GOVERNMENT OF THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF AGRICULTURE

## Some Suggestions on Housing and Feeding Poultry

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The Western Provinces need eggs and dressed poultry. Recently Canada has imported within one year about twelve hundred carloads of eggs and trainloads of dressed poultry. Nearly all of this was used in the West.

Here in Saskatchewan we have all the conditions necessary to successful poultry-raising, and instead of having to buy eggs and dressed poultry, we should be producing enough to supply the needs of the Province, and have some to sell elsewhere.

Among other natural advantages we have:

1. A very favorable climate, lots of bright sunshine and dry weather. (Clouds and dampness are very serious drawbacks to poultry raising).

2. Cheap Land—Where poultry can live naturally on free range, instead of being crowded into small, dirty, and disease-infected runs.

3. Cheap Feed—It is claimed that wheat, oats and barley can be grown more cheaply here than anywhere else in the world.

4. Cheap Buildings—Notwithstanding the fact that lumber is rather high in price, our bright, dry climate and the absence of rats and other vermin, make possible the use of cheaply-built houses with earth floors which would not be satisfactory where dampness and vermin have to be reckoned with.

5. Good Markets—The number of cars of poultry and products, now being shipped into the West shows how far the demand exceeds the supply. Since freight and duty have been paid on all the stuff shipped into Canada we are safe in assuming that the prices here are higher by at least that much, than in the country where the eggs and poultry were produced.

Feed wheat, which in ordinary seasons brings Saskatchewan farmers from 40c to 60c per bushel, costs eastern poultry-raisers from \$1.00 to \$1.25. When they can pay these prices for feed and still make money out of poultry-raising, we ought to be able to make twice as large a profit where feed costs only half as much.

In all parts of the Province men are planning to feed more grain at home. All who can do so are stocking up with cattle, pigs or sheep. But to those whose capital is all invested in the wide areas of land, the tractors, horses and implements necessary for extensive grain farming, the change to mixed farming and stock-raising will be a slow one. People in this position would do well to investigate the possibilities of the poultry industry.

Poultry raising as a branch of mixed farming should appeal to everyone. It requires only a very small cash investment. It may be developed rapidly from a small beginning into one of the largest and most profitable of our industries.

The farm poultry-raiser has many advantages over the "poultry farmer." The latter usually is trying to keep from five hundred to several thousand birds on a little piece of land near a city. His land has probably cost him more than it would take to buy a good-sized farm further out. He hasn't room to let his birds range properly.

He must buy practically everything he feeds or uses; grain, vegetables, straw, etc. On a farm the birds have plenty of room. Usually smaller flocks of from fifty to two hundred are kept. Much of what the fowls eat would otherwise go to waste: the rest has been grown on the land and has cost the farmer, just the labor of producing it. Since the farmer has plenty of room and lots of feed, he can put his birds in the best condition before marketing them, or can hold them for higher prices without being inconvenienced thereby. The poultry man, however, must sell as soon as his birds are marketable. He needs the room and the feed is costing money. He usually keeps small quick-maturing breeds, like the Leghorn. These do not weigh much when marketed. The farmer usually finds it pays better to raise larger more hardy breeds like the Plymouth Rocks, Wyandottes and Rhode Island Reds. These are all particularly well adapted to the needs of Saskatchewan poultry-men.

## POULTRY HOUSES

We find poultry doing well in so many different styles of houses that it is often hard to decide what model to adopt when building.

All the most successful poultry houses have certain features in common. They provide: (1) lots of fresh air, (2) plenty of sunlight, (3) a tight roof, (4) walls that break the wind, (5) from four to six square feet of dry floor space per hen. These are essential. Heat is not essential when hardy breeds of fowls are kept.

Fowls withstand steady cold better than sudden changes in temperature. The temperature in a cotton-front house changes less than in any other kind

of poultry house yet tried.

A single lumber, tar-paper-lined house in which cotton covered frames, hinged at the top and arranged to open in, form the greater part of the south side, will give better results than do the air-tight or glass front kinds; while it costs only about half as much to build. (Note—Poultry netting should be placed over the outside of the window openings to keep the fowls in when curtains are raised.)

If you now have an air-tight, dark poultry-house, try a big cotton window in the south side and see what an improvement sunlight and fresh air will make. If you have a glass-front house, try filling alternate frames with cotton. You will find the air much purer and the temperature much more even.

In planning a poultry-house, certain general rules apply. To have sunlight reach practically all parts of the floor daily, the width of the house should not exceed twice the height of the south side. The simplest form of house is the "shanty-roofed" type. If the front wall is six feet high above the sills, the width should be twelve feet. If the front is seven feet, the width may be fourteen. The height of the rear wall will depend on the slope required. Shingles need a steeper roof than prepared roofing. Probably from four feet to five and one-half feet would be satisfactory.

To get the greatest area of floor space for the number of feet of lumber in the walls, a building should be square. Thus as a general rule a building six feet high in front should be twelve feet wide and fourteen feet long. When one seven feet high would be fourteen feet wide and fourteen feet long. When other proportions than these are used it should be for a definite reason. If, for instance, a house twenty feet square is needed, a window in the east end and one in the west might be provided to give light to the back part of the house.

Houses twelve or fourteen feet square may be built on skids and moved from place to place. Such portable houses have many advantages over a large stationary one. By their use birds may be kept in small flocks on free range. This plan being natural to them, they lay more eggs. Both fertility and vitality are better than when birds are confined in small runs. More chickens are hatched from each hundred eggs laid by birds on free range, and more of the chickens will live to maturity.

When the ground gets dirty or green-feed scarce, the house is easily moved to a new spot.

If disease breaks out, it may be confined to one house and doctored there;

without letting it spread to the whole flock.

When a poultryman wishes to sell out or move, a portable house will bring all its worth, some neighbor is sure to want it. A big stationary house, however, must stay on the land, or if sold, will bring little more than the price of firewood.

## INTERIOR ARRANGEMENT OF POULTRY HOUSE

When putting in the poultry house fixtures, plan to leave as much floor space as possible clear. The number of square feet over which we can spread litter for the birds to scratch in determines how many hens can profitably be kept in the house. (A 12x12 house will accommodate 35 hens; one 14 feet square, 45 to 50 hens.)

By building in a droppings-board three and one-half feet wide across the back of a house fourteen feet square, nearly fifty square feet more of floor space is available for scratching room, than when no droppings-board is put in. Since without the droppings-board the litter beneath the roosts is fouled, so that the birds will not work in it.

If the poultry house door is in the east side, a cock-pen may be conveniently made by partitioning off a place, 2 feet wide by 3½ feet long, next the east wall and above the droppings-board to the roof. The front of this cock-pen should consist of a slatted door.

Three roosts made of two-by-four scantling, twelve feet long, placed on edge, should reach from the partition of the cock-pen to the west wall of the house at a height of eight or ten inches above the droppings-board. If the rear roost is nine inches from the back wall and the others placed about a foot apart they should be satisfactory. (For very large birds the droppings-board might be made four feet wide and the roosts spread more.)

A cotton curtain the full width of the house (for use at night during the winter) should be made fast to the rafters. It may have a roller across the lower side arranged with cords and pulleys so that the curtain may be fastened at any desired height. In this way we can regulate the temperature of the roosting quarters. The air behind the curtain should be good. If any smell is noticed raise the curtain a little. Don't let the birds get hot or they will feel the cold when let out in the morning. (Usually the curtain will be raised enough that they can get out when they wish.)

Nests may be nailed along the west wall at a convenient height from the floor and not close enough to the south wall to interfere with raising the cotton-

covered window.

The water supply should be arranged on a shelf or platform at least two feet above the floor. The platform should be large enough to permit of several hens standing on it to drink at the same time.

A hopper, having three compartments; one each for grit, oyster shell, and dry mash should be fastened to the wall at a convenient height.

Some use a dust-box built on legs, which may be moved into the sunlight or carried from house to house.

With the above arrangement, practically all the floor-space may be covered with litter for the fowls to work in.

If wet mash is to be fed, use a shallow trough, and clean it often.

## FEEDING

It is natural for a hen to work practically all day in order to have her crop full at night. To keep in that state of perfect health, which is necessary to the continued production of eggs, she must be on the move nearly all the time. In summer on free range fowls get this exercise in chasing flies or

grasshoppers and in scratching up the soil for grubs or green sprouts. They get a little at a time of a great variety of foods.

In winter when confined to the houses, they can get only what is brought to them. It is necessary, therefore, to provide as wide a variety of foods as possible, and to feed in such a way as to make the birds take lots of exercise. Fowls need: (1) grain food, (2) vegetable food, (3) meat food, (4) minerals in the form of grit and shell, (5) plenty of clean water to drink.

It is in feeding the various grains that we are most successful in making the fowls take exercise. By keeping six inches or more of clean straw on the hen-house floor, and by scattering all the whole grain fed on this straw, the hens have to scratch and dig to find enough kernels to fill their crops.

Wheat is probably the best single grain food for poultry—but the birds need variety as much as people do.

If a handful of mixed oats and wheat, or oats and barley, for each bird, is scattered in the straw early in the morning, the fowls will be kept busy till noon digging it out of the litter.

At noon some vegetables, or some form of green food should be provided—sugar beets, cabbage, turnips, sprouted oats, or steeped alfalfa leaves may be given.

At 2 p.m., a little whole wheat fed in the litter will keep them going till nearly time to go to roost. If a wet mash is fed at all, evening is the best time to feed it. They should have full crops when going to roost, but should never be fed in such a way that they can fill up in a few minutes early in the day. For when a hen's crop is full she has nothing to do till next meal-time, and when not working she is putting on fat, and will soon stop laying. Meat in some form or cut green bone should be fed at least three times each week, when birds cannot have free range. The practice is to feed about one ounce per bird. (Allow one pound to each 16 birds, three times per week.) meat question is about the most serious one that poultrymen have to solve. In brushy districts many feed rabbits. Some get the carcass of a cow or horse and grind or chop it up for the poultry. Some can get table scraps from hotels or bones from a butcher shop. Some can get milk and butter-milk. Some have to ship in beef scrap and green cut bone from the abattoirs. We have known a poultryman to feed badgers and coyotes to his fowls. This reversing of the usual custom, we believe, should be encouraged till all such animals have been done away with.

In selling fancy eggs it would be as well not to state just what meats the hens are using. Imagination goes a long way in such matters.

Of course, no decayed or tainted meat can be fed. It would be sure to flavor the eggs and more than that, will make the fowls sick and may perhaps poison them.

Oyster shell is required by laying hens to furnish lime for the shells of eggs. Other fowls will rarely eat any of it, if they have been provided with grit. Both grit and shell should be where the birds can get them as required.

Clean water should be where they can get to it at all times.

An egg is 65 per cent. water; even if other things are right, if you don't supply the water, the hen can't make the egg. In cold weather, water may have to be put in the dishes three or four times each day, because each fresh supply freezes so rapidly.

There is no great secret in getting winter eggs. When a pullet is fully matured, if conditions are right, she lays naturally, with no thought of paying for her board. All we can do is to supply right conditions—of housing to keep the birds in the best possible health, and of feeding, to supply all their needs in such a way as to make them exercise enough to keep their digestions right.