There was little opportunity of observing the pasture responses to either lime or manure over the bulk of the district. However, certain farmers are using both carbonate of lime and superphosphate and obtaining responses which indicate that the practice of liming and top-dressing in this district should follow the practices adopted in similar districts of New Zealand where the value of lime and super is appreciated. One farmer using certified rye-grass and top-dressing with lime and super has pastures which have been down for seven years, are fairly free from ragwort, and would be a credit to many farmers on first-class land.

Logs dragged over the bank with a tractor.

Management of Pastures.

The general management of pastures on ploughed land is generally in line with that adopted in other districts except that special problems connected with weed-control require some adjustment. As a general rule farmers experience little difficulty in preventing the ingress of scrub on ploughed land, though ragwort is more prevalent in such areas.

Supplementary Fodder.

Owing to the climatic conditions in this district the growth of grass is seasonal. From about May to August there is a period during which the supply of feed is at a minimum. If the winter-carrying capacity is based on pasture growth alone flocks will not be large enough to economically utilize seasonal growth, while if flocks are large enough to utilize the bulk of spring feed, grass alone will not winter them.

The growing of swedes is a common practice in the district, and this crop fits in very well with farm-management. However, as they are too bulky, swedes alone are probably a bare maintenance diet and are not eminently suitable for in-lamb ewes and cows in calf. Consequently, attention has been directed at the use of fodders such as hay or ensilage for the purpose of increasing the effectiveness of the swede crops.

The great difficulty in this connection is the fact that ragwort in hay or ensilage is injurious or dangerous to animal health so that only those paddocks that are relatively free from ragwort are shut up. This is a problem of major importance, the solution of which would materially increase the carrying-capacity and the productivity of the district.

Crops for Hay.

Where the value of hay is appreciated use is being made of oats, or oats and tares, or peas to provide this desirable supplement in the form of oaten hay. The crop is broadcast or drilled in the spring after roots or out of grass. No manure is used, and the oats are cut at the milky stage and stacked. This material is usually fed out on surface-sown country to assist in the control of weeds and secondary growth.

The ragwort does not appear to be prevalent in such crops, and so little danger to stock need be feared. The main reason why this practice is not as popular as it might be appears to be the cost of growing such a crop, also many farmers have not the labour or plant to handle a heavy hay crop. Climatic conditions also make haymaking uncertain.

The use of temporary pastures, including bulky growing plants such as red clover and Italian rye-grass, seems to afford scope for use in making hay, a fair bulk of which could doubtless be produced at a slightly lower cost than in the case of oats. Doubtless, ragwort would be more in evidence in such hay.

Control of Ragwort.

In only a few cases was the use of permanent pasture for haymaking observed. In one case the farmer experienced no difficulty in obtaining a good bulk of ragwort-free hay. In this case a mixture of perennial rye-grass, cocksfoot, &c., was used on land that had been limed and was being top-dressed.

Sheep were grazed during winter and early spring to keep back growth of ragwort, the field for hay being top-dressed and closed up later than would normally be the case. The result was a rapid growth of grass which competed more than favourably with the close-grazed ragwort, which consequently was not aggressive. Mowing was carried out earlier than usual before the ragwort had started to flower, and the result was a slightly lower yield of hay of good quality, almost free from mature ragwort. This hay was fed out on recent burns to check weed and scrub invasion, and altogether the method proved sound and practicable.

As a result of unstable weather at or about harvesting-time haymaking is a little precarious and so attention was given to the possibility of ensilage-making. Wet weather or broken weather interferes but little with ensilage-making, nor does it have any very deleterious effect on the quality of the silage. One farmer, realizing this, has made a pit silo and, using green oats, gets good results. Either oats, temporary pasture, or permanent pasture can be used for this purpose. However, ensilage generally is not as high as good hay in feeding-value and is not so suitable for feeding with turnips and swedes.

(To be continued.)