ROLE OF THE LAMB IN POST-PARTUM SEPARATION OF EWES FROM TWIN LAMBS

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Observations made at lambing on several flocks indicate that twin-bearing Merino ewes are less able than ewes of other breeds to maintain contact with both lambs during the first 24h post-partum (Alexander et al. 1983). The result is permanent separation and subsequent death from starvation of many otherwise healthy twin lambs. The fault appears to lie largely with ewes that move from the birth site soon after birth and appear content if accompanied by only one lamb. This paper reports on the possible contribution by the lamb to the high incidence of twin separations among Merinos.

Approximately equal numbers of fine-wooled Merino ewes were mated to rams of the same breed or to Border Leicester rams. Half of each sire-type group was lambed in one of two adjacent 6.5 ha paddocks, one devoid of shelter and the other containing low grass hedges parallel and 10 m apart. The ewes were observed constantly during daylight for 17 consecutive days. The position of twin- and single-bearing ewes relative to their lambs and to identified birth sites was recorded hourly on the day of birth and periodically thereafter. Lambs were weighed, assessed for vigour and ear-tagged only after the ewe had moved more than 20 m from the birth site. Particular attention was paid to circumstances in which lambs were separated from ewes.

Overall, 48% (68/140) of twin-bearing ewes became separated from at least one live-born lamb compared with only 5% (7/114) of single-bearing ewes. Precipitating factors, such as birth difficulty, interference, poor birth vigour, were identified in all separations of single-born lambs but these factors were involved in only 29% of twin separations. In the pooled data for the two paddocks, significantly more Merino X Merino twins became separated than Border Leicester X Merino twins (58%, 46/80 vs 35%, 22/62; p < 0.01). This difference was not related to tagging weight of lambs (3.16 ± 0.44 vs 3.30 ± 0.48 kg respectively) or to the time spent by the ewe near the birth site (3.43 vs 4.01 h; loge-transformed data 1.342 ± 1.021 vs 1.390 ± 1.021 respectively). Although more twins became separated in the sheltered than the non-sheltered paddock (54%, 38/71 vs 42%, 30/71), the difference was not significant.

Close examination of activity, alertness, time spent asleep etc. was not possible for individual lambs but at tagging 3-26 h after birth more crossbred than Merino lambs were rated on a subjective scale: good, fair-good, fair, poor, dead, as being of "good" vigour (69%, 84/122 vs 38%, 62/162; p < 0.001). More Merino twin lambs were also rated as being of "fair" or less vigour than crossbred twin lambs (30%, 37/122 vs 9%, 17/162; p < 0.05), but lambs in this category were not often separated from their mothers (7/37 Merinos, 2/16 crossbreeds). The greater vigour of crossbred lambs may reflect a greater alertness, easier arousal and more rapid co-ordination than in Merino lambs, giving them a greater ability to follow their mothers.