

Selecting the Right Chicken Breed

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Many factors should be considered before selecting a chicken breed for your flock, whether you are planning to start a new flock or to add to an existing one. You might be looking for a meat breed, an egg breed, or perhaps a breed that performs reasonably well at both (referred to as a dual-purpose breed). Perhaps you just want a pet or chickens to show at exhibitions.

While all breeds of chickens are descendants from the red jungle fowl of Southeast Asia, generations of genetic selection have developed breeds specializing in specific characteristics.

The mature weight of the jungle fowl is about 2 pounds, and a sexually mature hen will lay 10-12 eggs during the breeding season. Through generations of genetic selection, chicken breeds have been developed specifically for meat production, and they can reach a market weight of 6.6 pounds in eight weeks. Similarly, chicken breeds have been developed specifically for egg production, and the hens from these breeds lay year round and can produce more than 300 eggs in a year. For those interested in exhibition poultry, chicken breeds now come in many shapes, sizes, and colors.

Breed Characteristics

Meat Production

If you are looking for a meat-producing breed, the fast-growing Cornish cross—a “broiler” breed—is probably your best bet. They were developed by crossing the large-breasted Cornish and the white Plymouth Rock breeds. They can reach 4-5 pounds in six weeks and 6-10 pounds in 12 weeks, depending on the management conditions—especially housing and nutrition.

In Europe, a large market exists for slower-growing meat-type chickens. Some of these breeds have been imported into the United States and have recently become available for purchase. They are typically raised for 11-12 weeks and are therefore closer to sexual maturity than commercial broilers. Because they are slower growing than the typical commercial broiler chickens, they are said to have more flavor.

Dark-feathered, slower-growing breeds are popular in Asian cuisine. Although the Australorp was developed as an egg-producing breed in Australia, it is grown in many parts of the United States as a meat bird for sale in live-bird markets. An additional chicken breed popular in Asian cuisine is the silkie chicken. Silkie chickens, regardless of feather color, have black skin, black meat, and black bones. Chicken soup made from a silkie chicken is believed by some to have medicinal properties.

Egg Production

The single-comb White Leghorn is the breed (Leghorn) and variety (single-comb white) of chicken used in the commercial production of table eggs in most of the United States. They are prolific and highly efficient producers of a white-shelled egg. In the northeastern United States, however, brown-shelled eggs are preferred. Breeding companies have developed commercial egg-producing strains specifically to meet this market. Commercial breeds tend to be flighty and high strung and are not the best breeds for small flocks.

Most hatcheries in the United States have a sex-link cross available for chicken egg production purposes.

Black sex-link. The black sex-link (also known as Rock Reds) is produced by crossing a hen with a barred pattern in

Sex-linked Chickens

Specific breeds or strains of chickens can be developed where it is possible to tell male and female chickens apart based on their physical appearance, often plumage color.

For the matings to work, the physical characteristic must be carried on one of the sex chromosomes—thus the term “sex-linked”—and the correct male and female breeds selected. For example, a Delaware hen mated to a New Hampshire or Rhode Island Red rooster is a sex-link cross where the male offspring will have the Delaware feather pattern and female offspring will have a solid-red feather pattern. However, if you mate a Delaware rooster with a New Hampshire or Rhode Island Red hen, all the offspring will have the same Delaware feather pattern.

It is important to remember the offspring are hybrids and will not breed true.

her feathers with a non-barred rooster. The male offspring typically have barred plumage like their mother while the female offspring are a solid color, typically black. Black sex-links are typically produced by crossing a barred Plymouth Rock hen with a Rhode Island Red or New Hampshire rooster. At hatch, both sexes have black down, but the male chicks can be identified by the white dot on their heads.

Red sex-link. The red sex-link (also known as Golden Comet, Gold Star, or Cinnamon Queen depending on the specific cross used) is produced by a number of different crosses. White Plymouth Rock hens with the silver factor (a gene on the sex chromosome that inhibits red pigmentation of feathers) are crossed with a New Hampshire rooster

to produce the Gold Comet. A silver-laced Wyandotte hen is crossed with a New Hampshire rooster to produce the Cinnamon Queen. Additional possible red sex-link cross combinations are the Rhode Island White hen and a Rhode Island Red rooster or a Delaware hen with a Rhode Island Red rooster. Male chicks hatch white and can feather out to pure white or with some black feathering, depending on the cross. Female chicks hatch buff or red, depending on the cross, and they feather out buff or red.

California White. The most popular sex-linked crosses produced for small flocks lay brown-shelled eggs. The California White is one sex-linked cross that produces white-shelled eggs. It is the cross between a White Leghorn hen and a California Gray rooster. It is basically a commercial Leghorn bred to handle the conditions of small flocks, including those in areas with colder temperatures.

Typically hens of breeds with white earlobes lay white-shelled eggs and those with red ear lobes lay brown-shelled eggs. But every rule has an exception. For example, hens of the Dorking and Red Caps breeds have red ear lobes but lay white-shelled eggs. Notable exceptions are the Araucana and Ameraucana breeds. The Araucana is a breed from South America that lays a blue egg. Genetically, the blue egg color is a dominant trait and when the Araucana is crossed with other breeds the result is a chicken that lays a colored egg. If the coloring of the chicken meets the American Poultry Association Standard of Perfection, it is referred to as an Ameraucana. If not, the chicken is typically referred to as the "Easter Egger." The color of the eggshell produced by Ameraucana and "Easter Egger" hens varies from pink to green.

Additional options for egg production include the Minorca and Ancona for

Can you tell a barred Plymouth Rock from a Dominique?

Chickens of both breeds have barred feathers. The barring in the Dominique is thinner than that of the Barred Rock, but the feature that easily distinguishes between the two breeds is the comb. Barred Rocks have a single comb while the Dominique has a rose comb.

white-shelled eggs and the Australorp, Plymouth Rock, Dominique, Rhode Island Red, or New Hampshire for brown-shelled eggs.

Tables 1 and 2 give an indication of the color of the eggs laid by a variety of breeds of chickens. Some egg producers like to keep a variety of chicken breeds so they will get a wide selection of egg colors—adding a unique characteristic to the eggs they sell in the farmers market.

Table 1. Egg Color of Good Egg-Producing Breeds.

Chicken breed		Egg color
Yellow-skinned breeds*	Anconas	White
	Barnevelders	Dark brown
	Leghorns	White
	Sicilian Buttercup	White
	Sumatras, Black	White or lightly tinted
	Welsummers	Dark brown
White-skinned breeds	Andalusians, Blue	Chalk white
	Campines	White
	Hamburgs	White
	Lakenvelders	White (sometimes tinted)
	Minorcas	Chalk white
	Naked Necks	Brown
	White Faced Spanish	Chalk white

* Useful in evaluating hens for past production levels. For more information, see Evaluating Egg-Laying Hens (4AJ-07P0).

How can you tell an Araucana and an Ameraucana apart?

The Araucana chicken has no tail (a condition referred to as "rumpless") and tufts of feathers protruding from its face. The Ameraucana has a tail and, instead of tufts, has muffs and a beard, terms used to describe fluffy collections of feathers on the face and neck. The terms "Easter Egger" or "Easter egg chicken" are used for any chicken that carries the blue egg-color gene but does not meet the breed standards for the Ameraucana as listed in the American Poultry Associations Standard of Perfection.

Table 2. Egg Color of Dual-Purpose Breeds.

Chicken breed		Egg color	
Yellow-skinned breeds*	Brahmas	Light to dark brown	
	Buckeyes	Brown	
	Chanteclers	Brown	
	Cochins	Brown	
	Delawares	Brown	
	Dominiques	Brown	
	Hollands	White	
	Javas	Brown	
	Jersey Giants	Brown to dark brown	
	Lamonas	White	
	New Hampshires	Brown	
	Plymouth Rocks	Very light to dark brown	
	Wyandottes	Very light to rich brown	
	White-skinned breeds	Araucana/Ameraucana	Blue to light green
		Australorps	Brown
Catalanas, Buff		White or very light tint	
Crevecoeurs		White	
Dorkings		White	
Faverolles		Light brown	
Houdans		White	
LaFleche		White	
Langshans		Very dark brown	
Orpingtons		Light to dark brown	
Redcaps		White	
Rhode Island Reds		Brown to dark brown	
Rhode Island Whites		Brown to dark brown	
Sussex		Brown	

* Useful in evaluating hens for past production levels. For more information, see Evaluating Egg-Laying Hens (4AJ-07P0).

Dual-purpose Breeds

Dual-purpose breeds are those breeds in which hens lay reasonably well and roosters are large enough for meat production. Many breeds in the American and English classes—including the Plymouth Rocks, Sussex, and Wyandottes—meet these standards.

Broody Breeds

Some breeds of chickens rarely go broody and incubate their eggs. They include the white-faced Black Spanish, Blue Andalusians, Anconas, Sicilian Buttercups, Hamburgs, Campines, Lakenvelders, Welsummers, Polish, and Houdans. These breeds should be avoided if you want to use them to brood eggs from different species (such as duck or guinea fowl). Their classification as non-sitters also makes it difficult to breed them without the use of artificial incubation or a surrogate hen willing to incubate the eggs naturally.

Commercial single-comb White Leghorn strains are also unlikely to ever go broody. Bantam chickens are more likely to go broody and are often used as surrogate mothers. Other possible breeds include the Araucana, Australorp, Brahma, Cochin, Faverolles, Javas, Orpingtons, Sussex and Wyandotte.

Winter-hardy and Pasture Breeds

If you are looking for a breed that can handle harsh winters, possible choices include the Australorp, Brahma, Buckeye, Cochin, Delaware, New Hampshire, Plymouth Rock, and Rhode Island Red. The last three breeds are common dual-purpose chickens on farms in the United States.

Most pastured poultry producers in the United States use Cornish cross chickens. The breed selection is related more to their availability than anything else. Many of the characteristics that make the Cornish cross strains good for commercial production reduce their suitability for pasture production.

National Poultry Improvement Plan (NPIP)

The National Poultry Improvement Plan was established in the 1930s and is a collaboration between the poultry industry and state and federal programs. It was originally developed to eliminate pullorum disease, which is caused by *Salmonella pullorum*. The bacteria can be passed from mother to hen through the egg. The program tests breeder flocks to certify they are pullorum-free. The program was later expanded to include testing for other diseases, including *Salmonella typhoid*, *Salmonella enteritidis*, *Mycoplasma gallisepticum*, *Mycoplasma synoviae*, *Mycoplasma meleagridis*, and avian influenza. The program includes commercial poultry, turkeys, waterfowl, exhibition poultry, backyard poultry, and game birds.

A number of breeders are working on the development of a breed of chicken more suited to pasture conditions. For example, a breeder in Delaware has crossed a Cornish cross with a Delaware and sells them as “Pastured Peepers.” They are slower growers than the conventional Cornish cross, but are better suited to pasture production.

Some of the slower-growing breeds of chickens developed in Europe have been imported to the United States and sold as Freedom or Red rangers.

Raising Rare or Unusual Breeds

The Society for Preservation of Poultry Antiquities (SPPA) maintains a list of chicken breeds—both bantam and large fowl—in danger of disappearing. The list includes breeds that are old and have historical significance and documentation prior to the modern poultry show era. Not all of them are considered rare. The breeds designated “rare” reflect the organization’s observations of breeds in need of more breeders to avoid genetic limitations and ultimately disappearance of the breed. The list also includes breeds with a recorded history that are not listed in the American Poultry Association or

American Bantam Association’s Standard of Perfection.

SPPA officers evaluate the breeds and varieties reported by its members for the Breeders Directory listings. They assess trends as to which ones are gaining or losing ground. Breeds not available commercially and seldom seen at poultry shows are considered rare. It is important to note that although a breed may be in healthy supply, certain varieties within that breed may not be.

Poultry Exhibition

Exhibition poultry shows are popular in most states. The American Poultry Association publishes the Standard of Perfection, which describes the ideal body type, color, weight, and other characteristics of recognized breeds. Chickens are judged according to these standards.

Most chicken breeds come in a standard and a bantam size. Bantams are typically a quarter the size or less of their standard counterparts, however some bantam breeds have no standard-size version. Bantams are easier for young poultry fanciers to handle, and they eat less feed and take up less space. They do lay a smaller egg, however.

The American Bantam Association produces a Standard of Perfection specifically for bantam versions of the breeds.

Where to Buy Chickens

Once you have decided on the characteristics that most suit your needs, look for a hatchery approved by the National Poultry Improvement Plan (NPIP) to see if a suitable breed or variety is available. For most hatcheries, the manager is able to advise producers on the breeds available that most satisfy their needs. Day-old chicks can be sent through the mail using Priority Post.