

Selecting Geese

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Domestic geese were raised in Europe long before the settlers brought them to America to provide both food and feathers. Since then very little selective breeding has been done to develop specialized types of geese. Size, behavior and egg production vary according to breed (Table 1), and the right breed of goose for your flock will depend on what you intend to use them for.

Exhibition

The American Poultry Association (APA) Standard of Perfection recognizes 11 standard breeds of geese, divided into three classes based on weight: heavy, medium and light. Although classes are

broken by weight, weight should not be the only criteria for choosing a breed. For example, if you want to get as many hatching eggs as possible while using the minimum number of male geese (ganders), consider a lightweight breed. (Large breed males mate with only two or three females, but males of the lightweight breeds can mate up to six females.) If you are not concerned with eggs, Egyptian and Canada geese lay only a few per season. Each breed has merits and shortcomings. Proper breed selection can help you save on flock upkeep and cost.

When purchasing stock for exhibition purposes, be sure to distinguish between exhibition

and utility strains. For example, an authentic Toulouse goose should have a dewlap, a long, deep keel and a smooth, low paunch under the abdomen. Some utility strains of geese sold as Toulouse are the same coloring, size and marking but do not have the required characteristics. These non-conforming geese are called farm goose, common gray goose, utility goose, business goose or simply gray goose.

Meat and Eggs

All the geese in the heavy and medium weight classes are good utility birds. The most common geese raised for meat are the Embden, Toulouse and Pilgrim. Dressed yields based on live weight vary according to breed (Table 2).

Table 1. Comparison of goose breeds

Breed	Weight (lb)		Eggs/ Season	Primary uses	Behavior
	Female	Male			
African	8-10	10-12	10-40	Meat; crossing with Toulouse goose	Very aggressive
American Buff	9-12	10-12	15-25	Meat	Calm and docile
Chinese	3.5-4.5	4.5-5.5	40-80	Eggs; meat; guard animal, "weeder"	Active forager; Not as aggressive as some of the other breeds
Emden	10-13	12-15	10-30	Meat	Can be aggressive; good forager
Pilgrim	5-7	6-8	20-40	Meat	Calm; good forager
Pomeranian	7-9	8-11	3570	Breast meat; eggs; guard animal	Mostly docile
Sebastopol	4.5-6.0	5.5-7.0	30-50	Exhibition	Not aggressive
Toulouse	10-13	12-15	20-40	Meat; crossing with Toulouse goose	Not a good forager
Tufted Roman	4.5-5.5	5-6	40-60	Meat	Generally calm

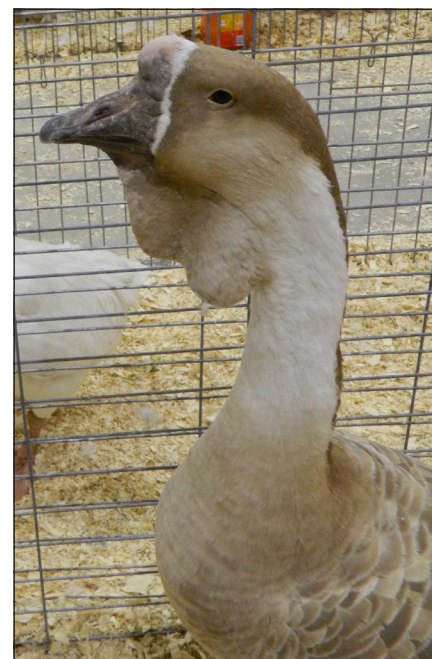


Figure 1. Toulouse goose.
Jacque Jacob

Table 2. Typical dressed yields based on live weight

Live weight (lb)	Dressed weight (lb)	Percent
20	16	80
18	14-14.5	78-81
10	7	70
8	5.5	69

- **Embden** is the most popular of the heavy breeds. Purebred Embden geese have blue eyes. Commercial hybrids are available that look like Embdens but do not have blue eyes. A common cross for these commercial hybrids is an Embden gander mated with a Toulouse goose. The Embdens do not lay as many eggs as the Toulouse, but they tend to be better mothers. Embden goslings can be sexed at hatch on the basis of the down color. Both have gray down, but the color is darker in females. Embden geese mature early and dress out nicely because of their white plumage but have a tendency to produce a fatty carcass. Embden can be an aggressive breed so it is best to not keep them with more docile breeds because they will bully them. They are good foragers.
- **Toulouse** geese (Figure 1) come in two types: production and exhibition. The production strains have been bred for their ability to gain weight rapidly. In the past goose fat was a primary source of cooking fat and lubricants. Toulouse geese put on a lot of fat when plenty of feed is available and they have no room for exercise. One result is an oversized liver. Toulouse geese have been used in the production of foie gras. The exhibition strains are decorative show birds with an exaggerated dewlap and keel. Toulouse geese are not good foragers.

- **Pilgrim geese** are a sex-linked goose breed developed in the U.S. Unlike most goose breeds, the plumage of the male and female Pilgrim geese is different. As adults the ganders are white with a little gray feathering on the wings, back and tail, and they have gray-blue eyes. The females are completely gray with brown eyes. At hatch the male goslings have yellow-gray down and an orange bill; females have olive-gray down and a dark brown bill. Pilgrim geese make a medium-sized roasting bird. They are also good foragers and can be tame if hand reared.
- **African** geese are the largest of the domestic geese. They produce a high quality lean meat, making them excellent for roasting. They can withstand considerable cold weather but need shelter. They have a large knob on their head that is susceptible to frost bite. African geese are often crossed with Toulouse geese to develop another commercial hybrid for meat production.
- **Sebastopol** geese (Figure 2) are unique in that their feathers are curly rather than straight. Considered a novelty by many, they do dress out well and are relatively good egg layers. The flight feathers are also curved, making it impossible for these geese to fly. Sebastopol can be successfully raised in cold climates but they need more protection during wet, cold and windy weather. Their loose feathering does not provide as much warmth nor do they shed water as well as other breeds.



Figure 2. Sebastopol goose.
Jacque Jacob

- **American Buff** breed was developed in the U.S. They are typically calm and docile and make good parents. They are moderately good for meat production but not very good for egg production.
- **Saddleback Pomeranian** geese were originally bred for their high breast meat yield. They have been used in the production of smoked goose breast. They can be very noisy and will react to anything out of the ordinary, making them good guard animals. They are usually docile, but some are quick to pick up on body language and will sometimes respond aggressively.
- **Chinese** geese have been kept for eggs and meat and as guard animals. They are relatively good egg layers. They actively forage and produce the least greasy meat of all but Pilgrim geese. They have been used in hybrid crosses with Embden geese, resulting in a goose that is more economical to raise than other pure breeds.
- **Tufted Roman** geese, despite their smaller size, produce a plump roaster bird. Roman geese do not have a keel, resulting in a high meat-to-bone ratio.

- **Canada** geese have been raised for meat production. It is important to note, however, that it is illegal to remove Canada geese or their eggs from the wild or to keep any wild bird as a pet. Canada geese, like all native birds, are protected by the 1918 Migratory Bird Treaty Act in the U.S. and Canada. Captive bred geese that have been properly marked may be kept with the proper permits. Other local and state regulations may also apply to the keeping of Canada geese. Check with your local Fish and Game department before trying to acquire any.

Feathers and Down

Feathers are the principal covering of birds. A feather has a hard quill shaft with a series of fibers joining together into a flat structure on each side of the shaft. Down is the light, fluffy undercoating that geese, ducks and other waterfowl have to keep them warm. Land fowl such as chickens do not produce down.

Despite their light weight, down feathers are good insulation. Down is either natal or definitive. Natal down is present on the bird when it hatches and shortly thereafter. Definitive, or body down, occurs in later generations of feathers and is a layer of small, fluffy feathers that lie underneath the contour feathers. This type of down is harvested for use as insulation.

Down feathers have the ability to “loft” so that each down cluster traps more air for its weight than any synthetic. Every ounce of quality down has about 2 million fluffy filaments that interlock and overlap to form a protective layer of still air that keeps warmth in and

cold out. Down is very resilient; it can be scrunched up or flattened out, and after a good shake it fluffs up and bounces back to the form that keeps you cozy and warm.

The best down usually comes from larger, more mature birds. When age and maturity are equal, goose down is better than duck down. However, down from an older duck is better than down from a younger goose. Larger down has an extraordinarily high warmth-to-weight ratio. Down from younger birds not only tends to have poor filling power, it will also tend to collapse in a relatively short time because its fibers are too fragile.

Climate does not affect the quality of the down, but it will affect the quantity produced. A bird in cold weather will grow more down to stay warm. Quality depends simply on the maturity of the bird.

Guard Animals

Geese are able to distinguish regular, everyday noises from unusual noises, which makes them good watch animals. They were used by the Romans to detect the approach of enemies and were found to be more reliable than human guards. Roman geese sounded the alarm when the Gauls tried to invade Rome. During the Vietnam War, U.S. soldiers used flocks of geese to warn of enemy infiltration. Pens with geese encircled entire camps.

Along with the Tufted Roman, the Saddleback Pomeranian is a good watch animal. They can be very noisy and will react to anything out of the ordinary. Chinese geese can also be used as guard animals; they are alert and vocal when a threat is perceived.

Weed Control

Geese can be raised for biological control of weeds, although geese are not efficient feeders. They are able to survive on a pasture-based diet because they are ferocious feeders who spend seven to eight hours a day eating.

The Chinese breed is most suited to this management system. They are good foragers and eat mainly grasses and herbaceous plants. If properly managed, Chinese geese make good “weeders” for crops. The number of geese needed to weed a crop depends on the crop and the quantity of weeds; usually two to three geese are sufficient for each acre.

Summary

Many options are available for those interested in starting a small flock of geese. The choice of geese should be made based on the purpose of the flock, the management system that will be used, and the general preference of the owner. Geese can be raised for many reasons, from meat production to weed control.