

CALF PRODUCTION FROM YOUNG F1 COWS OF HALF HEREFORD BREEDING

M.P. DELAND*, J.M. OBST* and I.D. JOHNSON*

Approximately 640,000 calves are slaughtered annually in Victoria at an average carcass weight of 20 kg. Many of these calves are straight-bred dairy females surplus to dairy requirements or beef x dairy crosses from cows not required for breeding dairy replacements. Carcasses produced have low yields of saleable meat but it is possible that such animals could be reared for breeding purposes thus substituting for animals of the beef breeds which have more valuable carcasses.

Plasma corticoids and liveweights were measured at 49 day intervals and compared with calf production from female progeny of Shorthorn, Jersey, Brahman, Charolais, Sahiwal, Simmental and Friesian sires mated to Hereford dams. A total of 400 cows were located at Struan and Wandilo in the South East of South Australia and Wanbi in the Murray Mallee. Each breed type was represented by approximately 20 cows per site. Cows at Wandilo have weaned three calves, at Wanbi one calf, and Struan cows have their first calves at foot. Total weaned weight of calf per cow kept at Wandilo was Shorthorn 554 (kg/cow), Charolais 653, Brahman 487, Sahiwal 588 and Jersey 732.

All cows were mated to Hereford bulls and steer calves from. Wandilo were slaughtered in February, 1977 (11 months) and Wanbi in August 1977 (16 months).

TABLE 1: Carcass weight and fat thickness of steer calves of 3/4 Hereford breeding reared in 1976.

Dam Breed	No.	WANBI		No.	WANDILO	
		Carcass wt. (kg)	Fat thick- ness (mm)		Carcass wt. (kg)	Fat thick- ness (mm)
JH*	6	151 dg***	1.7	10	183 bfg	10.0
CH	6	153 c	0.7	6	187 ade	7.8
ShH	3	145 bf	1.2	9	140 abc	5.7
SaH	5	162 fgh	1.1	9	164 cdfh	9.3
BH	6	148 eh	1.5	6	148 egh	8.0
SH	7	155 a	1.0	**	** **	**
FH	12	162 abcde	1.4	**	** **	**

* J = Jersey, C = Charolais, Sh = Shorthorn, Sa = Sahiwal, B = Brahman, S = Simmental, F = Friesian, and H = Hereford.

** SH and FH crosses were not included in the Wandilo group.

*** numbers with the same postscript are significantly different at the 5% level in the Wanbi group. In the Wandilo group a,b (P < 0.001) c,e,g (P < 0.01) d,f (P < 0.05).

The high fertility of these dairy crossbreds reported by Obst and Deland (1977) and the higher carcass weights and fat content of carcasses presented in the table above are consistent with higher productivity than from Shorthorn Hereford crossbred cows.

OBST, J.M. and DELAND, M.P. (1977). "Pre-mating plasma corticoid and calving percentage of different breeds of crossbred heifers". Proceedings of the Ninth Annual Conference of the Australian Society for Reproductive Biology, Melbourne, August 17-19, 1977 p. 8.

* Struan Research Centre, P.O. Box 618, Naracoorte, South Australia 5271