

THE IMPACT OF ONCE A YEAR WEANING OF CALVES TO 60 KG ON BREEDER FERTILITY AND MORTALITY IN THE KIMBERLEY - PRELIMINARY RESULTS

S. PETTY^a, W. RYAN^b, D. PRATCHETT^c and D. HADDEN^a

^ADept of Agriculture, Kununurra, W.A. 6743

^BDept of Agriculture, South Perth, W.A. 6151

^CKuttabul, Qld. 4741

Research at Ord River Regeneration Research Station in the Kimberley region in the dry tropics from 1984 to 1989, clearly showed the benefits to the breeder of weaning calves to 150 kg (about 6 months of age) twice a year, in May and October (Pratchett and Young 1989).

In October temperatures are in excess of 40°C and humidity is 70% or more. These conditions and the costs associated with the second weaning round means some pastoralists are reluctant to muster and wean at this time of year. An alternative is to wean calves down to 60 kg (6-8 weeks of age) once, early in the dry season and feed the smaller calves until they are able to graze for themselves.

The objective of this investigation was to determine if early weaning of calves down to 60 kg once a year resulted in a similar level of breeder fertility and mortality compared to those weaned twice a year in May and October.

Two weaning treatments were imposed on breeder herds at Flora Valley Station (700 breeders) and Ord River Station (400 breeders), in the east Kimberley. The treatments were:

- 1. Weaning all calves heavier than 150 kg liveweight twice a year in May and October (normal).
- 2. Weaning all calves heavier than 60 kg liveweight once per year in May (early weaning).

The breeders on Flora Valley had not been regularly weaned prior to the trial, whereas the Ord River breeders had been regularly weaned twice a year. The 60-100 kg weaners were supplemented with maize:meatmeal (5:1, 1.0 kg/hd.day) and the 100-150 kg weaners were supplemented with meatmeal:salt (10:1, 0.5 kg/hd.day). Both groups had access to good quality pasture.

The weaning percentage of breeders and breeder mortality was similar in both treatments with neither treatment showing a clear advantage (Table 1). The weaning percentage at Flora Valley in 1991 was lower in both treatment groups, and is an indication of the fertility of this herd prior to the introduction of any weaning strategy.

The large difference in the weaning percentage between the treatment herds on Flora Valley in 1993 provides an indication of the value of early weaning in drought conditions. The 1991/92 wet season on Flora Valley was well below average and it was in this period that the calves weaned in 1993 were conceived. Weaning 95% of the calves in the early weaned herd compared to 56% in the normal weaning system in May 1992 resulted in a large increase in the 1993 weaning percentage.

Table 1. Weaning percentage and breeder mortality (%) from the normal and early weaned breeder herds on Flora Valley and Ord River stations in the Kimberley over 3 years

Herds		1991		1992		1993		SEM	
		Normal	Early	Normal	Early	Normal	Early	Normal	Early
Weaning percentage	Flora Valley	62	40	86	82	58	82	8.7	14
	Ord River	65	75	76	80	80	80	4.5	1.7
Mortality	Flora Valley	13	3	4	2	1	4	3.6	0.6
	Ord River	4	4	2	3	0	2	1.1	0.6

Early weaning of calves down to 60 kg once a year has resulted in similar levels of fertility and breeder mortality as twice a year weaning to 150 kg. Early weaning is a very good drought management strategy to maintain weaning percentages.

PRATCHETT, D. and YOUNG, S. (1989). *J. Agric. West. Aust.* **30**: 11-4.