



CHICKEN BREED SELECTION

ANR-60

Agriculture and Natural Resources

Date: 08/17/2017

Sabrina Schirtzinger, Extension Educator, Agriculture and Natural Resources, Knox County**Tim McDermott, Extension Educator, Agriculture and Natural Resources, Hocking County**

There are various reasons people raise chickens: for eggs, meat, show and exhibition or simply to enjoy caring for and watching chicks grow. For some, raising chickens is a hobby while others see it as a sustainable part of living. This fact sheet will explore characteristics of chicken breeds to help select the right breed for you.

What are your goals for raising chickens?

Before selecting the breed of chick to purchase, you need to ask yourself several questions. The first one is: What are your needs for your flock? This is important because you are looking at a commitment of potentially seven to eight years, which is the average lifespan of a chicken. Other questions include:

- What is your end goal for raising chickens?
- Do you want a certain type of egg, or are you looking for meat production chickens?
- Is your goal egg production, egg and meat production, or just meat production?
- Are you interested in raising chickens for show purposes and production is not important?

Each breed of chicken has traits that make them better suited for exhibition, egg, meat or dual purpose production.

Terminology

Being able to talk “chicken” is important. Here are a few terms used for poultry:

- Hen: a female adult chicken
- Rooster: a male adult chicken
- Chick: a baby chicken of either sex
- Pullet: a female chick (immature chicken)
- Cockerel: a male chick (immature chicken)
- Broody: a hen inclined or wishing to incubate eggs
- Non-Setting: a hen that does not have the inclination or wish to incubate eggs
- Dual Purpose: chicken practical for meat and egg production

Egg Production

All hens will lay eggs; however, their egg production will vary. A rooster is not needed for egg production. Hens will lay non-fertile eggs without a rooster, a rooster is only needed if you want fertile eggs in order to hatch chicks. A hen usually lays one egg every 26 hours; although, there may be days when a hen will not lay an egg at all. As the hen ages, the egg size will increase; however, the shell quality and egg production will decrease. Hens that are producing eggs will need extra calcium in their feed to support shell development. Egg colors vary between breeds. Egg colors include: white, various shades of brown, or other colors such as blue and green. The best egg laying breeds tend to be the smaller bodied breeds such as Ancona, Leghorn and Minorca.

The breed used the most for commercial egg laying is typically White Leghorns. These birds are intended to produce eggs at a higher rate. Commercial producers only keep layers for two years before replacing the hen. White Leghorns are not usually the best choice for the novice backyard poultry enthusiast as they can be loud, nervous and occasionally aggressive towards people.

Egg and Meat Production

Some chicken breeds are referred to as dual-purpose breeds that will lay an adequate amount of eggs and grow large enough for meat production. The downside, though, is that the chicken will not mature quickly like other breeds of meat chickens. Hybrid birds, also called sex-linked, tend to be good dual-purpose, but hybrid birds cannot reproduce.

Meat Production

Chickens that are bred solely for meat production are generally poor egg layers because these birds are faster growing. Because of their faster growth, meat birds require a larger amount of feed daily with a higher protein content compared to egg-laying birds. The fastest growing birds are a Cornish chicken crossed with a White Rock, which is referred to as a Cornish Cross. Using good livestock care practices, producers will have fryers at approximately seven weeks weighing 4 to 6 pounds, reaching roasting stage of 6 to 10 pounds in eight to 12 weeks.

Just like commercial egg layers, commercial meat birds have been selected for desired characteristics to be able to grow quickly with high feed efficiency. Similar to White Leghorns, the breeds used in commercial production are not usually the best choice for the backyard poultry enthusiast.

Shows and Exhibition of Poultry

Shows offer an opportunity to display any breed of chicken and are becoming popular in the Midwest. The American Poultry Association (APA) has a publication called The American Standard of Perfection that has a complete description of all the breeds and varieties of domestic chickens. This publication describes the appropriate breed characteristics needed for birds to be shown in exhibition.

Buying Your Chickens



Figure 1. Ameraucana chicken is a common backyard breed that lays blue/green eggs.



Figure 2. Chicken eggs vary in sizes and colors.

Day old chicks can be purchased from hatcheries or feed stores. Chicks that are sold as a “straight run” will be a mixture of pullets (females) and cockerels (males). To buy only pullets, make sure the chicks are sexed. Before you purchase a rooster, make sure the regulations in your area allow for them. Many cities have implemented rules on keeping backyard poultry and do not allow roosters. A straight run purchase of chicks should be avoided in this case and only pullets should be purchased.

Biosecurity refers to procedures implemented to protect animals from disease-causing pathogens to help keep them healthy. One of the biggest aspects of raising chickens, or any type of livestock, is to make sure that biosecurity protocols are followed closely. Chickens should be purchased free of any disease to avoid introducing a disease into your existing flock. It is best to purchase similar age birds from a similar species at one time. Avoid purchasing poultry from unknown sources. Do not bring a bird into your flock if you do not know its prior health record. The Animal Plant Health Inspection Service of the U.S. Department of Agriculture has a fact sheet to reference on biosecurity. The fact sheet is available by searching for USDA poultry biosecurity.



Figure 3. Meat production chicken for exhibition.

To help biosecurity, the National Poultry Improvement Plan (NPIP) was developed in the 1930s with the mission to eradicate a number of major poultry diseases such as pullorum, salmonella, mycoplasma, and avian influenza. Breeders that are members are required to have their birds tested for pullorum-typhoid and be vaccinated against Marek’s disease. It is critical when purchasing chickens to only buy birds certified free of NPIP diseases. Starting with healthy chicks is paramount to having a healthy flock. According to the Ohio Poultry Association, the following Ohio hatcheries comply with NPIP regulations: Eagle Nest Poultry, Meyer Hatchery, Mt. Healthy Hatchery, and Ridgway Hatchery.

What temperament of chicken is ideal for you and your family?

After you have decided the goal for your backyard flock (eggs, meat or show), another characteristic to consider is breed temperament. Each breed has general temperament tendencies, but each bird will have a unique personality. If you are planning to have a small backyard flock of only three to five birds that are enjoyed as pets as well as producers in the local food chain for the family, you may consider a more docile breed. If you plan to involve children as caretakers to learn about keeping and taking care of animals, choose a breed with characteristics that are more compatible with your family so the children will enjoy the experience.

Breeds with the reputation for docility include: Plymouth Rock, Wyandotte and Orpington. These may be good choices for the novice backyard poultry enthusiast or if young children will be helping to raise and care for the poultry. Roosters, of any breed, on the other hand are naturally aggressive and may not be suitable for the novice poultry enthusiast or flocks where children are caring for the birds.

Individual bird behavior is unpredictable. The breed characteristics should be used only as a guide knowing that selecting primarily for temperament is difficult. Using a reputable and knowledgeable breeder is a good start in choosing which breed of chickens you wish to select to start your backyard flock.



Figure 4. Buff Brahmas are a gentle breed.



Figure 5. Black Australorps are a popular brown egg breed.

Chicken Breeds

Selecting the best breed of chicken can be difficult as there are so many choices. Understanding their differences will help to save you time and money. The following chart highlights characteristics considered by producers when determining the breeds for their flocks. It is designed to be a starting point when deciding between all the breeds. Once you pick the breed you are most interested in, further research of the breed is encouraged.

Breed	Varieties	Egg Color	Egg Size	Characteristics	Primary Usage
Ameraucana	Black, Blue, Blue Wheaten, Brown Red, Buff, Silver, Wheaten, White	Blue/Green	Large	Medium sized chicken, colorful feather patterns. Excellent egg layers.	Eggs
Anconas	Single Comb and Rose Comb	White	Extra Large	Known for being excellent large egg layers. Non- setting.	Eggs
Australorps	Black	Brown	Large	Popular breed for light brown eggs, heavy bird used for meat as well.	Dual
Brahmas	Light, Dark, Buff	Brown	Large	Heavy-bodied, broody breed.	Eggs
Buckeye	Only one variety	Brown	Large	Heavier and wider bodied breed, excellent dual-purpose.	Dual
Buttercups	Gold, Silver	White	Medium	Mainly used for egg production.	Eggs
Campines	Silver, Golden	White	Medium	Smaller-bodied breed more suitable for egg laying.	Eggs

Breed	Varieties	Egg Color	Egg Size	Characteristics	Primary Usage
Cochins	Buff, Partridge. White, Black, Barred, Silver Laced, Golden Laced, Blue, Brown	Brown	Small	Fluffy feather, broody breed, and considered one of the largest breeds.	Eggs
Cornish	Dark, White, White Laced, Blue, Brown			Excellent meat chickens.	Meat
Delawares	Only one variety	Brown	Large	Mostly white with barred tail and hackle (neck feathers).	Dual
Dominiques	Only one variety	Brown	Large	An American white and black barred breed (also known as cuckoo pattern). Adapt well to climates.	Exhibition
Dorkings-Single Comb	Silver Gray, Colored, Cuckoo, Red, White	White	Medium	Versatile breed used for meat and egg production. Has red ear lobes, but produces white eggs.	Dual
Faverolles	Salmon, White	Light Brown	Medium	Dual Purpose breed, mainly used for exhibition and has 5 toes.	Dual
Hamburg	Black, Golden Penciled, Golden Spangles, Silver Penciled, Silver Spangled, White	White	Medium	Excellent large egg layers and good foragers.	Eggs
Jersey Giants	Black, Blue, White	Brown	Large	Large, heavy breed used for egg production and meat.	Dual
Leghorn	Light Brown, Dark brown, White, Buff, Black, Silver, Red, Black Tailed Red, Columbian	White	Extra Large	Prolific egg layer	Eggs
Maran	Black Copper, Wheaten	Dark Brown	Extra Large	Excellent egg layers with very dark brown eggs. May be used for meat.	Dual
Minocra	Single comb black, Single comb white, Rose comb black, Single comb buff, Rose comb white,	White	Extra Large	Large framed, hardy and active breed.	Eggs

Breed	Varieties	Egg Color	Egg Size	Characteristics	Primary Usage
New Hampshire Red	Red	Brown	Extra Large	Dual Purpose breed, used more for meat production.	Dual
Orpington	Black, Blue, Buff, White	Brown	Large	Heavy dual purpose breed, and an excellent egg layer. Known to lay well in the winter months too.	Dual
Plymouth Rock	Barred, White, Buff, Partridge, Silver Penciled, Blue, Columbian	Brown	Large	Dual purpose broody chickens that will make good mothers, and do not mind the cold.	Dual
Polish-Bearded and Non-Bearded	Golden Silver, White, Buff Laced, White Crested Blue, Black, Crested White	White	Medium	Prolific egg layers, similar to Leghorns.	Eggs
RedCaps	Only one variety	White	Medium	This breed is a good egg layer, meat chicken and exhibition breed.	Dual
Rhode Island Reds	Single Comb and Rose Comb	Brown	Large	Known for being the best egg layer as a dual purpose breed.	Dual
Sussex	Speckled, Red, Light, Brown, Silver, Buff	Brown	Large	Dual purpose breed.	Dual
Welsummers	Only one variety	Very Dark Brown	Large	Good egg production chicken, cold weather hardy with a docile temperament.	Eggs
Wyandottes	Silver Laced, Golden Laced, White, Black, Buff, Partridge, Silver Penciled, Columbian, Blue	Brown	Large	Dual purpose breed. Cold weather hardy and make a good exhibition bird.	Dual

Sources:

- Akers, D., Akers, P., & Latour, M. A., (2002). Choosing a Chicken Breed: Eggs, Meat, or Exhibition. Animal Sciences Poultry, AS(518), w, 1-4. Retrieved April 20, 2016, from extension.purdue.edu/extmedia/as/as-518.pdf.
- Akers, D., Akers, P., & Latour, M. A., (2002, October). Choosing a Chicken Breed: Eggs, Meat, or Exhibition AS-512-W. Retrieved April 25, 2016, from extension.purdue.edu/extmedia/as/as-518.pdf.
- Breeds of Livestock. (1995, February 22). Information on breeds. Retrieved April 20, 2016, from ansi.okstate.edu/breeds/poultry/chickens/chickens.html#h.
- Murray McMurray Hatchery. (n.d.). Information on breeds. Retrieved April 20, 2016, from mcmurrayhatchery.com/index.html.

- National Poultry Improvement Plan: Poultryimprovement.org.
- Ohio Poultry Association: ohpoultry.org.
- The American Standard of Perfection. (2015, April). Presents the official breed descriptions for large fowl, bantams, waterfowl, and turkeys. Retrieved April 18, 2016, from amerpoultryassn.com/.

All photos by Sabrina Schirtzinger, OSU Extension.

OhioLine

<https://ohioline.osu.edu>

Ohio State University Extension embraces human diversity and is committed to ensuring that all research and related educational programs are available to clientele on a nondiscriminatory basis without regard to age, ancestry, color, disability, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, sexual orientation, or veteran status. This statement is in accordance with United States Civil Rights Laws and the USDA.

Roger Rennekamp, Associate Dean and Director, Ohio State University Extension

For Deaf and Hard of Hearing, contact Ohio State University Extension using your preferred communication (e-mail, relay services, or video relay services). Phone 1-800-750-0750 between 8 a.m. and 5 p.m. EST Monday through Friday. Inform the operator to dial 614-292-6181.

Copyright © 2017, The Ohio State University