

### What the Records Showed.

Editor "The Farmer's Advocate":

Like others, I have awakened to the fact that there is money in keeping poultry, but, before I learned this, I was curious to know whether I was feeding the hens for nothing, or were they feeding me. So, to satisfy this curiosity, I started, last year, 1908, to keep an accurate account of all the eggs they laid, and all the poultry we sold, charging up to them their feed as we bought it; and I might say that, as a result of my investigations, I found myself a considerable sum in pocket.

Our hens are three-quarters White Leghorn, and one-quarter White Rock. We cross them every other year, thus keeping up the size. In the autumn we kill off our old ones, leaving none but the pullets and yearling hens for our winter layers.

I have tried, and with no evident bad results, to force them to moult about the latter part of September, and I believe it a good plan, for you then get earlier winter layers, they set earlier the next year, and you have early chicks for the following year—the pullets for laying, and the cockerels for market.

We kept 30 hens and one cockerel, and never had eggs to hatch better. For feed, they get barley and corn, fed morning and evening, with mash and scraps for noon, plenty of good water being before them at all times. In summer they do not get the mash, for then they have the grass. I think they have laid well, as the figures below will show:

Month.	Eggs laid.	Price sold at per doz.
January .....	183	40c.
February .....	113	38c.
March .....	343	22c.
April .....	643	16c.
May .....	590	16c.
June .....	402	18c.
July .....	410	21c.
August .....	213	23c.
September .....	158	25c.
October .....	170	27c.
November .....	140	32c.
December .....	140	38c.

Total selling price, \$64.36; chickens sold, \$7.50; total, \$71.86. Cost of feed, \$26.35; giving a gain of \$45.51. This gives us, as it were, \$1.50 per head clear. W. B. W. Wentworth Co., Ont.

### Grains for Poultry.

Of all grains corn appears to be most palatable to poultry, and as a fattening food it is hard to beat where a yellow-colored carcass is not objected to. It should not, however, be fed in unlimited quantity to layers, particularly to hens, as the tendency is to produce excessive fat rather than to stimulate egg production. Wheat is the best single grain for laying hens or pullets. It ranks about next to corn in palatability, and is a more nearly balanced feed than corn, besides being better for burying in litter to induce exercise. Corn kernels are so large and conspicuous as to be quickly picked up, even if quite deeply covered. Buckwheat and millet are also good to induce exercise, though not so rich as wheat. Oats may be fed to a limited extent, though on account of their coarse hulls they are not very acceptable to chickens unless pretty hungry. Fed in excess, oats may induce indigestion. While single reliance should not be placed on any one feed, variety being an important consideration, there is little doubt that wheat, even at present prices, is a profitable grain to employ largely in feeding laying hens, particularly in view of the alluring price of eggs. While screenings or frozen wheat should be used where available, in the interests of economy, when these are not to be had it will pay to use a proportion, at least, of good marketable wheat. A feed of corn is good to fill up the crops at night, and barley has a recognized place in the poultry feed bin.

### Poultry Notes.

Make up your mind to raise more and better chickens this year.

If using an incubator, give it a thorough cleaning before using it. Wash it out with a solution of Zenoleum or some other disinfectant, and so have it sweet and clean. Run the machine a few days empty, so as to see that everything is right. No use wasting eggs.

Most farmers use hens for hatching out the chicks, with various degrees of success. Put the sitting hen in a pen by herself, and supply plenty of food and water, and a dust box, and the hen will do the rest.

Get out some early chicks. The cockerels will bring good prices for early broilers, and the pullets will make good layers next fall and winter.

Ducks can be marketed at two months old, and make a good side-line for the farmer.

Y. N. DOTTE.  
York Co., Ont.

### Dusted Lime for Mites.

Editor "The Farmer's Advocate":

To clean mites out of henhouse, I never found anything equal to air-slacked lime. Put the hens out; close the house up tight; take four or five handfuls of lime and throw up to the ceiling. I tried nearly everything, but never found anything to equal it. Repeat in a week or ten days.

Perth Co., Ont.

W. A. K.

## GARDEN ORCHARD

### O. A. C. Short Course in Fruit-growing.

Much that is of interest and value to those engaged in fruit culture was discussed at the short course in horticulture, held at the Ontario Agricultural College, Guelph, recently. Among the popular topics were: Co-operation; Cover Crops; Nursery Practices; Canning; Fruit-judging; Tree Thinning of Fruit, and the Marketing of Apples.

The question of cover crops for orchards was discussed at some length. They must be used according to climatic conditions. The food of the tree must not be used up by other crops during its growing season, and the growth of the tree must be checked early in order to ripen the wood well for the winter season. It takes two years to grow an apple—one year to grow, store up food, lose moisture, and ripen the foliage and fruit buds, and the next year to grow the fruit. The rule is to cultivate as early as possible in spring, and continue the operation to conserve moisture, make available plant food, keep down weeds, then to cease cultivating and sow a cover crop, according to the climate of the locality. In the St. Lawrence Valley they cease cultivating the first week of June; farther south they continue later. The general practice is to leave the cover crops on the ground until the following spring, when they are plowed under.

Harold Jones, Maitland, Ont., gave the following as a good rotation for the first six years' cultivation of a young orchard. The following crops may be removed, if manured heavily with potash and barnyard manure, in the following order: Potatoes, corn, clover, potatoes, corn, clover. The clover is cut when just beginning to bloom, and then the second crop is left, to be plowed down the following spring. Use a low-growing variety of corn.

### NURSERY PRACTICES.

The stocks for apple trees are grown in France. Probably the chief reason for the use of French stocks is because of their slight cost, the work in France being done largely by cheap female labor. The young trees are transplanted when about three inches high, and have their taproot cut off. The root system is thus improved. The stocks are imported and grafted in winter. They are mostly sold when the graft has grown for two years in the nursery row. Growers who want low-headed trees can purchase them from the nurserymen as one-year-olds, and head them low for themselves. Nurserymen customarily practice certain deceits upon unknowing purchasers. For instance, when an apple tree is not sold at the end of the second year, it may be cut back, and sold the following year as a two-year-old.

When grafting on roots, it is customary to make one or two grafts on the strong central roots, and several grafts on the small outer roots. Those on the large roots are grown on for two years, and sold as two-year-old stock, while the smaller ones are bedded for a year, and then grown similarly to the others. The nurserymen claim that the tree is not harmed by this method. Professor Macoun protested, "It would not do to starve an animal!" But he got for an answer, "A starved old cow, fattened, makes good beef!"

Many other practices in growing peaches, plums, cherries, grapes and pears in the nursery were outlined. It was strongly advised to purchase trees in nurseries of similar climatic conditions to the grower's own locality. The practice, too, of nurserymen, in continually choosing their grafts from the nursery row, must, after a few generations, be detrimental to the productiveness of the tree. The grafts are only chosen because of their vegetative functioning. It would be better for large growers, especially, to graft their own stocks, choosing the grafts from the best-bearing trees in the orchard.

### STRAWBERRIES FOR THE CANNING FACTORY.

"The canning business has made extensive fruit-growing possible," said S. H. Rittenhouse, of Jordan Harbor, an expert strawberry-grower. Carloads of strawberries now leave Jordan station, and growers have not to leave their fields to sell the luscious fruit. Mr. Rittenhouse had 2½ acres in 1906, and 1,000 crates, which brought \$1,250 gross returns. In 1907 he had 4½ acres, 1,820 twenty-four-box crates, at \$3,240, and in 1908, 3½ acres, 1,140 crates, at \$1,375. The

cost of cultivation, excepting harvesting, he estimates at \$50 an acre.

The system of work in strawberry culture is to obtain a rich soil, in good physical condition, and free from weeds, for planting on. Two heavy coats of manure in the year preceding the strawberry crop is not too much. It is impracticable to apply manure after the planting, because of the weeds it would sow. The planting is a very important and difficult work. The crown of the plant must not be covered, nor the roots exposed. An extremely important practice is to select good plants. The whole row should be dug up, and only the best and strongest plants chosen. The usual practice is to choose plants from the outside of the matted row, but that custom must, soon result in deterioration, as those plants are weaker. The Jordan Harbor people all grow one variety of strawberry, viz., Williams. This variety is not a good table kind, but is preferred by the canners because it lasts a long time in cold storage, and it is held together when cooked by the green tip. Good advice given by Mr. Rittenhouse, in closing, was: "Whatever you grow, whether of grain, potatoes or strawberries, get the community together, and grow only one good variety."

### JUDGING FRUIT.

"A uniform system of judging fruit should be established in Canada," said W. T. Macoun. The position of a judge of fruit is a difficult one. He must know a great many varieties, compared with the judge of animals, who has only several to learn. Judges of one section cannot well judge the apples of another section, as fruit varies with climate. Huron and Norfolk Spies do not look alike. If the exhibitor and the judge keep prominently in mind the two thoughts following, they cannot go very far wrong: First, how would the sample be on a fine dining table? Second, how would the apples look in a shop window? The scale of points suggested by Mr. Macoun for judging plate samples is as follows: Form, 10 per cent.; size, 10; color, 20; uniformity, 20; quality, 15; freedom from blemishes, 25; total, 100 per cent.

### PRUNING.

Eight good purposes of pruning were given:

1. To induce growth.
2. To lessen growth, by summer and root pruning.
3. To change the shape of the tree.
4. To promote the formation of fruit buds.
5. To enlarge the size of fruit.
6. To heighten the color of fruit.
7. To adjust the relationship between the branches and the roots.
8. To remove injured branches and eradicate diseases.

Four reasons for top-working of fruit trees:

1. To replace a poor variety with a good one.
  2. To increase fruitfulness.
  3. To induce earlier fruitfulness.
  4. To get a better trunk.
- Tolman Sweets, McMahon's White, Pewaukee and Haas are good trees for top-working.

### USES OF COVER CROPS.

The uses of cover crops were well summarized by Supt. H. S. Peart, of the Horticultural Experiment Station, at Jordan Harbor, as follows:

1. To conserve leaching nitrates when plants are not taking them up in July and August.
2. To turn the crop into the ground in spring, thus returning the food elements and adding humus.
3. Checking growth, by taking up moisture.
4. Holding snow.
5. Providing a winter blanket to keep the frost out of the ground.

How to cultivate an orchard on a hillside is a difficult problem. If the rows of trees run across the hill, alternate rows can be cultivated, one year in sod and one year to clover, sown in the summer, after clean cultivation.

The advantages of low heading are more and more marked as years come and go. The trees are lowering foot by foot, and inch by inch. Low-headed trees are more easily pruned, picked and sprayed. One whole day was devoted to the preparation of the important insecticides and fungicides, and the discussion and critical examination of the substances prepared. The spraying derrick, as manufactured by Waddell Bros., Norfolk, was on hand, and demonstrations of its efficiency given.

A preference among the fruit-growers in favor of arsenate of lead as an insecticide is quite manifest. It adheres better than Paris green, and does not injure the foliage. Co-operative associations obtain their fungicides and insecticides at a very low cost.

A general discussion on the varieties worth growing brought out some valuable points. Growers and buyers are unanimous in the belief that the biggest mistake sections make is in growing too many varieties. Several varieties, instead of sixty or seventy, as generally found, is much to be preferred, and, in fact, necessary, if a given