THE POULTRY BREEDS FOR SMALL FARM OPERATIONS
WHAT TO GET AND WHY?

- Establish objectives of your venture and how serious you are about your goals
  - Are you concerned about making money?
  - Do you just want to pay for the hobby?
  - Are you trying to produce a higher quality product?
  - Do you want to control all aspects of production?
  - Are you just trying to “get back to the basics?”
H ave a Goal

- Select the breed that best fits your goals
  - Breed Preservation – keeping breeds from going extinct
  - Dual-purpose – both meat and eggs
  - Meat production
  - Egg production
  - Developing your own breed/strain – when you just can’t find a breed that meets your goals
If your are producing meat what do your costumers want
- Yellow or white skin
- Large plump breast or lots of dark meat

For egg production consider
- Size of the eggs
- Color of the eggs
  - White, green, brown, dark brown, tinted or blue
INTRODUCTION

- Chickens are traditionally classified into groups based on:
  - Size
  - Were they come from
  - Shape
  - Color
INTRODUCTION

- Chickens come in two sizes;
  - Standard or Large fowl
    - These are the normal size birds
  - Bantam – A miniature size chicken or duck, usually about ¼ to of the regular size
    - Used mainly as ornamental birds
    - Most are miniature copies of the large breeds
      - Silkies, Sebrights, d’Uccles, etc have no large counterpart and are considered ‘True Bantams’
    - Some do have good egg production
      - Eggs are small
Class

- Typically refers to groups of birds from a common geographical area
  - Large fowl - American, Asiatic, English, Mediterranean, Continental and All Other Standard Breeds
  - Bantam fowl – Modern Game, Old English Game, Single Comb Clean Leg, Rose Comb Clean Leg, Feather Leg, All Other Comb Clean Leg

Breed

- Birds within a class that differ in body shape or size, skin color, comb type, number of toes, feathering of the shanks, etc.
TERMINOLOGY

Variety
- Birds within a breed that differ in feather color or pattern, or in the type of comb

Strain
- Birds within a variety that are developed for specific traits using breeder programs
  - Egg production
  - Meat production
  - Color of eggs

Broody
- When the hen wants to set on the eggs and hatch them
- This stops egg production

Forage
- The ability to scavenge to find their own feed
OTHER THINGS TO CONSIDER

Climate

- Some chickens do better in cold areas others do better in hot areas
  - Mediterranean breeds generally do well in hot humid areas
  - Most American breeds do better in cool area

- Usually birds with large combs will perform better in hot areas
  - Combs can get frost bite
  - Some breeds have varieties with different combs
    - Use a small comb variety in cold areas
COMB TYPES

Single Comb

Buttercup Comb
COMB TYPES

Pea Comb

Rose Comb
COMB TYPES

Cushion Comb

Strawberry Comb
COMB TYPES

The V Comb

Walnut Comb

Carnation Comb
# TOOLS FOR BREED SELECTION

## Temperament

| Easy to handle | Orpington  
|               | Rhode Island  
|               | Faverolles  
|               | Plymouth Rock  
|               | Brahma  
|               | Cochin  
| Friendly | Jersey Giant  
|          | Dominique  
|          | Australorp  
|          | Delaware  
|          | Java  
|          | Araucana  
|          | Ameraucana  
| Aggressive | Modern Game  
|           | Old English Game  
|           | Sumatra  
|           | Aseel  
|           | Malay  
| Wild | Ancona  
|      | Houdan  
| Flighty | Leghorn  
|         | Polish  
|         | Hamburg  
|         | Redcap  

# American Livestock Breeds Conservancy (ALBC) Conservation Poultry Priority List

<table>
<thead>
<tr>
<th>Chickens</th>
<th>Threatened</th>
<th>Watch</th>
<th>Recovering</th>
<th>Study</th>
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<tr>
<td><strong>Critical</strong></td>
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<tr>
<td>Campine</td>
<td>Andalusian</td>
<td>Ancona</td>
<td>Australorp</td>
<td>Araucana</td>
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<tr>
<td>Chantecler</td>
<td>Buckeye</td>
<td>Aseel</td>
<td>Leghorn- Non-industrial</td>
<td>Iowa Blue X</td>
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<tr>
<td>Crevecoeur</td>
<td>Buttercup</td>
<td>Brahma</td>
<td>Orpington</td>
<td>Lamona</td>
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<td>Holland</td>
<td>Cubalaya</td>
<td>Catalana</td>
<td>Plymouth Rock</td>
<td>Manx Rumpy (aka Persian Rumpless) X</td>
</tr>
<tr>
<td>Modern Game</td>
<td>Delaware</td>
<td>Cochin</td>
<td>Rhode Island Red - Non industrial</td>
<td>Sussex</td>
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<tr>
<td>Nankin</td>
<td>Dorking</td>
<td>Cornish</td>
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<td>Redcap</td>
<td>Faverolles</td>
<td>Dominique</td>
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<td>Russian Orloff</td>
<td>Java</td>
<td>Hamburg</td>
<td>Jersey Giant</td>
<td>Wyandotte</td>
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<td>Spanish</td>
<td>Lakenvelder</td>
<td>Houdan</td>
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<td>Sultan</td>
<td>Langshan</td>
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<td>Minorca</td>
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<td>Sumatra</td>
<td>Malay</td>
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<tr>
<td>Yokohama</td>
<td>Phoenix</td>
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</tbody>
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*links*
BREED PRESERVATION

- If you are interested in raising a rare breed then these may be for you

- **Heritage Poultry Conservancy**, dedicated to the preservation of ‘Heritage Poultry’ through education and breeding programs.
  
  http://www.heritagepoultry.org/

- **American Livestock Breeds Conservancy** has a list of poultry that are disappearing at an alarming rate along with ways to find them

  http://albc-usa.org/
CHOOSING A BREED

If there is a lot of interest for heritage breeds in your area, then that is probably the best way to go, but if your main concern is egg production then you would be better with a modern hybrid breed.

Heritage breeds

- Wheaten Old English Game Hen
- Golden Campine hen
- Delaware (Indian River)
## Chicken Breed Search Tool

For each row, select at least one characteristic.

### Select Checkboxes: All / None

<table>
<thead>
<tr>
<th>Choose a chicken breed size:</th>
<th>Standard</th>
<th>Bantam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose the purpose of the chicken breed:</td>
<td>Egg Layer</td>
<td>Dual Purpose</td>
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<tr>
<td></td>
<td>Meat Bird</td>
<td>Ornamental</td>
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<tr>
<td>Choose a rate of egg production:</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Choose the egg size produced by your chickens:</td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td>Choose the egg color(s) you want in your flock:</td>
<td>White</td>
<td>Light Brown</td>
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<tr>
<td></td>
<td>Brown</td>
<td>Dark Brown</td>
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<tr>
<td></td>
<td>Blue/Green</td>
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<tr>
<td>Choose the chicken comb types you want:</td>
<td>Buttercup</td>
<td>Cushion</td>
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<tr>
<td></td>
<td>Pea</td>
<td>Rose</td>
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<tr>
<td></td>
<td>Single</td>
<td>Strawberry</td>
</tr>
<tr>
<td></td>
<td>V-Shaped</td>
<td>Walnut</td>
</tr>
<tr>
<td>How often would your chicken be broody?</td>
<td>Seldom</td>
<td>Average</td>
</tr>
<tr>
<td>Choose a climate that your chicken breed will enjoy:</td>
<td>Cold</td>
<td>Heat</td>
</tr>
<tr>
<td>Check the temperaments you are looking for in your chicken breed:</td>
<td>aggressive</td>
<td>friendly</td>
</tr>
<tr>
<td></td>
<td>flighty</td>
<td>easily handled</td>
</tr>
<tr>
<td></td>
<td>noisy</td>
<td>quiet</td>
</tr>
<tr>
<td></td>
<td>not bear confinement well</td>
<td>bears confinement well</td>
</tr>
</tbody>
</table>

[Submit Your Chicken Breed Search!](http://www.backyardchickens.com/breeds/breed-search.php)
Modern broilers are crosses

Almost all modern breeds were derived by crossing older breeds
  - Even older breeds have been crossed with other breeds to improve them

Crossing improves performance
  - Many breeders cross egg laying breeds into their birds to improve egg production
  - Then select the birds so that they fit the breed type
  - ‘Poultry Purists’ frown on this!
MAKE YOUR OWN ‘BREED’ OR ‘STRAIN’

- Crossing breeds also allows for the use of traits from different breeds
- Look for the traits that you desire then breed those birds to produce the results that you want
  - That’s how many of the breeds today were derived
- Want a fast growing bird?
- Purchase broiler breeder males and use on pure breed hens
  - Plymouth Rock
  - Rhode Island Red
  - Or whatever your favorite breed is
- F1 generation will have improved growth
- Makes a good terminal cross
WHERE TO GET YOUR BIRDS

- It is usually best to get day-old chicks and raise them to fit the intended program
  - Improving biosecurity!

- Purchase from commercial hatcheries
  - A quick internet search will lead to dozens of hatcheries
  - Ask around your area and to other farmers to find a hatchery that is recommended close to your location

- Purchase from farm and feed stores

- Purchase or trade from other local producers

- Or, maintain breeding stock to produce replacement stock in house
MEAT BREEDS

These birds produce a great carcass
They do not lay eggs well
The fast rate of growth in meat chickens breeds, primarily the broilers used in the commercial industry, is due to breed and strain selection.

Some people worry that hormones (growth hormones/steroids) are used to make the chickens grow, this is FALSE. The birds have been bred for meat quality and growth through years of research in the poultry industry.

Hormones are not used in poultry production because:

• They simply don’t work in chickens (the birds don’t have the chemical receptors for them)
• The birds grow fast enough without them, they wouldn’t help growth even if they did work
• They are too expensive, the poultry industry strives on producing the most meat possibly for as little money as possible
• Hormones are not approved or authorized by the FDA for any type of use in poultry production
FALSE ADVERTISEMENT

Since hormones are NEVER used in poultry production (conventional or otherwise), producers that market their products as “Hormone Free” or “No Added Hormones” are misleading consumers.
MEAT BREEDS

- Broilers
- Freedom Rangers
- Cornish
- Java
- Jersey Giant
- Naked Neck
- New Hampshire
EGG LAYERS

These are birds that usually grow slower than breeds for meat and reach a lower body weight, but are great at laying eggs (200-300 a year!)
EGG LAYERS

Individual farmers have their preferences about the color of the eggs, the breed choices and the housing system that they want.
The color of the shell has no effect on the nutritional content or taste of the egg.

The differences in color come from the nutrition that the hens received.

Consumers often assume that brown eggs are more “natural” or “healthier”.

- Brown eggs can fetch a higher price.

Pastured or free-ranged eggs can have a lower amount of cholesterol, but the difference is really not significant for one’s health.
**Broody Hens**

- 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 naturally incubating until the whole clutch is laid.
  - This way, all the chicks will hatch at the same time.

- Some breeds tend to show more broodiness than others, this is a sign of which hen will take care of the eggs, while others will not.
  - If you plan on selling eggs, it might be good to not have hens with high broodiness as they tend to lay less eggs and want to sit on, and incubate the eggs they lay.

- Breeds like Leghorns and Minorcas don’t get broody, so make sure you’ve got an incubator to raise chicks if that’s the end goal.
CHOOSING A BREED

Hens will usually be kept for a couple of years, so you need to consider the weather in your area

- If you have cold winters, you may choose a heavier bodied, well feathered bird, if you have hot and humid summers then you should choose smaller birds

- If you want to breed and raise your own replacements, then you probably want a broody breed that will sit on the eggs and hatch them, but if you only want the eggs then you don’t want a broody breed
CHOOSING A BREED

There is no real difference in the nutritional content of eggs of different colors (white, brown or even blue/green eggshells)

- The color of the shell is given by the breed of the hen, but the contents MAY depend on the diet of the hens

Most people have an idea and a preference, so educate but don’t argue, find out what kind of eggs your clients like and make sure to get hens that lay that color of egg
EGG LAYER BREEDS

- Ameraucana
- Ancona
- Australorp
- Hamburg
- Houdan
- Leghorn
- Minorca
- Polish
- Sex Links
These breeds were developed to lay a reasonable number of eggs and still produce a good carcass.

- Egg production and growth are negatively correlated, this means that when selecting for growth rate egg production is reduced and when selecting for eggs production body size and growth rate is reduced.

- They are what we think of when we talk about the traditional farm chicken.
DUAL-PURPOSE BREEDS

- Brahma
- Delaware
- Dominique
- Orpington
- Plymouth Rock
- Rhode Island Red
- Wyandotte
**Brahma**

- Asiatic breed originating from China in the mid 1800’s
- Very large heads and loose feathers are consistent characteristics
  - Varieties: light, dark, buff
  - 8-12 lbs.
  - Egg shell color: light to dark brown
- Slow growing, but good meat producers
- They do well in cool climates due to heavy feathering
- Slow moving, deep vocalizations, calm birds that forage well and can go broody
Developed in 1940 by crossing off-colored Barred Plymouth Rock males and New Hampshire females

- Egg shell color: brown
  - Size: 6-9 lbs.
- Great for meat production, good layers
- Calm disposition, fast growing, good foragers
DOMINIQUE

- Considered the oldest ‘American’ breed, possibly from Asiatic and Hamburg bloodlines
  - Size: 4-7 lbs.

- Egg shell color: brown

- Dual purpose bird for meat and eggs

- Good foragers, can go broody, calm birds
ORPINGTON

- Originated in England in the late 1800's
  - Large frame, very loose feathering (fluff)
  - Varieties: buff, black, white, blue
  - Egg shell color: light to dark brown
  - **7-10 lbs.**

- General purpose for heavy meat production and eggs
- Often go broody and can be used as natural incubators
- Calm and docile, but don’t forage well
- Extra feathering can cause breeding and cleanliness issues
PLYMOUTH ROCK

- Developed in America in the middle 19th century

- Different varieties
  - Barred, White, Buff, Partridge, Silver Penciled, Columbian
  - Size: 7-10 lbs

- Egg shell color: brown

- Used to produce modern broiler strains
  - Some commercial broiler breeders still use Plymouth Rocks as their female line
  - Good general farm chicken, good broodiness, calm but poor foragers
RHODE ISLAND RED

- Developed in New England, Massachusetts and Rhode Island early 1900’s

- Red or white color
  - Size: 6 - 8.5 lbs.

- Egg shell color: brown to dark brown

- Used to produce many modern hybrids
  - Cinnamon queens, bovans, sex-links, etc.

- Used more for meat than for eggs
  - Will lay through moderate cold weather
  - Good foraging, docile, friendly, tough
WYANDOTTE

- Originated in New York State in the late 1800’s with the original Silver Laced Wyandotte known as ‘American Sebrights’ or ‘Sebright Cochins’
  - Varieties: Silver Laced, Golden Laced, White, Buff, Partridge, Silver Penciled, Columbian, Blue
  - 5.5-8.5 lbs
  - Egg shell color: very light to rich brown shell
  - Does well in colder climates
  - Relatively docile, good overall bird,
  - Commonly bred for show
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