Genetic gain	Performance selection of bulls and single sire joining
Pastures	Tree management, buffel grass, stylos, leucaena, forage cropping, downs ???
Support	Parasite control, inoculations, drought and performance supplements, HGPs, feedlots

Hybrid vigour, through our 3-way crossbreeding program, has given our production a definite boost at no extra cost, simply a modified herd management program. This could be adapted into many beef herds for immediate returns.

Genetic gain, through herd performance recording, is providing incremental production gains. However, any gains are cumulative and substantial over a 10-year period. We are presently conducting a PDS trial to try to identify a commercial value for Breedplan EBV (estimated breeding value) figures in a crossbreeding program: How much more can we justify spending on a bull with a higher EBV score?

Pasture development is a continuing challenge, to be able to provide high performance pastures at the right price. We are presently working at leucaena establishment, for a spring-early summer protein boost. We still need an improved pasture to compete with parthenium weed on our black soil downs country.

There are numerous other production support systems which vary between regions. Most of these have an immediate cost/benefit equation that needs to be examined regularly, but can provide an increased return under the right conditions. However, the adage, "you can't make a silk purse out of a sow's ear", certainly applies. You must have the right animal to produce the required result.

Our operation

We run 3 properties, Bendemeer, Kalbar and Yackadoo, an aggregation of 22 500 ha north of Clermont. The country is a mixture of open black soil downs, heavily timbered ironbark ridges and brigalow scrub soils, more than 8000 ha of which have been pulled and sown to buffel grass.

Crossbreeding program

From 1927 until the early 1960s, the family bred Polled Hereford. At this time, we introduced

Brahman bulls resulting in better environmental adaptation, especially tick resistance, and heavier bullocks. The first-cross females were highly productive. By the early 1980s, we had established a good Braford herd, but found it difficult to maintain performance and purchase replacement sires which were herd improvers.

In 1983, we started selecting replacement bulls from within our Braford progeny and purchased our first Simmental bulls. More Brahman bulls were bought the following year. We have now developed a 5-herd system (Figure 1): a herd of elite Braford cows mated to Braford bulls (A); a herd of Braford cows mated to Brahman bulls

(B); a herd of higher content Brahman cows mated to Simmental bulls (S); a herd of mixed breed cows mated to Braford bulls (C); and replacement females for all herds mated to young Braford bulls at 12 months of age.

It is very difficult to quantify success or failure without strict experimental controls, but we consider that we are meeting most of our current objectives with this breeding program. We achieve high pregnancy rates and rapid growth rates. Our steer progeny produce carcasses with differing carcass characteristics suited to a range of markets and marketable throughout most of the year.

We have found that there is more variation in performance of steers within the herds than between the herds. By weighing steers and noting when their growth is tapering off, we can identify which ones to target for the Korean market and which ones to keep to the heavier weights demanded by the Japanese grassfed chiller market.

A higher degree of management is required with the crossbreeding program than with a single breed operation but we consider that the additional returns more than cover the extra effort. In most cases, extra input is required to reap extra benefits, and our operation is no exception. We are always interested in new strategies for improving the profitability of our beef production system. We regularly review our production levels and set new production goals.

There is nothing new in what we are doing — crossbreeding, performance recording, pasture improvement and targeting cattle to markets are well established practices — but integrating these practices into a total management package has been the key to success.

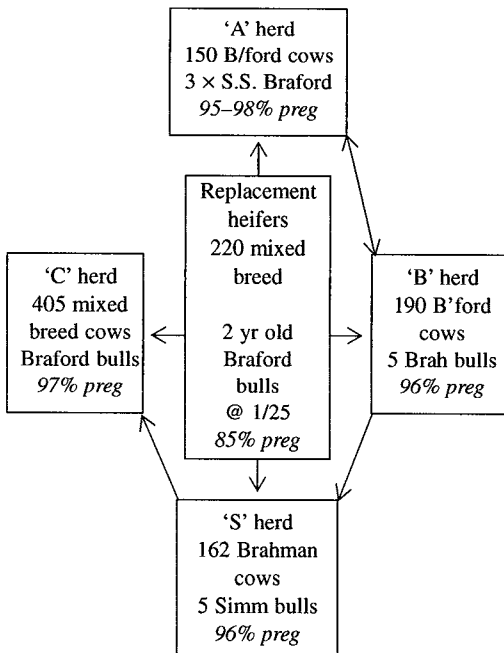


Figure 1. Crossbreeding program on Bendemeer in 1995.