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## BEHAVIOUR AT LAMBING OF ROMNEY EWES WITH EXOTIC BREED LAMBS: AN INTERIM REPORT

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A STUDY to assess the behaviour at parturition of ewes lambing both in pens and on the hills at Mana Island has recorded 56 pen births and 82 paddock births covering sheep in the following categories:

- (1) Exotic breeds lambing their own breed lambs (exotic controls).
- (2) Romney ewes with pure exotic lambs by ova transplant.
- (3) Romney ewes with half-cross exotic breed lambs.
- (4) Romney ewes with quarter-cross exotic lambs.
- (5) Romney ewes lambing own breed lambs (Romney controls).

Table 1 sets out the results for ewes in each of these categories showing the time intervals between birth and lamb standing, and between lamb standing and suckling, times which give some indication of the chance of lamb survival. In the pure Finns, lambs show short times from birth to standing indicating their relative activity, though this is offset by a longer period from standing to suckling. When the pure Finn has a Romney dam (by ova transplant) the time to suckle is reduced by half. Although shepherds came to the assistance of 30% of Finn ewes lambing own lambs, no Finn ova transplants to Romney or Finn half-cross lambs needed assistance for birth. Thirty-five percent of the quarter-cross births were assisted.

Field records from ewes lambing on hill slopes indicated that 4% of the lambs rolled down the hill slopes when attempting to stand and were lost while another 4% were stolen as a result of interference by other alien dams. From the observations to date the following tentative conclusions can be drawn:

- (1) Ova transplanted pure Finn and East Friesian lambs in Romney dams required no assistance at birth. However, quarter-cross Finn lambs needed assistance at lambing.
- (2) In pen lambing of the exotic breeds, the Finn lambs made better average times from birth to standing than the other pure breeds, but were slowest in average time from standing to suckling. Having a Romney dam seems to reduce the

TABLE 1: AVERAGE TIMES FOR POST-BIRTH EVENTS IN PURE AND CROSSBRED LAMBS

<i>Breed</i>	<i>Pure Bred</i>	<i>Ova Transplant<sup>2</sup></i>	<i>Half-cross<sup>2</sup></i>	<i>Quarter-cross<sup>2</sup></i>
(a) BIRTH TO STANDING TIME (min):				
Finnsheep	15 ± 17 (27) <sup>1</sup>	12 ± 13 (8)	7 ± 3 (5)	16 ± 19 (9)
E. Friesian	28 ± 17 (12)	24 ± 5 (3)	30 ± 16 (4)	18 ± 8 (4)
Oldenberg	24 ± 10 (10)	26 ± 11 (6)	13 ± 2m (3)	
Oxford Down	29 ± 13 (10)	22 ± 10 (9)	21 ± 13 (7)	
Romney controls			At pasture	20 ± 16m (21)
(b) STAND TO SUCKLING TIME (min):				
Finnsheep	60 ± 42 (21) <sup>1</sup>	31 ± 26 (8)	32 ± 27 (5)	29 ± 24 (11)
E. Friesian	53 ± 34 (9)	34 ± 18 (3)	31 ± 14 (6)	18 ± 12 (5)
Oldenberg	23 ± 12 (10)	12 ± 7 (5)	50 ± 14 (3)	
Oxford Down	52 ± 22 (10)	22 ± 20 (7)	45 ± 34 (7)	
Romney controls			At pasture	34 ± 26 (20)

<sup>1</sup> Mean, SD, No. of observations ()

<sup>2</sup> Romney dams.

standing to suckling time for Finn and East Friesian cross-bred lambs.

- (3) Ewes dropping twins in hill country pay more attention to the vigorous lambs and tend to leave behind the weak lamb that has rolled away from the birth site.
- (4) Some lamb stealing by alien dams occurs during lambing in hill country. Such stealing must be considered a normal part of sheep behaviour under all group lambing conditions.

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