

Selecting Ducks

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As with many domesticated species, ducks are selected for different purposes, primarily meat or egg production. They are also valued for their feathers and down. It is important to choose a breed of duck that best suits your particular needs.

The different breeds of ducks are believed to have originated from the wild Mallard (*Anas platyrhynchos*). The male Mallard has a couple of curled tail feathers referred to as the sex feathers (Figure 1). No other wild duck has these sex-feathers. All the males of the domesticated duck have the curled tail feathers as well.



Figure 1. Male sex feathers on a duck.
Jackie Jacob

Wild Mallard ducks are protected by the 1918 Migratory Bird Treaty Act in the U.S. and Canada. It is illegal to remove Mallard ducks or their eggs from the wild or to keep wild birds as pets.

The Muscovy (Figure 2) is often referred to as a duck, but it is actually a different species. It is hard to categorize Muscovies since 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. Muscovies are believed to have originated in South America. They are still found wild in the warm regions of South America and are raised domestically throughout the world. In southern Europe and North Africa they are referred to as the Barbary duck. In Brazil they are the Brazilian duck, and in the Guianas the Guinea or the Turkish duck (because of the caruncles on the face). The Spanish call them Pato, as do some handlers in the U.S. They are also known as Cairon duck, Indian duck, Musk duck, and the Turkey duck.



Figure 2. Male Muscovy duck.
Jackie Jacob

Exhibition

Fourteen breeds of duck are recognized by the American Poultry Association (Table 1). They are divided into four classes: heavy, medium, light weight and bantam. The large and medium weight ducks are typically raised for meat production.

Table 1. Comparison of breeds of ducks recognized by the American Poultry Association

Breed	Weight/lb		Eggs/year
	Female	Male	
Aylesbury	8-9	9-10	40-60
Buff	6-7	7-8	60-100
Call	1.12-1.25	1.38-1.62	20-50
Campbell	3.5-4.0	4.0-4.5	200-300
Cayuga	6-7	7-8	60-100
Crested	5-6	6-7	60-100
East Indie	1.38-1.50	1.62-1.88	20-50
Magpie	4.0-4.5	4.5-5.0	30-60
Mallard	1.88-2.25	2.25-2.50	20-50
Muscovy	6-7	10-12	60-120
Pekin	8-9	9-10	100-180
Rouen	8-9	9-10	40-60
Runner	3.5-4.0	4.0-4.5	100-150
Swedish	5.5-7.0	6.5-8.0	60-100

All of the breeds that will be mentioned 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 of Perfection are the Calls, East Indie and Mallard.

Meat

The main duck breeds raised for meat production are the Pekin and the Muscovy. Approximately 90 percent of the duck meat produced in the U.S. is from the Pekin. Commercial producers are able to obtain a 7 to 8 pound duck in seven weeks. Under small farm conditions they typically reach 6 to 7 pounds in seven to eight weeks. The commercial duck producer raises strains of ducks genetically selected for high meat production.

Such strains would not be available for small producers. Duck sold in stores is meatier than ducks raised in smaller flocks.

The Pekin (Figure 3) is popular because of its fast growth rate and yellow skin. Pekins should not be raised past ten weeks of age or they will become extremely difficult to pluck because of pin feathers. Also, the feed efficiency declines sharply at this age. Pekins can be considered a general purpose breed since they also lay approximately 200 white eggs per year.



Figure 3. Female (left) and male (right) Pekin ducks. *Jackie Jacob*

In many areas the Muscovy is the meat breed of choice. Since the Muscovy originates from the southern hemisphere the meat is leaner than the meat from other ducks. Muscovies must be butchered by 16 weeks of age or the meat becomes firm.

The incubation period of the Muscovy is 35 days compared to 28 days for other ducks. If a Muscovy is crossed with another breed of duck the offspring will be sterile and are often referred to as Mule or Moulard ducks depending on the cross. Many commercial duck operations in Europe raise Mule or Moulard-type ducks.

The male Muscovy can become very large (10-12 lb); the female is smaller (5-6 lb). The male has characteristic fleshy outcrops

around the eyes called caruncles. The Muscovy is the predominant waterfowl in Africa and Latin America as it thrives well under free-range conditions.

If you want more colorful ducks and can accept a slower growth rate there are other breeds that can be used. The Aylesbury, an 8 to 10 pound duck, originated in England, where it is popular because of its white skin. The yellow-skinned Pekins were never popular in England, and the white-skinned Aylesburys were never popular in the U.S. Like the Pekin, the Aylesbury will reach a market weight of 7 pounds in eight weeks. The deeper keel and loose feathers of the Aylesbury makes it look bigger than the Pekin.

The Cayuga is the only duck breed developed in America, near Cayuga Lake in New York state. Unlike Aylesbury and Pekin ducks, which reach 7 pounds in eight weeks, other heavy breeds such as the Cayuga take 12 to 16 weeks to finish as a market bird. Today they are mainly raised for exhibition.

The Buff Orpington was originally considered an egg breed, but is sometimes raised for meat. They are slightly smaller than the Aylesburys and Pekins. They will lay very well if not allowed to get too heavy.

The Rouen is a meat bird reaching 6 to 8 pounds in 12 to 15 weeks. The Rouen is popular for decorating ponds since they are colored like the wild Mallard but are too heavy to fly away. Young Rouens reach 7 to 8 pounds, but the bulk of the weight gain happens after 12 weeks of age. They can lay a blue-tinted egg every other day.

The Crested duck (Figure 4) is named for the ball of feathers on its head, but 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 there are two copies present. As a result, one-fourth of the fertile eggs will not hatch. Only two-thirds of the remaining fertile eggs will develop into ducks with crests. The other one-third will not have a crest and will not carry the gene necessary to produce a crest in further generations. Many raise the Crested duck for exhibition purposes only, but they do lay well, and their growth rate, though not as good as the heavy breeds, is good.



Figure 4. Crested duck. *Jackie Jacob*

Eggs

The Runner and Campbell breeds of ducks are excellent egg layers, often attaining levels of production higher than egg-laying chicken breeds. The Runner duck (Figure 5) is often referred to as the Leghorn of the duck family. Both breeds tend to be nervous and flighty and will stampede when startled. Both breeds are good foragers but also do well in confinement when a good layer ration is provided. Typically the Runner duck lays four eggs per week for about eight months. The Campbell can lay an egg a day for ten months.

Runner ducks are light weight and stand upright like penguins. They run rather than waddle, thus the name. They scare easily but are very hardy. The level of egg production will vary depending on whether they are exhibition or utility strains. Some utility strains have produced over 300 eggs in a year. Runner ducks cannot fly and rarely form nests. The ducks will drop their eggs wherever they happen to be. If raising Runners for egg production it is best to keep them confined overnight to make egg collection easier.

Runners are good at foraging. They will eat worms and slugs and have even been seen to catch flies. Only the females quack. All drakes are limited to a hoarse whisper. 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 food to maintain egg production during the extensive laying season. The darker varieties lay blue-tinted eggs.



Figure 5. Female Runner duck.
Jackie Jacob

The Campbell breed of duck was developed by Adele Campbell in the late 1800s. She crossed the Runner with a Rouen duck in an attempt to create a breed of ducks that would lay well but have bigger bodies. The offspring were then crossed with Mallards to increase their hardiness. There is only one variety of Campbell ducks: khaki. Campbell ducks are the closest thing to a dual purpose breed.

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 colored egg. Using a lighting system, Campbells will lay throughout the winter months when daylight hours are naturally shorter.

The Golden 300 hybrids and the White Golden layers were developed by Metzger Farms, and both are excellent egg layers. They crossed the Campbell with other duck breeds to keep the high level of egg production while introducing calmness into their temperament.

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 both rice and fish farming. One advantage of ducks is that they normally lay most of their eggs within three hours after sunrise (compared with five hours for chickens). This practice makes it possible to confine ducks at night and allow them to range freely in the rice fields during the day.

All duck breeds help eradicate mosquito larvae from waterways. They will also eat slugs, snails and insect pests in gardens and will clean algae slime and duck weed from ponds. The best foragers are the Campbells, Magpies, Runners and various bantam breeds. Cayugas will do a good job but do not cover as large an area, preferring to stay closer to home.

Training Herd Dogs

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 herding. The heavier the body, the easier the duck tires. Herders tend to choose the less calm breeds so that dogs can move them by using less force. It may be more beneficial, however, to use calmer breeds. With neurotic ducks, all the dog does is cut off escapes rather than really moving the ducks. In such cases Runners or Campbells are not your best choices.

Some herders have had success with Swedish ducks. They are very calm and break easily. Cayugas are another possibility, but they take longer to break and can be frustrating early on. Before they are broken, there is a very fine line between not moving at all and moving in all directions. Once they are broke, they can be worked easily. It takes a very well trained dog to break in Cayugas.

Herding ducks should be exercised on a daily basis. If not they will not have much stamina and will not be suitable for working regardless of the breed.

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 (Figure 6) 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 (Figure 7) that lie underneath the contour feathers (Figure 8). 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 warm-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.

Summary

Many options are available for those interested in starting a small flock of ducks. It is important to know the purpose of the ducks before selecting a breed. The heavier breeds are the best choice for meat production. The Khaki Campbell is your best choice for an egg-producing breed. If you just want to raise ducks as a hobby or for show your options are wide. A smaller bantam breed might be a good choice if you want to limit the space and feed required.

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