PASTURE MANAGEMENT ON A SOUTHLAND FAT LAMB FARM

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When I took over the ownership and management of my farm of 285 acres of terrace land 29 years ago, there were four 50 acre paddocks and two 47½ acre paddocks, six in all, a stable with a lean-to on it, plenty of open, unfenced ditches, and in a lot of cases gorse hedges used as subdividing fences. However, under the old system of farming then in vogue when grain growing was the chief source of revenue, these paddocks were not unduly large. It was then carrying 450 ewes and a five-horse team. It took 25 acres of turnips to winter the ewes. The lambing percentage was much lower than today, and very few lambs were drafted fat off their mothers, and had anyone then suggested that in 28 years' time one would start lambing with 1275 ewes, that 1500 lambs would be tailed, and that 70 per cent. of these would go away off the mothers, such a statement would have appeared fantastic, yet that was the capacity of the farm in the 1948-49 season.

In the spring of 1914 I sowed out a paddock with grass prior to which ½ ton of burnt lime per acre had been applied, the first lime, by the way, which was put on. I was then out of the country till 1919, and I well remember the surprise I got upon my return to see good grass still growing on that paddock. About this time, too, the idea of fertilising our grassland came under discussion, the late Mr W. Watson of Heddon Bush being one of the pioneers in this movement: and after visiting his farm and seeing the results obtained from treating his grassland, there was only one thing for the enterprising farmer to do, that was to do likewise. Thus crept in the new era in our system of farm management; less and less cropping, and instead of carting grain off the farm, we began carting lime and fertilisers on to it, and distributing them over our fields, then a laborious task, as it was all done with horses and drays or waggons. On the present day

plan of the farm you will see that there are 15 paddocks, most of them being oblong in shape, 13 of them consisting of about 16 acres, and the other two about 23 to 25 acres.. There are also three smaller -fields -round- about the homestead, well sheltered. All ditches with one exception have been fenced off and have had 6in. or 7½in. tiles put in them and been filled in, thus cutting out a big loss in stock yearly. Practically all gorse fences have been rooted out and replaced, in later years with fences made of concrete posts and No. 8 galvanised wire; so, since I took over, the whole farm has been refenced, except about 50 chains of boundary fence. I should say that out of 285 acres, 240 have natural drainage, but the other 40 acres of slopes and former swamps take a lot of attention as regards drainage, as the tiles fill up with silt and have to be lifted and cleaned out before putting in again. Sometimes, on account of the ground drying out and sinking, the drain has to be deepened, and in a lot of cases too small a tile was used in the first place.

I use the drain plough quite a lot in draining the slopes, it being a very quick and cheap way of doing so, and, provided the sub-soil is reasonably firm, this system is quite efficient, as by making a drain every two or three yards apart springs are tapped. If there is a tile drain to use as an outlet I pull over it, then dig down to the tile to see the water gets away, before filling in, the butt of a tussock having been put into it upside down, then earth put on top of it; or another method I use is to fan the drains off a slope close together near an outlet and dig a hand drain out and tap them. If they are only a yard apart at the required place a hand drain a chain long will be an outlet for 22 mole drains.

I use a. 2½in. plug and go about 20in. deep; the size of plug and depth being governed by the horse power of the tractor used on the farm. Formerly when this work was done, in most cases with a 12-horse team, a bigger plug was often used.

Prior to 1920 it was customary on most farms to close up a bit of the first year's grass and harvest the ryegrass and use that seed the next year in sowing out a paddock. No doubt we were using a poor strain of ryegrass, which in three or four years had definitely run out and was supplanted by fog and other inferior grasses. For the last twenty years or thereabouts I have used only certified seeds purchased from a. local

firm and have sown the following mixture:- 1 bushel Certified P.P. ryegrass, ½ bushel Certified Italian, 21b dogstail, 61b Certified cocksfoot, 21b Certified P.P. white clover, 21b Certified Montgomery red clover, and 21b Certified timothy, sown out of a grass-seed box attached behind the roller. Prior to sowing the grass-seed mixture 2lb of rape are drilled in at 21in. intervals with 2½cwt. of turnip proprietary fertilisers. With the treatment received, namely one ton of carbonate of lime at time of sowing out and topdressing every alternate year with 2cwt. of superphosphate and ½ ton of lime, and being constantly grazed, the fertility of the soil has been built up, thus giving us the results obtained.

I have had no harvest in recent years and I generally get my lime carted and sown in February and March. Then the ground is dry and one can put 4 tons on to a trailer and with a 14ft. wide Vulcan topdresser soon get over the ground, sowing ½ ton to the acre.

My ewe flock is of the Romney Marsh breed, and I have been putting in about three hundred two-tooths every year lately, getting the same sheep off the same station for the last 16 years; they are not so big as those reared locally, but develop into nice, well-woolled ewes after being a year or thereabouts on the farm. I use Southdown rams, it having been my custom until recently to buy Southdown ram lambs in Canterbury, and when one shear use them for replacements, the ones not needed being sold to neighbours.

I stated that I commenced the lambing season with 1275 ewes, but I rarely finish up with less than a 5 per cent. loss. Sleepy sickness in the older ewes and blood poisoning in the two-tooths are the principle causes of the death rates; then there is generally fully 4 per cent. of dry ewes, which are sold for mutton and replaced either with a corresponding number of ewes with lamb at foot or ewe hoggets.

I will say there is a bit of a bottleneck when the ewes start lambing, about September 10, as by then all the winter turnips are finished and the ewes are out on grass, and if it is a very backward spring there appears to be a lean period for the sheep, and there is then a decided need for knowledge of pasture management. During the winter nearly all the paddocks are used as a run-off, off the turnips. Towards the middle of August, however, only two may be used for this. purpose, and naturally they get extra heavily grazed

and take quite a while to recover, so that when the ewes start lambing 1200 are spread over approximately 200 acres. I find it a good idea to run the whole flock through the race a few days before they are due to lamb, when one can, by looking at the udder as the sheep go past, direct the man at the end of the race whether it is in or out, the outs being the later lambers. The early lambers are then put in the farthest away paddocks, and as they lamb, each field has its allotted number put into it, in most cases 5 ewes to the acre and on the better paddocks 5½ to the acre. I find the easiest way to do this is to put say 100 ewes into each of three paddocks and when 90 have lambed in these three paddocks, drive off the unlambed ewes. That is when one sees the benefit of the oblong paddock in that two men can start at one end of it and by the time the other end is reached practically all the ewes with lamhs will have been shedded off. If they are left quiet for a day, or two days for preference, the two lots are driven into the third paddock, which now has the required number. The gate is shut on them and that is their home until drafted off the mothers, thereby catering to the natural instinct in most sheep not' to stray far from a certain spot. This procedure is carried out right through lambing and by adopting this method the lambs when being marked are all about the same age, the castrating being done with a Daroux emasculator, and the tails seared off. Since adopting these methods, my rejects when slaughtered are almost negligible, there being 3 out of 1430 one year and 4 out of 1258 another year; both years 98½ per cent. were graded prime. There is no water available for the sheep, the moisture in the grass being sufficient for their needs.

With fully twelve ewes and lambs all counted to the acre, pasture control is not difficult, my theory being that grass must be kept closely grazed. Even with this intense stocking it does begin to get away about the beginning of November in some paddocks, in which case more sheep are drafted into these fields and this allows me to shut up 7 or 8 acres for hay, which will be cut and stacked or baled in the middle of January.

Personally I like to get my ewe flock shorn about the middle of November. The lambs at that time are still dependent on their mothers' milk, and if shorn a month later they are not so easily mothered up. In all cases the ewes and lambs are put back into their

own paddock and left undisturbed; except to look for cast ewes, for although shorn, some are liable to get cast. My wool returns for the last two seasons show that 13,000lb has been sold irrespective of the crutchings.

There, are always about 3 per cent. that fail to thrive, one of a pair of twins, perhaps, or one that has become mismothered at shearing time, and a month before the fats are drafted off the mothers these culls are run off, drenched with Phenovine, and put on to suitable feed, generally where the hay has been cut, and after a time, when there is sufficient leafage on the turnip, swede or kale crop, their teeth are cut out and they are put on to these paddocks, where they thrive rapidly and one never misses the feed. I am beginning to realise that more advantage can be taken of our pasture to put weight and condition on lambs when weaned. This year, for instance, my lambs did not do so well, only about 700 going off the mothers, weighing 361b. I was short of the usual fattening crops, rape and young grass, etc., so I picked out 250 of the tops of the ones that were left, and seeing the draft of fats went 36lb, it is only reasonable to suppose the tops of the ones left would not weigh more than 321b. In five weeks on good grass paddocks 188 of them went away prime, weighing 351b. exactly, representing an added value of approximately 4/-, all done on grass.

I consider myself very fortunate in being able to procure the two-tooth ewes spoken about previously towards the end of January. Bringing these extra 300 to 400 on to the farm just about drafting time helps to control the pasture, which at that time is liable to get out of control, especially as I have to shut the ewes up when separated from their lambs on a very small area to try to get condition off them—almost an impossible task.

My custom in the past has been to plough up a paddock as soon as it shows signs of the good grasses running out, irrespective of how long. it has been down; thus a paddock may be ploughed up that has been sown down only 9 or 10 years, while some others may be down over 25 years. I am sure that to get the most production in wool and lambs a certain area under cultivation is necessary, but we must feed our stock in the winter and fatten our lambs on the minimum area, thereby allowing us the maximum area on which to graze our stock on grass for fully 9½ months in the year.

Through my system of farming I have definitely lengthened the grass-growing period by fully a month, three weeks of this being in the autumn, I also get an earlier growth in the spring by a week or ten days. Similar conditions prevail on most of the Southland fat lamb farms.

As regards future development of the farm, I do not expect to increase its carrying capacity. There may, however, be a bit of altering done to advantage by cutting up the 25 acre paddock, putting 2 acres on to one 14 acre paddock and 7 on to another adjacent paddock, thus making sixteen approximately 16 acre fields and three smaller paddocks handy to the steading.

Just whether I can carry on with this system indefinitely is problematical. However, to forestall a possible breakdown in the results achieved in fat-lamb production, I think it would perhaps be a good idea to take a crop of wheat off in each rotation, and with this end in view I have got a quarter share in a header, fully realising the worry involved in harvesting wheat here in Southland on account of grain of high moisture content.

When it is realised that the number of ewes wintered has increased 300 per cent. in 28 years, and the acreage of winter feed has not increased, the importance of grassland to Southland is strikingly illustrated, and one may be pardoned for any doubt as to future possibilities.