

POULTRY.

Care and Feeding of Laying Hens

Paper read before the Women's Institute, St. Mary's, Ont., by Ena MacKay.

In all branches of the live-stock industry good blood is the foundation of success, and in nothing does good blood count for more than in poultry husbandry. Common hens, like cheap labor, are not to be depended on.

We often hear the question asked, "Which is the best breed?" I would say that this is a matter of choice. In proper hands, nearly all kinds and breeds have proved profitable. There is, however, a distinct satisfaction in having a uniform flock, not to mention the extra profit from the sale of eggs for hatching or fowl for breeding purposes. Laying strains of Rocks, Orpingtons, Wyandottes and Rhode Island Reds are now known to produce as many eggs as any of the so-called egg breeds, and they lay more readily in the winter, when eggs are more difficult to produce and high in price, and they certainly prove superior to the smaller breeds for roasters, and bring us more money when marketed.

In selecting eggs for setting, choose only from hens that are healthy and vigorous, and of a good laying strain; choose well-shaped eggs, neither too large nor too small, and be sure that they are perfectly clean, as bacteria often lurk about dirty eggs, and washing is injurious to them, and likely to completely spoil fertility. Be careful not to touch them with oily or greasy hands.

Have clean boxes for nests, and keep the brooding hens away from the rest of the flock. Put a sod in the bottom of the nest, hollow it slightly, and then cover with soft hay or straw, and when the hen is put on the nest, dust it well with insect powder or sulphur, and sprinkle a little in the nest, too. I find little trouble in moving a hen from one nest to another when I do the exchanging after dusk. Give her a couple of eggs, then put a board up to the front of the nest, so that she cannot get off, and leave her there until towards evening next day; then take down the board, and set food and water near the nest. If not frightened, she will generally come off and feed and return to the nest. When she does this once or twice, it is generally safe to give her the eggs. While the hen is sitting, provide her with a hopper of whole grain (mixed oats and wheat are good), grit, and pan of water, and see there is a place in the pen where she can roll in and dust. Do not give her wet food when sitting, as it induces diarrhea. On the tenth day give her another dusting of insect powder, and from the nineteenth day moisten the eggs daily with a little warm water, if the hens cannot get outside; even then it is good practice, as it helps the chicks to get out of the shell. When the eggs pip, put the board to the front of the nest again, and keep the hen on the nest until the hatch is out. If eggs have been shipped any distance, or been subject to any sudden jars, they should rest at least twenty-four hours before setting. About the middle of April is a good time to set the hens, as, by the time the chicks are hatched the weather will be getting warm. Be sure and place your coop on a dry, sunny spot. We place them on a bed of sand and gravel, and I find it so much easier to keep them clean. People have said, "What a task it is to look after young chicks." It should not be so where common sense and system are used about the work. I find it a very pleasant and profitable task caring for my feathered pets. Chicks should not be fed until 36 hours old. Just before leaving the shell, the chick draws into its body the whole of the unabsorbed yolk of the egg. This is its food before and after leaving the shell. It is the food nature provideth to sustain life until the chick is strong enough to take other food. If fed too soon, the yolk of the egg which is taken into the body before leaving the shell will not be drawn upon; it will remain unabsorbed, and in time decompose, causing bowel trouble and death. Hard-boiled eggs, chopped fine, mixed with three parts breadcrumbs, is what I feed for the first few days, and I am careful to see that they always have fresh water to drink and plenty of grit. As soon as the chicks are large enough, they are fed wheat; and, as they always have free range, they seem to thrive and grow right along. Perhaps, if the chickens had to be kept penned in, wheat alone might be too strong, so I prefer to better to give less wheat, and feed ground or rolled oats. I prefer the dry to the wet feeding for chicks, and, since I have adopted that plan, I rarely have a sick chicken. A friend of mine always feeds her chicks bread soaked in milk, and she says that she has good luck. The thing to remember is that is that chicks need plenty of water, and that they will eat anything that is put in front of them.

day may be given without stint, but the rest of the time they should be kept in good appetite. See to it that the chick is kept growing. Remember that the getting of frame and size comes when they are young and growing. When that stage is past they mature and fill out, and can only do so to the extent of the frame they have.

It is of great importance that the chicks should not be allowed to perch too young. The result would be a crooked breast-bone. A chicken's breast-bone, until it reaches the age of ten or twelve weeks, is very pliable, and the part mentioned consists of gristle. When the chick is allowed to perch at an early age, the whole weight of its body is laid upon its breast-bone; so, night after night, as the weight bears upon this tender spot, it is gradually growing out of place, until, when the chicken has reached the age of three months, the gristle has plowed into bone, and the part has grown from its right position and is dislodged. Birds so developed should never be bred from, as the chickens might inherit it, and there is often a very decided difference in the price offered when we market such birds. Keep them in their coops as long as there is room for them, but always remember that the coops and the ground on which they rest must be kept clean.

One of the wisest things to do when engaged in the poultry business is to get the man of the house interested with you, for there are many things about the poultry-yard in which you will need his helping hand; and, once interested, he won't be so apt to inform you of how often those hens have eaten their heads off. Now, to have a healthy, profitable flock of hens, there are some facts that we must pay attention to. Irregularly-fed hens are not a paying proposition, and satisfactory results are never attained from a flock that receives attention only during the egg-laying or breeding season. In order to secure good results from them, they must be nourished and attended to. The question of feeding is a very important one, as it has within its power the making or unmaking of a bird. There should be a knowledge of the various grains and their feeding value, and of the mixing of the foods in proportion; and there should also be sound judgment in the matter of feeding. A fowl requires grain food, vegetable food, meat food and grit. These foods should be clean and wholesome, and a portion should be given in some form to induce the birds to take exercise, in order to keep them healthy. Fowl should be well supplied with water. Many make the mistake of not giving sufficient drink, or not giving it regularly. This, I consider, a very great mistake. If you will take time to observe your birds, you will find that the first thing they do after feeding is to go at once for a drink, and they generally do the same after laying an egg. The supply, then, should be constant and clean. Dirty water, dirty or slimy drinking dishes, or dirty surroundings, will do more towards making a flock unhealthy and diseased than anything else.

Wheat is the most popular feed, and is one of the best, but its price, compared with that of other grains, makes it necessary to mix other grains with it. Oats are good, and, when rolled (hull and all), are an ideal food as a dry mash. Barley is considered next to wheat in point of value, but, on account of its hard shell, is not very satisfactory, as, if much is fed, the hens are apt to become crop-bound. Corn is heating and fattening, and is, therefore, best adapted for winter feeding; it is counted rich in egg production.

Our method of mixing is 2 parts wheat, 2 parts oats, 1 part barley, with just a few peas added; one quart to 25 hens. We feed this quantity twice a day in winter—morning and evening; at noon, boiled potatoes and parings, which are mixed with the meal. Three or four times a week we give them meat which has been boiled and run through the chopper; feed from 1 to 2 quarts to 100 hens, and you will soon see happy results in the egg basket. Of course, for summer feeding this is not necessary, as the birds running at large find plenty of animal food for themselves; neither is it needful to feed such quantities of grain.

Alfalfa is becoming one of the most important of green foods. It is an egg-producer, and is very valuable in winter-egg production. You will find that the hens are very fond of this, and will eat large quantities of it. A good way to feed it is from a rack made of poultry netting, and fastened to the wall.

Grit is as necessary to poultry as tooth-brush to animals; both are used in grinding food, the difference being that animals grind it in their mouths, and poultry and birds in their gizzards, so you will see how absolutely essential it is that they should be provided with good sharp grit. Sharp gravel, or earthenware, or broken glass, broken up small, makes excellent grit. Shells and old mortar are not only good for use in digestion, but help in the mashing of the food.

It is the well-fed hen that pays. I do not

that a poor hen will not lay. When a hen gets only enough to keep her own wants supplied, she will never lay. A. G. Gilbert, manager of the Poultry Department at the Experimental Farm, Ottawa, lays great stress on this fact. He says it is only the surplus feed that goes into eggs. There is less risk of getting a hen overfat by heavy feeding than of reducing its egg-yield by under-feeding, and the only time that good hens are apt to get too fat is after moulting, when they take a rest from laying. Many complain about their hens being so fat and not laying. Very often the trouble is traced to the manner in which they are fed. If just scattered plentifully on a clean floor, you may be sure that there will soon be star boarders in your flock. See to it that there is litter, and plenty of it, so that they will have to work for what they get, and they will be healthier and happier, and more apt to repay you.

Sunshine is essential to egg production—almost as much as food and water. If there is any doubt about this, shut some birds away for a month or two and note the result.

It is perfectly natural that fowls should moult their feathers during the warm weather. During this period, if the hen is properly fed and cared for, she will continue to lay. The moulting of the old feathers makes no special demand upon the strength and nourishment of the birds; but when the new feathers are growing rapidly, the nourishment which had earlier gone to the production of eggs is diverted to the growth of feathers. During this period and for a few weeks after, egg production is likely to cease, and the hens pass the time in regaining the strength which was spent in the growth of feathers. There is a difference of opinion upon the question as to whether the time of moulting can be artificially controlled or not. I will not touch on this, as I prefer to trust to nature and her ways, and let the hens moult when they will. It is a mistake to neglect them at this time; give them plenty of nourishing food; a thick gruel made of ground linseed cake, is good—a quart to 50 hens daily, until the new feathers get a good start. Add 2 ounces yellow sulphur to this quantity three times a week. Sulphur is regarded as a feather food, and also helps to cleanse the skin and remove impurities, and at no time does the hen need meat more than when she is growing feathers.

About the housing of the hens in winter, I am afraid I'm behind the times. I do not take to the theory of open fronts; would rather surround them with summer conditions, if possible. The house should be dry, no drafts, plenty of light and good ventilation, and should be thoroughly disinfected twice a year. For this we make a solution of good fresh lime and water. To every gallon we add one-half pint of coal oil, and use a spray pump to apply it. If you want to keep your fowl free from disease, it is necessary that you do not miss a crevice or corner. Keep at it until every spot from floor to ceiling, nests and roosts, are white. This is no little task, and you will readily understand that this is one of the places where the man's helping hand comes in.

A dust-bath for the inside of the house should be provided, and it should be near a window where the sun shines on it. For this purpose, a common box, filled with sand, ashes or road dust is effective. No matter how careful the flock is kept, we will sometimes find a sick hen. At times a few doses of some good poultry food given in a mash, or salts, 1 pound to 100 hens, in a mash, will bring them all right again. If a hen shows signs of tuberculosis, it is wise to dispose of her at once. For roup or bad cold, I use Rundle's Non-Such Liniment, and the method is 1 teaspoon three times a day in one-half cup of milk, with bread enough to soak it up. For dizziness, mix a meal or two, then give them a teaspoonful salts in bread and milk. I save all the eggshells in the summer months, dry and grind them, and give them to the hens in winter. I find that they are just the thing needed to tone up a droopy hen. A head of cabbage or a mangel is good when they are shut in. Hang it so that they will have to exercise themselves to get it. Some give turnips, but there is danger of the flavor of the egg being so good, and it is the good flavored egg we are anxious to get.

Freshness is the prime requisite in quality, but freshness is not necessarily a question of age. An egg may be fresh, under certain conditions, at the end of a week; it may be spoiled under other conditions at the end of a day. For instance, if an egg is placed soon after it is laid, and put away in a cool cellar, it will remain fresh for many weeks; whereas, if laid early in the day, and exposed to the heat of a broody hen, would not be fit to eat after eight or ten hours. Be particularly careful about the cleanliness of the nests. Eggs are porous, and, to lie for a long time against anything that is not clean is bound to become of a taint to the inside. We should never leave near onions or coal oil, or anything with strong odor. If shells are