Which goose breed is best for small and backyard poultry flocks?

Written by: Dr. Jacquie Jacob, University of Kentucky

Europeans raised domestic geese for both food and feathers long before settlers brought them to America. Unlike with chickens, turkeys, and ducks (to a limited extent), little genetic selective breeding has occurred with geese. However, different breeds have different characteristics, and the right breed for your flock depends on your intended use. Geese can be used for exhibition, meat and egg production, feather and down production, guard duty, and weed control. Geese even can be used as decoration—Egyptian geese are tiny (having a mature weight of only 4 to 5 pounds) and mostly are kept as ornamental birds.

There are eleven standard breeds of geese recognized by the American Poultry Association (APA). The APA publishes the American Standard of Perfection (also known as the APA standard), which describes ideals for various breeds of domestic fowl. Goose breeds are categorized into three classes, based on weight—heavy, medium, and light. Knowledge of the characteristics of breeds in certain weight classes is important when choosing a breed. For example, if you want to obtain as many hatching eggs as possible while using the minimum number of male geese (ganders), you should consider a lightweight breed. Males of heavy breeds mate with only two or three females, whereas males of lightweight breeds can mate with as many as six females. Weight class is not the only factor to consider, however. For example, Egyptian and Canada geese lay only a few eggs per season, meaning that selecting one of these breeds can help you save on flock upkeep. You also should consider temperament when choosing a breed and raising geese. Although some differences in temperament exist among breeds, upbringing also plays a major role in the temperament of all geese.

Exhibition

When purchasing stock for exhibition purposes, it is important to distinguish between exhibition strains (birds bred to meet the standards for purebred exhibition birds) and utility strains (birds bred for meat and egg production). For example, the exhibition strain of Toulouse goose has a dewlap; a long, deep keel; and a smooth, low paunch under the abdomen. Utility strains of geese sold as Toulouses have the same coloring, size, and markings of an authentic Toulouse but do not have the required characteristics. These nonconforming geese are referred to by several names, including farm goose, common gray goose, utility goose, business goose, and gray goose.

Meat and Egg Production

All 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. Other geese that can be used for meat and egg production are the African, Sebastopol, American Buff, Saddleback Pomeranian, Chinese, Tufted
Roman, and Canada breeds, with the Embden, Toulouse, and African all attaining adult weights in excess of 19 pounds. The most popular breeds for small flocks are Embden, Toulouse, African, Chinese, and Pilgrim.

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 Embden does not lay as many eggs as the Toulouse, but Embdens tend to be better mothers. Embden goslings can be sexed at hatch on the basis of down color—both have gray down, but the color is darker in females. Embden geese are good foragers, are the fastest growing of the domestic breeds, mature early, and dress out nicely because of their white plumage, although they have a tendency to produce a fatty carcass. The Embden can be an aggressive breed that will bully other geese, so it is best not to keep Embdens with more docile breeds.

The utility strains of Toulouse geese have been bred for their ability to gain weight rapidly. In the past, goose fat was a primary source of cooking fat and lubricants. Although they are not good foragers, Toulouse geese put on a lot of fat when plenty of feed is available and space for exercise is not. One result of this fat production is an oversized liver. Consequently, Toulouse geese have been used in the production of *pate de foie gras* (French for "fatty liver").

A Pilgrim goose makes a medium-sized roasting bird. The Pilgrim is a sex-linked breed developed in the United States for which the plumages of the males and females differ. As adults, the ganders are white with a little gray feathering on the wings, back, and tail. The females, which produce gray-blue eggs, are completely gray with brown eyes. At hatch, male goslings have yellow-gray down and an orange bill, whereas females have olive-gray down and a dark bill. Pilgrims are good foragers and can be tame when 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. The large knob on the head of the African goose is susceptible to frostbite. Often, African geese are crossed with Toulouses to develop a commercial hybrid for meat production.

Sebastopol geese 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 curved, making it impossible for these geese to fly. Sebastopol can be raised successfully in cold climates, but they need protection during wet, cold, and windy weather. Their loose feathering does not provide as much warmth as the feathering of other breeds, and they do not shed water as well as other breeds.

The American Buff breed was developed in the United States. American Buffs usually are calm and docile and make good parents. They are moderately good for meat production but not good for egg production.

Saddleback Pomeranian geese originally were bred for their high breast meat yield and have been used in the production of smoked goose breast. Although they can be noisy, they typically are docile. However, some are quick to pick up on body language and 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 they produce the least greasy meat of all geese except Pilgrims. The Chinese goose has been crossed with the Embden, resulting in a hybrid goose that is more economical to raise than pure breeds.

The Tufted Roman goose makes a plump roaster bird despite its smaller size. It produces a high meat-to-bone ratio because it does not have a keel.
Although Canada geese have been raised for meat production, it is important to note that removing Canada geese or their eggs from the wild (or keeping any wild bird as a pet) is illegal. Canada geese, like all native birds, are protected in the United States and Canada by the 1918 Migratory Bird Treaty Act. Captive geese that have been properly marked to identify them as such may be kept, although permits are needed. However, local and state regulations also may apply to the keeping of Canada geese, so it is important to 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 from one end to the other, with a series of fibers joining together in a flat structure on each side of the shaft. Down is the light, fluffy undercoat of ducks, geese, and other waterfowl. Land fowl, such as chickens, do not produce down.

Despite their light weight, down feathers are good insulation. They have a three-dimensional structure and the ability to "loft" so that each down cluster traps more air for its weight than any synthetic material. Every ounce of quality down has about two million fluffy filaments that interlock and overlap to form a protective layer of still air that keeps warmth in and cold out. Down is resilient, so it can be scrunched up or flattened out and, after a good shake, fluffs up and bounces back to the form that maintains warmth.

Generally speaking, the best down 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 tends not only to have poor filling power but also to collapse in a relatively short time because its fibers are too fragile.

Climate does not affect the quality of the down a bird produces, but it does affect the quantity. In cold weather, a bird grows more down to stay warm.

### Guard Animals

Geese are able to distinguish regular everyday noises from other noises. As such, they are good as watch animals. The Romans used them to detect enemy approaches and found them to be more reliable than human guards. During the Vietnam War, U.S. soldiers used flocks of geese to warn of enemy infiltration, with pens of geese encircling entire camps.

The breeds best suited for guard duty are the Tufted Roman, Saddleback Pomeranian, and Chinese. Tufted Roman geese make excellent guard animals. In fact, it was Tufted Roman geese that sounded the alarm when the Gauls tried to invade Rome. Saddleback Pomeranian geese can be very noisy and react to anything out of the ordinary. Chinese geese are alert and vocal, raising the alarm whenever they perceive a threat.

### Weed Control

Geese can be used as a biological control of weeds. The breed most suited to this management system is the Chinese goose. Chinese geese are good foragers that eat mainly grasses and herbaceous plants. If properly managed, Chinese geese make good weeders for various crops.

### For More Information
Selecting Breeds for Small Flocks. West Virginia University.

Selecting the Right Goose Breed. Jacquie Jacob, Tony Pescatore, and Austin Cantor, University of Kentucky.