

INTEGRATED FISH-CUM-DUCK FARMING SYSTEM

LPM-610 (Unit-II)

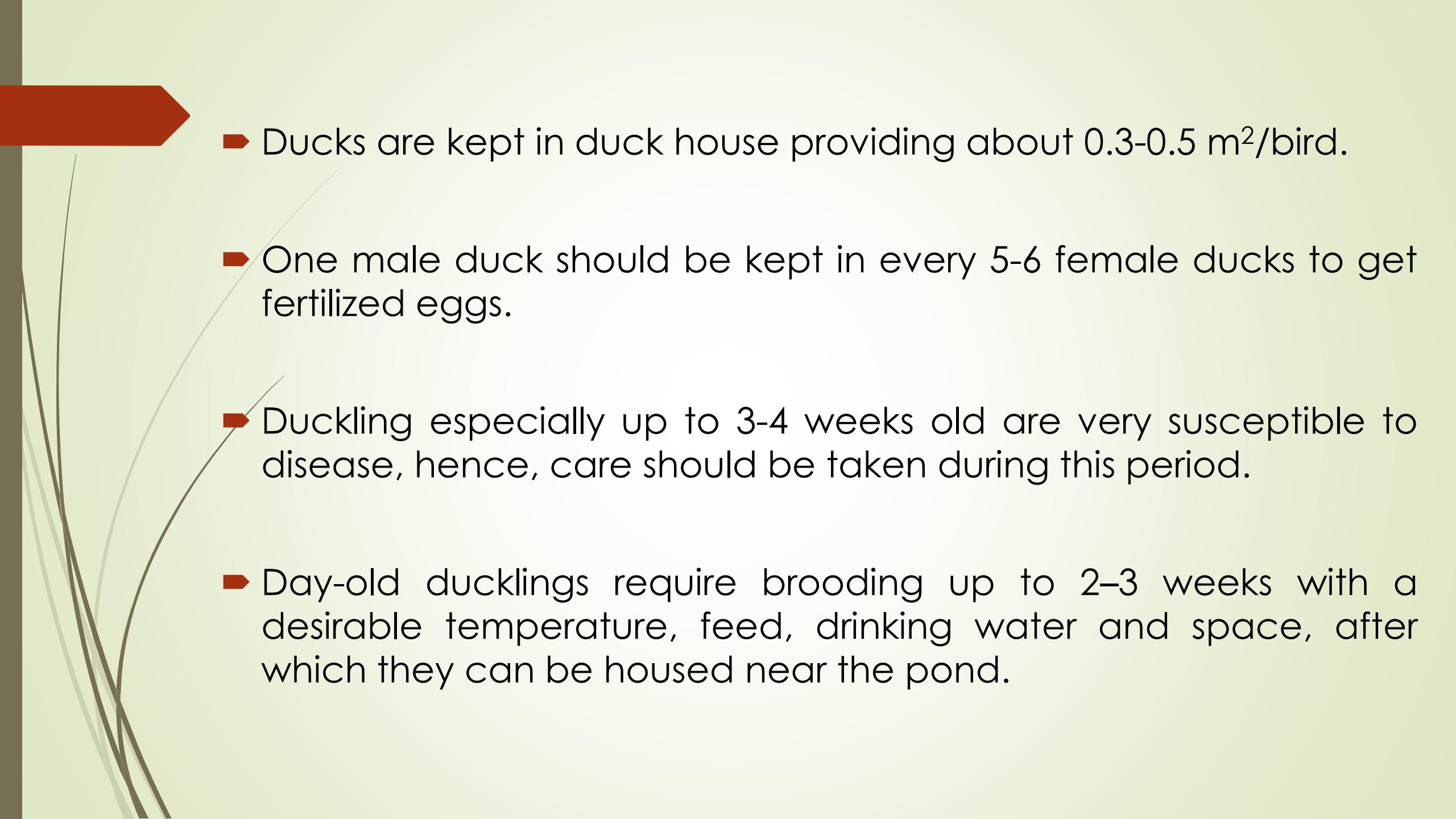
Lecture: III
Date: 29.10.2020

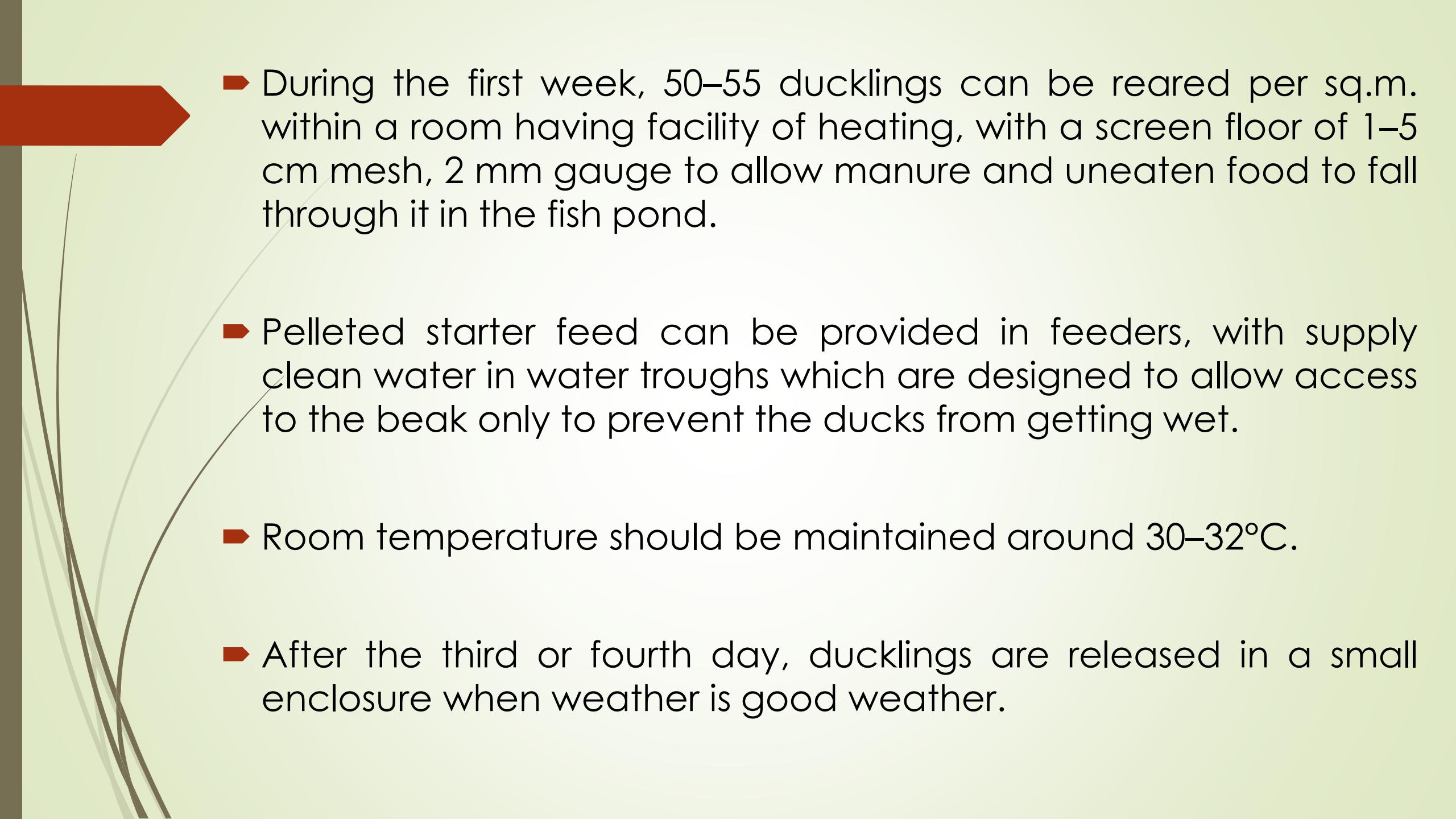


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Duck night shelter

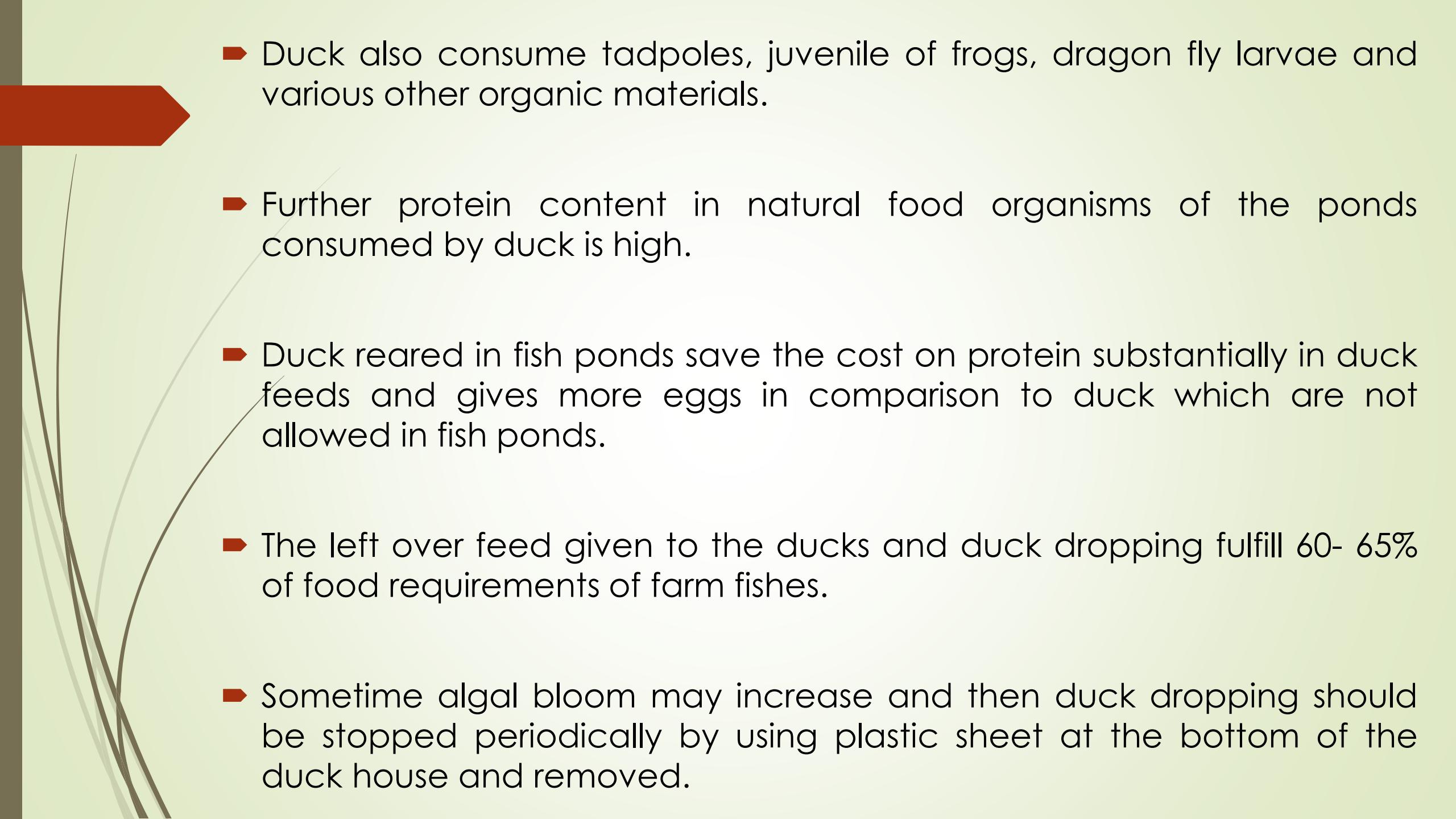
- ▶ Duck requires night shelter on the pond dyke or over the pond surface.
- ▶ It should made with the help of locally available material such as bamboo cane, thatches etc.
- ▶ If duck night shelter is made over the pond surface, a small bamboo bridge is constructed from the duck house to dyke for feeding the ducks as well as for collecting eggs and duck from the house.
- ▶ Another bridge is constructed from the duck house to the pond surface.
- ▶ Duck house should be well ventilated and it should be exposed to direct sunlight.
- ▶ Peripheries of the pond are to be fenced for protection of ducks.

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- ▶ Ducks are kept in duck house providing about 0.3-0.5 m²/bird.
 - ▶ One male duck should be kept in every 5-6 female ducks to get fertilized eggs.
 - ▶ Duckling especially up to 3-4 weeks old are very susceptible to disease, hence, care should be taken during this period.
 - ▶ Day-old ducklings require brooding up to 2-3 weeks with a desirable temperature, feed, drinking water and space, after which they can be housed near the pond.

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- ▶ During the first week, 50–55 ducklings can be reared per sq.m. within a room having facility of heating, with a screen floor of 1–5 cm mesh, 2 mm gauge to allow manure and uneaten food to fall through it in the fish pond.
 - ▶ Pelleted starter feed can be provided in feeders, with supply clean water in water troughs which are designed to allow access to the beak only to prevent the ducks from getting wet.
 - ▶ Room temperature should be maintained around 30–32°C.
 - ▶ After the third or fourth day, ducklings are released in a small enclosure when weather is good weather.

Feeding of Ducks

- ▶ Mostly fine rice bran and poultry feed (layers mash etc.) are used as duck feed at the rate of 100-120 gm feed/day/duck.
- ▶ Duck feed should be stored at cool and dry environment to avoid growth mould producing aflatoxin.
- ▶ Inclusion of maize in duck feed may be avoided as it is rich in magnesium which will favour mould growth in moist environment.
- ▶ Apart from that Duck weeds (Lemna, Wolfia, Azolla etc.) are also fed to the ducks.

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- Duck also consume tadpoles, juvenile of frogs, dragon fly larvae and various other organic materials.
 - Further protein content in natural food organisms of the ponds consumed by duck is high.
 - Duck reared in fish ponds save the cost on protein substantially in duck feeds and gives more eggs in comparison to duck which are not allowed in fish ponds.
 - The left over feed given to the ducks and duck dropping fulfill 60- 65% of food requirements of farm fishes.
 - Sometime algal bloom may increase and then duck dropping should be stopped periodically by using plastic sheet at the bottom of the duck house and removed.

Health Cover

Means of disease spread through:

- ▶ Wet litter, Feed and water, Close contact, Contaminated equipment, Attendants and visitors, Air, External parasites, Free moving birds and Rodents and flies.

General Principles for Prevention of Diseases.

- ▶ Procure day old ducklings from disease free flock.
- ▶ Maintain proper hygienic conditions.
- ▶ Provide adequate feed, water and floor space etc.
- ▶ Rodents and wild birds etc should be prevented to enter the houses.

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- ▶ Follow regular vaccination schedule.
 - ▶ Proper disposal of dead birds.
 - ▶ Footbaths should be provided at the entrance of each shed.
 - ▶ Reduce stress effect.
 - ▶ Ensure clean and adequate water supply.
 - ▶ Use of suitable litter material and periodical turning is essential to keep it dry.

Feeding of Fishes

- ▶ In integrated fish-cum-duck farming, supplementary feeding to the cultured fish is not required as duck excreta helps in fertilizing the pond water to produce fish food organism - phytoplankton and zooplankton.
- ▶ 60% of operational cost of farming goes for feed alone. So, local availability of fed ingredients as well as their cost is important.
- ▶ Apart from that some fish like- common carp take duck dropping directly as their feed.
- ▶ But supply of feed to the herbivorous fish like- grass carp is required.
- ▶ They need to be fed with grasses like- Para grass, Napier or Hybrid Napier, banana leaves, chopped green cattle fodder etc.

Production of fish, egg and meat

- ▶ Through this integration, a production of 3500-4000 kg of fish, 17000-18000 eggs and 450-600 kg duck meat from a hectare of pond area in one year without any supplementary feed and chemical fertilizers can be obtained and the cost is turned down to 60% lesser than traditional practices.
- ▶ The system results in a net handsome amount of income in a year per hectare.



THANKS

