

Important Points About Incubators

Kenneth Pentland, Peterboro Co., Ont.

We have had better success with our incubators early in the hatching season than later. Our hatchlings early in the season last year averaged 70 to 80 per cent. with good vigorous stock, and hence fertile eggs. With strong germs and a good incubator cellar, we believe that early hatched chickens can be secured quite as easily as from eggs set later. The nine incubators that we use have a total capacity of 2,340 eggs. All are hot air machines.

When the incubators are new we run them two or three days at first to be sure that we can keep the temperature steady at 103 degrees. After the first year of their use our first move in preparing for the hatching season is to scrub the incubators with Zenoleum solution. This kills disease germs and aids the poultryman in keeping clear of that most dreaded of all diseases, white diarrhoea. Not only do we wash the incubators with Zenoleum but we dip the eggs into a two per cent. solution of Zenoleum as well to get rid of any germs there may be on them. Our temperature is 103 degrees right to the end of the hatch. At the end the animal heat generated by the chickens in the shells will raise the temperature somewhat; this cannot be avoided and will do no harm.

TO REGULATE MOISTURE

The moisture in the machine is a very important consideration, and in many incubators proper provision is not made for supplying moisture. In the incubators that we use we at first had water in pans under the machines on the floor, but this did not supply sufficient moisture in the machine. Later in the season we made sand trays and placed them inside the incubator under the egg tray. Fully twice as much moisture will evaporate from the rough surface of the sand as from the smooth water surface. The eggs are tested at the end of the seventh day, and all infertile ones removed and again on the eighteenth day, when we remove dead germs. The chickens are left in the incubator 48 hours.

We have saved a great many chickens by assisting them in getting out of their shells. If the eggs were not pipped we break the shell and give

water, roll it around the egg and put it back in the machine. The combined moisture and heat strengthens the chicken and enables it to get out itself.

Methods in a Turkey Centre

Edmund W. Thompson, Dundas Co., Ont.
In this section of Dundas county we farmers,



There is a Heap of Satisfaction in a Flock of Well Bred Poultry

Mr. W. G. Rennie, of York Co., Ont., is one of the many Canadian farmers who is making money from poultry. He keeps only pure bred Buff Orpingtons, and caters to the highest class market. His profits are larger than would be possible from fowls of ordinary breeding. It pays to keep the best.

—Photo by an editor of Farm and Dairy.

and especially our wives, have always been quite successful from year to year in raising turkeys. We simply use our own judgment in dealing with the young birds. Their care and feeding requires good judgment and not over-feeding of the young.

The principal feed of the young turkeys after a week old consists of shorts mixed with sweet milk, crumbled and fed sparingly. Hard boiled eggs, dry bread and cornmeal are also given. Grit and lots of clean fresh water are always on hand. It is very important that the drinking vessels be kept clean. The young birds are not confined too closely. The mother birds are cooped or tied so that the little ones cannot stray too far.

THEY FEED THEMSELVES

As soon as the young birds are able to run at large, if the ground is not too wet, they will collect themselves nearly all the feed they need and always come home at night when they are given a little additional feed. When the feathers are coming out the young turkeys need a little hard food. There is not much attention paid to the poulters after they are about four to six weeks old. We see only that they have a perch to roost upon.

After the harvest is off the turkeys swarm to the fields and pick up the grain that has shelled off. They sometimes travel through the corn fields and get some feed there. Not until the weather begins to get cold are they ever fed by us. From the last of October and in November they get grain morning and evening.

Not a farmer within miles of us has ever estimated the cost of feed to the turkeys to be more than \$12 or \$15 at the outside. Some of these farmers sell from \$75 to \$150 worth of turkeys from year to year.

A Talk on Poultry Feeding and Housing

One of the best known and best informed poultry men in Canada is Mr. A. G. Gilbert, Manager of the Poultry Department at the Central Experiment Farm, Ottawa. Although hampered in the past by lack of financial assistance and encouragement in his work at Ottawa, Mr. Gilbert, both as a speaker and experimenter, has for many years been doing good work for the poultry industry of Canada. When visiting the Central Experimental Farm recently, an editor of Farm and Dairy spent a pleasant and profitable hour chatting with Mr. Gilbert and looking over the poultry plant.

Speaking of feeding, Mr. Gilbert laid great stress on feeding rather heavily. "It is only the surplus feed," said he, "that goes into eggs, milk, pork, etc. We get lots of letters at the Poultry Department here with a tale somewhat like this: 'My hens look well but do not lay.' And our answer invariably is, 'Feed more.' There is less risk of getting a hen over fat by heavy feeding than of reducing its egg yield by under feeding. The only time that good hens are apt to get fat is just after moulting, when they take a rest from laying. Another point that we are particular about here is to keep our old hens and pullets in separate compartments. They require different feeding, and this cannot be given when they are in one flock."

PROVED TO BE A POULTRY MAN

Mr. Gilbert does not consider that he, as a poultry man, is engaged in a small business. He pointed with pride to our \$500,000,000 worth of poultry produce produced in Canada last year. He told our editor that in the United States the value of their poultry production in 1909 was \$750,000,000, and that in 1911 it would probably be \$1,000,000,000. In the United States poultry produce is more valuable than any one of their agricultural products except corn, and is one-half as valuable again as the dairy industry.

"Too many people," said Mr. Gilbert, "look down on the hen. Some time ago, a lady visiting our farm here, actually turned up her nose at the idea of visiting the Poultry Department, but she was interested after all, for a few weeks later she married a man named Henry and had a whole 'henner' to herself."

The open front poultry house is not looked upon with as much favor by Mr. Gilbert as by some other of our other poultry authorities. "We are trying the open front house," said he, "but we do not get a paying yield of eggs. We are too far north. When the weather is moderately cold, the hens will lay well and pay their way and a nice profit besides, but when a cold snap comes and the temperature goes down to 25 or 30 degrees below zero, we find that the egg yield drops."

"Of course, I believe in the fresh air house, but would advocate the cotton front form (see illustration on page 14) for our climate in Carleton county and in places similarly located. This morning, for instance, it was 26 degrees below zero outside, but in the cotton front house it was 40 degrees warmer. The water was not frozen, nor the manure on the dropping boards. In our partially heated houses, however, the manure and water were both frozen. This is hard to ex-

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Come on In, the Water is Fine

Are you making money from poultry? Others are. You can. Why not try ducks? Don't let such a remark as "My ducks eat their heads off" discourage you. People who talk that way are not going about it in the right way. Market ducks don't eat their heads off till after 10 or 12 weeks old. Then they do. The point is—market at a maximum price at an early age. Then you will enjoy duck raising as much as the ducks here illustrated are enjoying their swim; because they pay.

the chicken a better chance. In most cases, however, the chicken will be able to pip the shell, but has not the strength to break it and get out. In that case we take a piece of felt 12 inches long and one and a half inches wide, dip it in warm