

The Farm Nursery*

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Certain varieties of the hardy trees, most suitable for the planting of shelter belts, can be just as easily raised on the farm as a crop of garden peas or corn, and undoubtedly at much less expense than if purchased as one or two-year-old seedlings. These should be, in connection with every farmer's garden, a small nursery patch devoted to the growing of such hardy trees as maple and ash, and cutting stock of cottonwoods, willows or Russian poplars. There would be little difficulty in obtaining the necessary seed, provided orders were sent in to the seedsmen or nurseryman during the summer, so that they could make preparations for getting a sufficient quantity collected. A pound of maple or ash seed, if sown in suitable soil, would produce considerably over 1,000 seedlings, and would take up very little room in the garden. A few hundred cuttings of willow, Russian poplar and cottonwood, would not occupy much room either and could be made to produce annually as much stock as the average farmer could conveniently plant each spring.

The farm nursery, adapted to the needs of an average prairie farm would be very simple; the area of ground occupied very small, and the labor to obtain good results very little. My idea of the stock in such a nursery patch would be about as follows:

A 50-foot row of one year maple seedlings. A 50-foot row of one year ash seedlings. Another 150-foot row of two year ash seedlings, 100 feet of willow cuttings set one foot apart, 50 feet of cottonwood cuttings and 50 feet of Russian poplar cuttings.

POSSIBILITIES OF THE NURSERY.

Such a nursery would easily supply 1,000 seedlings and as many cuttings each year, or more than enough stock to plant half an acre of shelter belt. It would be necessary to sow each year about one pound of maple and one pound of ash seed to keep up a supply of seedlings. The willows and poplars would be cut down to the ground each spring and the shoots made into cuttings.

The ground for this work should be prepared in the same manner as for vegetables and if possible sheltered from the strong winds. As a temporary shelter, sunflowers are very effective. If the heads are cut off in the fall and the stalks left standing, they will collect plenty of snow which would prove of the greatest benefit to young seedlings during winter and early spring.

The ash seed should always be sown in the fall, and the maple might best be put in early in May, as the seedlings are not then so liable to damage from spring frosts and the high spring winds. The seed is sown thickly in drills about an inch or an inch and a half deep.

So far I have only mentioned such varieties as any farmer can raise without the least difficulty. We find, however, that many men have a special liking for this sort of work, and these might very easily propagate a few ornamental shrubs such as Caragana and Tartarian honeysuckle, which are easily raised from seed.

We get numerous applications from farmers for spruce and pine seed, and in some cases these might be successfully raised in the farm nursery, though such cases would be exceptional, as considerable special care is required to raise a good stand of evergreen seedlings. Besides, the growth is so slow that the average man would become discouraged long before the plants were large enough to set out, so that on the whole the growing of this class of stock cannot be recommended as suitable for the farm nursery.

Evergreens, however, are most desirable for prairie planting, but there are not many farmers who would be willing to go to the expense of purchasing a thousand or more spruce or pine suitable for windbreak purposes, at prices quoted in the general catalogues. If nurserymen would supply two-year-old seedlings, these could then be given a place in the farm nursery where they could be lined out for a couple of seasons, and then set out in the permanent situation.

EVERGREENS

I do not know whether evergreen seedlings grown in Canada can be purchased in any quantity. I do not remember having ever seen them quoted in nursery catalogues; but in a catalogue recently received from D. Hill of Dundee, Illinois, two-year Scotch pine seedlings are quoted at \$6 per 1,000 and white spruce at a slightly higher figure. Seedlings of this age are, of course, only a few inches high, and would, as before stated, need to be transplanted to nursery rows for two seasons when they would probably be from 10 inches to one foot high; but there is no reason why a farmer with ordinary care should not successfully carry 1,000 or so of these plants in his nursery patch. If planted four inches in the row, with rows eight inches apart, a bed six feet by about forty would be all the ground needed for 1,000 transplants and would entail but little labor. Though it is not likely that very many farmers will do this, still it is a very practical way in which anyone can get evergreens at a comparatively reasonable cost, and in sufficient numbers to make their planting worth while.

If the farmers who are interested in tree culture will only grow for themselves some of the common varieties suited for windbreak planting along the lines I have indicated, many of them will be spared the disappointment which I am confident numbers are going to experience in the near future, when they realize the importance of tree planting, and then find that after perhaps making all their plans and preparations for planting, they cannot obtain the necessary nursery stock.

Cement Floors in Cow Byres

J. H. Caldwell, Carleton Co., Ont.

Where cow stables are cemented right up to the manger, there is constant trouble saving the knees of the cattle and in keeping bedding under them. We have until recently used wood as flooring, but when installing cement in our cow byre I decided to leave a trench four inches deep and 20 inches wide where the front feet of the cows would come. This trench we filled with blue clay, which soon packed very solid. It acts as one of the best aids in keeping bedding under the fore feet and in saving the cows from sore knees.

With this equipment in the stalls this past winter, we have had no trouble, nor do we anticipate any from the causes mentioned above. The men who put in the cement work were very loath to do as I requested, as they had never seen the like before. The plan now has the approval of all who have seen it, and no money would induce me to have this trench filled with cement, which, however, could easily be done at any time if one so desired.

Another advantage of the clay is that it is warmer than cement and it would appear that cement will ere long be universally in cow byres. Those intending to put in cement floors under their cattle should certainly give consideration to this point of having clay under the front feet of the cattle.

There is no other crop that can be grown that will produce as large a quantity of nutritious food for dairy cows, as the corn crop properly harvested and preserved in the form of ensilage. J. H. Coatsworth, Essex Co., Ont.

Dairying for Profit*

N. P. Hull, Michigan, U.S.A.

There are three things that we must keep in view in dairying: 1st, good cows; 2nd, plenty of good feed; 3rd, proper care. If we are going in for dairying we should aim to get the most possible out of it.

Every man who is on a farm should aim at two things: 1st, to sell as much as possible off his farm at the highest possible prices; 2nd, to increase the fertility of his land each year so that the following year he will be able to sell larger crops at still better prices. Will dairying do this? For my part I have found it the most profitable branch of farming, year in and year out, that I have ever followed.

The feed fed to a steer which sells at 10 cents a lb., if fed to a dairy cow would produce 20 to 30 cents a lb. in butter. There is more labor in dairying but the net profits are greater.

Hogs may be fed for six months and may prove profitable and may not. You can seldom tell. Do you know of any line of farming that will bring in such steady and profitable returns and as regularly as the dairy cow? The old hen comes the nearest to doing so of anything I know.

A farmer I met in Michigan had bred up a herd in which the poorest cow produced over 10,000 lbs. of milk a year and the best cow over 14,000 lbs. This man sent his milk to a cheese factory and netted \$100.14 from each cow on the average for his milk. His calves sold at an average of \$59 each, so that his cows netted him \$219 each, at a feed cost of \$55 per cow.

A REMARKABLE DIFFERENCE.

At one of our factories in Michigan we had two farmers living not over a mile apart. The cows of one produced milk which netted him, on an average, \$22 a cow or less than it cost him to feed them, so that for every dollar's worth of feed he fed his cows they returned him only 76 cents each in milk. The cows of the second man produced enough milk to average \$79.00 each at the factory. These cows returned their owner \$1.95 for every dollar's worth of feed they consumed. The first man was nothing more than a cow keeper. The second man was what I like to call a farmer.

When I started dairying, my cows, when they consumed \$30 worth of feed in a year, yielded me an average profit of \$10. When, however, I had developed them so that they consumed \$40 worth of feed each in a year their product sold for \$80 per cow and the average profit per cow was \$40. Thus I made as much in one year as formerly I had made in four.

Feed a variety of feeds. Cows enjoy a change of feed just as much as we do. Feed palatable food. Keep the cows in good health and comfortable. Much of the tuberculosis that we hear so much about is due to cows being kept in dark, poorly ventilated barns. The sun's rays are death to the tuberculosis germ.

Any man who can afford to keep a cow can afford to buy enough building paper to make his stable warm. He can afford, also, to buy enough window sash to put in enough windows to ensure the stable being well lighted. And, if he cannot do anything else he can at least knock out a few small holes in the sides of the stable and fasten some muslin over them to furnish ventilation. This is by no means an ideal system of ventilation but it is far ahead of none. These little things are of vital importance as regards their influence on the health and comfort of the cows and there is no animal on the farm that will return as much profit in return for good care as will the dairy cow.

*An outline of an address delivered at the last convention of the Western Ontario Dairywomen's Association by N. P. Hull, the president of the Michigan Dairywomen's Association and Master of the Michigan State Grange.

*A portion of a paper read at the convention of the Western Horticultural Society, held at Winnipeg in February. Although it was prepared especially for the western provinces, the principles and methods mentioned may be applied with equal advantage on farms in the east.