

UNIT:4TH (ANIMAL
HUSBANDRY &
POULTRY)

Management
Of
Breeding Stock

Subject: Applied Zoology. (ZOOLOGY)
Course: DSE (ZOODE0601)

Unit-IV
Sem-6th

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2.3 Management of breeding Stock and broilers

Poultry refers to birds such as chicken, turkeys, ducks, geese ostrich & other related species used for commercial production of meat, eggs feathers and leather.

Generally two types of birds are found in poultry:

1) layers / Egg producing chicken: The egg laying forms are kept in this category and are reared in smaller groups. They are provided a measured space for their development and the quality of feed is also different.

They are reared in groups of 200-500/farms

2) Broilers or meat producing chicken:

These are specially reared birds particularly for meat and flesh. They are developed for 8-16 weeks and attain a particular size & wt. The quality of meat produced is much different than that of chicken or other varieties of fowls. & this is now a more popular industry.

The birds that do not have desired traits are removed from stock by the breeders and this is called Culling.

Feeding and Management of Breeding stock / Laying Hocks ②

There are certain factors which can help a breeder in increasing profit and maintaining the farm

- By increasing production
- By decreasing the production cost
- By using better means of marketing
- Reduction of mortality rate.

Along with this

The laying house should have proper space and ventilation.

Proper light and fresh air is must for good poultry.

There should be a bed of paddy bran with thickness of $7\frac{1}{2}$ - 15 cm.

It should have $\frac{1}{2}$ kg dried lime to avoid dampness and produces heat/warmth to the flock.

A thick litter is always good as it has no dampness and produces heat during composting.

Proper feeding and water drinking arrangement should be assured to the hen.

Light plays an important role in the egg laying.

A hen requires at least 14-16 hr light per 24 hrs. There should be big & protected windows on the eastern & western sides.

The poultry feed must be standard

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quality with required amount of Calcium to cover its loss in the bird. The feed should have shell of Oovo, Pila and ground stones.

Heavy proteinaceous diet is given to the hen. This diet is mix type with animal proteins along with cut & chopped dried pieces of meat, fish, prawns, whereas the second diet is rich in green leaves like vegetables & other green fodders. Vitamins and minerals are also added in required amount in the feed to avoid their loss.

Management of Young Chicken / Breeding Stock

The brooding & rearing of young chick is done with great care!

Two methods are employed here:

- 1) Natural Method: The fertilized eggs are laid by the female and in natural course, the broody hen sits over these eggs and provides them the required warmth for their development. Generally the eggs hatch after 21 days. No extra effort is required by the farmers and a hen easily manages a set of 10-15 eggs at a time. This requires protection / care of bird & eggs. But this method cannot be applied on commercial basis.

2) Artificial Method

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In this method, development of egg is done inside the specially made brooders.

There is a complete arrangement of humidity, temperature, warmth and light in the brooder. They contain special requirements of food, space feeding & water. They are kept warm with heaters, bulbs, kerosene oil lamps.

Some of important & common types of brooders are

1) Colony brooder: It is special type of brooder used for rearing a large number of chicks in a small space. It is of 2 types:

1) Folding type

2) Fixed type

1) Folding type: It is a wooden structure fixed on wheels & are well ventilated with sliding windows fitted with wire mesh. They can be moved to places where ventilation, light water and sanitation can be arranged.

2) Fixed type: These are made up of cement and concrete but not moveable. But with proper ventilation, light, meshed windows & floor covered with litter about 4-5 cm in thickness.

2) Electric brooder: This is made up of large number of small compartment & is kept warm by the electric heaters. This is used in big poultries. The chicks are provided warmth in small space & the mortality rate is much lower.

than any other methods.

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Artificial brooders have many advantages over natural broodings :

- 1) Large number of chicks can be reared during any time of the year.
- 2) Maintenance and rearing is easier.
- 3) Mortality rate is quite low.

The artificial rearing / Intensive rearing is carried out in a well ventilated coop or poultry house & all the care is taken to maximize the egg and meat production.

The contribution to total world poultry meat and egg production through this rearing is 74% and 68% resp.