

POULTRY.

Something About Geese.

Editor "The Farmer's Advocate":

Raising geese has become almost a thing of the past in many parts of the country. Some years ago nearly every farmer would have a few, but for one reason or another, real or otherwise, people have ceased raising them, till, at the present time, the familiar cry is rarely heard. I think perhaps the chief reason for disposing of them was the difficulty experienced in plucking. I remember, one time, spending at least half a day trying to rid one goose of her fluffy coat. I have had a prejudice against them ever since.

Nevertheless, I know that a flock of three or four geese, properly handled, will be found quite profitable stock on any farm. A neighbor of mine has a flock which she keeps in a fair-sized yard where there is abundant pasturage and running water, and she has told me that, apart from this, they need very little attention during warm weather. In the winter they have a small enclosure as protection from the weather in one end of a large, open cattle shed, and are fed twice a day. A great many people make the mistake of feeding too much grain, and, as a result, force them to lay too early, or perhaps become too fat for breeding purposes. Silage is as good a feed as any for them, while corn and corn meal is also good.

In raising geese, it is not necessary that there should be a pond for them, any more than for ducks. Only an abundance of fresh drinking water is necessary. A running stream is good, but in this case, while the goslings are young and tender, it will be better to pen them up with the mother goose away from the stream, as you must not allow them to become chilled. For feed, different breeders have different plans of feeding. The neighbor who I mentioned before gives bread soaked in water at first, then scalded cracked corn, but never so much that they will lose their appetite for grass. A too heavy grain diet causes them to weaken on their legs. In moderate weather they require no artificial heat after a week old. They should be confined to pens, and moved every day onto fresh grass, until strong enough to have their liberty. It is better to set the first lot of eggs under hens, five to seven to a setting, according to the size of the hen. Then the goose may be set, and, as a rule, she will cover about fifteen eggs. It is a good plan to test out the clear eggs after they have been set a week. As a rule, each goose should average about twenty goslings in a year, and the average weight of these when fattened is about ten pounds, so that goose-raising, if properly handled, should be as profitable as anything in the poultry line. Of the larger breeds, of which the Embden is the best, I think it generally pays to market them at the age of about ten weeks.

Some advise plucking the feathers every two months, but I have been told that this is a mistake, although, in doing so, the feathers are an item worth considering; but once a year has proved to be the best for both laying and breeding purposes, as plucking often causes the meat to be tough and stringy. C. S. Carleton Co., Ont.

Dryness in the Poultry House.

The first essential of the poultry house is that it be dry. There is no condition, unless it be actual starvation, according to Bulletin 132 of the Iowa State College of Agriculture, that will be more surely and quickly fatal to fertility and egg production than dampness in the hen house. It is likely to cause an outbreak of disease, as well.

To secure a dry hen house, it is necessary, first of all, to select a dry location. A gentle slope to the south, with good air, drainage and a porous soil, is the ideal building spot. The ground immediately surrounding will then drain quickly, and the yards will be dry and warm. Where yards are damp, evaporation is constantly going on. Evaporation is a cooling process, so damp yards give the hens cold and dirty feet. Cold feet will lessen egg production; dirty feet will make dirty nests and eggs, and dirty eggs bring poor prices.

Often it is not possible to have an ideal location, and then extra precaution must be taken. If the best site available is inclined to hold moisture,

the moisture must be kept from getting into the house. Placing a 3-inch tile even with the bottom of the foundation and just at the outside, and giving it proper outlet, will prevent the entrance of moisture to a large extent. The foundation should be high enough above grade to prevent the entrance of surface water.

Especially care needs to be taken in building the floor; its improper construction is one of the most common causes of dampness in hen houses. The board floor is generally dry, because of the air space below it. Because of the high cost of lumber, the tendency is toward the cement or dirt floor. In either case, if special precautions are not taken, the moisture is likely to come up, just as oil travels up a lamp wick.

To avoid this, the capillary attraction must be broken. Whether a dirt or cement floor is used, remove enough dirt so that 6 or 8 inches of coarse material, preferably crushed rock, may be filled in. If a dirt floor is desired, spread some finer material, as cinders, over the rock, and finally put six inches of dirt on top. Many people seem to prefer the dirt floor, but it is not nearly so sanitary as the cement floor. It requires much more labor to care for it properly. The cement floor is readily cleaned, and will soon pay for its extra cost in the labor it saves. However, the cement will get as damp as the dirt, unless the precaution noted above is taken to keep the moisture out. Over the crushed rock place a thickness of two-ply roofing, and carefully seal all seams and edges. Lay the grout above the roofing, and finish with a half-inch finishing coat.

What has proven to be a very satisfactory floor was constructed by laying clay building blocks on their flat side on a bed of well-settled gravel, and plastering the whole with cement plaster. This floor is cheap, and has proved to be warm and dry.

Single-wall houses are cheaper than double-wall houses, and this, together with the fact that they are generally drier, commends their use.

Permanent vs. Movable Poultry Houses.

A permanent house is any house that is built on a permanent foundation, while a movable house is one which is so constructed that it can be moved from place to place. Movable houses are necessarily small. They are very often called colony houses. A movable house is always a colony house, but a colony house is not always a movable house, as it may be built stationary. Colony houses contain only one family or colony of birds, hence the name.

Both styles of houses have their advantages. The permanent house can usually be built at a less cost per hen capacity. In bad weather it is easier to get from one pen to another, and the hens are probably better protected from the cold and wind.

On the other hand, the movable colony house is simply made; may be moved from place to place as feed, weather and convenience suggest. For the small village lot or the land too rough to move the house there is no advantage to build it movable. For the farmer or poultryman who has fairly level land, the movable house is a decided advantage.

One of the troubles in keeping poultry housed in permanent houses is the difficulty of keeping the land pure and sweet. With the movable house the yards can be changed at will; the poultry may be kept in one field after another, thereby the poultry, instead of becoming a nuisance, are a decided advantage. They help scatter fertility over the farm, which later may be turned under for crops. Where poultry are used in combination with a fruit farm, the houses are moved along the edge of the orchard. Movable houses may be used most advantageously with ordinary farm crops, especially with corn, roots, etc. In growing grain, young chicks are easily reared in movable houses located along the headland or in the rough part of the field. The grain forms a protection against the hawks, etc., and the little damage that may be done to the grain is more than compensated for by the bugs and insects eaten by the chickens.

An added advantage in this method (the movable house) is that a comparatively small outlay is required to start. Only sufficient house room to accommodate the present flock is required; additional houses may be built each year as the flock increases. Feed that might otherwise go to waste may be utilized. More advantage of the weather can be taken. In the spring the houses can be drawn into the sun, and as the weather grows warmer they can be taken to an orchard or grove, where the trees will shade the birds from the hot sun.

With movable houses, fences are not essential,

while a permanent house requires a permanent yard, the fencing of which costs often as much as the house. The colony housing makes it possible to use a system of feeding that saves labor. Where the birds have unlimited range, they can be fed by the hopper system better than when they are yarded. This method of feeding saves much labor, and can be best used in the colony system. —[Farm Poultry Bulletin published by Macdonald College, Que.]

A good flock of laying hens go far towards swelling the summer's income on a farm. A reader whose poultry business was written up in these columns a few years ago mentioned casually the other day that, since March 20th her flock of seventy-five had been making her a dollar a day. That is better than milking three extra cows.

GARDEN & ORCHARD.

Insects Attacking Vegetables.—IV

By Arthur Gibson, Chief Assistant Entomologist, Experimental Farm, Ottawa.

BLISTER BEETLES.

Complaints have been received from various parts of Canada of the prevalence of blister beetles. In eastern Canada these insects are reported to have done injury chiefly to potatoes, while in the West the favorite crop attacked has been broad beans.

Blister beetles have the habit of appearing suddenly, and in many instances much injury has been done before the farmer or gardener is aware of their presence. When they congregate in great numbers, it is only a matter of two or three days before a crop is entirely ruined. Fortunately, however, they oftentimes disappear from a locality as suddenly as they came.

The most regularly-occurring species is the black blister beetle. It occurs particularly in Ontario and the Eastern Provinces, but some seasons it is also present in large numbers in Manitoba and the other Western Provinces. It is of a uniform dull-black color, and in length varies from a little more than a quarter to slightly more than half an inch. It is chiefly complained of as a potato pest, but it will also attack mangels, beets, carrots, cabbages, tomatoes, corn, beans, etc.

The ash-gray blister beetle, similar in appearance to the black blister beetle, but of uniform ash-gray color, is another common species in the East, especially during July. Potatoes and beans are favorite food plants, but peas and other field and garden crops are frequently destroyed.

In the Western Provinces, the Western blister beetle, or, as it is also called, "Nuttall's Blister Beetle," is the one which nearly every year attacks leguminous crops, particularly Windsor broad beans. It is a handsome species, and in length is from three-quarters to one inch. The wing-covers are purple, greenish, or of a coppery color. The time of the appearance of the swarms of this beetle varies. In 1910 the beetle appeared in large numbers in Saskatchewan from about the 25th of July till the middle of August.

In British Columbia, and also in some of the other Western Provinces, the spotted blister beetle is frequently abundant. In color it is gray, or, rather, the body is black, clothed with fine gray hairs, excepting small areas on the wing covers, which show up as black spots. The beetle appears any time from May till the middle of August. Potatoes are particularly attacked, but beets, cabbages, spinach, beans and clover are often injured seriously.

In the older Provinces, where potatoes are so largely grown, little injury from the attacks of blister beetles should result if the vines are sprayed regularly with the ordinary poisoned Bordeaux mixture (4 pounds of copper sulphate, 4 pounds of fresh lime, 4 ounces of Paris green, and 40 gallons of water), so widely used for fungi and leaf-eating insects. As is well known, blister beetles in their larval state are predaceous on the eggs of grasshoppers. It is well, therefore, that the farmer should realize this and watch for the appearance of blister beetles in years following excessive outbreaks of grasshoppers. Whenever these latter insects appear in destructive numbers, the now well-known Criddle mixture* should be applied. This has given excellent results, particularly in Manitoba and the West. When the grasshoppers are destroyed in this manner, the chances are, of course, that blister beetles will not be present in numbers to do very serious damage the