

INTENSIVE GRASSLANDS MANAGEMENT - FAT LAMB FARM

By: Mr. J. Bruce Chrystall, Lockwood, Manawatu.

The farm is at Lockwood, 8 miles from Palmerston North and lies in the Taonui Basin, an area of the Manawatu swamp country which is still subject to flooding both from the Manawatu and Oroua rivers. The 320 acres was originally flax swamp and 16 years ago the area was without subdivisional fences or drains, being a wilderness of stumps, blackberry, rushes and willow-weed, with patches of grass consisting of tall fescue, swamp peas, and meadow foxtail, with some ryegrass on the drier areas. The country was completely devoid of clovers and had the reputation of not being able to fatten cattle.

DEVELOPMENT:

In the 16 years since development began, some 300 acres has been stumped, ploughed, cropped and sown down with a permanent grass seed mixture in which certified strains of ryegrass and clovers have been used. The farm has been provided with a complete internal drainage system and has been subdivided into 16 main paddocks ranging from 16 to 26 acres each.

DRAINAGE:

The topsoil is a friable peaty loam and the subsoil is a broken rubbly clay which is very free draining. This drainability is probably the most valuable characteristic of this land and has enabled me to establish and maintain very good perennial rye-white clover pastures in spite of annual and sometimes prolonged flooding. The importance of having good drainage cannot be overstressed. It is the first essential in the production of late autumn winter and early spring growth, and on well drained land such as this, pastures never become really muddy despite the rotation of large numbers of ewes. On much of the Kairanga land, stock movement and management is determined not so much by the feed as by the detrimental effect of large numbers of stock in paddocks when the ground surface is wet and muddy.

PRODUCTION CAPACITY:

It is not possible to give a table showing the year-to-year development in carrying capacity as the farm has been, up to the last year or two, in the process of breaking in - every year there has been a difference in the size of areas in feed crops, a difference in the areas harvested for wheat, ryegrass and clover seeds, and the effect of flooding has had varying effects on the feed position. An average of some 50 acres harvested for seed has been maintained over the past 14 years.

A comparison of the carrying capacity in my first year compared with last season, will give an indication of the development which has taken place. In my first year, the stocking at March on taking over, was 980 2-tooth ewes, 500 wethers and about 100 head of mixed cattle. I docked 650 lambs of which 140 were drafted fat off the mothers at 31 lb.. The cattle and wethers were sold as stores in the winter.

Last season by comparison the farm wintered 1,400 breeding ewes, 400 wethers, 53 fattening bullocks, 40 hoggets, 25 rams. One 16 acre paddock newly sown down was out of action and there were 16 acres of indifferent swedes and chou which had been damaged by flooding. In August the 53 bullocks were sold fat at 840 lbs, and were replaced by 132 more fatteners. The 400 wethers were got off prim's fat in August and September, and were not replaced. By January 1,260 lambs were sold at 41 lb. off the mothers and the balance of 140 plus 650 bought in were fattened in the autumn on grass to 43 lbs, average. Every ewe

was sold in one draft at 67 lbs. and 125 of the bullocks were sold in drafts by the end of the Autumn. Sales of fat Stock for the full year were, therefore :-

Lambs	2,050
Ewes	1,350
Wethers	400
Bullocks	178

As an aid in the summer management of pastures, some 32 acres were harvested for ryegrass and clover seeds and 16 acres were in fallow. The fact that no drenches were used on the livestock indicates that the general health of the stock was good.

#### MANAGEMENT:

The system of grazing management I have developed, is a modification of rotational grazing. A system that in my opinion gives the maximum number of lambs fat off the mothers, gives a greater length of time for fattening bullocks and more spread for the autumn fattened lambs and the winter fattened wethers. A system, moreover, that gives reserves of feed that may be needed in the case of any unforeseen eventuality, a system which in fact is very flexible. In grazing management we cannot lay down hard and fast rules, no two seasons are alike - we have to contend with floods and droughts, feasts and famines etc.,

The following is the management of the ewe flock for the season under review - in March the 1,400 ewes were in one mob and had the rotation of about half the farm (8 paddocks) and were moved on an average every 2 days or according to the size of the paddock and the feed. This rate of stocking gives the ewes at this time of the year, plenty of feed and allows them to thrive during tugging time. After about six weeks, that is mid-April, their rations were shortened up by taking two paddocks out of their rotation. These paddocks came back into the rotation about the end of June or so soon as the season warranted. Other paddocks are brought into the ewe rotation area if and when required as the ewes near lambing. During lambing the ewes still continue on rotation but, during the lambing peak on a daily shift basis. The unlambed ewes go ahead each day leaving the lambing ewes behind. The latter after a day or two are gathered up and put into a paddock that has comparatively speaking been lightly grazed with wethers or cattle. Sufficient lambing ewes are put into each paddock to stock it up to capacity and these ewes and lambs are not further rotated. This procedure is continued until ultimately every paddock has its complement of ewes and lambs, about 5 ewes and 5 lambs per acre, with the spring purchase of fattening cattle to control the feed.

It will be noted that the other half of the farm had been comparatively lightly stocked with bullocks and wethers, and consequently this stock is in tip top order to be sold at the end of August or early September at peak prices. The placing of the early ewes and lambs into the paddocks on this half of the farm with the pasture in great heart is the ideal for bringing on the lambs for fattening on their mothers. Further the other half of the farm as the reduced number of unlambing ewes proceeds round it in rotation, is given a period of lighter stocking and is thus able to make headway ready for the set stocking with ewes and lambs.

The period September-October, was one of relatively light stocking with sheep and it was able to buy bullocks early - a very important factor in fattening store cattle.

At the end of October the ewes in the paddocks to be harvested for ryegrass seed were spread over the remainder of the paddocks thus concentrating the stocking with sheep sufficient to maintain with the cattle the grazing paddocks in good order for ewes and lambs. The closing of paddocks for seed harvest is a safe and usually very profitable way of controlling the flush

of feed in the late spring and early summer. After shearing the cast ewes were put aside in two or three paddocks and the remaining lambs plus the bought in ones were spread thinly amongst the cattle until the rotation was taken up again.

CATTLE MANAGEMENT :

I attach considerable importance to the role of cattle on a fat lamb farm. The fattening of a bullock is a question of time. It is, therefore, important to buy cattle early, important for controlling feed for the sheep (once the feed gets away it is a very risky business to buy extra cattle, to get it eaten back). September and early October grass cleans the cattle up and by Christmas they are in very forward condition and ready to put on weight in the Autumn when there is plenty of time and feed for this process.

SUMMARY:

To sum it all up, it is the concentration of the ewes that is the important factor in this system of grazing. The rotation area provides sufficient feed for the ewes but it also allows me to save that very valuable autumn grass when the ewes are dry for their winter feed and for the carrying of additional fattening stock through the winter for the extra high spring prices. I also have a fair proportion of the farm in good feed for the early lambs in the spring which again enables me to buy cattle early and keep them late.

TOPDRESSING AND CROPPING:

I have found topdressing an aid in pasture production but my limit has so far been about 10 tons of serpentine.

I have grown a crop of swedes and chou moellier about 15-20 acres and this crop is used about the end of June for some 500 late lambing ewes, with an adjacent paddock as a run off. The ewes are divided into two, one lot being on the crop and one lot on the run off. The crop is fed off in breaks. This area of crop helps in the conserving of grass for the early lambed ewes. The crop is about 2/3rds swedes and 1/3 chou moellier, sown not together but in separate strips.