ter makers and dairymen show that there are no bad results from the use of this food, we cannot but say that ensilage may safely be fed to all dairy cows without injury to the quality of the milk. Turnips, however, have a tendency to impart their flavor to milk, especially if fed in large quantities or soon before milking. However, if fed in moderation immediately after milking there is little danger of contaminating the milk.

Regarding the general care of cows in the stable the main point to emphasize is to keep the animals clean and allow them a considerable amount of exercise. Treat them kindly, as the dairy cow is a sensitive machine working under forced draught, as it were, and any excitement that tends to agitate her nerves cannot help but be detrimental to the production of milk.

Control and Extermination of Weeds

From "Farm Weeds in Canada"

In adopting a method of extermination of a weed, the nature of the plant and its habits of growth must first of all be considered. Some experience is necessary to know the best time to work certain soils or to deal with special weeds, as well as to recognize them in all their stages. Some weeds, Russian Thistle and Stinkweed, for instance, have a very different appearance when young and when mature. No general rule can be given, as the treatment must vary with different districts, different soils and different climatic conditions. What may be successful in one place may fail in another.

Annuals may be eradicated from land, however badly infested it may be, through any method by which germination is hastened and the young plants destroyed before they produce seed.

Biennials must be either plowed or cut down before they flower. Mowing at short intervals in the second year, so as to prevent the development of new seeds, will clear the land of this class of plants; but a single mowing will only induce them to send out later branches, which, if not cut, will mature many seeds. Where plowing is impracticable, such plants should be cut off below the crown of the root.

TREATMENT OF PERENNIALS

Perennials are by far the most troublesome of all weeds and require thorough treatment, in some instances the cultivation of special crops, to insure their eradication. Imperfect treatment such as a single plowing, often does more harm than good, by breaking up the rootstocks and stimulating growth.

For shallow-rooted perennials, infested land should be plowed so lightly that the roots are exposed to the sun to dry up. For deep-rooted perennials, on the other hand, plowing should be as deep as conveniently possible. The nature of the land must determine the depth of plowing. In light or gravelly soils shallow plowing may be preferable as deep plowing might interfere with the mechanical texture of the soil, which is so important in the storing of moisture.

The rootstalks of some perennial weeds are very persistent. Small sections or cuttings from them will quickly take root when they are distributed by plowing or cultivation. Where such persistent perennials have become well established it is usually advisable to adopt the most convenient method of cultivation that will bring the rootstalks to the surface. They should then be gathered and burnt or otherwise destroyed. Most perennial weeds will, however, succumb to continued thorough cultivation that will prevent the growth of leaves.

Plants take in most of their food through their leaves. Perennial plants, which live for many years, have special reservoirs where some of this food, after elaboration, is stored in such receptacles as bulbs, tubers and fleshy rootstalks. The first growth in spring, particularly flowering stems, is produced mainly by drawing on this special store of nourishment. Plants are therefore in their weakest condition when they have largely exhausted their reserve supply of food and have not time to replenish it. The stage of growth, then, when plowing will be most effective is when their flowering stems have made full growth but before the seeds, which would be a source of danger, have had time to mature.

Prince Edward Island a Source of Seed Supply

T. G. Raynor,, Seed Division, Ottawa, Ont.

Having spent some ten days at the beginning of the harvest among the farmers and on various farms in Prince Edward Island this summer, some observations on this island, as a source of seed supply, might be of passing interest.

I know of no district where many of the farm seeds could be produced better or purer than on this island. This is made possible first by each farmer practically possessing a threshing outfit of his own. It is usually run by a two horse tread power, which in time will largely give place to the gasoline engine as a knowledge of how to run them properly is obtained.

The soil and climatic conditions are capable of producing a good quality of seed of the cereal grains such as oats, wheat, barley, and especially potatoes. There are numbers of farmers who are willing to pay the price necessary to grow such seed grain if only they can get a paying market. By paying the price, I mean that there are a number of farmers there who will select some of the best plants, will use a breeding plot and will be careful to keep the seed from mixing in the field and in the barn. There was evidence of this while judging in their field crops competitions in oats, wheat and barley. In a number of cases, the seed used for these competitions was obtained directly or indirectly from a member of the Canadian Seed Growers' Associations. Some have been selecting their seed for eight and nine years. Quite a large percentage of the prize winning fields were sown more or less with seed selected from such sources. One field of oats secured as high as 97 points out of 100. Where so many of our farmers are growing mixed crops and depending upon a change of seed from year to year in Ontario, it might be wise to try the Prince Edward Island goods to keep the sources of seed supply pure.

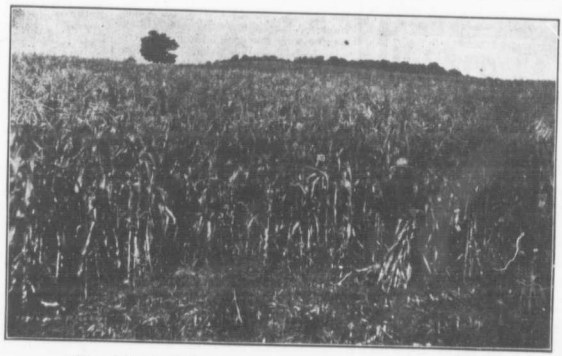
It is true that the Island has its weed problem, but not to the same extent in range or in quantity as obtains in most other countries. They have plenty of Couch grass, but it doesn't seem to be so persistent in its growth of root stalk, for it seems to be quite easily handled through a system of cultivation. This system of cultivation is growing in favor among the Island farmers and elsewhere, wherever it is tried. This system is to plow up the meadows very shallow soon after the hay crop is removed and work it more or less until it is plowed more deeply a second time in the fall. In some cases, as when prepared this way for potatoes, one plowing and cultivating in the autumn is sufficient. It is manured the next spring and the potato seed plowed in. This preparation of sod land for crops gives the cleanest as well as the best crops grown. The same plan, it will be noted, is largely used in the fall wheat districts in Ontario, only the stable manure is plowed in and the plowing is done more deeply than is usual on the Island. The average rotation in use on the island is a five or six year one in duration, three and four years of which it lies in meadow. A shorter rotation would doubtless handle some of their annual weeds better. Hemp nettle, spursey and wild buckwheat are very common in the crops. With a good fanning mill most of their farm seeds could be sent out free from weed seeds. The Island seems to be free, practically, of wild oats, which is a great boon.

The perennial sow thistle is, however, getting a wide distribution. Not many seem to be very much alarmed about its spread or the degree of injury it is working. It may be in their loamy soil, which obtains pretty much over the Island, that it, like Couch grass, may not prove so vigorous as it does in heavier soils.

The Island is rejoicing in a good, all round crop this year. The hay crop was perhaps more than an average one, as there was an unusual amount left for timothy seed, of which there will be some splendid seed for export. The cereal crops, too, were above the average as were the root and potato crops. The promise for potatoes was never better. There are some very large yields of good quality, McIntyres, the favorite late variety, being most prevalent.

Many of the Island farmers have something to learn about stock breeding. As elsewhere the breeding has been very much mixed so that a lot of inferior stock obtains. There are notable exceptions, however, and some good grade dairy herds are to be seen.

The needs of the Island farmer as summed up by an outsider might be summarized as a shorter rotation; more clover and a trial of alfalfa; a better arrangement and massing under one roof of outbuildings; more attention paid to breeding stock and greater co-operation in methods of handling farm produce. The Island farmers would unanimously say, give us a tunnel to the mainland as a panacea for all our ills.



A View of the Corn Field, taken August 20th, 1909, on Mr. Alex. Hume's Farm

Corn has come to be the main fodder crop of all dairymen, and is extensively grown by our best dairy farmers. The illustration shows but a part of the 25 acres of ensilage corn grown by Mr. Alex. Hume, of Northumberland Co., Ont., whose farm is one of the competitors in the Dairy Farms Competition.