

POULTRY.

THE FEEDING AND REARING OF CHICKENS.

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Chicks hatched artificially should not be fed for at least 36 hours, which did not necessarily mean that the chicks should be confined in the drying box of the incubator for that period, provided the weather was fine and warm, they might be placed in some sheltered corner or brooder, the floor of which should be covered with fine sand, at which they may peck away to their hearts' content.

The question of food for chicks is a much debated one; and many methods of feeding are claimed to be excellent. In this connection one may say right away that the method of feeding is almost as important as the actual food itself. In other words, success in chick rearing cannot be done by a book, but only by continual care and experience gained by actual practice.

Until quite recently the first meal for chicks was not considered complete unless it contained finely-chopped hard-boiled egg. This we find in actual practice is not at all necessary. In fact, we may go so far as to say that it is even not desirable.

We are frequently informed that the egg must be good for chicks, as it is their natural food. Quite so, but not hard boiled.

Shortly before the chick leaves the shell a quantity of yolk matter is absorbed into the body, traces of which may be found for five days, or even longer, and this is Nature's provision for the chicks, and the reason why food is not really necessary for some considerable time after hatching.

Though one, or even two feeds of hard-boiled eggs may not do any harm, more should certainly not be given, as constipation is invariably the result. The preparation of finely-chopped hard-boiled egg for a large number of chicks cannot be done quickly.

If egg matter must be fed, let it be given in the form of a custard, dried off with coarse oatmeal. This is much safer, and certainly better for them.

Coarse oatmeal is one of the best foods for newly-hatched chicks for the first few meals, and one that is readily picked up. Being white in colour it quickly claims their attention, and soon the whole brood will be busily employed.

THE GOLDEN RULE.

"Little and often" is the golden rule in feeding chicks, and, if time permits, one cannot very well feed them too often, always provided only sufficient is given at one time to be readily cleared up. On no account should food be left about the floor of the brooder.

Until chicks are well grown (about 10 to 12 weeks old), I have no hesitation in saying that what is known as the "dry mash" method of

feeding is by far the best. Not only does this method save labour, but it practically eliminates bowel trouble, provided of course, that the meals, etc., used are of good quality.

By this I do not mean to infer that an occasional feed of wet or moist mash should not be given; in fact I am of opinion that a feed once daily of this will prove more beneficial than otherwise, as it provides a change, and if mixed with milk or soup will do a lot of good. But, here, again, it is very essential that every scrap of the mash should be cleared up, and none left about to become sour and tainted.

Generally speaking, however, the beginner is strongly advised to feed his chicks on dry mash only until experience is gained.

Dry mash should be fed in hoppers, so constructed that all waste is prevented. Chicks will, if they can, get into the hoppers and scratch the contents about, picking here and there, usually wasting a considerable portion of it.

As to whether the hoppers should be open all day or not is a debatable point, but as the last meal of the day should be of grain it is advisable, in order to get the chicks to fill their crops well, to remove the hoppers by 2 o'clock in the afternoon.

The following dry mash for chickens has been found satisfactory.

One to three weeks :—

- 1 part by measure coarse oatmeal
- 1 part by measure wheaten bran
- 1 part by measure pollard
- 1 part by measure mealie meal
- $\frac{1}{4}$ part by measure crayferine, fish or meat meal.

Three to six weeks :—

- 2 parts by measure wheaten bran
- 2 parts by measure Sussex ground oats
- 1 part by measure pollard
- 1 part by measure mealie meal
- $\frac{1}{4}$ part by measure crayferine or meat meal

Six to twelve weeks :—

- 2 parts by measure wheaten bran
- 2 parts by measure pollard
- 1 part by measure Sussex ground oats
- 1 part by measure mealie meal
- $\frac{1}{2}$ part by measure crayferine or meat meal

Usually a certain amount of fine meal or residue is found at the bottom of each hopper in the evening that the chicks cannot or will not eat. To utilise this, in order to prevent waste, it may be mixed with milk and fed to them the following day.

Dry-mash hoppers should be so constructed as to be rat and mouse proof, also damp proof. Many types of hoppers are on the market but quite serviceable utensils can be made from petrol tins and cases.

Needless to say, only the very best meals should be used, as inferior and musty meals will quickly cause bowel trouble in the flocks.

In addition to the above, two or three times weekly a little fine fresh green bone may be given. This is, without doubt, one of the best animal foods for chicks, but not easily obtainable away from towns.

Small grit should always be available, also granulated vegetable charcoal. The latter may be, if desired, mixed up with the dry mash feed in the hoppers.

GREEN FOOD.

To keep chicks in the best of health this is very necessary, and should be fed fresh and at least once daily, more often if possible.

Lucerne is excellent (nothing really better), but in most parts of Natal it is not always available. From the vegetable garden, however, quite a lot of stuff may be obtained that might otherwise be wasted, viz., carrot and onion tops, leeks, cabbage and lettuce leaves, etc. Willow leaves have been proved to be the most useful for this purpose.

The main thing, however, is to feed something fresh, green and succulent, and many common weeds, such as black jacks, pig weeds, etc., are considerably better than nothing at all.

Oats and other grains may be sprouted for chick feed quite successfully in mid-winter when little else is obtainable.

GRAIN.

In addition to the above a certain amount of grain feed is necessary. Two feeds of this daily will suffice, say, at 11 a.m. and again at 3 p.m., or later according to the time of the year. In other words the last feed of the day.

Good grain mixtures graded in three sizes are on the market, and generally give satisfaction, but can be made up as follows for chicks up to three weeks old :—

- 1 part by measure finely crushed maize (yellow)
- 1 part by measure finely crushed wheat
- 1 part by measure finely crushed kaffir corn
- 1 part by measure finely crushed millet

From 3 to 6 weeks :—

- 1 part by measure fine crushed maize (yellow)
- 1 part by measure fine crushed wheat
- 1 part by measure fine crushed kaffir corn
- In two inches of fine scratching litter.

From 6 to 12 weeks :—

- 1 part by measure crushed maize
- 1 part by measure kaffir corn
- 1 part by measure wheat

Usually a large amount of grain feed is wasted, doves and other wild birds getting a big share. In many bought mixtures grains are included such as buck wheat, etc., which are seldom picked up.

The grain feed must also be looked upon as a means of making the young stock exercise, and should therefore, after the first three weeks, be scattered in litter, the depth of which should be increased as the birds grow. Exercise aids in developing sturdy chicks that make rapid growth, and is one of the most valuable preventives of disease.

WATER.

How soon water should be supplied to young chicks is another much debated point. In early spring, when the weather is cool, the morning of the third day is quite soon enough, but in mid-September, when days are hot, water can be safely given on the second day. Chicks with hens have been, to my knowledge, without water for five days, but were in a shady run.

When water has been once supplied, however, it should be constantly available, and given in a chick fountain containing a round pan. This will prevent overcrowding into the water.

Fountains with conical tops are better than those with flat tops, because the chicks cannot perch on them and foul the fountain and water with droppings. Clean water should be supplied at least once a day.

MILK.

Nothing is better for growing stock than milk, but unfortunately during the hatching and rearing season milk is generally scarce. Should only a limited quantity be available, it is advisable to mix it with the dry mash, and given one feed in the form of a moist or wet mash in the forenoon. Care must be taken that only just sufficient be given for the chicks to clear readily up. This feed of wet mash will vary the daily diet, and be eagerly devoured.

If plenty of milk is available, then the amount of animal food should be somewhat reduced. Milk should be fed in enamelled or earthenware vessels, as the lactic acid corrodes galvanised iron dishes or pans. The former should be of the fountain pattern, otherwise the chicks are likely to become plastered and sticky with milk, which tends to make them dirty.

RUNS.

Chicks should be put on the ground as soon as possible, and needless to say, ~~the~~ fresher and cleaner the run the better. On a large plant a piece of ground should be specially reserved for chickens and after being vacated at the end of the breeding season should be allowed to rest until the following year. These runs are better if under grass, even though the grass is dry, as it is likely to be in winter and early spring. If the chicks can run in a pen or enclosure in which some growing crop exists so much the better.

Nothing is better for young stock than insect life, and this can only be obtained in some plant growth.

A lucerne patch may be considered the ideal run, but unfortunately these are few and far between in this Province.

In runs where no grass grows, the ground should be from time to time hoed over, otherwise the soil is apt to become sour and tainted and sickness results. Dry air and sunlight are powerful vermicides and disease-preventing agencies.

Another point of importance in this connection is that when the surface of the run is hard the chickens cannot enjoy a dust bath, which always tends to keep them free of lice and consequently in good health. A change of run should be given as frequently as possible.

SHADE.

Live shade, that is shade provided by trees, creepers, plants, etc., is much better than that artificially made. Shade from the hot sun is very necessary indeed, in fact essential in this part of the world.

Where no shade is provided chicks will remain still for a considerable period of the day, and consequently will not exercise, growth being therefore retarded.

Mealies, sunflowers, etc., can be planted in runs to be used for chicks and runner beans, etc., trained on the wire netting fences. On the other hand too much shade can be a source of danger as the ground is apt to remain damp and shuts out light and air.

OVERCROWDING.

To rear chicks successfully overcrowding must be carefully guarded against, and only chicks of the same age and size should be kept together in brooders and runs.

The majority of poultry keepers hatch out more chickens than they have space for, and this is frequently the cause of heavy mortality in flocks. It is much better to have a smaller number of sound, healthy stock than a large number of birds not even fit for the pot!

CULLING.

This should commence right from the day the chicks are hatched and any deformed or crippled should be killed without delay. The process of culling must not stop here, but every day, if necessary, a sick or weakly chick should be destroyed. Remember that the health of the remainder depends to a great extent on this.

SEPARATING THE SEXES.

This should be done as soon as possible with the light breeds, *viz.*, Utility Leghorns, Anconas, etc., usually about four to five weeks of age. In other breeds, Wyandottes particularly, it is often very difficult to determine the sex until the birds are three to four months old. Apart from giving the pullets more room, the cockerels, especially of the Light Breeds, are apt to take the greater part of the food, keeping the pullets away from the hoppers and otherwise interfering with them.

Unless a poultry-keeper has established a reputation as a breeder of high-class stock it is very doubtful whether more than a few cockerels should be reared. Light breeds are not good table birds, in fact seldom worth the food to bring to maturity.

TOE-PICKING.

This habit or vice is not uncommon among newly-hatched chicks and may result from several causes. It does, however, undoubtedly happen on many occasions where chicks are put out for the first time by one accidentally picking the toes of another hard enough to draw blood.

One frequent cause is when toe-punching takes place and a little blood remains on the foot. Chicks have a natural taste for animal products and once they taste blood they will lose no opportunity in obtaining it.

Another cause is through injury to the foot or toes through scratching in the food hopper. Any chick injured in this manner or through careless toe-punching should be removed from the remainder without delay.

FINAL CONCLUSIONS.

Brooders, coops, feed and water utensils must be kept perfectly clean. Inspections should be made as often as possible in case insect pests, such as red mite, sand fleas, etc., are causing trouble.

Give the chicks a change of run every now and then; change of environment works wonders. Don't overcrowd in runs or broods; cull severely when necessary. Remember a layer without stamina and constitution is useless. Separate the cockerels and pullets as early as the sex can be determined.

Don't be afraid to introduce a little novelty and change into the feed menu of growing chicks.

Chicks cannot be reared altogether by the book—it cannot tell you, for instance, when your chicks are beginning to flag or when they require a change of run.

Exercise is absolutely essential both for the chick and the laying hen. This must be provided by means of scratching litter, and last, but not least, remember that chicks require just as much care and attention on Saturday, afternoon and Sunday as at any other time.—South African Poultry Magazine and Small-Holder, Vol. XVIII, No. 154.