

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

This program is funded by the Beginning Farmer and Rancher Development Program (BFRDP)

USDA-NIFA-BFRDP 2010-03143











Meat chicken breeds for small farms



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



Meat Breeds

- These birds produce a great carcass
- They are not good egg producers





Meat breeds

- Cornish
- Java
- Jersey giant
- Naked neck
- New Hampshire
- Broilers
- Freedom Rangers





- Originated in England in the late 1800's and are often called "Indian Game"
- Foundation bloodlines include: Aseel, Black Red Old English Game, and Malay
- Male and female body conformation similar, feathers lay very close to body







- Varieties:
 - Dark
 - White
 - White Laced Red
 - Buff
- Comb type:
 - Pea





- Skin color:
 - · Yellow
- Egg shell color:
 - Brown
- · Adult Size:
 - Roosters
 - Hens



8.5 - 10.5 pounds

6.5 - 8 pounds









- Commercial use:
 - Super heavy meat producing fowl
 - Valuable for crossing with other breeds to produce market poultry
- Characteristics:
 - Can be very aggressive (game birds)
 - · They tend to eat a lot of feed
 - Poor foragers





Java

- Second oldest American breed
- Varieties:
 - Black
 - White
 - Mottled
 - Auburn
- Comb type:
 - · Single









Java

- Egg shell color:
 - Brown
- · Adult Size:
 - Roosters
 - Hens

9.5 pounds

7.5 pounds







Java

- Commercial use:
 - Heavy meat producing fowl
- Characteristics:
 - Calm disposition
 - Hens are good brooders
 - Cold hardy
 - Very good foragers





Jersey Giant

- Varieties:
 - Black
 - White
- Comb type:
 - Large single comb
- · Skin color:
 - Yellow



Chicks have a "tuxedo" pattern



http://www.backyardchickens.com/web/viewblog.php?id=512-Jersey_Giants



- Egg shell color:
 - Brown
- · Size:
 - Roosters
 - Hens

13 pounds

10 pounds



http://www.backyardchickens.com/web/viewblog.php?id=512-Jersey_Giants



Jersey Giant

- Commercial use:
 - Super heavy meat producing fowl
 - Fair layers of extra large eggs



- Characteristics:
 - Calm disposition
 - Slow growing and have a poor feed conversion
 - Not good at foraging for feed



Naked Neck

- Sometimes incorrectly called 'Turkens', it is not a breed, but a genetic trait
- Genetics first appeared in Eastern Hungary but reached its perfection in Germany



This trait can be added to any breed







Naked Neck



- Birds must have very distinct areas of bare skin on the neck
- Other traits vary dependant upon original breed characteristics
- Trait will express itself upon crossing in the first generation









Naked Neck



- Commercial use:
 - Used primarily for meat production
 - Posses less than half the feathers of commercial birds, provides smooth skin and easy plucking
 - Fewer feathers make them more heat tolerant







New Hampshire

- Developed in New Hampshire from Rhode Island Reds that were selected only for growth (not color or egg production)
- Comb type:
 - Single comb
- Skin color:
 - · Yellow





New Hampshire

- Egg shell color:
 - Brown
- · Adult Size:
 - Roosters
 - Hens

- 8.5 pounds
- 6.5 pounds







New Hampshire

- Commercial use:
 - Great for meat production
 - Mature early
 - Fair egg production



- Characteristics:
 - Fast growing
 - Usually calm but can be aggressive
 - Poor at foraging

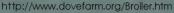




Broiler (Cornish Cross)

- Commercial broilers have been selected for increased growth rate since the early 1900's
- Foundation stock were the Barred and White Plymouth Rocks and Cornish breeds









Broiler (Cornish Cross)

- Broilers are very efficient at converting feed to meat
- 90% of the increased growth rate is due to better genetics of the birds
 - · The rest is due to nutrition



Hormones in chicken: FALSE!



- The fast rate of growth in meat chicken breeds is due to breed and strain selection
- Some people worry that hormones (particularly growth hormones and steroidal hormones are used to make the chickens grow so fast, but this is not true
- Hormones are not used in poultry production, for several reasons:
 - they don't work in chickens (they don't have the chemical receptors for them)
 - they grow fast enough without any type of chemical help
 - hormones are very expensive
 - hormones are not approved or authorized by FDA for any type of use in poultry production





Because hormones are never used in poultry production (conventional or otherwise), producers that market their products as "Hormone free" or "No added hormones" are misleading their consumers by making them believe that other chicken producers use these hormones

FDA can fine producers that use this claim

Be careful how you market your product!





Broiler (Cornish Cross)

- Several choices are available internationally, but fewer in the US
 - US market
 - Cobb, Aviagen
 - Hubbard, Heritage Farms
 - Pureline, Peterson
 - International market, same companies but a greater variety of products
 - Colored birds, naked neck, slow growing, etc.





Freedom Rangers

- These are an alternative to modern broilers
- Developed in France in the 1960's
- Ready for processing at 12 weeks
- Comb type:
 - Single comb
- · Skin color:
 - Yellow



http://www.motherearthnews.com/happy-homesteader/wrong-about-freedom-rangers-zb0z10zgri.aspx



Freedom Rangers

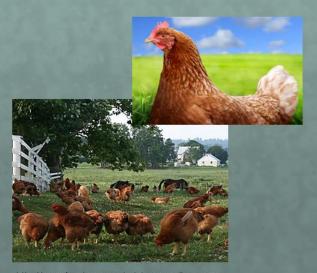
- Commercial use:
 - Great for meat production
 - Mature early
 - Poor egg production



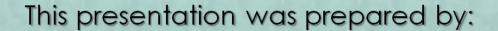
- Fast growing
- Usually calm
- Good at foraging



http://yellowdoorbarn.blogspot.com/2011/01/chicken-breeds.html



http://www.freedomrangerhatchery.com/learnmore



UNIVERSITY OF ARKANSAS

University of Arkansas, Fayetteville Dan Donoghue Ixchel Reyes Herrera



USDA-ARS-Poultry Production and Product Safety Research Unit

Annie Donoghue Jonathan Moyle



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

This program is funded by the Beginning Farmer and Rancher Development Program (USDA-NIFA-BFRDP)

USDA-NIFA-BFRDP 2010-03143





This project is the result of the collaboration of these institutions:











USDA-NIFA-BFRDP 2010-03143





Want more information?

ATTRA	http://en.aviagen.com/assets/Public- Relations- Images/ATTRAMeatChickenBreeds.pdf
Feather Site	http://www.feathersite.com/Poultry/BR KPoultryPage.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/chicke n-breeds/breed-list.aspx