

THE LIFETIME REPRODUCTIVE PERFORMANCE OF COWS IN A
SOUTH AUSTRALIAN BEEF HERD

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There is a complete lack of information in South Australia on the lifetime reproductive performance of beef cows. These records are required to assess productivity and herd management.

To fill this need the individual records of all cows culled from the Roseworthy herd were analysed for the period 1944-1977. The management aims for the herd were to produce first calves from two year old cows and subsequent calves at yearly intervals.

Estimates of the number of live calves produced in a cow's lifetime, the age at culling, age at first calf and the calving interval are shown in the table.

TABLE 1 : Lifetime reproductive performance of 163 Roseworthy cows

	Live Calves per cow	Culling age (years)	Age at first calf (years)	Calving interval (days)
Mean	3.11	5.50	2.25	400
+ SE	0.23	0.24	0.04	7.3
Range	0-12	1.6-14.5	1.5-4.0	317-730

In comparison with the three calves produced per breeding cow in a herd of the same breed in Queensland (Donaldson, 1962), the South Australian cows produced slightly more progeny in only five and a half years compared to eight years in Queensland. The Roseworthy cows were more productive over a shorter period because they were able to be bred a year earlier and had shorter calving intervals. Despite these results, calving intervals were 400 days and first calves were dropped at two and a quarter years of age; this has meant that the management aims were not fully realised. Wiltbank, Spitzer and Le Fevre (1973) have indicated that these intervals can be modified by nutrition. However Wiltbank and Price (1973) have suggested that the level of feeding should be limited since they observed calving losses in overfat heifers. A major source of reproductive wastage in the Roseworthy cows was the 12.4% of all calves born which were dead at birth. Although the majority of these dead calves were from heifers, individual cows calved successfully up to nine times before they produced a dead calf. Another source of reproductive wastage was the 50% death loss of calves born as twins. Consequently research at Roseworthy is now directed to improving reproductive performance by paying closer attention to the nutrition and pelvic size of replacement heifers.

DONALDSON, L. (1962). Aust. vet. J. 38:447.

WILTBANK, J.N., SPITZER, J.C. and LE FEVRE, D.G. (1973). Cattle 1:(4), 17.

WILTBANK, J.N., and PRICE T. (1973). Cattle 1:(5), 17.

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