

CANTERBURY PASTURES



Lambs being fattened on rape. [Green and Hahn Ltd. photo.]

With his cocksfoot and lucerne and cocksfoot and subterranean clover pastures well established, Mr. Rands feels that he is well insured against such periods of acute feed shortage.

Mr. Rands's success in establishing the various pastures has been largely due to:—

1. Growing lupins, usually two crops in succession, to build up fertility.
2. Summer fallow and careful preparation of the seed-bed.
3. Sowing of pedigree seed.
4. Controlled grazing, suited to the characteristics of the various species. (Topdressing then helps to maintain production.)

Lime and Fertiliser

One ton of lime is applied before final cultivation; then 1 ton is applied every fourth year or, alternatively, $\frac{1}{2}$ ton yearly. When it is available 1cwt. of superphosphate is applied, usually in February or March.

A 7-ton roller has been used on all pastures to bury stones and consolidate the ground; its use has made topping and haymaking possible and topdressing easier.

Because of the attractive returns that have been received from growing small seeds in recent years, Mr. Rands has often been tempted to close some of his pastures for seed. He has spent a lot of money sowing down pastures and there was a time when he felt justified in gambling on small seeds when he had surplus feed rather than increasing stock numbers. He has occasionally harvested small seed crops, but he does not depend on them. His aim is to increase his flock, as he depends on heavy stocking to build up soil fertility. In 1946, however, as a result of exceptional growth, a total area of 110 acres of white clover, perennial ryegrass, short-rotation ryegrass, and Montgomery red clover was harvested.

Stock

When Mr. Rands took over the farm in 1939 the carrying capacity was 400 half-bred ewes and dry sheep. By 1947 he had increased this to 1000 ewes, but, on account of ill health, considered it wise to reduce his flock to 800 Romney cross breeding ewes and 200 dry sheep. Judging from the present feed position, 1000 ewes would still cause no worry.

Mr. Rands changed over from half-breds to Romney cross ewes when better pastures had been established. He felt that with the Romney cross he would be better able to control his pastures, have a better lambing, and have lambs that would be more easily handled. Each year sufficient 2-tooth ewes are bought from hill country to replace the cast-for-age ewes, which are sold fat. Southdown rams are used.

Half the total crop of lambs usually goes away off the mothers by the end of January, averaging 33-35lb. Owing to the fact that nor'-westers can soon alter the whole feed position, lambs are usually sold when prime rather than held on with a view to increasing their weights. It is not the practice to buy in lambs, though 400 were purchased last year and fattened on surplus feed.

Realising that carrying capacity is governed by the amount of feed available during the summer period, Mr. Rands plans to have the minimum of stock on the farm at the driest time. To achieve this he arranges the lambing so that full advantage is taken of the high spring production to fatten lambs and cast-for-age ewes. This practice also enables him to get into good order the ewes he intends to put to the ram in early autumn. Approximately 200 of the older ewes lamb in June. Greenfeed (oats and lupins) is provided for these ewes in addition to the short-rotation ryegrass pasture, which is specially reserved, and a cocksfoot and subterranean clover

paddock which has been nursed during the autumn for this purpose. Over a period of 4 years, including some bad winters, this practice has proved profitable.

The main flock starts to lamb late in July, so it is possible to have the bulk of the lambs off their mothers before production falls away with the dry weather. As mating at the end of February, which is early, does not allow time for flushing ewes bought in autumn, 200 ewe hoggets have latterly been added to the flock each year.

Though there have been periodical bouts of foot-rot, it has been found practicable by early treatment and isolation to keep infection to the minimum. No trouble is experienced with internal parasites, as the older sheep are disposed of every year and replaced by hill-country sheep, pastures are kept clean, and lambs are weaned on to fresh, clean paddocks. A hay crop is usually taken off the cocksfoot-lucerne paddock and the weaned lambs are put on the aftermath, which provides a clean pasture very well suited for the purpose. From the cocksfoot-lucerne paddock the lambs go on to rape. As they are in good condition by the time they go on to rape, a smaller area of the crop is required than would be the case where lambs lacked condition.

Implements

The 20 h.p. tractor used on the farm which was bought in 1938 is still working efficiently. A lighter one has recently been purchased for use at rush periods, and in addition a power mower, tedder, and new 3-furrow plough have been added to the range of implements. Very often heading, topping, haymaking, or cultivation have to be done at the same time. The header is regarded as a very necessary part of the farm equipment.

The policy throughout has been to pay for all equipment and improvements out of revenue. Mr. Rands has erected 70 chains of fencing, planted and fenced 30 chains of shelter belts, built a hay shed, and improved his dip and yards.

Crutching, shearing, lime spreading, hay baling, and carting of hay to the shed are done by contract. During the war years a boy was employed. Help for seasonal work is secured as required.

Mr. Rands intends to lay down a stand of 30 acres of lucerne next autumn, which he hopes will provide sufficient hay for 1000 ewes. He also intends to sow down another cocksfoot-lucerne area in the autumn and is considering the establishment of an area of *Phalaris tuberosa* for winter greenfeed.

There is no doubt that this property is being well farmed. A few years ago soil fertility was depleted to such an extent that the growing of white crops was no longer payable and stock-carrying capacity was poor. Today the fertility of the soil has been restored. If prices for wool and fat lambs drop, Mr. Rands can again turn to cropping and his crop yields will be quite satisfactory. With the knowledge he has acquired during the last few years, it is certain that by the adoption of a sound crop rotation Mr. Rands will have no difficulty in maintaining soil fertility.