

another field let the grass in the former piece grow again, and fifteen or twenty days afterwards you will see, if the season be propitious, a bulk of herbage in excess even of what there was before the first feeding off.

The next season the pasture may be mown, if you really want hay, but it would be better for the permanence of the grass to pasture it continually. Bush-harrow and roll every spring, and give it a good dressing of we'll rotted manure, mixed with earth, ditch-clearings, &c., every third year. Ten bushels of lime mixed with ten loads of earth will help, if dung cannot be spared.

In the Eastern Townships, many pastures are to be found which are as nature left them; they have never felt the plough. Thence come the best butter and the most savoury cheese that are made in the country. Unfortunately, their proprietors have terribly neglected these fine pastures. They have robbed them of all their wealth, and have repaid them no part of it; the land is ignorant of the very existence of the dung-cart. If these farmers will listen to me, they will never break up these fields. They are full of every description of grasses and clovers native to the country, and only wait for food fitted to their wants to produce abundantly. Are they too moist? Drain them. Those who say that grass-lands do not benefit by drainage are mistaken. It is just the reverse: the best herbage will not grow in wet places. Every animal on the farm improves more rapidly on a dry soil; they find the grass more to their taste, and are generally more comfortable. In marshy soils, dung is almost wasted, it remains a *caput mortuum*, and, like a corpse in a wet cemetery, it takes some years to become decomposed.

But to return to the consumption of the now established pasture. As farmyard manure but too often runs short, give two or three pounds a day of oil cake, pease-meal, or corn-meal, to each of the cattle on the pasture, and within a twelve-month of beginning this system of feeding, both cattle and land will show its efficacy. With us, in England, the better class of farmers always treat their second-rate pastures after this fashion, and thus make them almost equal in fattening power to land of the first quality. Do not omit spreading the droppings of the stock two or three times a month.

Rape and colza are, unfortunately, almost unknown crops in this province. Frequently, grass-seeds are sown, in England, with rape, and the double crop fed off by sheep or young cattle. This answers very well, as the beasts tramp down the roots of the young grass, and thereby fix them in the soil more firmly than can be done by rolling. As rape is sown broadcast, it requires no hoeing, and you may take my word for it, that the cultivation of this plant, with its subsequent consumption by sheep, each one eating in addition a pint of pease with a little clover-chaff *per diem*, would restore the sadly worn out lands of the country sooner than any means that can be devised.

And what grasses shall we grow on our pasture?

The choice depends entirely upon the texture of the soil we have to deal with. Some grasses start into growth early in the spring; others are valuable from their persistence in the autumn. Again, the grasses long for nitrogenous food, whereas the clovers seek for lime and phosphoric acid; both grasses and clovers are fond of potash, and both, if these food-matters are freely presented to them, will be found in amicable occupation of a well managed pasture.

When the turf is thickly set, you will very probably find as many as thirty different species of graminaceous and leguminous plants in it, that is, provided that the soil be of good quality. And this variety of species is by no means unimportant, as all animals do better on mixed food than when confined to one sort of food. Butter and cheese too will be

more highly flavoured when the pasturage is such as I have described. Timothy grass and weeds, which is about what our cows get in August and September, will never produce good cheese.

The greater the variety of grass seeds sown, the greater the chance of some of them suiting the land. Soils have tastes as well as men, and are sufficiently skilled in selection to distinguish those species which are the most likely to survive when the terrible contest, which will inevitably take place between their true and their foster children, shall have terminated.

GRASS SEEDS FOR AN ACRE - PROFESSOR BROWN, OF QUELPH.

GRASSES.

Meadow fescue.....	6 lbs.
Meadow foxtail	3 "
Perennial rye-grass	2 "
Timothy	3 "
Orchard-grass	3 "
Canadian blue-grass.....	4 "
Red top.....	2 "
Yellow oat-grass.....	2 "

25 lbs.

CLOVERS.

Lucerne	4 lbs.
White clover.....	2 "
Red clover	1 "
Yellow and hop clover.....	1 "

8 lbs.

Total grass and clover..... 33 lbs.

GRASS-SEEDS AND THE SOILS FOR WHICH THEY ARE SUITED.

Meadow foxtail.....	Rich loams.
Red top.....	All soils.
Yellow oat-grass	Sands.
Crested dog's tail.....	All soils.
Rough fescue.....	All soils.
Meadow fescue.....	Rich loams.
Sheep's fescue.....	All soils.
Rye-grass	All soils.
Orchard grass.....	Rich heavy land.
Perennial rye-grass.....	All soils.
Timothy.....	All soils.
Blue grass.....	All soils.
Poa, the common.....	Clays.
Poa, wood.....	Shady spots.
Poa, evergreen.....	All soils.

Mr. Brown's list is very good, but I should, in this province, omit the Lucerne, which does not seem to do well when mixed with other seeds, though it is invaluable as a forage plant. The orchard grass, on light inferior sands, may be replaced by 3 lbs. of crested dog's tail and 2 lbs. of yellow oats.

My own mixture for the average run of soils in Quebec, is as follow:

Pacey's perennial rye grass.....	8 lbs.....	\$ 80
Timothy.....	6 ".....	25
Orchard grass	7 ".....	1 50
Meadow fescue.....	3 ".....	1 05
Perennial red clover.....	3 ".....	45
Alsike	1 1/2 ".....	45
White	1 1/2 ".....	30

30 lbs. \$4 80