

**BEEF PRODUCER ATTITUDES REGARDING  
CROSSBREEDING BEEF CATTLE**

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**INTRODUCTION**

Why do beef producers use or not use crossbreeding in their herds? This question is an important one for groups or institutions conducting research and advisory programs on the crossbreeding option. A survey of a group of beef producers and beef advisory officers was conducted to investigate this question.

The proportions of Australian beef cattle reported to be crossbred in 1987 ranged from 28% in S.A. to 57% in Queensland with an overall figure of 45% (Australian Bureau of Statistics 1988). In 1982 the figure was 38%, and the main increases were in N.S.W. (18 to 33%) and in Queensland (51 to 57%) up to 1987. These proportions are substantial, but the question remains of whether they are the result of planned programs or confused management.

**METHOD**

Beef cattle advisory officers from Departments of Agriculture in southern and eastern Australian States were each asked to distribute questionnaires to 12 clients in their districts - six who did crossbreed and six who did not. Response was voluntary although some 'chasing up' was done. The information requested from producers was the four major reasons why they do or do not crossbreed and additional background information. A list of potential reasons for and against was provided in random order, but there was also an 'other' category for respondents to express additional views.

Although this process was a survey to determine attitudes and reasons, it was not based on a random sample of producers. The results can only be interpreted as a case study of what this particular group of beef producers thought about crossbreeding. At the same time the beef advisory officers were given the same questionnaire and asked to nominate the main client reasons. These were to be returned prior to seeing responses of clients.

Altogether 143 beef producers and 53 advisory officers answered the questionnaires. Ninety of the beef producers were crossbreeders and 53 were not (see Table 1).

Table 1 Survey returns by State

	N.S.W.	Victoria	Queensland	W.A.	S.A.	Tasmania	Total
Beef producers							
- crossbreeders	51	29	4	1	5	-	90
- non-crossbreeders	27	22	2	-	2	-	53
- total	78	51	6	1	7	-	143
Beef advisory officers	19	15	12	-	1	6	53

## RESULTS

Beef producers were initially asked whether they thought that efficiency and net returns from beef production can be improved by crossbreeding. Perhaps not surprisingly all 90 of the crossbreeders agreed. However, a quarter of the non-crossbreeders also agreed, implying that there were factors other than profit in their decision not to crossbreed. They were then asked whether they used crossbreeding and reasons for and against. The main results are presented in Table 2 where the major reason is listed plus an (arbitrarily) weighted sum of the four reasons (most important x 4, second most important x 3, third most important x 2, fourth most important x 1).

The most important reason beef producers gave for crossbreeding was to increase profitability and this was clearly the most dominant. Other reasons mentioned were to remedy a specific problem, to improve adaption of cattle to the environment in their district, to improve marketability and 'other'. The beef advisory officers came up with virtually the same emphasis.

When it came to non-crossbreeders the reasons were more diverse. The major reasons given were that they were happy with their current profits and 'other'. Some felt that there was discrimination against crossbreds in saleyards, that there were additional management requirements or specific problems with the outcome from crossbreeding, that there would be difficulty in breeding crossbred replacements and some were unconvinced of financial benefits.

Beef producers who did not crossbreed and who gave 'other' as the major reason mentioned aspects such as the suitability of major breeds to variable climatic conditions and markets, that they are easier to sell in dry times, characteristics of fertility, temperament and carcass quality, and the challenge of making genetic gain within the breed. Others were stud breeders or developing stud herds, or that 'someone must produce purebreds'.

Again the beef advisory officers emphasised similar reasons although they put slightly more emphasis on 'discrimination in saleyards'. A number of beef advisory officers thought that the discrimination against crossbreds in saleyards was more perceived than real. Advisory officers also tended to rate social, family or peer pressure as a more important factor against crossbreeding than did beef producers (although this was a difficult question for producers).

Table 2 Reasons given for and against crossbreeding

	Beef producers		Beef advisory officers	
	Main reason	Four reasons weighted	Main reason	Four reasons weighted
<b>Reasons for crossbreeding<sup>(a)</sup></b>	%	%	%	%
Like a challenge	1	3	-	2
Remedy specific problem	14	12	11	16
Increase profitability	55	35	57	31
Unhappy with straightbreeding	1	7	2	10
To improve marketability	5	18	2	10
Adapt cattle to environment	14	10	17	13
Like to be different	-	-	-	1
Utilise seasonal pasture	-	4	2	5
Others	<u>10</u>	<u>11</u>	<u>9</u>	<u>12</u>
	100	100	100	100
<b>Reasons against crossbreeding<sup>(a)</sup></b>				
Lack of information about crosses	2	1	-	5
Discrimination in saleyards	16	10	24	14
Financial constraints	-	-	-	-
Difficulty breeding replacements	6	8	2	8
Not justified because of nutrition	4	4	-	3
Happy with current profits	24	18	22	13
Herd too large	2	2	-	1
Scarcity crossbred females	2	3	-	6
Additional management	6	9	8	10
Bull buying problems	-	1	-	1
Herd too small	2	3	6	4
Off-farm commitments	-	-	-	-
Hassles with neighbours	-	-	-	-
Specific problems with crossing	4	8	8	6
Other farm commitments	-	1	-	2
Insufficient information	2	2	4	3
Unconvinced of financial benefits	8	7	8	11
Others	<u>24</u>	<u>21</u>	<u>20</u>	<u>13</u>
	100	100	100	100

(a) These reasons are in the same order as in the questionnaire

#### DISCUSSION

Another potential reason against crossbreeding in Australia, where substantial numbers of beef cattle are located on mixed enterprise properties, is that the use of crossbreeding on mixed enterprise properties may be less popular. If cattle are run on properties as a smaller enterprise to wool, for instance, then managers may not be

interested in the extra management required. This aspect may not have been picked up fully in the survey.

What implications can be drawn from these results in the light of the current levels of crossbreeding? We should remember that the information in Table 2 is only a case study that does not necessarily truly represent Australian beef producers.

Hawkins (1988) discussed socio-economic factors that are likely to influence the acceptance of crossbreeding. He listed factors such as relative advantage (a perception that the innovation is 'better'), compatibility (consistent with values, experiences and needs), complexity (difficulty in understanding and usage), divisibility (trialability on a small scale) and observability (extent that the results are visible to others) as important in determining adoption of new technology.

A strong conclusion from these results is that the decision to crossbreed is heavily influenced by profit, with improved marketability also being important. Demonstrations of relative profitabilities of production systems serving different markets will provide better information for farm-level decision making. A smaller number of straightbreeders indicated they were happy with their current profit levels or gave 'other' reasons for not crossbreeding. As some beef advisory officers indicated, social pressures may be a significant factor.

Some reasons against, such as discrimination in saleyards and unsuitability of crossbreds to conditions and markets, will be reconciled over time as information becomes available from more experience in production and processing. Further development of recognised crossbred sales will partially alleviate the problems of scarce crossbred female replacements. Other reasons against crossbreeding, such as specific problems or additional management requirements, may be resolved with better dissemination of information which highlight the management systems which utilise hybrid vigour and breed characteristics to match market requirements.

A similar type of survey in Western Victoria in 1979 was aimed at determining beef producers' knowledge and attitudes to crossbreeding (Holland 1984). The findings of that survey were that although the potential increases in production from crossbreds were recognised, many regarded crossbreeding as a short-term system which was hard to manage. Some of these results are consistent with those of the present survey. These include attitudes towards crossbreeding and the need to demonstrate alternative systems that are both manageable and profitable at the property level.

It should be emphasised that the beef industry will continue to need the development of a wide variety of purebred lines to generate the genetic diversity and numbers of cattle required by an increasingly sophisticated market for beef products. The 'correct' mix of breeds and crosses in the industry will be determined eventually by market forces. In the future new market specifications and payment for specific types of cattle will require a more 'tailored' product and crossbreeding systems will be one method of achieving this result.

#### REFERENCES

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