

The Farmer's Advocate AND HOME MAGAZINE.

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DOMINION.

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Secure Your Seed.

All indications point to a scarcity of seed, particularly for some important crops for the coming spring, and unless precautions are taken an even greater scarcity in 1919. Seed supplies are not as plentiful as those engaged in production would like to see them. Cereal grains are generally produced from local-grown seed, but for the coming spring there is likely to develop an unusually large demand for choice seed oats, and possibly for spring wheat. Choice barley may not be too plentiful, and red clover and alfalfa seed promises to be scarce and high in price. It would be good policy for readers to secure their supplies early.

At the present time the field root and vegetable seed situation gives cause for alarm. Those who know the condition of the market and are engaged in the seed business hope to be able to supply the demand for seeds this spring. However, it will be necessary that farmers and gardeners in this country grow a large proportion of the 1919 supply. Importations from Europe have been cut off. Canada can produce root seed. This being true, every farmer who has land in a climate which will mature mangel, sugar beet, turnip, carrot and other vegetable and root seed should plant enough roots or stockings this spring to at least secure his own seed. Right now, while the roots in the cellar are still sound, select a few of the desired type and put them away in one corner of the cellar for planting next spring in an effort to ensure seed for 1919.

The seed corn situation is similar. There will not be enough well-matured seed with high germinating power in Canada to meet the seed corn producing area. It will be necessary to go further south in the States than has been the custom to get seed to grow corn for silage purposes here. This being true, readers should order early and should thoroughly test; in fact, all seed which goes into the ground this spring should be tested as to germinating ability. Always buy good seed. This year secure it early.

Helpful Hints on Production.

Farm production in Canada is destined to be one of the biggest factors in the war during 1918. The world is reaching the crucial point in this great conflict, and there is more talk at the present time about food supplies than about armies and munitions. True, men are being called to the colors in our own country and we read that the various Allied countries are combing their territory for more soldiers for the fighting lines, but never since the war began was the call for increased production more urgent and never was it as necessary that every effort be put forward to produce economically and in large quantities as it is now at the beginning of 1918. Those misguided people who think that farming is of comparatively little importance in the conflict, are growing fewer daily, but we still have too many of them. However, for the men on the land who know the problems as no one else does or can, any suggestions that will help in any way will be appreciated. The farmer is not looking for advice; he has had too much of that already, but he will gladly take and make the best use of any helpful hints no matter where they find their source.

At the Experimental Union meeting recently held in Guelph, some helpful suggestions were made by men who are in close touch with the situation. These were published in last week's issue of "The Farmer's Advocate," but some of the hints will bear repetition. No one who knows how hard farmers of this country have worked during the last two years would expect them to be able to do much more work in 1918. But, while their hours may remain the same, or practically so, as one speaker has said, two shifts of eight hours each—one before dinner and one after dinner—it may be possible to work to a little better advantage that the maximum production result from the efforts made. First of all, co-operate; work with your neighbor, because there are many jobs in the work of the farm which two or more men together can do to better advantage all around than where one works alone. Use power machinery where at all possible. Of course, we know that new machinery is expensive and in some cases difficult to procure, but where either horse-drawn or power-drawn implements and machines can be used to cut down the time necessary to handle the work and do it economically they should be used.

In stock feeding, Prof. Day advises using an abundance of roughage and as small amount of concentrates as possible. It is practicable, where plenty of clover hay with roots or silage is available, to make both meat and milk with a minimum of concentrates. This practice would release grain for sale for human food and would, at the same time, practically maintain the output of meat. With hogs, which are so necessary now, roughage again must be used. Pasture them to the best possible advantage on young alfalfa or red clover, or a mixture of spring grain sown thickly with which about seven pounds per acre of clover has been added. Plan for the fall by arranging a rape pasture, and for next winter by planning a patch of mangels or sugar beets to provide roots to pulp and mix with the meal ration.

With cereal grains it is important that a large acreage be sown. The acreage in Eastern Canada cannot be increased very much by spring efforts, but the land should be given the greatest possible amount of cultivation, and the seed sown should be of known high-yielding varieties and well cleaned. Now is the time to select and clean the seed. Get the maximum yields per acre by using large, plump, clean, pure seed of the heaviest-yielding sorts and sown as early as the land will work. It is important that seedling be done at the proper time. In this connection land that is rich and well prepared and will grow spring wheat might be sown to that crop, and any lands which will grow beans might well be planted to beans. Seed of cereal grains and more particularly of corn, should all be tested as to germinating qualities before being planted. Let us do everything to get a big yield from the acreage put in in 1918.

Dairymen have been experiencing no small amount of difficulty in obtaining supplies of dairy products, which have not advanced in price in comparison with cost of production and prices of other farm products. Prof. Dean recommends that more and better cows be kept, and that they be fed more and cheaper food, but with this will be necessary more labor or its equivalent in machinery. Also, a higher price must come for cheese if production is to increase in 1918. In his opinion larger quantities of dairy by-products should be manufactured into food for human consumption.

The poultry situation may be summed up briefly. Weed out all poor layers and keep only the heavy pro-

ducers, and in so far as is at all possible, substitute some other feeding stuff for wheat. Never was a good laying hen more profitable, and never was a poor layer more unprofitable than at the present time.

The fruit grower must carry on, but experts believe that orchards should get the minimum amount of care necessary to keep them clean and productive, that small fruit be grown in as large quantities as possible, and that the land in orchards to be cropped should be put in to some crop of vital necessity at the present time. There may be some food for thought in these suggestions.

Nature's Diary.

A. B. KLUGH, M. A.

Canada From Ocean to Ocean—IV.

As we journey inland from the Maritime Provinces we first pass through a portion of Quebec which is mainly Spruce-Birch country, and then through Western Quebec which, in regard to fauna and flora, resembles the adjoining portion of Ontario.

Most of that part of Ontario which is generally known as Eastern Ontario and Central Ontario, or to define it more exactly, that portion between a line drawn from Ottawa to the middle of the east shore of Georgian Bay and a line drawn from a little south of Hamilton to Sarnia, was originally covered mainly by a Maple-Beech forest with a fair sprinkling of coniferous trees or in places by a pure, or practically pure, stand of Pine. To-day, since this district includes some of the very finest agricultural land in Canada, we naturally find conditions much changed. But we still have, over considerable areas, and occurring throughout the district in patches, (sugar bushes), stands of timber which approximate to original conditions.

The Maple-Beech forest is one of the best-marked habitats which we have in Canada. The main and predominating part of the flora, as the name indicates, is the stand of Maples and Beeches, with other deciduous trees such as the Yellow Birch, Paper Birch, Ironwood, Elm and Oak, interspersed.

The Maple-Beech forest has a very characteristic ground-cover, consisting of plants which, in the great majority of cases, send up their leaves and flowers in early spring, such as the Hepatica, Bloodroot, Dutchman's Breeches, Squirrel-corn, Yellow Adder's-tongue, Trilliums of several species, Blue Cohosh, Pepper-root, Spring Beauty, Jack-in-the-Pulpit, Wild Leek and Violets of many species. These plants are adapted to living in this particular habitat because they develop their leaves in early spring, before the leaves of the trees overhead have expanded sufficiently to cut off the light, manufacture their food and store it in some underground structure, such as a bulb, corm, tuber or root-stock, so that it is ready to nourish new leaves and flowers in the following spring. In summer and autumn the Beech-Maple forest is not at all rich in flowering plants, and such as do occur have leaves adapted to work under conditions of reduced light. A plant thus adapted is the Maiden-hair Fern, the most characteristic fern of this habitat, and if we examine under the microscope a section of a leaf of this plant we find it to have a very thin epidermis and an open arrangement of the green cells which carry on the manufacture of food.

Of the fungi which occur in this habitat the most characteristic are the "bracket-fungi" which grow on the trunks of both living and dead trees.

Insects are comparatively abundant in this forest, caterpillars which feed on the leaves of the trees, wood-boring larvae which bore into the trunks, ground-beetles which feed mainly on such insects as fall from the trees, carpenter ants which live in decaying trunks, bees and wasps of various kinds which visit the flowers in the spring, and mosquitoes which breed in the woodland pools.

The Maple-Beech forest is also the home of many species of birds. The Ruffed Grouse makes its nest among the fallen leaves, the Wilson's Thrush is abundant, the Crested Flycatcher announces its appearance by its harsh, screaming notes, the Oven-bird builds its dome-shaped nest on the ground, several species of Woodpeckers excavate nests in dead trees and render invaluable service by seeking out and devouring the destructive wood-boring larvae, the Cuckoos go quietly about their business of consuming hairy caterpillars which are left alone by many other birds, the Red-eyed Vireo sings persistently among the leafy branches from spring till fall, the Nuthatches climb about the trunks of the trees, head down, or head up as the fancy takes them, the Chickadee makes a nest in a cavity in some rotten stump, the brilliant Scarlet Tanager gleams like a fire-brand amid the green leaves, the Rose-breasted Grosbeak sends forth his rich, warbling carol, the Wood Pewee utters his doleful refrain, and numerous species of Warblers flit like flying gems amid the branches, and sing their quaint little ditties.

The most characteristic mammals of the Maple-Beech forest are the Northern Deer, the Groundhog, the Raccoon, the Chipmunk, the Red Squirrel and the Deer Mouse. Of these the former is still fairly common in parts of the district in which there are still large areas of woods left, and in some parts is rather increasing than diminishing owing to the reduction in numbers of its old enemy the Timber Wolf. In parts of the district which are sparsely settled this latter mammal is still by no means rare. The other mammals are still common, and of them all the commonest is the one least often seen—the Deer Mouse. It is not unless traps are set, or one camps in the woods and so hears them about at night, that the immense numbers of these little creatures present in these woods is realized.