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

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As with many domesticated species, ducks have been genetically selected for different purposes, primarily meat production and egg production. In addition, ducks are raised for exhibition, pest control, herd dog training, and feather and down production. If you plan to raise ducks, it is important to choose a breed that best suits your particular needs.

All domesticated duck breeds are believed to have originated from the wild mallard (*Anas platyrhynchos*). The male mallard has a couple of curled tail feathers, called sex feathers. No other wild duck has these sex feathers, yet the males of all domesticated duck breeds do.

Another bird widely kept in domestication is the Muscovy. Although often referred to as a duck, the Muscovy actually is a different species. It is hard to categorize Muscovies—they have a body like a duck; they nest, attack predators, and hiss like a goose; they roost like a chicken; and they have a plump breast like a turkey. The male Muscovy has characteristic fleshy growths around the eyes called caruncles. It is believed that Muscovies originated from South America. They are still found in the wild in the warm regions of that continent and are raised domestically throughout the world. The Muscovy is called the Barbary duck in southern Europe and North Africa and the Brazilian duck in Brazil. In the Guineas, it is known as the guinea duck or turkish duck because of the caruncles on its face. The Spanish call it the Pato, as do some handlers in the United States. The Muscovy also is known as the Cairo duck, Indian duck, musk duck, and turkey duck.

There are 17 breeds of ducks 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. Duck breeds are categorized by the APA into four classes—heavy, medium, lightweight, and bantam.

**Meat Production**

Heavy and medium weight ducks typically are raised for meat production. The main breeds are the Pekin and the Muscovy.

Around 90 percent of the duck meat produced in the United States is from the Pekin. Commercial producers are able to obtain a duck weighing 7 to 8 pounds in seven weeks. Under small farm conditions, a Pekin usually reaches 6 to 7 pounds in seven or eight weeks. The Pekin is popular because of its fast growth rate and yellow skin. Pekins should not be raised past 10 weeks because at that age, they become difficult to pluck due to their pin feathers and their feed efficiency declines sharply. Pekins are considered a general purpose breed because the hens lay fairly large numbers of white-shelled eggs.
The meat breed of choice in many areas is the Muscovy, which thrives under free-range conditions. Because the Muscovy originates from the warmer areas of the Southern Hemisphere, its meat is leaner than meat from ducks, which tends to be fatty. Another difference between the Muscovy and ducks is length of incubation—35 days for the Muscovy versus 28 days for ducks. The male Muscovy can become very large (10 to 12 pounds); the female is smaller (5 to 6 pounds). Muscovies must be butchered by 16 weeks of age, or the meat becomes too firm.

Another option for meat production is a Muscovy cross. When a Muscovy is crossed with a duck, the offspring are sterile and often are referred to as mule ducks or moulard ducks, depending on the cross. Many commercial duck operations in Europe raise mule or moulard ducks.

If you want more colorful ducks and can accept a slower growth rate, consider choosing from other breeds that can be used for meat production. Options include the following breeds:

- **Aylesbury.** The Aylesbury is a pure white duck that originated in England and is popular there because of its white skin. (In general, the yellow-skinned Pekins are not popular in England, and the white-skinned Aylesburies are not popular in the United States.) Like the Pekin, the Aylesbury (which can grow to 8 to 10 pounds) reaches a market weight of 7 pounds in eight weeks. The deeper keel and loose feathers of the Aylesbury make it seem larger than the Pekin.

- **Cayuga.** The only duck breed developed in the United States, the Cayuga originated near Cayuga Lake in New York State. Unlike Pekin and Aylesbury ducks, which reach market weight in eight weeks, the Cayuga and other heavy breeds take 12 to 16 weeks to finish as a market bird. Today, Cayugas are raised mainly for exhibition, but they also are an option for meat production.

- **Buff Orpington.** Although they are smaller than Pekins and Aylesburies, Buff Orpingtons sometimes are raised for meat. The Buff Orpington was originally considered an egg breed, and it lays very well if not allowed to get too heavy. The Buff Orpington breed is not recognized in the current APA standard.

- **Rouen.** The Rouen reaches 7 to 8 pounds in 12 to 15 weeks, with the bulk of the weight gain happening after the bird is 12 weeks of age. The Rouen not only is a good meat bird, but a Rouen hen can lay an egg every other day during the breeding season. Rouen eggs have a blue tint. Rouens also are popular for decorating ponds because they are colored like the wild mallard but are too heavy to fly away.

- **Crested.** The crested duck is named for the ball of feathers on its head. It is not simply a white duck with a crest but a defined breed. A crested duck typically does not breed true. The gene responsible for the crest is lethal when two copies are present. As a result, one-fourth of fertile eggs do not hatch, and only two-thirds of the remaining fertile eggs develop into ducks with crests. The other one-third do not have crests and do not carry the gene necessary to produce further generations having crests. Although many breeders raise them for exhibition purposes only, crested ducks have a good growth rate, though not as great as that of the heavy breeds, and lay well.

- **Silver appleyard and Saxony.** The silver appleyard and Saxony breeds are recent additions to the APA standard in the heavy class. Both breeds are colorful and have been selected for both meat production and egg production.

### Egg Production

The runner and Campbell breeds are excellent egg layers, often attaining levels of production higher than those of egg-laying chicken breeds. Both breeds are hardy but tend to be nervous and flighty and stampede when startled. Both breeds are good foragers but also do well in confinement when a good layer ration is provided.
Runner ducks cannot fly, are lightweight, and stand upright like penguins. They run rather than waddle, thus their name. Only the females quack; the drakes are limited to a hoarse whisper. A runner duck's level of egg production depends on whether it is an exhibition strain or a utility strain (that is, bred to meet the standards for purebred exhibition birds or for egg production). Typically, a runner duck lays four eggs per week for about eight months, and some utility strains have produced more than 300 eggs in a year. In fact, the runner duck has such high egg production levels that it often is referred to as the Leghorn of the duck family. Darker varieties of runner ducks lay a blue-tinted egg. Runner ducks rarely form nests; instead, they drop their eggs wherever they happen to be. Consequently, when raising runners for egg production, confining them overnight makes egg collection easier. Good at foraging, runners eat worms and slugs and have even been seen to catch flies. Because of their small size, runners eat less feed than meat ducks. Of course, it is important to provide them with sufficient calcium and protein-rich feed to maintain egg production during the extensive laying season.

The Campbell breed was developed by Adele Campbell in the late 1800s. She crossed a runner and a Rouen in an attempt to create a breed of ducks that would lay well but have bigger bodies. The offspring were crossed with mallards to increase their hardiness. There is only one variety of Campbell ducks—khaki. Campbell ducks become sexually mature at approximately six months of age. They seldom become broody as this characteristic was sacrificed in exchange for a high level of egg production. They lay an off-white egg. When a lighting system is used, Campbells lay throughout the winter months, when daylight hours are naturally shorter.

A recent addition to the APA standard is the Welsh Harlequin duck. This colorful breed can serve as a meat duck and as a prolific producer of white or tinted eggs.

The Golden 300 hybrids and the White Golden layers, both developed by Metzer Farms, are excellent egg layers. The breeder crossed the Campbell with other duck breeds to produce ducks that achieve a high level of egg production and have calm temperaments.

**Exhibition**

All duck breeds recognized by the APA can be raised as exhibition birds. The bantam ducks are particularly good for exhibition because of their small size. The bantam breeds included in the APA standard are the call, East Indie, and mallard.

**Biological Control of Pests**

For centuries, ducks have been used as a biological control of insect pests in rice paddies in Asia. Today, in many parts of Southeast Asia, duck production has been integrated with rice and fish farming. One advantage of ducks is that they normally lay most of their eggs within three hours of sunrise (compared with five hours for chickens). This makes it possible for ducks to range freely in the rice fields by day and be confined at night.

All duck breeds help eradicate mosquito larvae from waterways. They also eat slugs, snails, and insect pests in gardens and clean algae slime and duckweed from ponds. The best foragers are the Anconas, Campbells, Welsh Harlequins, magpies, runners, and various bantam breeds. Silver appleyards, Cayugas, and Saxonies do a good job but do not cover as large an area, preferring to stay closer to their homes.

**Herd Dog Training**
Herding dogs, such as Australian shepherds, are often trained with a group of ducks. In general, it is best to use lighter-bodied breeds of ducks for such training. The heavier the body, the easier the duck tires. Herders tend to choose more highly strung breeds, such as runners or Campbells, because such ducks have lighter temperaments, and the dogs can move them by using less force. There are benefits to using calmer breeds as well. Some herders have had success with Swedish ducks, which are very calm and "break" easily. The Cayuga is another option, but Cayugas take longer to break and can frustrate a herder early on. Regardless of the breed, herding ducks should be exercised daily. Otherwise, they will not have the stamina needed for working.

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.

Eiderdown comes from the eider duck and is considered by some to be the finest-quality down. Eiderdown is unique in that it clings to itself, resulting in superior insulation. The eider duck is a protected migratory species. Eiderdown is collected by hand from nests without disturbing the birds.

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.

For More Information

Selecting Breeds for Small Flocks. West Virginia University.

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