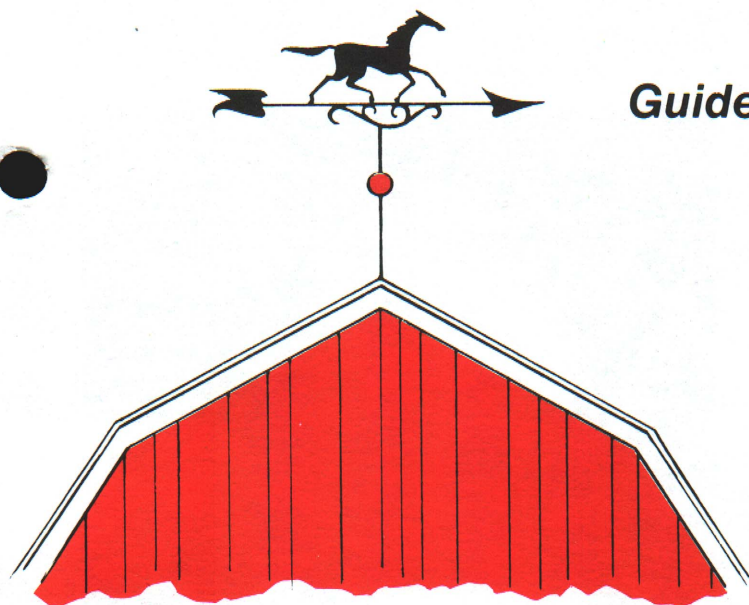


FARMING KNOW-HOW**Guidelines to Better Family Farming****Raising A
Few Ducks****COOPERATIVE EXTENSION SERVICE****Michigan State University**

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Nothing brings out the maternal or paternal instinct more quickly than very young ducklings. Before you plunge, however, remember that:

1. They can be very messy!
2. Duck feed is not always available.
3. They grow up to be adult ducks and then what do you do?
4. They require care, housing and equipment.
5. They have very fragile legs. They should be held by the neck and lifted with the palm of the hand under their breast.

But you want to raise a few ducks anyway — fine. None of the problems mentioned (or others not mentioned) are insurmountable.

What Duck? What Breed?

When raising ducks for meat, you are almost limited to the White Pekin duck. There are two other meat-type ducks, the Rouen (a tame Mallard bred to a much larger size) and the Muscovy. It is the White Pekin duck, however, that is grown and marketed by commercial duck growers in the United States.

The Pekin duck is a white-feathered duck. It grows rapidly to 6 to 7 pounds in 7 to 9 weeks if fed well. It does not fly; therefore, it does not waste a lot of energy (food) in the exertion of flying. But it must be protected from dogs, foxes, and other predatory animals.

The Muscovy is good if you want a semi-wild flock of ducks. It is a good forager when grown. The Muscovy doesn't quack; it makes a hissing sound and is a strong flier, but generally will not leave home. It perches or roosts like some of the lighter breeds of

chickens. It grows more slowly than the Pekin duck. A female will weigh 6 to 7 pounds and a male 10 to 13 pounds at 16 to 20 weeks of age. The White Muscovy is the most popular of the various feather colors available.

Some people keep ducks for egg production. The Khaki Campbell and Indian Runner breeds are both well known for their egg laying ability.

Obtain day-old ducklings by checking the farm magazines' classified ads in February, March, April and May. Vocational agriculture teachers, county Extension agents, 4-H agents and the Department of Poultry Science at Michigan State University are also good sources of information. If you order the ducklings to arrive in May or later, your housing problems will be less difficult.

Housing

Assume that you are starting with a few ducklings. A small pen 5 feet by 5 feet will be fine to start 10 to 15 ducklings. Remember, the pen may have to stay the same size but the ducks surely will grow so be sure you have enough room to begin with. The house, or pen, may be very simple, but it must be vermin-proof, reasonably tight from drafts, and dry. Very young ducklings will swim, but should have a warm, dry place to spend some of their time.

Equipment

Chick feeders and waterers (Figure 1) will work well for young ducklings. Ducklings will play in and spill water, and make the litter wet. This is undesirable. Water fountains or pans should be put on a water stand (Figure 2) as soon as the ducklings can climb up on it. This is a low stand 2 feet by 2 feet covered by a quarter-to-half-inch screen or hardware cloth. Put the waterer on it and the drippings and splashings will be down

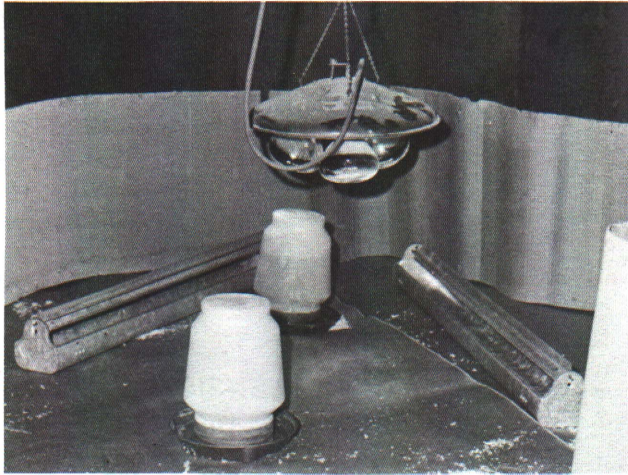


Fig. 1 Chick feeders and waterers which work well for ducklings.

below the screen and not all over the litter. Provide fresh water in clean waterers at all times.

Heat

Ducklings need heat for the first few weeks. A 250-watt heat lamp bulb (Figure 3) will provide heat for up to 250 ducklings. Two lamps are a good idea as one may go out. A 100- or 150-watt incandescent bulb will provide enough heat for only a few ducklings. The lamp should be hung (using a porcelain socket to prevent overheating) 2 feet above the backs of the ducklings. The temperature should be warm at floor level under the lamps and cooler 2 to 3 feet away from the point directly under the bulb. If it is comfortable for your hand (for 3 to 5 minutes) directly under the lamp, it will probably be comfortable for the ducklings. A corral (Figure 1) will help the ducklings locate the heat. It can be removed in 5 to 7 days. As the ducklings begin to feather, they will need less and less heat. You can raise the heat lamp gradually. In a matter of a few weeks, in warm weather, the ducks will not need any heat. When grown, they will only need feed and water.

Litter

Litter to cover the floor when starting ducklings can be a problem. Day-old ducklings might eat sawdust or shavings, and straw is difficult for the young birds to get around in for the first week or two. A hard surface, such as concrete, or any nonskid surface, will do for the first two or three days. Shavings and crushed corn cobs make fine litter after that; however, they have a tendency to get wet and pack, which is undesirable. Another factor to keep in mind is cost. Most litter materials have become quite expensive, but straw is probably the cheapest.

Water

The water fountain should be big enough and deep enough to allow the birds to immerse their beaks and

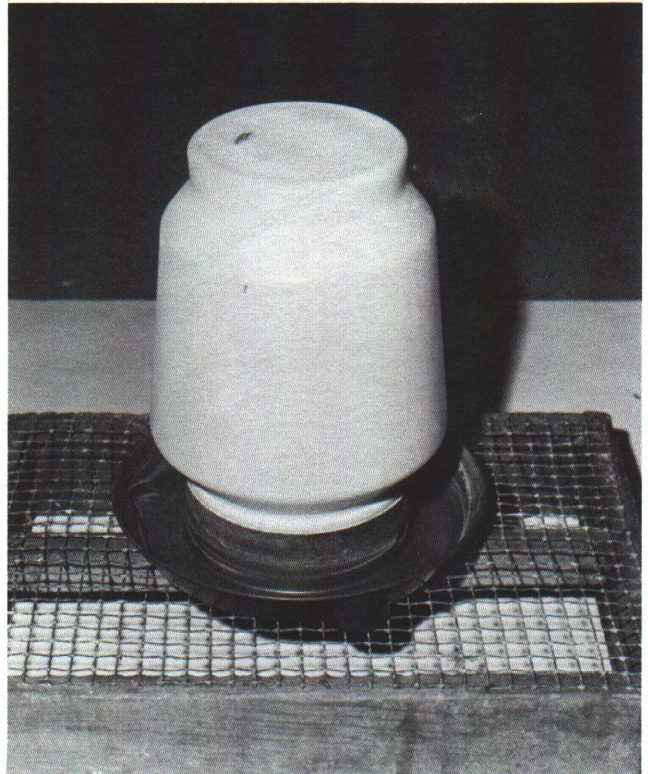


Fig. 2 When ducks are older a water stand will help keep the watering area dry.

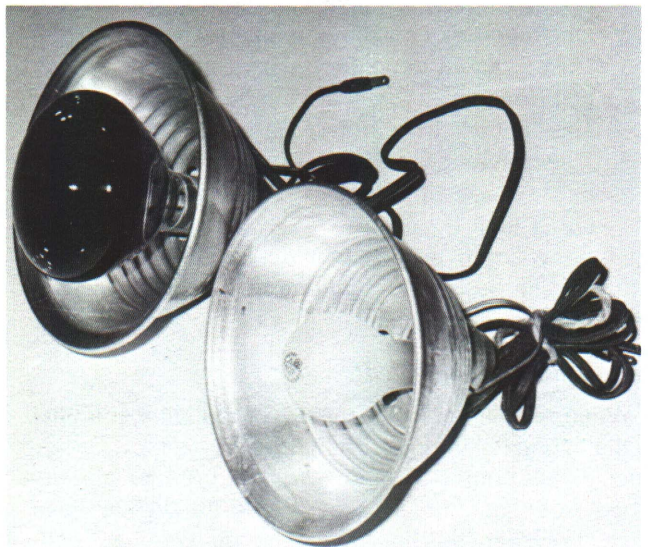


Fig. 3 A 250 watt heat lamp bulb can provide heat for up to 250 ducklings. A 100 or 150 watt incandescent bulb however, will only provide heat for a few ducklings.

eyes in the water. This will help to clean the beak, nostrils and eyes of dust and sticky mash. A water pan with a wire guard (Figure 4), to keep the ducks out of the water, is good for larger birds.

Feeding Ducks

The birds can eat well from a hanging feeder (Figure 5). It should be placed on the floor when the birds are

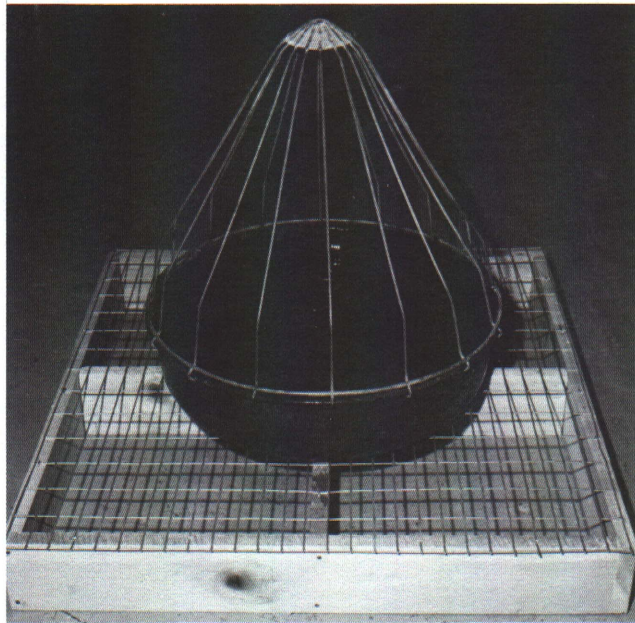


Fig. 4 A wire guard over the water pan will keep larger birds out of the water.

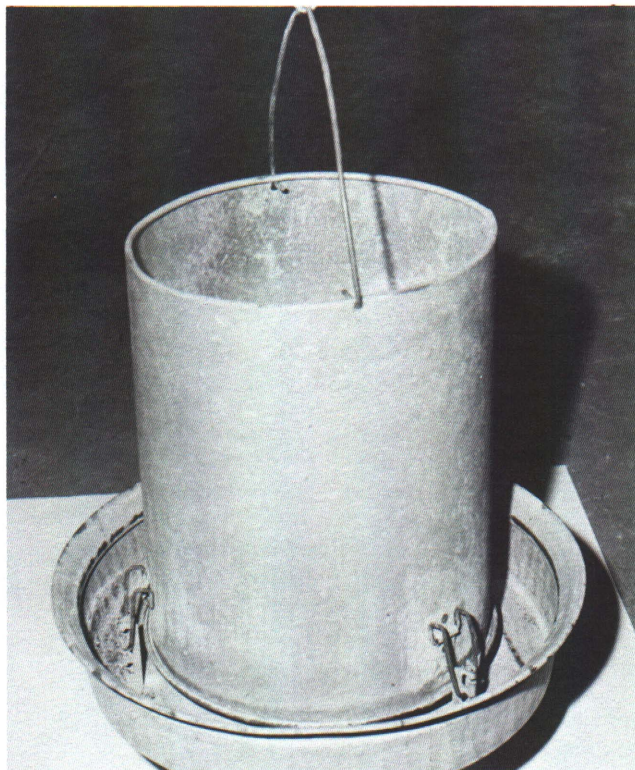


Fig. 5 Ducks can eat well from the hanging feeder.

one day old. Litter can be piled at the side of the feeder so that the day-old ducklings can stand up high enough to reach the feed. The feeder should be high enough so the ducklings will stand up with their backs at least level when eating. A situation where the shoulders are slightly higher than the rump is even better. The bird will not shovel the feed out of the feeders into the litter as easily when the feeders are raised. Pelleted feed will

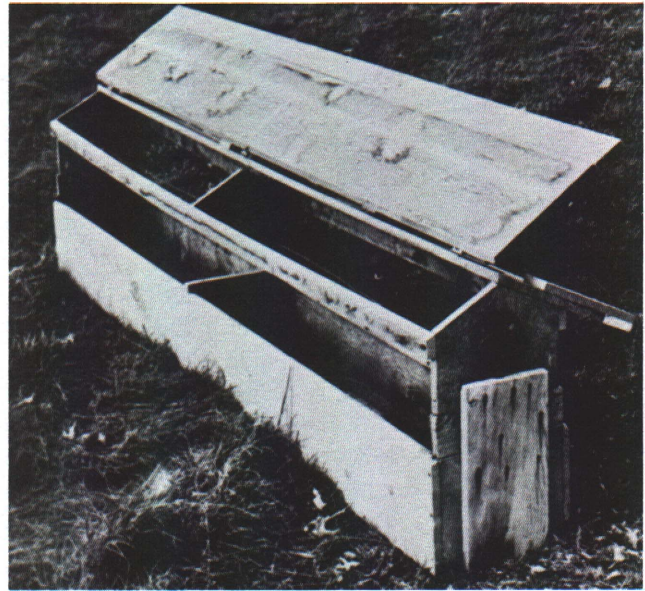


Fig. 6 An example of a covered feeder.

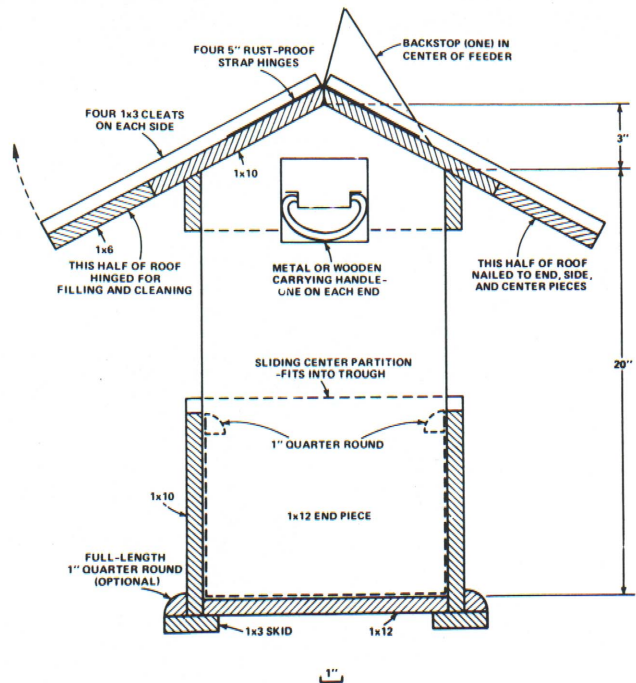


Fig. 7 Diagrammed plans for the covered feeder in fig. 6.

also help prevent feed wastage. The covered feeder in Figure 6 (cross-section plan shown in Figure 7) will help eliminate feed wastage if you wish to feed the ducks outside.

Ducklings from day old to 2 to 3 weeks of age should have a 22 to 24 percent duck starter ration available at all times. Chick starter can be used if duck starter is not available, but *must not* contain any drugs which could be harmful to the ducklings. Check the label. Whatever starter ration you use should be crumbled or in small pellets if possible. Mash tends to gum up in the ducklings' beaks. Ducklings can eat mash but waste a lot of it

by going to the water fountain and washing a part of the feed out of the beak into the waterer.

At 2 to 3 weeks of age the feed can be changed to an 18 to 20 percent duck grower feed. This feed can be used until market age — 8 to 10 weeks for Pekin ducks. If duck grower pellets are not available, a chicken grower mash, pelleted if possible to cut wastage, can be used. Be sure to avoid feeds with drugs in them as ducks can be very sensitive to some of the drugs used in poultry feeds.

The expected growth rate and feed consumption of growing ducks can be seen in Table 1. This information will show you how ducks selected for rapid growth will grow when fed properly. They will grow almost a pound a week. It is also interesting to note that feed consumed per pound of gain increases from the first to the eighth week of age.

Table 1. Average liveweight, feed consumption and feed conversion ratios of White Pekin ducklings at different ages, mixed sexes.*

| Age (weeks) | Liveweight (pounds) | Feed Consumption | | Feed/lb of weight gain to date (pounds) |
|-------------|---------------------|------------------|---------------------|---|
| | | Weekly (pounds) | Cumulative (pounds) | |
| 1 | 0.60 | 0.50 | 0.50 | 0.83 |
| 2 | 1.68 | 1.64 | 2.14 | 1.27 |
| 3 | 2.98 | 2.55 | 4.69 | 1.57 |
| 4 | 4.01 | 2.55 | 7.24 | 1.81 |
| 5 | 5.13 | 3.27 | 10.51 | 2.05 |
| 6 | 6.19 | 3.57 | 14.08 | 2.27 |
| 7 | 6.96 | 3.87 | 17.95 | 2.58 |
| 8 | 7.54 | 3.39 | 21.34 | 2.83 |

*Cornell University data

Table 2. Duck Feed Formulas.

| Ingredients | Type of Formula | | |
|--|------------------------------|----------------------------|---------|
| | Starter (day old to 2 weeks) | Grower (2 weeks to market) | Breeder |
| | pounds | pounds | pounds |
| Ground wheat | 50 | 60 | 30 |
| Wheat shorts | 20 | 20 | 20 |
| Wheat middlings | 20 | 20 | 20 |
| Ground yellow corn | 30 | 30 | 30 |
| Pulverized oats | — | — | 22 |
| Ground barley | 34 | 34 | — |
| Dehydrated green feed | 6 | 6 | 20 |
| Meat meal (50% protein) | 4 | 5 | 4 |
| Fish meal (65% protein) | 5 | 3 | 8 |
| Dried whey | 4 | 4 | 6 |
| Soybean oil meal (44% protein) | 21 | 13 | 30 |
| Ground limestone | 2 | 2 | 5 |
| Dicalcium phosphate | 2 | 2 | 3 |
| Iodized salt | 1 | 1 | 2 |
| Vitamin A supplement, stabilized, (10,000 I.U./gm) | 0.05 | 0.05 | 0.05 |
| Vitamin D ₃ supplement, (1,500 I.C.U./gm) | 0.10 | 0.10 | 0.20 |
| Manganese sulfate (feed grade) | 0.025 | 0.025 | 0.05 |
| Vitamin B ₁₂ supplement (6 mg/lb) | 0.10 | 0.10 | 0.20 |
| | grams | grams | grams |
| Riboflavin | .20 | .20 | .30 |
| Niacin | 2.00 | 2.00 | 2.00 |

The small duck flock will do well if it is hatched and reared in late spring (May and June) when the weather is warm. A tender, green pasture, clean water and a good chick crumble are usually adequate as far as the nutritional requirements of ducks are concerned. Weather permitting, the ducklings can be allowed out in the grass at 4 to 5 days of age.

Table 2 lists the ingredients of some starter, grower and breeder duck rations. These rations were common in the early 1960s and are less complicated than the commercial feeds that are presently used. Some country elevators may be able to mix these diets for you.

Breeding Ducks

A breeder ration is listed in Table 2. If you keep a breeder flock, a breeder ration is necessary. Much of the difference is in the vitamin and mineral composition of the breeder diet as compared with the starter and grower diets.

If you keep a breeder flock, one drake (male) will breed 5 or 6 ducks (females). It is easy to tell the drakes from the ducks. The tips of the middle tail feathers on the adult drake curl forward. This does not occur on the female duck.

Disease

Ducks are not susceptible to many of the diseases of poultry. Usually ducks that are kept in small flocks that have plenty of range do not have disease problems. If problems occur, it is usually with large numbers that are closely confined. Sanitation, good nutrition, brooding, ventilation and general management will prevent most

disease. Wet litter and mud are areas where diseases may develop.

Killing and Dressing

One of the primary reasons for keeping ducks may be to have roast duck. This means that the birds must be killed and dressed. A strong quarter- or three-eighths-inch rope, a sharp knife and a candy thermometer (Figure 8) will make the job easier. Tie the duck's legs, as shown in Figure 9, and hang the bird so the head is at least waist high (Figure 10).

Hold the head firmly in one hand and cut the jugular vein (one goes down each side of the neck from the head to the body). The bird will flop so stoop below the wing action. Hold the head firmly with pressure down to keep the head from throwing blood.

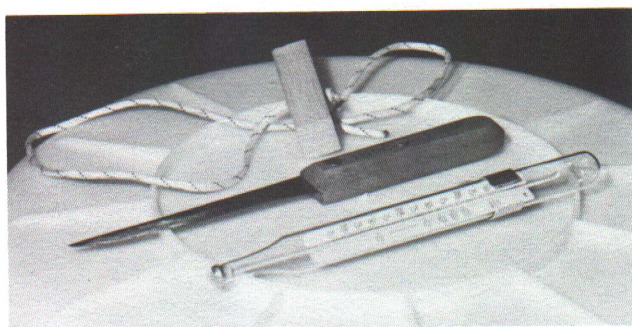


Fig. 8 Equipment helpful when butchering ducks.

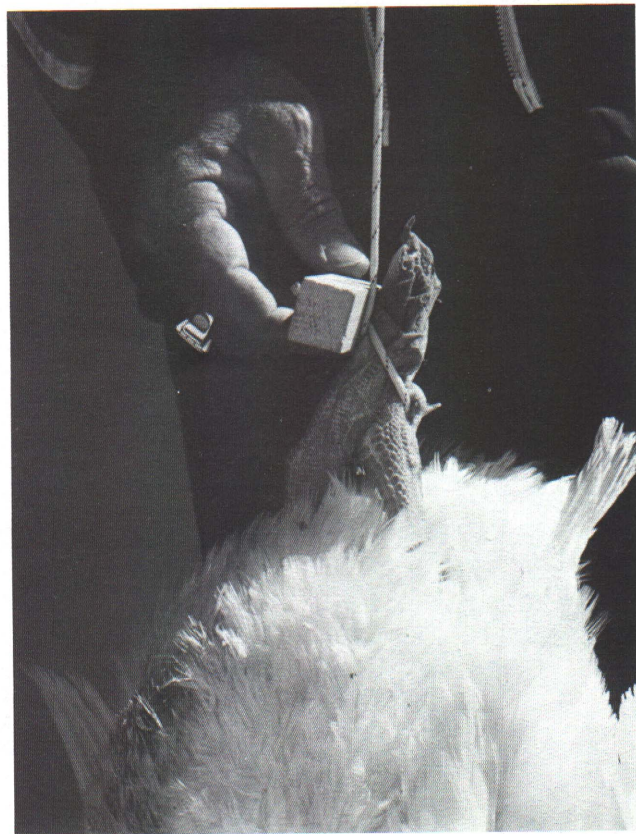


Fig. 9 Proper way to tie the duck's feet.

After the struggling has stopped, dip the bird into 140-150°F water for one to one and a half minutes. Use a large vat and plenty of water. You must move the bird around in order for the hot water to penetrate the feathers. Some detergent will help the water to penetrate the feathers. After the bird has been scalded (the body feathers should pull easily), hang the bird up again and remove the feathers. The scalding water cooks the outside skin layer, called bloom or cuticle, and it is usually removed during the picking procedure when the skin is rubbed to remove pin feathers and down. When this outside layer of skin is removed, the remaining skin tends to dry out and become leathery in texture. You can prevent this drying by cooling the birds in a tank of cool water after the feathers have been removed.

The bird is then ready for evisceration as follows:

1. Remove the head and legs.
 2. Cut the skin down the back of the neck and peel out and remove the neck.
 3. Cut open the abdomen between the tip of the keel (breast) bone and vent (anus).
 4. Cut around the vent and remove the intestines.
- Your job will be much easier if the birds were starved for 12 hours (just take the feed away the night before butchering). Be sure to remove the heart and lungs; they are located well forward in the body cavity.

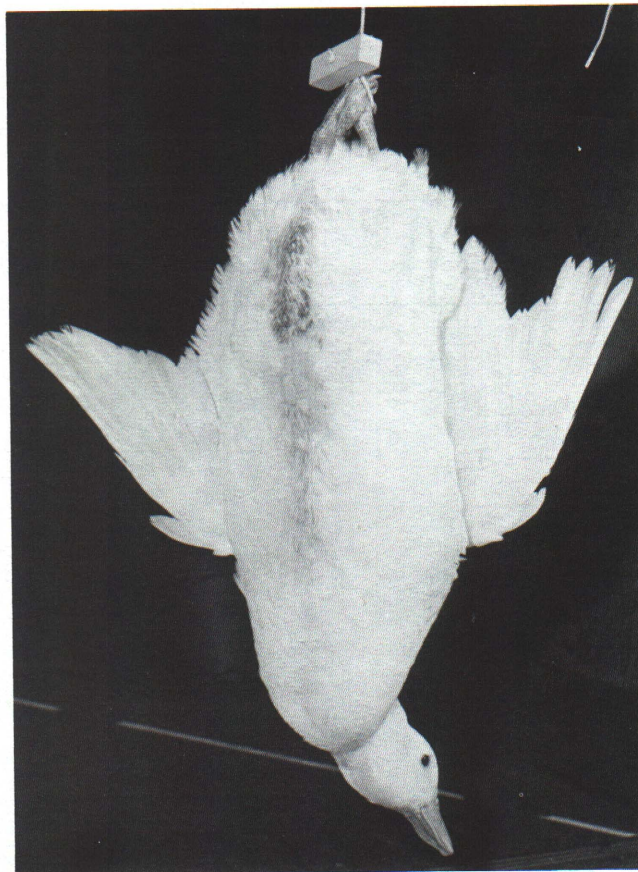


Fig. 10 Hang the ducks at least waist high.

5. Wash the carcass and put it into clean cold water until you are ready to package, freeze or cook it.
6. Clean the liver and gizzard; the gizzard will clean more easily if it is cold. The gizzard contains a sack that acts as the teeth of the duck — it grinds any pellets, grain or mash that the duck eats. This sack must be removed.
7. Remove the oil gland at the base of the tail of the duck.

Now you are ready to package the bird for freezing. (See Figure 11.) Put the heart, liver, gizzard and neck inside the body cavity. Place the bird in a plastic (freezer type) bag. Remove as much air from the bag as possible and tie it tightly. When the bird is put into the freezer, maintain the temperature at as near 0°F as possible. Fluctuating temperatures tend to cause more

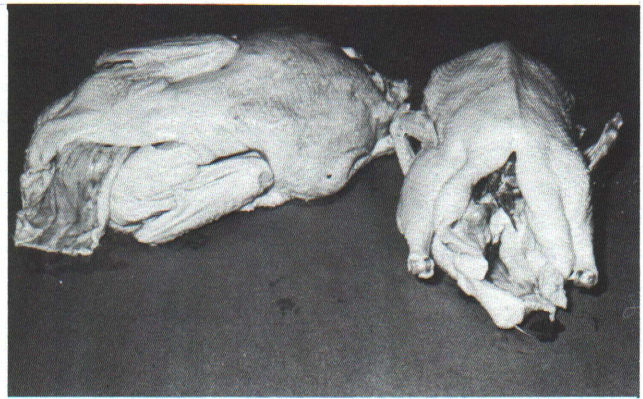


Fig. 11 Butchered birds ready for freezing.

freezer burn (dehydration) than a steady cold temperature even if the bird is well wrapped.