



This presentation is part of an educational modular program designed to provide new and beginning farmers and ranchers with relevant information to initiate, improve and run their agricultural operations



United States Department of Agriculture
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Egg layer breeds for small farms



This project is partly sponsored by USDA-NIFA-BFRDP 2010-03143.

Egg layers

- Great at laying eggs
- These birds usually grow slower than breeds for meat, and reach a lower body weight





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Notes on egg production: Egg color

- According to poultry farming publications from the early XX century, people from New York preferred white eggs, while people from Boston preferred brown eggs
 - Even today, many consumers assume that brown eggs are more "natural" or "healthier"
 - Brown eggs also tend to be more expensive, because the hens that lay the white eggs tend to be smaller, eat less and therefore preferred by commercial producers
 - However the color of the shell has no effect on the nutritional content or taste of the eggs
 - The difference comes from the nutrition that the hens receive

Notes on egg production: Egg color

- Some people look for blue eggs because they are fun, but other people will look for them because some believe that these eggs has less cholesterol than other eggs
- This is not true!
- The composition of the egg depends on the diet that the layers receive, and not on the color of the shell

Pastured or free ranged eggs can have a lower amount of cholesterol, but this difference is really not significant for your health





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Notes on egg production

Broody

- A hen is called "broody" when she wants to sit on the eggs and hatch them (also called maternal instinct)
- A hen lays only one egg every day or two, but she doesn't start incubating until the whole clutch is laid
- This way all the chicks will hatch at the same time
- Some breeds show more "broodiness" than others, and it tells you that the hens will take care of the eggs, while others will not
 - If you plan on selling eggs, then it might be good not to have hens with high broodiness, because they lay less eggs, and they want to sit and mother the eggs
 - Other breeds, like the Leghorns and Minorcas, don't go broody, so you will need an incubator if you want to raise your own chicks

Egg layers

Leghorn

Minorca

Ancona

Australorp

Hamburg

Houdan

Polish

Araucana

Ameracauna

Fayoumi

Sex-links





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Leghorn



- Original breed came from Italy in the mid 1800's
- Other varieties developed in England, Denmark, and America





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Leghorn

- Varieties:
 - Color:
 - White, Black
 - Buff, Red
 - Silver, Columbian, Duckwing
 - Light Brown, Dark Brown
 - Comb types:
 - Single
 - Rose





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Leghorn

- Skin color:
 - Yellow
- Egg shell color:
 - White
- Adult Size:
 - Roosters 5 – 6 pounds
 - Hens 4 – 4.5 pounds



Leghorn



- Commercial use:
 - Egg production only!
 - Very prolific, efficient and economical producers of table eggs
- Characteristics:
 - Very high energy, active
 - Will forage over large areas
 - Will not incubate the eggs





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Minorca

- Breed developed in England from Spanish Castilian Fowl
- Largest and heaviest of Mediterranean breeds, very sturdy frames
- Large head, comb and wattles
- Similar to WF Black Spanish and Andalusians





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Minorca

- Varieties:
 - Color:
 - Black
 - White
 - Buff
 - Comb type:
 - Single
 - Rose





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Minorca

- Skin color:
 - White
- Egg shell color:
 - Chalk white
- Adult Size:
 - Roosters 7.5 – 9 pounds
 - Hens 6.5 – 7.5 pounds





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Minorca

- Commercial use:
 - Excellent producer of large white eggs
 - Unique blend of large lean frame and egg production
 - May not be as good in cold climates
- Characteristics:
 - Somewhat flighty and full of energy
 - Forage well





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Ancona

- Originated in the city of Ancona, Italy
- Original bloodlines from other Italian breeds and Leghorn type fowl
- Came to the United States in the late 1800's





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Ancona

- Varieties:
 - Color:
 - Black mottled
 - Red mottled
 - Comb type:
 - Single
 - Rose





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Ancona

- Skin color:
 - Yellow
- Egg shell color:
 - White
- Adult Size:
 - Rooters 5 – 6 pounds
 - Hens 4 – 4.5 pounds





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Ancona

- Commercial use:
 - Excellent egg producers
 - Good mix of visual appeal and production
- Characteristics:
 - Can be flighty and high energy birds
 - Great at foraging
 - Will rarely incubate their eggs





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Australorp



- Developed in Australia primarily for egg production
- Foundation bloodline is only the Black Orpington. Basically, it is an Australian bred Orpington selected for egg production and not meat
- Smaller than the Orpington as a result of selection for egg production



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Australorp

- Skin color:

- White

- Egg shell color:

- Light brown

- Adult Size:

- Roosters 7.5 – 8.5 pounds
- Hens 5.5 – 6.5 pounds



Australorp



- Commercial use:
 - Medium weight, active bird which lays a tinted egg
 - Good egg producing bird with good meat production
 - Popular egg producing bird for backyard flocks
 - Calm friendly birds





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Hamburg

- Origin is Dutch although the name is German
- Original breeders selected for “pheasant fowl” characteristics





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Hamburg

- Varieties:
 - Color:
 - Silver spangled, & penciled
 - Golden spangled, & penciled
 - White
 - Black





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Hamburg

- Skin color:
 - White
- Egg shell color:
 - White
- Adult Size:
 - Rooster 4 – 5 pounds
 - Hens 3.5 – 4 pounds





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Hamburg

- Commercial use:
 - Egg production only
 - Exhibition quality
- Characteristics:
 - High energy and flighty bird, good fliers
 - Forage very well
 - Good for free range egg production systems
 - Rarely will sit to incubate their eggs





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Houdan

- Old French breed imported into England in the mid 1800's
- Foundation breeds include the Dorking, Crevecoeur, and possibly Polish
- They normally have a fifth toe on each foot





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Houdan

- Comb type:
 - V shaped
- Skin color:
 - White
- Egg shell color:
 - White
- Adult Size:
 - Roosters 7 – 8 pounds
 - Hens 5.5 – 6.5 pounds





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Houdan

- Commercial use:
 - A general purpose originally bred for both meat and egg production
 - Not a good 'yard bird', due to visual impairment and predation
- Characteristics:
 - Gentle and friendly bird
 - Good foragers
 - Rarely will incubate the eggs



<http://www.triplespringacres.com/rareandfancychickens.htm>





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Polish



- Old breed from Holland
 - Shown in paintings from the 1500's
- They are a “Crested” breed
- Have a large knob on top of there head from which their head feathers grow



<http://www.triplespringacres.com/rareandfancychickens.htm>



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Polish

- Comb type:
 - Small V shaped
- Skin color:
 - White
- Egg shell color:
 - White
- Adult Size:
 - Roosters 6 pounds
 - Hens 4.5 pounds



<http://www.triplespringacres.com/rareandfancychickens.htm>





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Polish

- Commercial use:
 - A general purpose non-sitting fowl originally
 - Good egg production
 - Not a good 'yard bird', due to visual impairment and predation
- Characteristics:
 - Gentle and friendly bird but startle easily
 - Not good at foragers
 - Will not sit to incubate the eggs





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Araucana

- First imported into the US in the 1930's
- Mapuche Indian tribe in South America developed these from Collonca and Queteros breeds
- Collonca – clean faced, rumpless, blue egg laying fowl
- Queteros – ear tufts, tailed, lays a pinkish brown egg





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Araucana

- Different from the Ameraucana
- The ear tuft gene carries a lethal gene which causes embryo mortality
- Blue egg trait is dominant so these birds have been cross bred with a number of American breeds to increase hatchability and are called "Ameraucana's"





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Araucana

- Do better in open production systems
- Poor at foraging for feed

Breeding can be a problem because of the lethal gene (associated with the ear tufts) that kills ~25% of chicks before they even hatch





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Ameraucana

- Early 1970's these began to be developed from the Araucana imports from Chile
- Considered the 'Newest American Breed'





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Ameraucana

- Varieties :
 - Comb type
 - Pea comb
 - Color type
 - Blue, Blue Wheaton
 - Black, Silver
 - White, Buff
 - Brown Red, Wheaton





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Ameraucana

- Skin color:
 - Varies with color variety
- Egg Shell color:
 - Green to blue eggs
- Adult Size:
 - Roosters 5.5 – 6.5 pounds
 - Hens 4.5 – 5.5 pounds





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Ameraucana

- Commercial use
 - Used primarily for egg production with some lines heavily selected for egg production
 - Some people call them Easter egg chickens or Easter eggers because they lay blue eggs
- Characteristics
 - Good general farm chicken
 - Some lines will exhibit broodiness
 - Good at foraging





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Fayoumi

- Often called Egyptian Fayoumi
- Very old breed goes back to the time of the pharaohs
- Mature very quickly
 - Some start crowing at 4 weeks





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Fayoumi

- Egg Shell color:
 - Off-white, some may be pink-tinted
 - Excellent layers of small eggs
- Adult Size:

• Roosters	4.5 lb. 2 kg
• Hens	3.5 lb. 1.6 kg
- Feral-like, being self-sufficient and tough, can forage well



<http://www.triplespringacres.com/rareandfancychickens.htm>





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Sex-link

- Not a breed of chicken
- Sex-links are a result of a predetermined cross that results in easily “sexable” male and female chicks at hatch



Sex-links



<http://www.countryhatchery.net/chickens.html>

- Sex links are not a breed
- They are cross-bred chickens whose color at hatching is differentiated by sex, thus making chick sexing easier
- Traditionally, chicken sexing is done by observing the vent of the chicks (males have a small "bump") or by observing feather development on the wing tips of the chicks (if they have two different sizes of feathers, they are females)
- This is very expensive and time consuming



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Sex-Link

- They are most often used in the commercial egg industry to produce brown egg laying strains
- They are usually very hardy and produce good carcass
- Often called Red Stars, Cinnamon Queens, Bovans, Cherry Eggers, Production Reds



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Sex-links

- Most often used in the commercial egg industry to produce brown egg laying strains
- Often called Red Stars, Cinnamon Queens, Bovans, Cherry Eggers, Production Reds



Sex links (examples)

In black sex-links, both sexes are black, but the males have a white dot on their head



http://aviewfromthegreenbarn.blogspot.com/2009_03_01_archive.html



Female red sex links are red with white flecks and white underneath their stomach. The males are white with red markings

Egg color	Breed
White	Leghorn Hamburg Polish Fayoumis Ancona Houdan
Light brown	Orpington Malay Cochin Rhode island Plymouth rock Jersey giant
Dark brown (chocolate)	Marans Welsummer
Brown	Wyandotte Dominique Cornish cross Rhode island Java Naked necks New Hampshire Delaware Australorp
Blue/green	Araucana Legbar Ameraucana



<http://chickenpic.blogspot.com/2008/03/marans-chickens-cuckoo-marans-chocolate.html>



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Want more information?

ATTRA

<http://en.aviagen.com/assets/Public-Relations-Images/ATTRAMeatChickenBreeds.pdf>

Feather Site

<http://www.feathersite.com/Poultry/BRKPoultryPage.html>

**American Livestock
Breeds Conservancy**

<http://albc-usa.org/cpl/wtchlist.html>

Backyard Chickens

<http://www.backyardchickens.com/products/category/chicken-breeds>

My pet chicken

<http://www.mypetchicken.com/chicken-breeds/breed-list.aspx>



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