

importation of any oleomargarine into Canada that complies with the above regulations.

12. Any person violating any of the above regulations shall be guilty of an offence and shall be liable on summary conviction to a fine not exceeding five hundred dollars, or to imprisonment for a term not exceeding six months, or to both fine and imprisonment.

We have little comment to make further than to say that the regulations appear to be adequate if properly enforced. No set of rules, however adequate as far as wording goes is any use unless followed up by action to enforce them. In the interests of all the Food Controller and Department of Agriculture will see to it that these regulations are lived up to.

Ayrshire Specials at Winter Fair.

In compiling the Prize List of the Guelph Winter Fair the specials offered by the Canadian Ayrshire Breeders' Association were inadvertently omitted. R. W. Wade, Secretary of the Winter Fair informs us that the following are the specials offered:

\$50 for an Ayrshire cow, \$50 for a three-year-old heifer, and \$50 for a two-year-old heifer, to be given as Champion prizes in the Dairy Test at the Ontario Provincial Winter Fair, providing that the highest score at this Fair be made by a registered Ayrshire in their respective classes; and in the event of an Ayrshire in either of the above classes making the highest score over all other breeds in the test, that the prize be increased to \$100. All Ayrshires competing to be recorded in the Canadian Ayrshire Herd Book."

POULTRY.

A little whitewash applied to the walls of the poultry house will brighten up the pen.

Pullets with crooked breasts are not usually profitable to keep for the laying pen.

Feed and care for the flock as diligently as you look after the horses, cattle, sheep and pigs, if you want results.

Turkeys and geese require a little extra feeding to put them in prime condition for the market. Well-fleshed birds always command a higher price per pound than thin ones.

If short of roots and cabbage, gather up the clover leaves at the edge of the mow and save them for the hens. They can be fed dry or scalded and fed in a mash. They take the place of green feed.

Try keeping an account of the feed consumed, egg production, and all expenses entailed in looking after the flock this coming year, in order to find out definitely how the returns from the flock compare with other branches of farming when investment is considered.

Don't forget to mark the pullets this fall so that you can distinguish the yearlings from the two-year-olds next summer when culling the flock. A band around one leg serves the purpose. Different colored bands, or numbered bands, can be used to distinguish the ages when the practice is made of marking the flock year after year.

The birds don't go out on the fields as much as they did a month or six weeks ago. They are inclined to huddle together in the pen. Exercise is essential to health, consequently the birds in the laying pen should be forced to take it by having to scratch for their morning grain feed in a deep litter of straw. It will start the blood circulating and warm their bodies.

Select the Male Bird For The Breeding Pen.

The fall is the best time to select the male bird for the breeding pen next spring. There is greater opportunity now to select a bird which suits you than there will be in the spring, and you can winter a bird as cheaply as the other fellow. Some apparently have the idea that breeding and individuality does not count for much in the male bird, and are not over particular about the quality of bird they select or purchase. In this they are mistaken. Comparatively speaking, it is as important to pay attention to breeding, character, individuality and quality in a cockerel to place in the breeding pen as it is in the sire to place at the head of a herd. The qualities are transmissible whether good or bad, and no constructive breeder knowingly chooses the latter. Where eggs are of chief consideration the male bird should be from a good laying strain of the breed kept. There are good and poor laying strains in practically all breeds. Then, strength and constitution should be considered. A weak, anaemic bird cannot be expected to produce strong chicks. Broad head; short, thick bill; bright, full eye; deep, thick body, with strong shanks, are desirable features. All may not be secured in one bird, but the aim should be to secure one which denotes strength and vigor. This

is done more easily now than several months later. Splendid specimens are killed every fall that would make better flock headers than many that are kept.

Where only a few eggs are set to provide meat for the table in the fall, and enough pullets to replenish the flock, one male bird is all that is required; it is a mistake to go to the expense of buying and feeding three or four. If they run together there is a great deal of fighting, and it usually ends by one being boss of the yard. Instead of having fertile eggs from the entire flock, select fifteen or twenty of the best hens and mate them with a real good male bird. This number will supply sufficient eggs for setting on the average farm. Of course, if a practice were made of selling eggs for hatching, it would be different, but then poultrymen only want eggs from your best birds. It is unreasonable to expect every hen or pullet in the flock to be up to the mark. Where no selection is made the eggs from the hen with the weakest constitution or from the poorest layer are as liable to be saved as those from the strongest and best producers. If improvement of the flock is the aim, then selection of the females is essential. The benefit if this selection will be partially lost unless there is some discrimination in the quality of male bird used. Cull the flock this fall and market old hens and weak pullets, then select out the best in the spring for breeding stock. One or at most two male birds are sufficient in the average flock. It is not necessary to have a young bird, very often a one or two-year-old male bird can be secured that shows better individuality than any cockerel you are able to obtain. If you have a good bird that is related to the pullets you may have an opportunity of trading with a neighbor who has a bird to dispose of which meets your requirements.

Poultry House Disinfection.

The principal factor in the eradication of poultry diseases is the adoption of proper sanitary measures at the outset. Infectious disorders will recur no matter how wisely treated, unless such treatment is supplemented by the liberal use of efficient disinfectants. Disinfection is the one basic principle upon which rests freedom from disease, and prevention must occupy the foremost place if headway is to be gained.

Remove all litter from the floor and nesting places and burn as near the building as convenient to avoid contamination of the surrounding soil. If possible remove nests, roosts and other portable fixtures and place in the sunlight. Empty all hoppers, feed bins, etc., of dry mash and other grains and discard grit or scald with boiling water before using a second time. Scald all utensils, pans, etc. If cotton fronts are used, these should be removed and either washed thoroughly or scalded with boiling water. The windows should be taken out and washed with warm water and soap, the frames being well scrubbed with a hard brush. If straw lofts are used, the straw should be removed and burned with the litter. The inside should then be thoroughly swept down to remove cobwebs, dust accumulations, etc., or if possible, flushed out with a good hose. All accumulations of hard droppings should be loosened by softening with water and then scraped clean with a hoe or other sharp instrument. Disinfection may now be commenced. Mix fifty pounds of unslaked or quick-lime in a barrel of water and add to this one gallon of good commercial disinfectant. If a smaller amount is required it may be made by adding two and one-half pounds of quick-lime to a pail of water plus half a teacupful of disinfectant. Be sure that the lime is not slaked by exposure to the air as all its disinfecting power is thereby lost. The easiest method of applying the lime-wash is by means of a spray-pump which can be purchased at a reasonable cost and can be used to advantage in other buildings. Before using the lime solution it is advisable to strain it through a fairly fine sieve or cheese-cloth as the filter is liable to become clogged. In the absence of a spray-pump, a white-wash brush may be used, although it is difficult to fill the cracks and crevices without a stream to drive in the solution. These cracks serve as breeding places for mites, lice, etc., and should be given careful attention. Where an infectious disease, such as Tuberculosis, has been present, it is wise to spray the interior at least twice, with an interval of one week between each application. Otherwise one good treatment will be sufficient. The runs, if not too large, should be covered with a thin coating of air-slacked lime and then spaded or ploughed to a good depth. If lime is not available, a thorough spading may be sufficient although less effective than the former method. The runs should be changed each year if possible or divided up, one-half being sown to rape or other green crop. This cropping destroys the breeding places of worms, etc. If portable houses are used, they should be moved frequently as feeding fowls and chicks on the same ground year after year, serves to infect them with numerous diseases. Allow the fowls open range if such is available.

Disinfect in the spring and fall if possible and by all means in the fall before introducing fresh stock in to the fowl houses.—Experimental Farms Note.

A sick bird is difficult to treat, and it sometimes pays better to kill it rather than attempt a cure. At any rate it should not be kept with the main flock. Isolate all sick birds to avoid spreading contamination.

HORTICULTURE.

The Blooming Period and the Fruit Season.

Labor is now the one great controlling factor in the fruit industry which limits operations and influences the kinds of fruit which can be produced at a profit. The high price put upon berries and other small fruits is due in a very large degree to the scarcity of pickers, and only by extending the season throughout which available harvest help can be employed can one expect to accomplish the most in the way of production. The prospects now are that high prices will prevail for berries and their kind just so long as labor is at a premium. Those who can take advantage of a reasonable supply of help in order to produce more, or those who can make the harvesting season extend throughout the entire summer and early autumn are in the best position to make a success of the business during these abnormal times. If the fall-maturing fruits can be supplemented with berries and, perhaps, early vegetables, the demands upon labor are spread over a longer period and a greater income accrues.

Where such a system as has just been recommended is being introduced it is necessary to carefully plan the work for the entire season, else confusion is likely to result and the grower will find himself confronted with conditions demanding more labor than can be provided. As one crop is nearing the end, another should be coming on so when each kind of fruit is at its best and its demand upon pickers at a maximum there should be no other crop requiring more than scant attention.

The first thing to get acquainted with is the season of bloom and harvest of the various kinds of fruit. They overlap, of course, in many cases, and the extent to which they do overlap is important, particularly in regard to maturity. The best data in respect to this subject which has come to our attention is that compiled by U. P. Hedrick, Horticulturist at the New York State Experiment Station, Geneva, N.Y. The results of investigation at that Station should be applicable to a large section of South-western Ontario, for the latitude of Geneva is approximately the same as the line running through Sarnia, London and eastward. The actual latitude of Geneva is 42 degrees, 52 minutes, 46.2 seconds, and the altitude is around 500 feet. Fruit districts along the north shore of Lake Ontario would be about one degree farther north, which would delay the dates but would not interfere with the natural order of blossoming and ripening. No one station can supply definite data in this regard for the entire country. However, the order in which different fruits blossom and mature is after all the most important consideration. This data is compiled from observations covering a period of five years.

The Dates of Bloom.

The blooming season of apples at Geneva averages twelve days; the shortest season of bloom was seven days in 1913, and the longest season eighteen days in 1910. The first date of bloom for apples in 1912, an average year, was May 7.

During the past five years the blooming season of pears at this Station averaged ten days. The shortest season's bloom in this period was five days, in 1911, and the longest season fifteen days in 1912. The first date of bloom of pears in 1912, an average year, was May 7.

During the four years which the data concerning peaches cover, the blooming season at Geneva averaged ten days. The shortest season of blooming was six days in 1911; the longest, sixteen days in 1910. The first date of bloom for peaches in 1912, an average year, was May 8.

European plums are among the first to begin blossoming, yet they cover such a long season that some varieties are recorded as very late and are only slightly earlier than the latest natives. The blooming season may open from the middle of April up to the beginning of the second week in May, and may be from one week to three weeks long. In 1912, an average year for plums, the first blossoms among Europeans were recorded May 6, and the last varieties to open were recorded on the 16th. Varieties of five native species are grown at Geneva. These are much slower at starting in to bloom than are the European varieties. The 1912 season opened on the eleventh of May and continued for six days.

The blooming season of sweet cherries at this Station averaged six days. The shortest season of bloom was four days in 1912, and the longest season eight days in 1911. The first date of bloom in 1912, an average season, was May 1. With regard to sour cherries the shortest season of bloom was five days in 1911; the longest, eleven days in 1910. The first date of bloom in 1912 was May 7.

The average length of the blooming season for grapes has been twenty days; nineteen days in 1912 and 1914, and twenty-two days in 1913. The first date in the average year of 1912 was June 14, while for 1914 it was June 7.

The first date of bloom for gooseberries in 1912, an average year, was May 7. The shortest season was nine days, and the longest twelve days.

May 6 was the first date of currant bloom in 1912, an average year, and the average length of the blooming season for currants has been eight days.

Following are the dates of the first bloom in the average year of 1912 for the berries mentioned: Blackberries, May 31; dewberries, June 1; red raspberries, June 1; yellow raspberries, June 11; black raspberries, May 31; strawberries, May 16.