MATING EWE LAMBS

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Mating of ewe lambs has not been a widely adopted practice by prime lamb producers in Australia, although Godlee and Scarlett (1968) and Dyrmundsson (1973) indicated that the practice can be successful. Cost pressures and recognition of the possible genetic consequences of the traditional system are forcing consideration of a change in maternal aspects of prime lamb production systems. Earlier mating is an option for producers who wish to rear their own ewes, or want to reduce the outlay for replacement ewes.

Thirteen prime lamb producers in South Western Victoria, who had experience with mating ewe lambs, answered a detailed written survey. These farmers mated their ewes in January to March, the average lambing percentage in 2001 for their adult ewes was 130% (range 110-170) and the expected main flush of lambing occurred five months after the start of joining.

In 2001, nine producers joined flocks of 70 to 1600 ewe lambs at seven months of age. Eight producers considered that mating ewe lambs at seven months of age was a useful strategy, two generally mated a little later at 9-10 months and three felt it was not a successful and or a beneficial practice. The average lambing percentage for ewe lambs was 72% (range 32-102). These figures were in line with the owners' expectations. Note that the producer with 32% felt it was still a useful strategy to mate ewe lambs. For three producers, the ewe lambs started lambing on the due date but for the remaining six, there was a delay of up to month for the peak of lambing. Of four producers who did not join ewe lambs in 2001, three expected that based on past experience, the start of lambing would be delayed by up to a month.

There was general agreement that the twinning rate and birth weights were lower and lamb mortality was higher in ewe lambs compared with the older ewes. The ewe lambs did not require more assistance at birth, although often additional care was taken in the selection of sires. Ewe mortality was similar to that in the adult ewes. Only four respondents felt the lambs grew out as well as those from adult ewes. Eight felt that with particular attention to feeding lambs would grow out successfully, while one producer stated that they would remain undersize for life.

Four respondents felt that the ewes were penalised by this early pregnancy and would not conceive as well as expected during the following joining period. The remaining nine felt that there was no penalty and the ewes performed very satisfactorily in later years. All the producers suggested that if a ewe lambing system was to be successful, then extra management inputs were required. These included better nutrition from weaning until the end of joining. Target weights, ranging from 38 to 50 kg at mating were suggested and strategies varied from drafting the heavier lambs for mating, to mating them all. Most producers were careful about management during pregnancy with ultrasound scanning and better nutrition for pregnant/twinning ewes, monitoring of worm egg counts and use of capsules for worm control being common. Three producers reported foetal loss due to *Campylobacter* infection.

A better definition of nutritional targets for ewe lambs is needed and these are likely to be genotype dependant (Cummins *et al.* 2001). Interactions between nutrition, daylength, age and the ram effect are likely to affect conception. More carefully controlled nutrition during pregnancy may allow an increase in birth weight and lamb survival without increasing the incidence of dystocia.

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