

SHEARING INCREASES THE SUSCEPTIBILITY OF WEANERS TO FLEECE-ROT

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Young sheep are generally more susceptible to fleece rot than older sheep (Belschner 1937, Watts et al. 1979). Belschner suggested that lamb "tip" if left unshorn, favoured entrance of water and contributed to their high susceptibility to fleece rot. We present evidence here that shearing of weaners increases their susceptibility to fleece rot.

Data came from the following two experiments.

Experiment 1 Merino lambs (268) born and pasture reared at Armidale NSW were divided into two groups with one group of 141 being shorn at 5 months old and the other group of 127 being left unshorn. Fleece rot was assessed as a distinct band of matted wool containing extraneous proteinaceous material. At 13 months of age, 36% of the shorn group and 16% of the unshorn group were affected with fleece-rot (Chi-squared = 13.8, $P < 0.001$, 1 df).

Experiment 2 Merino lambs (32) born and pasture reared at Prospect N.S.W. were divided into 3 groups. Group A (11) was shorn at 3 months old, and group B (8) was left unshorn. Group C (13) was born 2 months later and left unshorn. These three groups allowed comparisons of a) shorn v unshorn sheep of similar age but different fleece lengths (A v B) and b) shorn v unshorn sheep with similar fleece length but different ages (A v C). Fleece-rot was assessed as in Expt. 1. At 7-9 months old and after several periods of rain, fleece-rot affected 10 of 11 shorn sheep (A), 3 of 8 unshorn sheep (B) and 6 of 13 unshorn sheep (C). The shorn group had significantly more fleece rot. (Chi-squared = 7.06, $P < 0.05$, 2 df). The difference between the two unshorn groups was not significant. Wet skin along the dorsal midline occurred in 10 of 11 shorn sheep (A), in 3 of 8 unshorn sheep (B), and in 7 of 13 unshorn sheep (C) (Chi-squared = 6.34, $P < 0.05$, 2 df). *Pseudomonas* sp. in dorsal midline skin washings was observed in 4 out of 5 shorn sheep (A) and in 1 out of 5 unshorn sheep (B). Group C were not sampled. *Pseudomonas* was usually absent from skin washings unless the skin was clearly wet at the time of sampling. The increased incidence of fleece-rot in the shorn sheep is unlikely to be due simply to their shorter wool as the younger group of unshorn sheep with similar fleece length had a lower incidence of both wet skin along the dorsal midline and of fleece-rot. Further research is needed before we fully understand why shearing increases susceptibility of weaners to fleece-rot.

Weaners are traditionally shorn to minimise grass seed contamination, to control fly-strike, to separate lambs' wool from fleece wool and to stimulate growth (Drinan and Ferguson 1966). However, if lambs are not shorn, various advantages can result. These include the elimination of shearing costs, reduced losses associated with fleece rot and probably body-strike and fewer lamb deaths due to cold stress.

REFERENCES

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