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G84-713 Brooding and Rearing the Home Goose Flock

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Brooding and Rearing the Home Goose Flock

This NebGuide discusses brooding and rearing small geese flocks, including feeding from starter to growing and finishing on pasture, and slaughter, cleaning and processing procedures.

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Goose growers in general have not been caught up in the ultra- efficient feed utilization trends that have developed in other parts of the poultry meat industry. This may be due to of the fact that the geese are good foragers. Understandably, growers have concluded that a considerable saving in prepared feeds can be achieved by rearing the birds on pasture. Even without special foods, the goose is more rapid growing than other domestic species of poultry.

Geese are quite hardy and relatively easy to grow. They are not susceptible to many of the common poultry diseases, and so medicated feed is not usually needed. Contrary to popular belief, a large pond or river is not necessary. As a matter of fact, mud puddles and ponds may cause some disease problems. All in all, geese make a good home flock project.

Breed Selection

The Emden and Toulouse are the two most popular goose breeds. However, many African, Pilgrim and Chinese are also raised. The first three breeds are considered heavies and the last two are lightweight birds. There are many differences in breeds and even in strains (selected families) within breeds. Their characteristics should be fully evaluated to best meet your own requirements.

Brooding

Various types of housing can be used for brooding. A special building is not required for small flocks. Any small building, even the corner of a garage or barn, can be used as long as it is dry, reasonably well-lighted, ventilated and free from drafts. Allow at least 1/2 square foot of floor space per bird at the start of the brooding period. Increase this to 1 square foot by 2 weeks. If the birds are to remain confined beyond this time, additional floor space will be needed as they increase in size.

Cover the floor with 4 inches of absorbent litter, such as wood shavings, chopped straw or peat moss. Be sure

the litter is free from mold when it is put down. Maintain good litter condition and prevent molds from growing by stirring frequently, removing wet spots and periodically adding clean dry litter.

The brooding of goslings differs from chicks in that goslings are larger at day-old than chicks and require more space. Heat lamps are a convenient source of radiant heat for brooding small flocks. A 250 watt lamp will heat 25 goslings. When using hover- type brooders, brood only about one-third as many goslings as the chick rated capacity of the hover. It may be necessary to raise the hover 3 to 4 inches higher than for chicks. When the goslings arrive, the temperature at the edge of the hover should be 85 to 90°F. Reduce the temperature 5 to 10° per week until 70°F is reached. Goslings usually do not require brooding heat beyond 4 to 5 weeks of age.

Confine the birds to the heated area for the first 3 or 4 days with a corrugated paper or wire mesh fence encircling the brooder. The behavior of the birds is an indication of their comfort. They will move away from the heat source if they are too warm, or crowd together under the brooder or in corners if too cool. A dim light, if there is none from the heat source, on the birds at night tends to discourage crowding.

Excess brooding heat may result in slow feathering and growth. In warm weather, goslings can be let outdoors as early as 2 weeks of age, but must have shelter from rain available. They must be kept dry to prevent losses from crowding and chilling while in the "downy" growth stage. Heat is usually not needed at all after the 4th or 5th week. In good weather, they can be placed on pasture at this age.

If goslings are brooded under hens, the mother will take care of them if they have a warm dry place to sleep and to escape to in bad weather. Goslings must have feed and drinking water readily available when they are started under either the brooder or the hen.

Feeding

Use waterers the birds can't get into to prevent losses from chilling. The waterers should be wide and deep enough for the bird to dip both bill and head. Pans or troughs with wire guards are satisfactory if the birds can reach through the guard. Place the waterers over welded-wire platforms to help keep the litter dry. Change waterers or adjust their size as the birds grow.

Feeds formulated specifically for goose feeding are not normally available from feed suppliers. Crumbilized or pelleted chick starter gives very satisfactory results when used as a goose starter. However, coccidiostats commonly used in chick starting and growing mashes may cause lameness or death in goslings. To be safe, feed unmedicated feeds. Avoid feeding chicken broiler and especially turkey starters because they are higher in protein than needed and cost more than chick starter. A satisfactory starter ration formula is shown in *Table I*.

Table I. Goose ration formulas.

Ingredient	Starter	Grower-Finisher (Range)
Ground yellow corn	15	20
Ground wheat or milo	15	20
Ground barley	20	25
Ground oats	20	25
Meat scrap (50%)	2	3
Soybean oil meal (47%)	21.5	4

Dried whey	2	□
Dehydrated alfalfa meal (17%)	3	□
Dicalcium phosphate	0.5	□
Iodized salt	1	1
Riboflavin	2 grams/ton	□
Niacin	20 grams/ton	□
Vitamin B_{12}	6 milligrams/ton	□
TOTAL	**100**	**100**

Feed the starter free-choice throughout the brooding period (4 to 5 weeks). For the first few days, place feed on egg case flats as well as in the feeder to help the birds find it. The same type feeders as used for chicks are satisfactory. Change the type of feeder or adjust its size as the birds grow. Provide insoluble grit at all times. After the first 3 or 4 weeks, cracked grains can be fed along with the chick starter.

By the time the birds are 5 to 6 weeks old, they do well on pasture alone. Supplemental whole grain or grower feed (chick or goose grower pellets) is often continued on a limited basis (1 to 1.5 lbs. per bird per week) after the birds have established on pasture. However, many flocks are raised on green feed only during the pasture period.

When the birds are 12 to 14 weeks old, switch them to a full feeding program. If they have been on whole grain, change the diet to growing-finishing pellets or a ration with adequate protein, vitamins and minerals. Geese normally reach a desirable weight (11 to 15 lbs.) and finish 3 to 4 weeks after starting full feeding.

Growing-Finishing

Geese are excellent foragers. Good succulent pasture or lawn clippings can be provided as early as the first week. This helps prepare them for eventual heavy dependence on pasture. By the time the birds are 5 to 6 weeks old, a good share of their feed can be from forage. Be sure the birds have shade in hot weather while on pasture. A 3-foot woven wire fence will usually confine the geese to the grazing area.

Geese are often selective and tend to pick out the most palatable forages. They will reject alfalfa and narrow-leaved tough grasses and select more succulent clovers, bluegrass, orchard grass, timothy or bromegrass. They will not do well on dried-out pasture. Corn or pea silage can be fed if available. An acre of pasture will support 20 to 40 birds, depending on the size of the geese and pasture quality. Always avoid pasture or green feed that may have had a chemical treatment that could be harmful to the birds.

Home flock geese are usually processed in time for the holiday season in late fall when they are 4 to 6 months old. Confine them in a smaller pen and place them on full feed 3 or 4 weeks prior to processing. Do not fatten any birds to be saved for breeding stock.

It is possible to grow geese more rapidly by full feeding grower-finisher pellets throughout the growing period on range. However, if this is done they reach the desirable weight (11 to 15 lbs.) and finish at 12 to 14 weeks of age. At this time, the feather condition is one of many, many pinfeathers, which makes cleaning and plucking virtually impossible. After 14 weeks, this feather condition rapidly improves. Therefore, it appears wise to make full use of pasture by restricting feed during the early period on range, and to full feed for the minimum length of time required to do the job. Growth retardation during the range period does not appear to have any permanent effect on future growth. One case has been reported where goslings gained only 2 pounds from 3 to 12 weeks of age because of restricted feed and poor pasture. At 12 weeks they were placed on full feed and gained more than a pound a week for the next 5 weeks.

Cleaning and Plucking

Remove feed 10 to 12 hours prior to killing the geese. Do not remove the water. To kill, place the geese in funnels or hang them by their legs in shackles. Cut their throats just back of the lower jaw bone to sever both the jugular vein and the carotid artery.

The birds can now be scalded or drypicked. The dry method, if well done, results in an attractive carcass. However, it usually is considered to be too slow and laborious. There is also the danger of tearing the skin in dry-picking.

Scalding and then using hot wax is the most common practice. The procedure is as follows.

1. Kill and bleed by the usual method.

2. Scald or semi-scald to loosen the feathers sufficiently for rough plucking. Immerse the bird in water for 1 to 3 minutes at a temperature from 130 to 150°F, taking care not to cook the skin. Always use a controlled source of heat or a thermometer to help maintain a fairly uniform temperature. The higher the temperature, the shorter the required scalding time. A little detergent added to the water will hasten thorough wetting of the feathers.

   The water vat must be large enough to permit thorough submerging of the goose. Grasp the bird firmly by the bill with one hand and by the legs with the other, then submerge its body (breast down) in the scalding water. Pull the bird repeatedly through the water against the lay of the feathers. This action forces the water through the feathers to the skin. The relatively light feathering on the back needs less scalding than the more dense feathering on the breast.

3. After scalding, quickly remove the bulk of the feathers, being sure to open up all thick clumps, but leaving a few feathers on all parts of the carcass.

4. Allow the bird to dry for a brief interval.

5. Dip the bird in a second vat containing a 1- to 2-inch layer of specially prepared melted wax (you can purchase "duck wax" at a produce house or farm supply store). The wax and water below it (melted wax will float on water) must be deep enough to submerge the carcass and should be 140 to 150°F. Again hold the bird by the head and feet and move it up and down through the wax layer to help the wax penetrate to the skin.

6. Dip the bird into a third vat filled with ice water and then again back into the wax. The first wax dip is for effective penetration and the second dip is to improve the thickness of the wax coat.

7. Hold the bird in the ice water a few seconds to quickly semi-harden the wax. Remove the bird from the water before the wax becomes too brittle. It is easier to remove when it is not too hard.

8. Remove the wax and all feathers possible with it.

The used wax can be reclaimed with only partial loss by skimming off the feathers that rise to the surface of the wax. A piece of coarse screen wire can be used for the skimming process. Never heat the wax to more than 250°F, even when reclaiming, as it might lose some of its pulling power. To save additional wax, the feathers can be squeezed or run through a ringer. Water that enters the wax from the wet birds settles to the bottom and does no harm. In reclaiming, you can remove some debris by adding additional water, stirring well, and allow it to settle and the wax to harden. The cake of wax can then be removed and any dirt or sludge scraped away.

Following dressing, the birds may be eviscerated, packed in air tight plastic bags and frozen. If a rapid freezing method such as blast freezing is used, hold the birds in ice water for several hours before bagging and freezing.

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