

to a colder one seemed very definitely to check ripening. With later varieties, Delayed Storage invariably shortened the time fruit would keep as compared with immediate storage at the same temperature. Anjou, Comice, and Clairgeau when given Delayed Storage last about the same length of time as such fruit given Car Storage.

"The comparative tests of the relative value of Cold Dry and Cold Humid Storage are not entirely satisfactory, owing to the fact that the temperature of the humid room averaged 3 to 4 degrees colder than the dry room. Results may be due either to the humidity, or the temperature, or possibly to a combination of both. Bartlett held 50 to 60 days in Dry Cold; 90 to 110 in Humid Cold. With later varieties, months after picking in either storage, Bosc, Anjou, Howell, Comice, and Clairgeau were in fine condition. With Bartlett all types of storage seemed to give very similar results as far as quality is concerned. Bartlett held too long in Humid Cold Storage were found to scald badly, but when removed before they reached the scalding stage, were of good quality. Anjou gave excellent results in all types of storage, time of picking rather than type of storage influencing quality.

"No Bosc of good quality were secured where fruit was held under refrigeration, while those held at 70 degrees ripened nicely and were of excellent quality, the flesh becoming mellow and full of juice. Under car temperature Bosc had a tendency to become mellow on the outside while the inside remained hard and green, though some ripened sufficiently to become of fair quality. In Cold Storage no Bosc ripened well; the surface became soft and even decayed while the interior remained still hard and green, making the fruit absolutely worthless. Chemical tests show much less sugar in Bosc ripened in Cold Storage than those ripened at a temperature of 70 degrees."

A Friend in Need.

EDITOR "THE FARMER'S ADVOCATE":

It is a pity that so many farmers do not avail themselves of the help the Government, both Provincial and Federal, is so ready to supply. Last year, for instance, one farmer was in despair regarding his orchard. Just as it was time for it to commence bearing the trees seemed to sicken and some of them died altogether. The only prospect was to destroy the orchard altogether and to begin all over again. A friend queries, "Why not send specimens of the bark to Ottawa?" The experiment was tried and in a week came back the cause of the failure and the method of fighting the pest. This year the orchard has taken on a new lease of life. The trees are clean and healthy looking and that orchard, though somewhat damaged, is saved—to the farmer's advantage and the good of the commonwealth.

Still another farmer had difficulty with his fine plum trees. Early in the season there would be a fine showing, but before the autumn the plums fell in disappointing profusion. In this case, too, application was made to the Government and the remedy given and applied with highly satisfactory results. Illustrations of the way in which the Government is ready to give effective aid in these and other ways to the farmers, may be multiplied indefinitely.

One reason for the failure of the Government to co-operate with the farmer through the bulletin system is that the writer of the bulletin, while he understands the scientific end of the affair, does not know how to write so that the farmer will understand him. The bulletin writer does not always know the farmer's language. He is a scientist while the one for whom he writes is a farmer who is not familiar with the scientist's viewpoint. Further, the bulletin usually suggests sprays and other insect destroyers but it fails to tell where these materials may be secured. When the farmer seeks for such materials he, frequently, is at an utter loss to know where he can secure the materials recommended. When he seeks to make his purchase, is met with a volley of "We have none in stock," "We don't know," or "Here is something just as good if not better," and for this reason the farmer is at his wit's end.

Would it not be well for the Government to go one step farther and help the farmer to secure good spraying and other insect-fighting materials?

Elgin County.

JAMES ANTHONY.

POULTRY.

Profitable Winter Poultry Flocks.

The primary factor in securing a flock of profitable winter layers is the hen herself. She must be able to lay a profitable number of eggs under reasonably good care and with reasonably good feed. Profit from the feeding of hens comes from the sale of eggs as food, and naturally the hen that makes the greatest profit for her owner is the one that is able to lay the largest number of eggs when the price is highest. During the winter months eggs bring the highest price on the market, and it is then that the hens are expected to do their best. The natural egg-laying season is in the early spring months, with the result that during the winter months when the weather is usually very cold and other conditions are not very favorable, the normal production of eggs is low. This causes a shortage of supply, with the result that prices increase with the coming of cold weather and remain high until the natural laying season begins. It is during the winter months, then, that hens bred for egg production and intelligently handled are able to give the best account of themselves on the profit side of the poultry account.

Hens that are to be profitable winter layers should begin to lay early and pullets hatched in April should begin to lay in October. The advantages of early hatching have been pointed out in these columns more than once when the advice was more in season, but it is quite fair at this time to point out that these advantages will be borne home to every observant poultryman during the next six months. If a bird is able to start out upon her year's effort when eggs are beginning to increase in price she will have a better chance to show a profit at the close of the year than if she was hatched late and must wait until well on into the winter before reaching maturity. Early maturity thus has a very direct bearing upon the cost of production, since it is a very decided advantage to have the hen laying some eggs as soon as the cost of feeding her begins to mount up in the fall.

As a general rule pullets will require about six months from the time they are hatched before they will start to lay. This means that pullets hatched in June, as a great many are on the farms of Eastern Canada, cannot be expected to lay under ordinary conditions until late December or January. By this season much valuable time has been lost, and it is advisable to hasten the maturity of these late-hatched chickens as much as possible so as to get them to the laying stage at the earliest possible moment. Maturity can be hastened to a certain extent by increased feeding. If they are fed all the grain and mash they will eat and provided in addition, with plenty of green feed and animal feed they will not become stunted and will lose no time in beginning to lay. "A stunted chicken is a stunted chicken," and a stunted chicken will never lay well. This fact should be remembered when the pullets are being fed. The more feed the pullets will eat the faster they will grow and the sooner they will start to lay. April hatched chickens should mature in October as mentioned before and show a production distributed over the year as follows:



A Mixed Farm Flock but One that is Rendering a Good Account of Itself.

Month	Percentage production for pullets	Percentage production for hens
October	8.5	25.0
November	25.0	8.0
December	30.0	10.0
January	40.0	20.0
February	44.0	25.0
March	51.0	45.0
April	56.0	50.0
May	58.0	50.0
June	50.0	42.0
July	47.0	35.0
August	47.0	33.0
September	40.0	28.0

Increased winter egg production should be the main object in improving any farm flock, and while it may not be considered practicable on many farms to hatch the chickens as early as March, the advantage of early-hatched pullets should not be lost sight of. As a rule where they have been hatched early and have been well taken care of pullets will produce more eggs than hens, and for the best results hens and pullets should be housed separately. If the pullets have been given plenty of free range during the growing season, and if they have been well fed and uniformly developed, April-hatched pullets should reach a monthly egg yield of 25 per cent, by November without much trouble. If such an egg yield is secured there should not be much trouble in maintaining it or even increasing it during the winter months, but if the egg yield is very small in November it will be very difficult to obtain a profitable production from the birds during the next three months.

It is of advantage to put the birds into winter laying quarters early, preferably a month before they are expected to begin laying. This gives the birds plenty of time to become accustomed to their new quarters and also gives the poultryman time to get to know his birds. When the birds are once put into laying quarters it is much to be preferred if they can be allowed to stay in the same quarters for as much of the year as they remain inside. A change of quarters is not conducive to egg laying and the less frequently the birds need to be changed the better.

Only strong and healthy birds should be put into the laying pen for winter. It is a good plan to cull out

the pullets at least once during the summer, and to make a very rigid selection when the pullets are put into laying quarters. All weak, sick or crippled birds should be taken out of the flock and none retained but the largest, strongest and healthiest ones. For best results also the number of birds in a pen should not be too large, but on the average farm, in cases where it is practicable to keep the pullets and the hens separate, the number of birds in each pen will not be too large. Over-crowding should be avoided and the birds should be forced to take plenty of exercise so that they will continue egg laying at a good rate. Green feed and plenty of animal feed are also necessary if the flock is to be kept strong and healthy.

FARM BULLETIN.

Nova Scotia News.

EDITOR "THE FARMER'S ADVOCATE":

The Murray Government has been returned to power with a majority of seventeen over all other parties, but as several elected either as labor or farmer representatives are of the "Grit" political complication, the majority stands about as it did before, eleven Opposition in a house of forty-three. The line-up of the present House is: Liberals 30, Farmer 6, Labor 5, and Conservatives 2. Mr. Hall, the leader of the Opposition during the preceding sessions is among the slain, while the Hon. E. H. Armstrong did not get the necessary number of ballots to hold his ground against a farmer candidate in Yarmouth. The work of the Farmer and Labor parties must at once attract attention as new factors in provincial affairs.

The visit of press representatives from various parts of the British Empire to "The Valley" was fittingly commemorated while at Grand Pre by one of the lady visitors, Lady Burnham, unveiling a statue of Evangeline as, heart-broken, she takes the last, long look at that home so dear to her youthful heart.

It was my good fortune to attend some of the meetings held by doctors and nurses at Hortonville. With several ambulances, first among them being the one donated by the school children of Nova Scotia for service in France, these faithful medical professionals are, under the auspices of the Nova Scotia Branch of the Red Cross Association, visiting every county in the Province, bearing to any and all their message of good health. At Hortonville, seventeen quite serious operations were performed by the surgeon, and at the same time other physicians were conducting examinations of

cases, while the dentist surely was busy with his instruments of torture as he "filled" many a decayed molar. Dr. Craig, a specialist from the State of Massachusetts, delivered a short address on tuberculosis that all reaching years of understanding ought to appreciate. As I understand it, the idea of these caravans is to carry the message of health to the people and urge them not to leave the matter until sickness makes it impossible to go further. Dr. Ryan's talk on "The Teeth and Their Care" made one feel as if our teeth were worth looking after. Dr. Douglas, of Halifax, had charge of the caravan visiting The Valley and Western Nova Scotia, while the other caravan took the North Shores of Minas Basin and Bay of Fundy. As soon as suitable nurses can be secured, a clinic is to be opened in each county; the one at Windsor has already been established. From these, nurses are to visit schools and there give talks in regard to right care of the various organs of the body, to examine children as to defective eye sight, teeth, etc. In fact, these caravans mark the beginning of an educational campaign in the methods of caring for man's greatest asset, good health. I believe Nova Scotia is the first Province in Canada to organize the "good health" movement. All honor to those responsible!

I had the pleasure of taking a long auto trip with a citizen of one of the large Massachusetts cities, who some fifty years ago left a North-Mountain farm for a job behind a grocery counter. His exclamations regarding the luxuriance of orchard and field told their story of what this man thought of the land where he was born, which possibly never looked much better than it did on August 1, 1920.

Apples have dropped very little and look splendid. Speculators are busy and many orchards have been sold at \$2, without the barrel.

An abundant crop of grain is fairly certain, although oats appear to be ripening rather unevenly. Haying is about over. A good crop of fine quality has been secured during the fine weather, but for the past few days frequent showers have interfered, practically making hay curing out of the question. Potatoes never looked better the first of the month (August), but the persistent wet, warm weather the past few days is certainly very favorable for the growth of disease in this crop, and a few fields plainly show that the vines are seriously affected. Spraying with Bordeaux, or dusting, has been very thoroughly carried out by practically everybody trying to grow the silver-skinned tuber.

Kings Co., N. S.

C. PERRY FOOTE.