LIVESTOCK PRODUCTION AND MANURE MANAGEMENT

The decision to feed supplements to grazing animals is commonly based on their current liveweight and anticipated weight change. Since breeding and non-breeding livestock are characterised by different physiological demands and liveweight trends within each year, their respective requirements of supplementary feed are also likely to differ.

Merino wethers and August-lambing ewes of the same age and flock background were grazed at various stocking rates in an experiment in the wheat-sheep zone of northern Victoria. Stocking rates were 3.7, 4.9, 6.2, 7.4, 8.6, 9.9, 11.1 wethers/ha (7f/plot); 2.5, 3.7, 4.9, 6.2, 7.4 ewes/ha (15/plot). Supplements were fed when the mean liveweight of the animals in a plot declined to 41 kg.

August-lambing ewes either lost weight in early spring or gained weight more slowly than wethers at the same stocking rate (Figure 1), the ewes being about 15 kg lighter than the corresponding wethers at the beginning of summer. Ewes and wethers had similar rates of weight loss from November to March. No wethers required supplements during 1970 or 1971, their mean weights being always greater than 41 kg. In autumn, 1970, ewes were fed 0, 9, 14, 14 and 18 kg hay D.M./sheep at 2.5, 3.7, 4.9, 6.2 and 7.4/ha respectively. In 1971 only the highest-stocked ewes (7.4/ha) were fed (6 kg D.M./sheep).

Winter- and spring-lambing systems are commonly advocated in this environment to avoid the heavy feeding programmes associated with autumn lambing systems. This experiment showed that August-lambing ewes are more likely to require feeding and incur large feeding costs than wethers stocked at similar or even higher rates. Weight losses or reduced weight gains of breeding ewes during lambing and lactation in late winter and early spring contribute to liveweight differences between ewes and wethers, these differences continuing through into the following autumn.

Figure 1. Liveweight trends of ewes (E) and wethers (W)
F = Feeding hay; L = Lambing; S = Shearing

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**Animal Research Institute, Dept. of Agriculture, Werribee, Vic. 3030.**

**Department of Agriculture, Bendigo, Vic. 3550.**

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