

Government "Model Orchards" in Nova Scotia.

In 1901 the Government of Nova Scotia passed an Act authorizing the establishment of a number of model orchards in the different counties of the Province, more particularly in those lying outside of the recognized fruit belts. The specified object of these orchards was to encourage the growing of fruit in the different sections by the introduction of better methods, and by ascertaining, if possible, what varieties of the various fruits were best adapted to each locality.

In order that the plan should encourage fruit-growing, it was felt that the Government ought not to give much aid to the man having the model orchard, otherwise his neighbors would say: "Well, it is all right for Jones to have a good orchard for he has the Government back of him, but we can't afford it." It was, therefore, decided that the "Government assistance" in the establishment of the orchards should consist only in furnishing the nursery stock for the orchard, in overseeing the setting of the trees, and in superintending the future care of the orchard, inspecting it once or twice yearly and furnishing written directions for the balance of the year.

The work of carrying out the provisions of the act was intrusted to B. W. Chipman, Secretary of Agriculture for the Province, and the writer, and up to date twenty-seven of these orchards have been established—one in every county and two in half of the counties of the Province. The owners of the orchards, with addresses, are as follows: Chas. R. Marshall, Falkland Ridge, Annapolis Co.; F. R. Trotter, Antigonishe, Antigonishe Co.; John Brown, West Lochaber, Antigonishe Co.; Peter S. Lewis, Cox Heath, Cape Breton Co.; Charles Fulton, Upper Stewiacke, Colchester Co.; Geo. McLellan, New Annan, Colchester Co.; W. R. Slade, Oxford, Cumberland Co.; Alcide Saulnier, Meteghan River, Digby Co.; H. M. Rice, Bear River, Digby Co.; J. A. McMasters, Boyleston, Guysboro Co.; Thos. A. McKeen, Aspen, Guysboro Co.; John W. Reid, Upper Musquodoboit, Halifax Co.; Jas. W. Mitchell, Cook's Brook, Halifax Co.; Joshua A. Wallace, Gore, Hants Co.; Lewis L. Smith, Blackstone, Inverness Co.; Rev. Donald McPherson, Glendale, Inverness Co.; Daniel Durland, New Germany, Lunenburg Co.; H. T. Hebb, Bridgewater, Lunenburg Co.; H. F. McDonald, Avondale, Pictou Co.; Andrew McPherson, Rocklin, Pictou Co.; C. E. Beck, North Brookfield, Queen's Co.; Donald Urquhart, West Bay, Richmond Co.; Jas. A. McKay, Clyde River, Shelburne Co.; Howard A. Harris, Welshtown, Shelburne Co.; M. E. McKay, Baddeck Forks, Victoria Co.; Jos. M. Porter, Deerfield, Yarmouth Co.; Judson Moses, Hebron, Yarmouth Co.

Add to these a similar orchard set upon the Agricultural Farm at Truro, and an experimental orchard at Wolfville, and we have a total of 29 orchards established in the Province.

The results have varied, of course, in the different sections, but as a whole they have been very satisfactory. New orchards have been set out in many places as a direct result of the establishment of the model orchard. Old orchards have been better cared for, and a very general revival of interest has been shown in most places. Some very interesting data has already been secured in reference to the varieties which are hardy in each section, and more information will be forthcoming with each year. Up to date the most promising varieties of apples for the trying sections of the Province are Stark, McIntosh Red, Baxter, Ribston, Wealthy, Yellow Transparent, Wolfe River, Hurlbut, Gano and Ben Davis. Among the plums, Lombard, Fellenberg, Shropshire Damson, Magnum Bonum or Yellow Egg, Reine Claude de Bavay and Bradshaw. Bartlett and Clapp's Favorite stand best among pears.

Altogether, though mistakes have been made and discouragements have been met with, yet the general result has been most emphatically hopeful, and so far the object of the act has been accomplished, viz., the encouragement of fruit-growing. F. C. SEARS.

Low Vitality in Fruit Trees.

Owners of fruit orchards (especially peach) in vicinities in which winter-killing has given trouble, will do well to note the conclusions reached by investigators from the Ohio Experiment Station after examination of several orchards so decimated. Invariably it was found that trees and orchards of low vitality suffered most. Where trees were kept in good condition, and, by frequent spraying, free from fungous disease and San Jose scale, the frost was resisted much better. In addition the report states: "No injury of trees was found where stable or barnyard manure had been used upon the ground within the last year or two; rarely was an injured tree found standing in sod; no injury was done where the surface of the soil beneath the trees had been covered with even a light mulch; little injury was done when the trees stood in fairly well-drained soil containing a moderate amount of fertility and humus. No injury was found where the trees were under the grass mulch method of culture. No injury was observed in

any case where the stems of trees had been slightly banked or mounded with a few shovelfuls of soil, peat, or manure. Very few trees, on the other hand, which had been affected with leaf curl, San Jose scale or borers, or trees existing upon infertile or exhausted soil, remained uninjured."

The San Jose Scale in Lincoln County.

"What about the San Jose scale?" is a question asked, as a matter of course, by the visitor in the fruit districts. The reply is less pessimistic than it was a few years ago, because means have been found to keep the scale in check and prevent it from killing infected trees. The lime-sulphur wash, put on in the spring, has been employed by many with satisfactory results. A Niagara Township grower tells of a very encouraging case. He had a plum orchard badly infested, and set to work to clean it with the lime-sulphur wash. Last spring's treatment cleaned the scale out, and now there is not one infested plum to be found.

Mr. W. H. Bunting, of St. Catharines, however, takes a different view of the situation. He thinks that while the above mixture is to be highly commended as a means of keeping the scale in check, extermination, even in well-cared-for orchards, is not to be looked for. He, also, has an experience to relate: In 1901 he bought a piece of orchard in town and sprayed thoroughly with the mixture every year until 1904, which season he skipped. This spring it was sprayed again, yet the fruit is so badly infested that it will be necessary to apply a summer wash.

"Those who think they have San Jose scale under control," he remarked, "are like the ostrich hiding its head in the sand." It cannot be exterminated, but the vigilant grower who sprays thoroughly will be able to save his trees from serious injury and reap good crops of fruit, on which he stands, ultimately, to realize higher prices, on account of the scale reducing production. Red currants afford a case in point. They were particularly hard hit, and as the price used to be low, growers did not think it worth while to save them and they were torn out wholesale. As a consequence the price is soaring away up this year, and those who have any are reaping a rich harvest.

Besides the lime-sulphur wash, a local pro-

Give the Apple Orchard a Chance.

A poor outlook for apples is the general complaint this year, and a good deal of talk is heard in some quarters about tearing out the trees. It is superfluous to say that the ones who talk most are those whose orchards are uncultivated, unsprayed, and frequently unpruned. The apple orchard has a hard time of it, truly. When the crop is good the farmer points to his yield as evidence that his orchard can grow both fruit and hay, or fruit and grain, as the case may be. When the crop is unsatisfactory he talks about cutting the trees down. Really it is almost the exception in most parts of Ontario to find an apple orchard well cultivated according to modern methods. The apple industry in this Province has never had a fair chance, and the orchard-owner who destroys a good bearing orchard is simply sacrificing something he has never learned how to utilize. It were well, also, before doing anything rash, to consider the red-currant business. A few years ago red currants were flatter than pancakes, and consignments to the commission men in Toronto and Montreal were sometimes acknowledged with requests for remittance to cover the freight. Everybody got discouraged, and a great many tore out their bushes; this year the price of red currants is away up. "What everyone else does, avoid," is a motto the apple-grower would do well just now to bear in mind. There are many bits of orchard of ill-arranged, ill-assorted, unhealthy trees that would be more remunerative as firewood than as fruit-bearers, but the man who has a reasonably good block of well-selected standard sorts would be extremely foolish to plunge with the crowd. An apple tree doesn't grow in a night.

POULTRY.

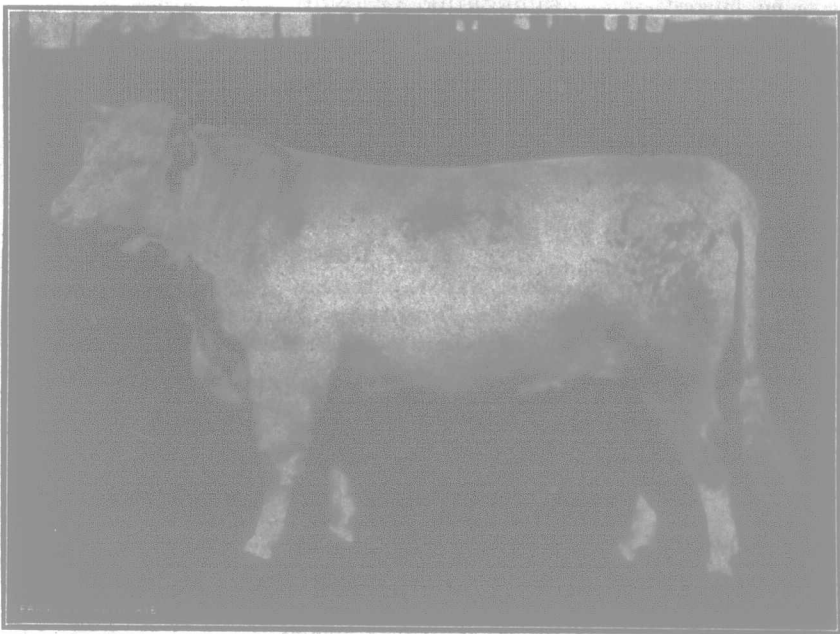
The Moulting Period.

The moulting or shedding period for poultry generally extends from July to December, and at this season of the year, while the hens are passing the most critical period of their lives, it is well to repeatedly call attention to the care hens ought to have. It requires about ninety days for the hen to complete the moulting process. Some hens will begin to moult much earlier than others, and finish before cold weather sets in. This is very desirable, as the hens seldom lay during the moult, or the larger part of it; therefore, if they begin early it will be a decided gain, for they can then be got

in laying condition before cold weather; chicken feathers are composed largely of nitrogen and mineral matter. The first process of moulting is the loosening stage, when the feathers loosen and drop out, at times leaving the birds almost naked. Hens should be carefully housed during this period if the weather is at all cold or damp, as cold and disease are likely to follow. When the new feathers begin to come in it causes quite a drain on the hen's body, especially of such substances as go to furnish nitrogen and mineral matter. Corn, wheat, etc., furnish the hen principally with carbon (fat), etc., while grass, bugs, worms, etc., furnish the nitrogen and mineral matter. Thus it is seen that the foods best adapted to the moulting period are nitrogenous foods. If the weather is favorable the hens should have unlimited range, so they can gather a supply of such articles as they need. During this period it is advisable to add a tonic to the drinking water—say one teaspoonful of chloride of iron to a gallon of

water. Sometime before the moulting season the hens should be fed up and put in good condition, for poor hens are usually slow to commence to moult. This forcing food should contain, in addition to the regular soft feed, linseed meal, cottonseed meal, fresh meat and fresh cut bone. The object, of course, is to supply the fowl's body with such material as the feathers are composed of. Commence this food now if you haven't commenced it before, and keep it up all during the moult. As the new feathers mature the hen may be found to be overfat, especially if she has too much corn or other hearty food. If this is the case, which is not often, withhold all grain and feed on bran, meal and oats, withholding the oats as she nears the laying period. Oats should not be fed, usually, oftener than three times a week. Give plenty of cool water during the moult. It is best to kill off and sell all the late moulting hens, for they seldom commence to lay before spring. All hens should be through moulting by December, and I would not advise anyone to keep those which are not moulted completely by the fifteenth of November, as they will only take up the room of layers, and yield no decided profit. J. W. DORAN.

Renfrew Co.



Meteor (86631).

Two-year-old Shorthorn bull. First and reserve champion, Highland Show, Glasgow, 1905.

prietary recipe, called the Carlson mixture, has been tried rather extensively this year. It has been prepared and patented by a St. Catharines blacksmith named Walter Carlson, who owns a small-fruit lot. It is an oily substance, and when applied as spray it will spread and cover the surface. The lime-and-sulphur, on the other hand, will not spread in this way; hence, unless very thoroughly applied, some scale is pretty sure to be missed. If a better and cheaper treatment than lime and sulphur can be found there will be money in the patent. Meantime, let us be thankful for the remedy we have.

Good Prospect for Peaches.

Barring untoward disaster, peaches ought to be one of the farmer's luxuries this year. The crop in the Niagara District is very promising, and within a few weeks many trees will be bending with their loads. Without wishing the growers bad luck, we hope that the price may bring this luscious fruit within reach of the common people.