

(4) *Sheep Husbandry and Pasture*.—The type of pasture appears to have a very great deal to do with the condition under discussion. In all cases the ewes have had access for a large part of the gestation period to coarse fibrous grass of a very low nutritional value. Many flocks have been fed on turnips with a run-off on to fescue or tussock (a mixture of *Poa colensii* and other poor grasses being included), but other cases have occurred among ewes run on the rough pasture alone so as to avoid overcondition at lambing. It has been a striking fact that ewes placed on good grass-paddocks—*i.e.*, rye, clover, and cocksfoot—have shown no sign of the trouble.

So impressed are the farmers where the deformities have been found that rough pasture is at the bottom of the trouble that they are either getting rid of fescue altogether, or keeping stock on turnips alone or on English grasses during gestation—practices which have given them relief from the trouble. It is difficult to arrive at a reason for the deformity and for the œdema of the uterus from the observations made, but something may result from experimental work planned for next lambing-season.

In order to overcome the losses farmers are advised to keep ewes off rough pasture during gestation, and where a run-off from turnips is required to see that the pasture is short and good. Especially should ewes be kept off fescue. If fescue-paddocks are a necessity they should be grazed closely and no roughage allowed to accumulate. It might be possible to let wethers eat this type of feed out earlier in the season.

The experimental work in hand is briefly as follows:—

(1) Twenty ewes and one ram were obtained in the North Island, their breeding history being irreproachable. These have been sent to a selected farm in an affected locality, and are being run on Chewings fescue with the object of finding whether their lambs will become deformed. They will possibly be kept two years on this farm.

(2) Two ewes were thyroidectomized at the Wallaceville Laboratory with a view to breeding from them. One ewe died from post-anæsthetic pneumonia, but the other has been put out with the ram. A third ewe is to be operated upon after tugging.

FARMERS' EXPERIENCES.

The following is a summary of experiences gathered with the assistance of Mr. D. Weir, Inspector of Stock, Ranfurly, from local farmers:—

J. A. (Hyde).—In this case there were 150 deformed lambs among 300 half-bred ewes, four-tooth, in 1928. The same ewes, as two-tooths in 1927, bred to Romney rams, had no deformed lambs in a 100-per-cent. lambing, but they were grazed on a different type of pasture, a rye and clover mixture, with an occasional change to 150 acres, half of which was mixed English grass pasture and the remainder Chewings fescue. The 1928 winter was spent on rank Chewings fescue and tussock alternately. The same Romney rams were used in both seasons, and came from three well-known breeders. In 1929 160 full-mouth half-bred ewes, bought farther inland on 10th April, were put on rank fescue for six weeks; Romney rams were with them three weeks; then changed to English mixed pasture, but brought back on to fescue for a fortnight in July, after which they were on ordinary