

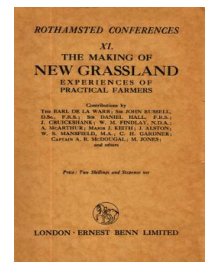
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The Making of New Grassland

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Making of New Grassland

A. McArthur

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stocked so that the pasture was evenly eaten down the grasses did not go readily into ear and there was a good supply of pasture of the best quality.

One point of importance is that if there are different types of soil in a field which produce different kinds of pasture these should, if practicable, be sown with mixtures suitable for the different types of soil, or be fenced and grazed separately.

But, the best-laid schemes "gang aft agley." Weather conditions often upset plans.

MAKING OF NEW GRASSLAND

By A. McARTHUR

Buntingford, Herts

I HAVE been asked to read a paper, or rather to relate to you my experience in laying down arable land to permanent pasture.

About fifteen years ago I put several acres of land down to grass in Cambridgeshire, on land that was absolutely unfit to grow corn and which is now a fine pasture; there has been no deterioration at any time since being put down, which often does happen.

I succeeded in getting an excellent plant the first year, and never at any period in the summer months was it closely grazed, and to this I attribute the successful result. At no time during the first ten years was any of the pasture cut for hay. I strongly believe that to cut your pasture for hay goes a long long way towards ruining it. Graze it, and feed it, either by fattening stock with cake, or by applying artificial manure.

In 1922 I purchased a farm of 580 acres, near Buntingford, 80 acres of which was old pasture, the remainder arable; the most of it two-horse land in dry weather, and three horses when wet. One would call it a medium heavy soil, all mole-drained, the subsoil being suitable for this treatment. I started putting one field down to grass and then another, until I now have 300 acres in pasture out of a total of 580 acres, and it has gone down splendidly, with the exception of one field, from which I cut hay. That field has lost a large percentage of the clover, the clover plant having been choked with the vigorous growth of varieties of grass plants, which always grow quicker and more robust than the clovers. When I put down mixtures for cutting on arable land, sainfoin or clover, I have found in the case of Italian ryegrass and sainfoin the best mixture is four bushels of sainfoin and one-eighth of a bushel of Italian ryegrass, which is quite sufficient grass. Now why such a small quantity as one-eighth of a bushel? Because if you put more it spreads out so much it will smother the sainfoin or clover, and you never see them any more. The same thing applies to new permanent

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pasture, but far more so, because you are using a finer and much less robust variety of clover, and you have to apply a larger quantity of grass seed. Take most old pastures, and look for clover after the hay has been made. You will find very little clover; but if the same pasture was grazed and manured properly you will get, in most cases, abundance of clover. Now, to partially destroy the clovers in new pastures and then to try to build them up again, or to recover them, must be a retrograde and not a progressive step.

With regard to the proper mixture of grasses and clovers to be used. I think a lot of money is wasted in using a quantity of fine grasses or a quantity of coarse grasses. You want to strike a happy medium, and I have come to the conclusion that wild white clover, Dutch clover, alsike and perennial ryegrass are sufficient to make an excellent pasture. Cocksfoot, no!—indigenous or otherwise. Timothy, no! I always see cocksfoot grasses left uneaten by cattle, so why use them? In an examination of the pastures which I have put down each year since I started in 1922 you will see that perennial ryegrass and wild white clover are the principal mainstays. I don't see that you want anything better. They both seem to like one another, and as long as they are kept within reasonable bounds of growth, by the grazing of cattle, I believe, if the cattle could speak, they would say the grass was delicious. If, through exceptional weather for grass, the pasture should get beyond the stock on the ground don't worry, but when the ryegrass and clovers get heads, and are very ripe, run a mowing-machine over it, and, if not worth raking up for hay, let it lie and the seed will be trodden into the ground and will germinate with the first rain, and a large proportion of it will become a part of the pasture, and by running your machine over your pastures you kill two birds with one stone—you cut all the thistles that may be there.

With regard to manure, I apply with the crop 5 cwt. North African phosphate, and continue to give 20 per cent. of the land in grass 5 cwt. each year. This means, if I have 300 acres in grass, 60 acres are dressed with 5 cwt. per acre per annum. Possibly someone may say, why don't you apply nitrogen and potash as well as phosphates? I do not want to choke my clover by using nitrogen, and from experiments which I have carried out I do not think my land requires any potash.

I do not think I could wish for better results than I have secured.

Now a word with regard to my experience in the actual sowing down and preparing of the seed bed. It is of first importance that the bed should be solid, so that the seed may be deposited at the proper depth and as regular as possible. No end of small seeds are sown at far too great a depth, and if they do manage to struggle through the heavy covering of earth they are weak, and invariably die. It must be apparent to anyone that to get a plant is the first essential in forming a pasture. Taking one season with another, I do not think you can do

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better than put your seeds down with a growing crop and sow early. If you are in the habit of using steam ploughs, try to use them when ploughing the field for the last time. This may not appear to be of much importance. The object is to get your land free from hollows, as no furrows are left when steam ploughs are used. When grazing sheep in after years, especially ewes in-lamb, you will be almost sure to lose several by them getting cast if furrows remain as they would do if the land had been horse-ploughed.

With regard to after-cultivation of young grassland, if this is grazed judiciously the only work required on same is to roll it well at the proper time in the spring. Harrowing is detrimental for many years after laying down.

I should just like to say in conclusion that those who wish to lay down pastures other than permanent—that is, with two objects in view, a hay crop as well as grazing—a different mixture should be used, so don't compare a three years' ley with permanent pasture.

I have been relating my experience. All I have told you represents the methods which I am convinced are correct in my case, although it is possible that all present may not see eye to eye with me. I did not, nor do I, presume to dictate to anyone that there is only one method, and that my own. Far from it. I have farmed too many years, and have met with too many rebuffs, to be so bigoted. I started farming when I left school, and have been at it for forty years or more; and my father was a farmer before me, worse luck! I wish he had been a lawyer. I might now have been laying down the law to you in place of simply relating to you my humble experiences of farming operations.

GRASS DURING THE PAST FIVE YEARS

By MAJOR J. KEITH

Pitmedden

It is now rather more than five years since the full possibilities of rotation grasses sown under the newer systems have been realized in Aberdeenshire, but one can hardly deal with the most recent development of one's ideas in these years without looking at the previous practice. Except in a few gentlemen's parks and on high-lying grounds there has never been much permanent grass, and it was generally believed that only on limited areas of the best soil would grass hold for more than three years or so.

Prior to the great improvements on grassland which began about twenty years ago, as the result of experiments and propaganda by the