

eXtension

Raising Geese in Small or Backyard Flocks

★ articles.extension.org/pages/69517/raising-geese-in-small-or-backyard-flocks

Written by: Dr. Jacquie Jacob, University of Kentucky

Geese have been raised in Europe for centuries and were brought to the "New World" by European settlers. Geese can be raised for a number of different reasons, including to provide meat or down and feathers or to serve as weeders or guard animals. Geese are excellent foragers, and by the time they are five to six weeks old, they can get a lot of their diet from pasture. An acre of pasture will typically support 20 to 40 geese, depending on the size of the goose and the condition of the pasture.

Meat Production

After the <u>brooding</u> period, goslings can be grown to market weight either in confinement or on range. The growing of geese in confinement allows for better control of the environment, but it increases housing and feed costs. Geese raised in confinement are typically taken to market weight very quickly. Broiler-type geese can be raised to market weight in eight to nine weeks of age, at a weight of 9 lb. (4 kg). Heavy-type geese can be raised to 13 lb. (6 kg) in 12 to 14 weeks. In addition, confinement housing makes it possible to raise twice as many geese per acre. Geese raised in confinement are typically housed on deep litter, as is common for broiler chickens. However, geese can also be raised on slats or wire mesh. This allows the droppings to pass through the floor, and any water spilled from the drinkers passes through as well. This reduces the risk of parasite infection.

Geese raised on range require less intensive care than geese raised in confinement. Except in very cold locations, geese raised on range typically require only drinkers, feeders, fencing, and shelters for shade. Although geese are not able to digest grass much better than other poultry species, they do have an ability to consume large quantities. When kept on pasture, they will also consume insects, snails, worms, and so on, which can provide about 10% of their required daily protein intake. In range systems, the time to market weight depends on whether geese are going to be plucked for down and what size the market allows. Providing geese with pasture during the growing period dramatically reduces feed costs. For example, some producers have observed a 48% reduction in the amount of complete feed for geese on pasture versus those in confinement. The only difference in performance is that geese raised on pasture will reach market weight at a later age and will be leaner.

Geese are able to go long distances, if required, to consume forage. They have a very strong flocking instinct and can be easily herded from one area to another. Geese also return home as a flock on their own at the end of the day. Geese have been shown to exhibit this behavior returning from distances of up to 3 mi. (5 km).

If you are planting a pasture specifically for raising geese, almost any grass or clover species can be used. The exception is alfalfa, which geese do not appear to have a preference for. In a pasture consisting of perennial ryegrass, timothy, and white clover, stocking densities of 60 geese per acre (150 geese per hectare) are possible. Geese like new growth, so pasture management should be practiced, including rotation and clipping.

Butchering geese is similar to the process for butchering other poultry species. The typical yield of usable meat from a butchered goose is 70% of the carcass when giblets are included, or 63% without giblets. The goose is suspended upside down, typically in a funnel that allows the head to come through. The jugular veins are cut on either side of the neck, although the head should not be cut off. After the bleeding is complete, the goose can be dry plucked, but dry plucking is very labor extensive. Alternatively, geese can be plucked using a process and equipment similar to that used for chickens and turkeys. A carcass is first dipped in scald water to loosen the feathers. Large wing and tail feathers are removed by hand, and then the carcass is put into a plucking machine.

Removal of all the down and pin feathers is usually accomplished with a wax dip. The carcass is dipped in a wax bath for one to two minutes. The carcass is then dipped in cold water to harden the wax. The carcass is then dipped in the hot wax a second time, and again dipped in cold water to harden the second layer of wax. The wax is then stripped from the carcass either by hand or with a dewaxing machine.

To determine the best time for slaughtering geese, catch a few birds, and pull out tail feathers and a few breast feathers from each. If the tips of the feathers show signs of blood or are very soft and flexible, wait another seven to ten days before slaughtering. When the feathers have hard tips and are easy to remove, it is time to slaughter the geese, and it should be done as soon as possible.

Down or Feather Production

Goose down and feathers are produced for the garment and household linen industries. The most valuable product is the down, followed by the fine feathers. Most commercial products use a combination of down and fine feathers. The more down used, the higher the value of the product. The down is obtained from the breast area of the goose.

To obtain feathers and down when slaughtering the geese, it is common to first use a hot water scald (140°F to 154°F, or 60°C to 68 °C, for one to three minutes). The coarse feathers are then plucked by hand and the rest removed either by a plucking machine or by hand. The feathers are then dried and sorted.

Down and feathers from live geese are usually collected when geese are around nine to ten weeks of age, when they would be molting naturally. Harvesting feathers during the natural molt makes the removal of the down and feathers easier. Growing geese can then be plucked every six weeks, which coincides with the time of each successive molt. All breeds can be plucked, but the white plumage is more valuable.

Fatty Liver (Foie Gras) Production

Foie gras (French for "fatty liver") is produced by force-feeding geese (and sometimes ducks) with a high-energy diet. Force-feeding usually takes place between 9 to 25 weeks of age for a period of 14 to 21 days. As a result of the high intake of dietary energy, the liver increases from an initial weight of 0.21 oz. (80 g) to a final weight of 21 to 28 oz. (600 g to 1 kg).

The choice of breed for foie gras production is based on the ability of the goose to produce an enlarged liver in the desired period of time, as well as the temperament of the goose. The geese will be handled five to six times a day, so a nonaggressive breed is required. Two breeds of geese are commonly used in foie gras production: the Toulouse (United States) and Landes (Europe).

When processing geese raised for foie gras, the liver is the main product desired, so care must be taken when defeathering to not damage the liver. There is equipment designed specifically for defeathering geese raised for foie gras, but geese can also be plucked by hand. The fatty liver should be extracted and cooled as fast as possible. This provides a good quality product in which there is reduced fat-loss during cooking.

Geese as Weeders

Geese are effective weeders because they like grasses and stay away from broadleaf plants. Geese can remove grass and weeds that, because they are close to other plants, cannot be removed by hoeing. In addition to weeding traditional crops, geese can be used to clean up forage on dikes and ditches that are difficult to maintain with equipment. Geese work all day, removing grass and weeds as new growth appears. Geese will not damage the roots of crops. Geese will also graze when the ground is too wet to hoe. Using geese as weeders also adds fertilizer and organic matter to the soil.

In the United States, geese were initially used to weed cotton plantations. Since then, geese have been used to weed a variety of crops, including asparagus, potatoes, fruit shrubs, nursery stock, tobacco, nut trees, grapes, fruit trees, beets, sugar beets, beans, hops, various ornamental flowers (roses, iris, gladiolus, chrysanthemums, peonies, dahlias, and so on), onions, and strawberries. Geese kept for weeding are typically on restricted feeding, with any grain given in the evening. The level of feed restriction will depend on the amount of forage material available in the area to be weeded. If the restriction is too much, the geese may start eating the crop that is to be weeded. As with any range management system, weeder geese need to be provided with shade and water.

Young growing geese are used in weeding programs. It is important not to give the goslings access to lush grass prior to using them in a weeding program, because they may reject the lower quality weeds. Day-old goslings are usually brooded for six to eight weeks before being placed permanently in a field without shelter. Younger birds can be used if shelter is available. It is not advisable to keep geese from one season to the next because older geese are less active in hot weather than young birds. It is also harder to keep them from crossing fences.

Chinese geese are typically the breed of choice as weeder geese. If a larger bird is desired African geese can be used. These two breeds of geese are more active and energetic than Toulouse and Embden geese although these breeds are sometimes used.

Crop-Specific Information

The number of geese needed per acre depends on the level of weed growth and the crop. For example, one to two geese are adequate for an acre of cotton (five to six geese per hectare), and two to three geese are recommended for an acre of strawberries (six to eight geese per hectare). Weeder geese are usually placed in the fields early in the season when grass and weed growth first starts to appear. For row crops, two to four geese per acre are typically sufficient when placed when the first grass appears. No more than four geese per acre should be used. More geese may be required, however, if the plantings are in beds, because beds have a larger area where grass and weeds can grow. More geese may also be required if grass and weed growth is heavy before the geese are placed.

The list below provides more-detailed information about how many geese are typically required to weed a particular crop.

• **Cotton:** Only one to two geese per acre are required to weed cotton. Five- to six-week-old goslings are typically placed for weeding soon after the cotton has been planted.

- **Strawberries:** Usually six to eight geese per acre are required to weed strawberries. Five- to six-week-old goslings should be placed for weeding when the weed growth first appears. Remove the geese after the berries start to ripen because the geese will eat the ripe fruit.
- **Corn:** Geese will consume young corn plants, and therefore should not be placed for weeding until after cultivation when the corn has been "laid by." After the corn is harvested, the geese can remain in the field to pick up shattered grain. This fattens them to market weight and reduces the incidence of volunteer corn plants in soybeans or other subsequent crops.

Geese will keep down grass and weed growth in orchards, groves, and vineyards, as well as irrigation ditches. They will also eat any fruit that has fallen, thereby controlling damaging insects.

Geese as Guard Animals

Geese have a talent for telling the difference between regular, everyday sounds and sights from those that are unfamiliar. They are also very territorial. As a result, they will sound the alarm when there are intruders (of the two- or four-legged kind). Using geese as guard animals is not something new. Geese were used as guards by the Romans. Geese are most effective as guard animals when they are kept in a flock. There should be only one male in the flock. This will prevent fights between ganders, which will distract the geese from their guard duties. If the geese are kept in an area where they can forage for food, they require only supplementation with some scratch feed. If you are able to establish your property as their territory, guard geese are an effective and low-cost method of security.

For More Information

Raising waterfowl. Phillip Clauer and John Skinner, University of Wisconsin factsheet.

Brooding and rearing ducklings and goslings. Glenn Geiger and Harold Biellier, University of Missouri.

Weeding with geese. Glenn Geiger and Harold Biellier, University of Missouri.

<u>Management requirements for waterfowl</u>.Phillip Clauer, Virginia Tech.