

raise from 20 to 25 geese. I do not think any fowl on the farm is more profitable than the goose, because she will live on pasture, and you can carry her over the winter with mangels or turnips. I would have the pasture divided off into lots, in order to give them a change. It is not necessary to have a pond; running water is all right if you have it.

DISCUSSION.

Q.—What do you have to pay for good wheat? per? A.—Wheat screenings.

Q.—Is not good wheat cheaper? A.—No, I would prefer the screenings; we can get them for a cent a pound.

Q.—What kind of food do you put in this hopper? A.—You can get it now for 70c., or 75c.

Q.—I would prefer the good wheat. A.—For young chickens I think screenings are the best; I do not mean half chaff and oats, and stuff of that kind.

Q.—Would you give them corn? A.—I do not think much of corn for young chickens.

Q.—Do you only put one kind of grain in the hopper? A.—Yes.

Q.—Do you put in any meat scraps or anything of that kind? A.—Not when they are running out; I give them all the milk they want.

Q.—What is the effect of feeding too much corn? A.—It is apt to stunt them.

Q.—What kind of ducks do you raise? A.—Pekin ducks.

Q.—What do you do when you find half of them are taken by hawks? A.—When you are troubled with hawks, the only way I know is to shoot them.

Q.—Last year we hatched out 200 chickens and the hawks took 100 of them, and I offered a man \$5.00 to shoot the hawk, and he could not do it. A.—I have heard that a trap set on a pole is the best way to get a hawk.

Q.—What about rats? A.—My houses are built on cement foundations, and I have never been troubled with rats. My brooders are put up on runners, so that the cat can get under, and I have a fox terrier that goes around with me, and he hunts out the mice.

Q.—Can you tell us anything about a breed of fowls called Favorolles? A.—Yes, I have heard of them; they are good layers, but do not seem to be becoming popular in this country; they are a French fowl.

Q.—What would you advocate feeding for winter laying? A.—I would say a mash composed of 50 per cent. bran, a little corn chop mixed with milk and beef scrap. I would prefer green bone if you could get it.

Q.—I understand Mr. Graham kept chickens in the cornfield without water; what substitute did he have for water? A.—The dew is the only thing I know of. The chickens made remarkable growth. Milk is an ideal food for young chickens; I give them all the milk they want.

Q.—Is buttermilk a good thing for chickens? A.—I never tried it; I would not like to give it fresh.

Q.—What do you feed chickens the first few days after hatching? A.—I like the prepared chick foods that are on the market. If you haven't that, breadcrumbs and chopped eggs are good. Young chickens do not do well on sloppy food.

Q.—Then, you advocate dry food and dry water? (Laughter). A.—Yes; I do not say that I raise my chickens without water.

Q.—Would you recommend giving little chickens water when you first start to feed them? A.—Yes, I would recommend giving them water right from the start. I would give them all they want, unless they were very thirsty, then I would not let them gorge themselves. If you are feeding dry food, then you must give them water, but on soft food they do not require so much water.

Q.—Are your hens laying now? A.—Yes, I am getting a couple of dozen a day. I feed them the mash just before they go to roost.

Q.—Do you put pepper in the mash? A.—No.

Q.—Do you think it a good feed when you have zero weather? A.—On an exceptionally cold night I would take some corn and warm it, and give it to them before they went to roost.

Mr. A. G. Gilbert, Experimental Farm, Ottawa: I have no desire to intrude, but I think there is a very important phase being left out of Mr. Clark's address. I meet a great many farmers in going about this country, and they say: "It is all very well to talk about raising chickens in incubators, but at that time of the year, we are very busy plowing and other work, and what are we to do?"

A Member: Let them do it.

Mr. Gilbert: You are a bachelor, because you would never get married if you knew anything about what a woman is like. The crying problem, and I think the crying labor problem, why not be a farmer? I have tried that a few times, and I have found that boys and girls who are raised on a farm deal better than any other class of people to them. "I will give you a job if you will take charge of the plowing work."

That way you enter into partnership with your sons and daughters, and you may inculcate in your children a love for the work and for the farm, and they may never leave the farm. Too many of our boys and girls wander away from the farm and never come back. (Applause).

GARDEN ORCHARD.

Horticultural Progress.

[Prepared for "The Farmer's Advocate" by Prof. W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.]

VII.

SUGGESTIONS ON THE RENEWAL OF THE PEACH INDUSTRY IN NEW JERSEY.

Bulletin 197, by G. F. Warren, New Jersey Agricultural Station, New Brunswick, N. J., U. S.: The peach industry in New Jersey having declined during recent years, this bulletin was written by the Horticulturist of the New Jersey Station, with the object of encouraging the fruit-growers to plant more trees, and to care better for those they have. A large number of orchards in the States were visited and information obtained, which is presented in a practical way. Several experiments were also tried, the results of some of which are here published. As New Jersey is considered one of the best peach States, there must have been some important reason for the decline, and on enquiry it was learnt that this was largely due to the spread of San Jose scale, although lack of tillage, starvation of soil, borers, brown rot and leaf-curl all contributed to discourage peach-growers. It was found on investigation that where thorough spraying was done the insects and fungous diseases were kept under control. One sprayed orchard showed an increase in crop from 400 baskets in 1902 to 3,000 baskets in 1906. Mr. Warren believes that now is a good opportunity for a man who will take care of his trees to grow peaches, as the San Jose scale can be controlled by thorough spraying with lime and sulphur, and many of the growers who have not faith in spraying have become discouraged and do not care for their trees, hence prices are good. This applies in the Niagara district, where the growers in a comparatively limited area have to supply most of the large demand for Canadian peaches, and where peaches are now proving about the most profitable fruit grown there to the man who sprays thoroughly. The culture of the peach from planting of trees to the marketing of the fruit is dealt with in this bulletin. Three experiments of interest to Canadians were tried. In a planting experiment designed to show the effects of exposing the roots of the trees before planting the results were as follows; 44 trees were divided into four lots of eleven each:

	Number making good growth.	Number making fair growth.	Number making poor growth.
Lot 1, exposed 15 minutes, wet.	9	2	0
Lot 2, exposed 15 minutes.....	6	4	1
Lot 3, exposed one hour.....	6	3	2
Lot 4, exposed 1½ hours.....	3	5	3

While this experiment is not conclusive, it shows the advantage, as has often been pointed out to Canadian fruit-growers, of keeping the roots moist until the trees are planted. A good plan is to have a blanket to throw over the roots in the field.

In another experiment eighty trees were divided into four lots and pruned in different ways before planting. The results were:

	Number making good growth.	Number making fair growth.	Number making poor growth.	Dead.
Pruned to a whip.....	18	2		
Pruned to 1-in. stubs.....	17	3		
Pruned to 3-in. stubs.....	18	2		
Two-thirds top left.....	11	6	2	1

This confirms the advice given to Canadian planters to prune severely when setting. Some growers prefer pruning to a whip—that is, removing all the side branches—while others prefer heading back the side branches to one or two buds. The advantage of the former method is that there is a better chance of making a symmetrical head, while it is claimed for the other method that there is less danger of splitting later on when the new growth starts from the side branches near their base.

A third experiment was that of dipping the trees before planting in lime, sulphur and salt. No injury resulted from dipping tops in a mixture made with 15 lbs. lime, 15 lbs. sulphur, 15 lbs. salt and 45 gallons water, boiling for one hour with one-half to one-third of the water, and adding the other water cold. The trees are dipped but not let remain in the water. As a result of this experiment, dipping is recommended to New Jersey planters to destroy scale on young trees, but this should be done while the trees are dormant, although what injury was done in this instance when the trees were starting to grow was very temporary.

He who either plants or prunes a peach tree is a public benefactor.

P. E. Island Fruit-growers' Convention.

Unpropitious weather—anticipated winter—greeted the Fruit-growers of Prince Edward Island, in annual assembly convened. A foretaste of it had very adversely affected the Maritime Winter Fair the week previously. It appears that one never knows when the clerk of the weather may project his chilling waves upon a Maritime coast. There should be little fear of midwinter weather till midwinter arrives; dear only knows how far the circle has been reversed. Certain it is that the most trying conditions are now being experienced down here by the sea, and everybody is growling his prettiest.

To the Island meetings, journeyed out from Ottawa Dr. Fletcher, Dominion Entomologist and Botanist, whose knowledge in those matters was to be laid heavy siege to, for there are many weed and insect pests getting into the horticulture, and field culture, for that matter, down in these quiet regions. To the Island, also, journeyed Prof. Macoun, Horticulturist at Ottawa, with much practical experience in experimentation to break to its good people. To the Island journeyed, also, the delegate representative of Ontario's nurserymen, anxious to restrain the hand of the Islander, raised to smite the whole importation trade, by the imposition of serious restrictions—trees untrue to name and of worthless quality and bad upbringing we'll have none of longer. To the Island, for participation in those interesting meetings, journeyed Senator Ferguson, after the adjournment of his Chamber—the worthy Senator who grows fruit successfully, and understands all about the business, undoubtedly. But none of them were properly hitched up to continuity in travel, and, wandering hopelessly up and down the mainland, they came readily to the conclusion that there was something in the regular plaints of the denizens of this country when shut up from the world and subjected to untold inconveniences. This telegram, sent by the professors from Pictou, gives the stranger a little idea of the heartrending side of things here:

Pictou, N. S., Dec. 10th, 1906.

Cannot reach Charlottetown in time for meeting. No Saturday boat from Point du Chere. Reached Truro at four Sunday morning, 14 hours late. Advised come here this morning. Cannot get boat till Wednesday. Cannot connect by Tormentine. Please convey regrets to meeting. Sorry there is no tunnel.

(Sgd.) FLETCHER AND MACOUN.

And what were the feelings of the inhabitants? Dr. Sam Johnston said that all Islanders were, from the very nature of the case, prisoners. Still, one chafes awfully under confinement. We can speak for ourself. When we arrived at Charlottetown to open the meeting, and received a batch of telegrams, of which the above is a sample, we confess to a feeling of the deepest and most abiding disgust. Even the assurance on every side, "There's nothing but the tunnel," couldn't arouse us. And as we say one, so we say all. You continentals may well pity us.

There was to have been a regular heart-to-heart conference this year. We hadn't called out the reserves. The papers bulletined were few, the set addresses, apart from the President's, fewer, and all the hard-and-fast features thrown overboard. A practical meeting, in which Fletcher would compare notes with us on bugs, and Macoun swap methods on tree culture, was all we hoped for, all we considered of consequence in the moment.

We had to go on with the work as best we could unaided, and we did. The President gave an extended report of the year's operations. He considered horticulture well enough along the highroad to success to talk plainly to its votaries. The time of indiscriminate effort in the work was over. Unless the planter knew what he was doing and strove to adapt it to the best methods, there was no golden glare ahead. Effort always tells; in fruit-growing, effort—strenuous, intelligent effort—was essential. And there was need of concerted effort. Co-operation was the duty of the hour. There was a prospect of substantial assistance from the authorities to equip the horticultural circuit—establish a plant to store, pack, jam, evaporate and cider apples—whenever we showed a disposition to help ourselves. If they wouldn't move Federally, Hon. Mr. Haszard expected Provincial support to this end. And we must restrain the wayward tree agent. Too many lamented blasted hopes throughout the Province. Bonds for good behavior was the panacea. Owing to the absence of the party of the other part, the precise form of coercion was withheld till they could show cause against its application.

The fruit show in connection with the Fair, despite a complicity of adverse conditions and the onset of an Avars, was splendid. Mr. W. C. White, our latest experimentalist, had given us a blueberry such as experiences; in the presence of that fruit we couldn't take it seriously, and we didn't. The winter varieties, in colors, was