

Livestock

Species

- Cattle
- Swine
- Poultry
- Sheep
- Goats
- Horses
- Llamas
- Fish

Cattle

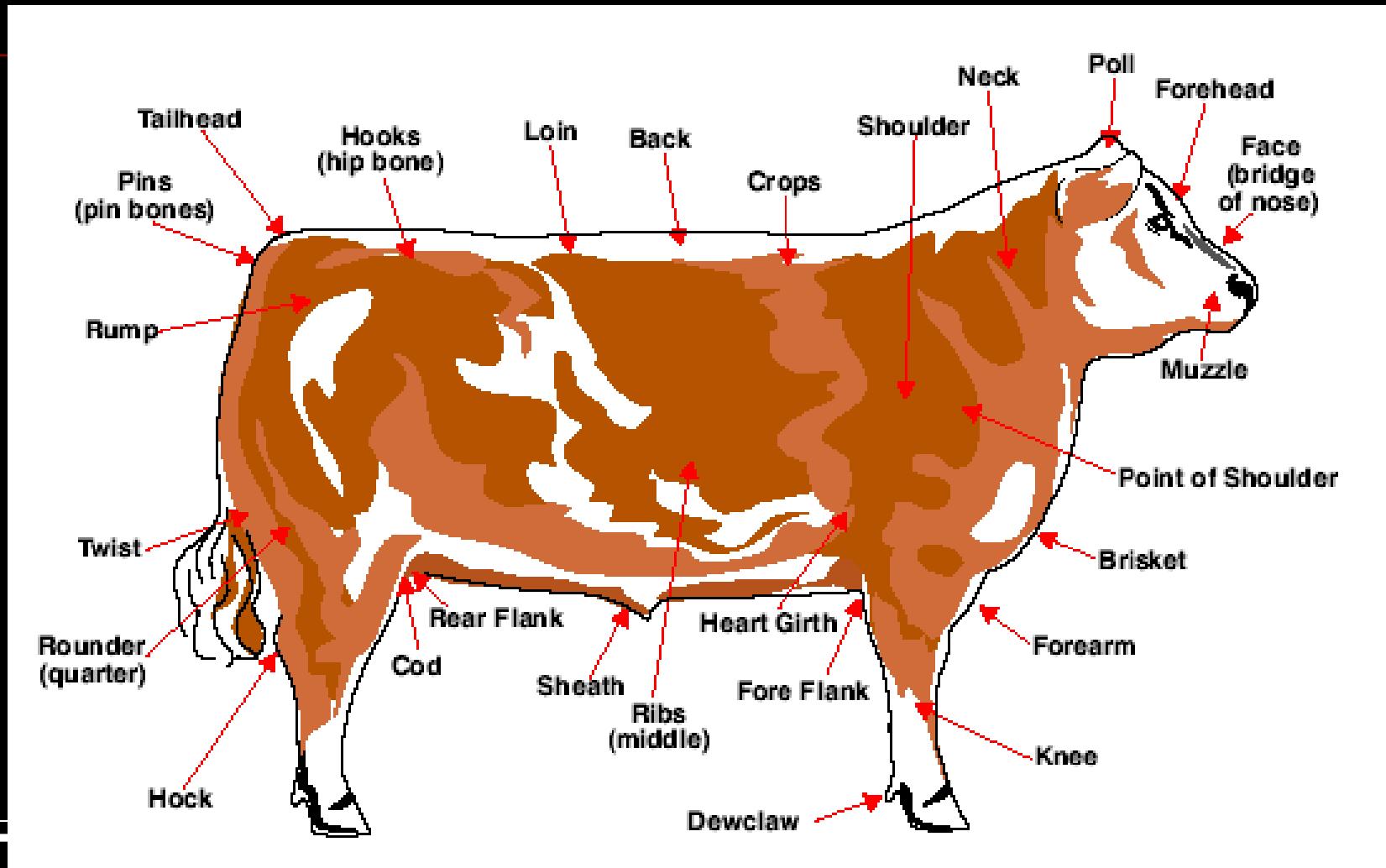
Terms

- Cow – female who has had a calf
- Heifer – female who has not calved
- Calf – young
- Steer – altered male
- Bull – intact male

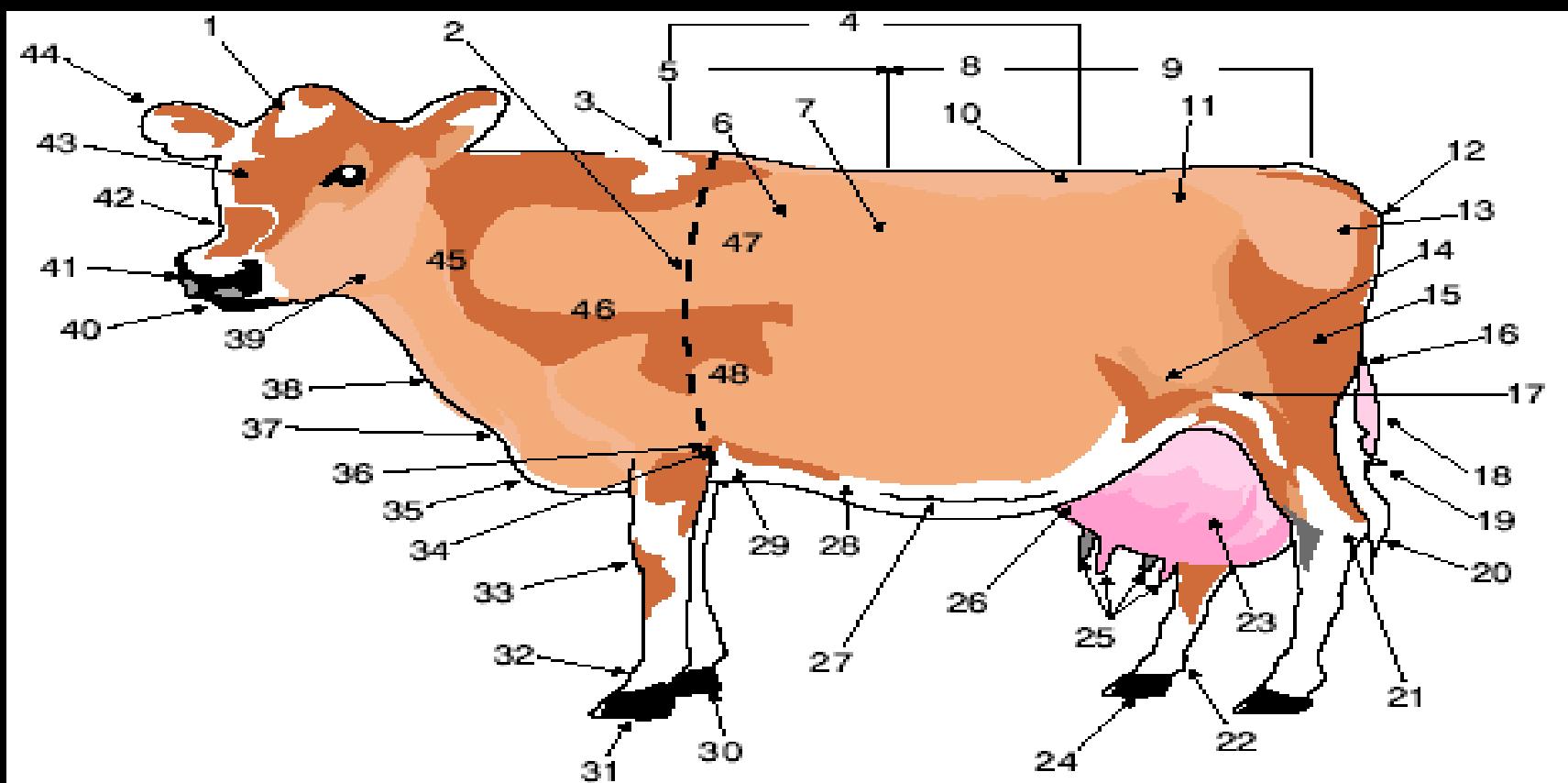
CATTLE PRODUCTS

- Beef (meat)
- Veal (meat)
- Milk
- Leather (hide)
- Pharmaceuticals (cattle tissues)
- Gelatin (connective tissue)
- Household products – candles, cosmetics, detergents, plastics, etc (fats and proteins)

External Parts of a Beef Animal



What are the major external parts of a dairy cow?



BEEF BREEDS

BEEF BREED TERMS?

- Polled
 - born naturally without horns
- marbling
 - desirable presence of fat in the muscle
- cutability
 - amount of available retail cuts from the carcass
- dual-purpose breed
 - traditionally used for both milk and beef production

ANGUS

- Originated
 - Northeast Scotland
- Most popular purebred beef animal because:
 - vigorous
 - perform well in feedlots
- Polled
- Solid black or red
- known for their marbling



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CHAROLAIS



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- Originated in:
 - Charolais, France
- Pink skin
- White to straw colored
- Large breed
- Polled or horned
- Heavily muscled
- Popular crossbreeding

HEREFORD



2002 Champion Steer

Shown by: Jay Blake, Brookston, IN

- Originated in:
 - Hereford County, England
- White faces & red bodies
- White markings on switch, underline, below the hocks, and on their crest & flank
- Horned
- Easily handled
- Moderate Sized

Polled Herefords

- Started in
 - Iowa by Warren Gammon
 - gathered naturally polled animals and bred them
- Same traits as Herefords
- Eligible for registry in
 - American Hereford Association
 - American Polled Hereford Association



SSF Keysha 949

Shown by:

Kasey Herman, Skiatook, OK



LIMOUSIN

- Originated in:
 - Southwestern France
- Wheat to rust red or orange colored
- Polled & horned
- Long & Shallow bodied
- known for calving ease
- also their leanness & large loin eye area
- High cutability



American Shorthorn



provided by the American Shorthorn Association

- Originated in:
 - England
- Dual-purpose breed
- Red, white, or roan
- Horned or polled
- Short
- Docile
- Good mothering ability

SIMMENTAL

- Originated in:
 - Western Switzerland
- White face is dominate
- Red & white spotted or solid red
- Black strains have been developed
- Polled & horned
- Rapid growth
- Thick muscled



provided by Beate Milerski

- Originated in:
 - United States
- Used in crossbreeding programs
- Light gray or red & sometimes black
- loose skin, large hump over shoulder & large drooping ears
- Resistance to disease, insects
- Tolerant to heat, rapid weight gain, quality carcasses
- unpredictable temperament
- Excellent ability to forage on poor range

BRAHMAN



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BRANGUS

- Originated from:
 - a cross between Brahman & Angus
- 3/8 Brahman & 5/8 Angus
- Polled
- Solid black
- Many of the same characteristics as the Angus & Brahman



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Beefmaster



- Developed in:
 - Texas by combining $\frac{1}{2}$ Brahman, $\frac{1}{4}$ Shorthorn, $\frac{1}{4}$ Hereford
- Coloration varies but red is dominant
- Horned or polled
- very hardy and good milking ability
- Good temperaments
- Heavy weaning weights
- Rapid weight gain

Beef Operations

- Cow-calf operation
 - keeping mature cattle to produce calves
 - cows bred every year
 - calves sold 2 ways
- Feeder calves
 - weaned animals under a year old until sold to feedlot and raised to slaughter weight
- Yearling feeders
 - calves between 1 and 2 years of age sold to another producer to feed out to slaughter weight

DAIRY BREEDS

Holstein



provided by Hoard's Dairyman

- Most popular breed
- makes up 90% of dairy cattle in the U.S.
- Came from Netherlands in 1600's
- Black & white
- very large animals
- produce large average amount of milk per cow
- milk is lower in butterfat and protein
- butterfat –
 - the fat content in the milk

Red & White Holstein

- Evolved from the black & white Holstein
- Red & white in color
- all other characteristics very similar to Holstein
- large animals
- high milk production
- low butterfat and protein

Ayrshire

- Originated in Scotland
- light to dark cherry red, browns, and white in any combination
- polled
- known for strong feet & legs, grazing ability, and well-attached udders



provided by Hoard's Dairyman

BROWN SWISS

- Originated in the Alps of Switzerland
- Solid brown in color
- Nose & tongue are black
- light-colored band around muzzle
- higher fat and protein ratio than Holstein
- Calm disposition



provided by Hoard's Dairyman

GUERNSEY

- Originated in the island of Guernsey
- color is mostly fawn with white markings
- smaller calves
- their milk color is more golden in color
- popularity has declined



provided by Hoard's Dairyman

Jersey

- Originated in the island of Jersey
- vary in color but can be fawn, near white, grayish, with or without white markings
- known for udder qualities
 - well shaped with strong attachments
- lower in milk
- butterfat & protein is the highest
- increasing in popularity
- small breed



provided by Hoard's Dairyman

Milking Shorthorn



provided by Hoard's Dairyman

- Originated in England
- any combination of red and white, just red or just white
- very adaptable
- commonly used for beef & dairy
- a fairly new breed designated as a dairy breed in 1968

Dairy System

- Heifers are bred and calve
- When calves are 1-3 days old it is removed
- Cow is milked 2-4 times per day to maintain production
- Calf is fed milk replacer and sold or raised as future heifer

Dairy By-Products

Terms

- Veal
 - meat of young calves that are not used for replacement animals
- Beef
 - meat from cattle
- Cattle by-products
 - products made from various parts of the cattle

Swine

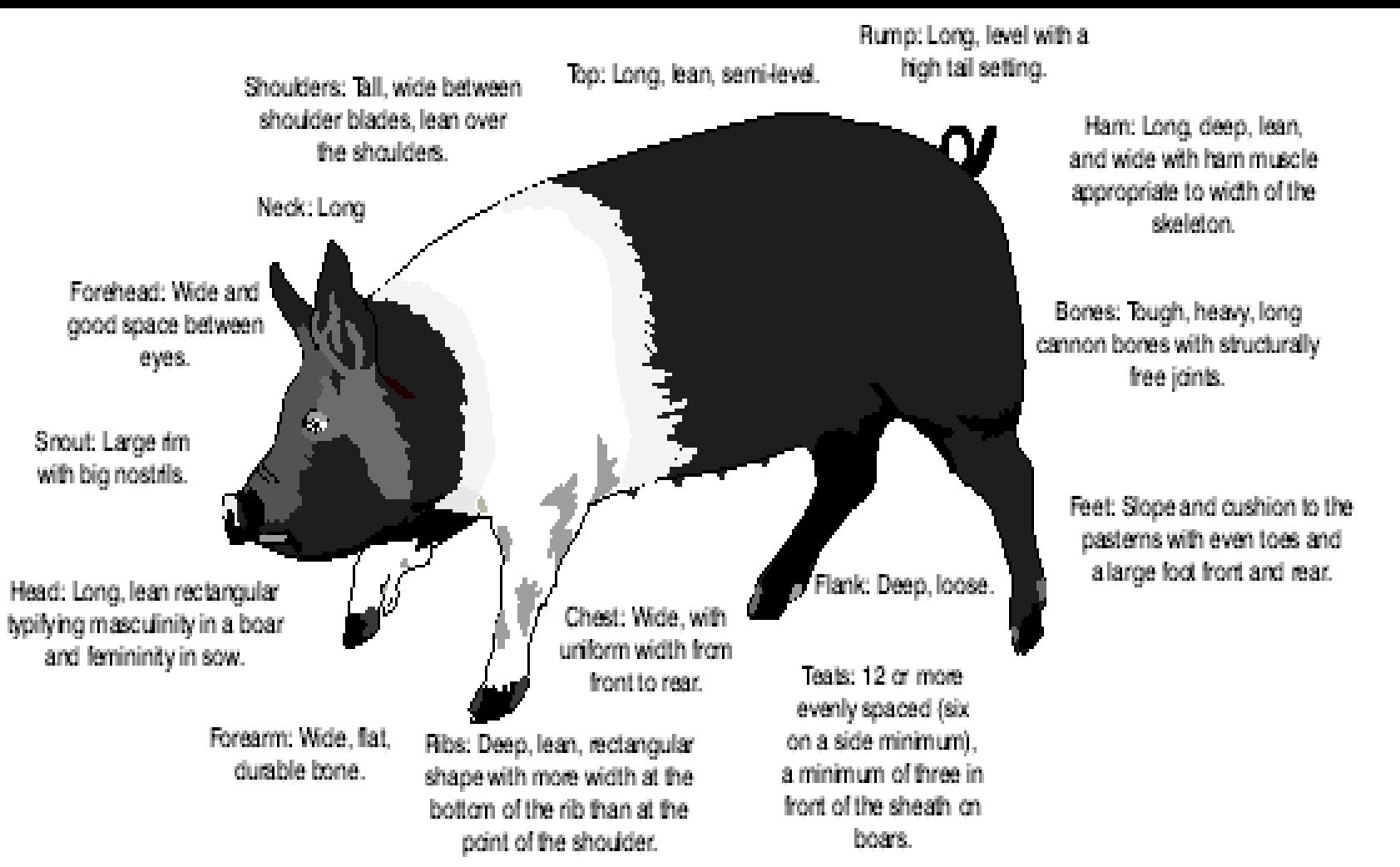
Swine Products

- Pork (meat)
- Leather (hide)
- Lubricants, waxes, plastics (fat)
- Bone meal

Terms

- Piglet - a baby pig
- Barrow - a male pig that was castrated at a young age
- Gilt - a young female pig that has not given birth or farrowed
- Sow - an older female pig
- Boar - mature male hog

What are the major parts of a hog?



TERMS

- **Prolificacy**
 - the ability to produce large numbers of offspring
- **Meat-type hog**
 - hog that produces the greatest amount of high value meat cuts

DUROC



provided by National Swine Registry

- Originated in the United States
- color is varying shades of red
- droopy ears
- good mothering ability
- efficient feed converters
- fast growth rate
- prolificacy
- a meat-type hog

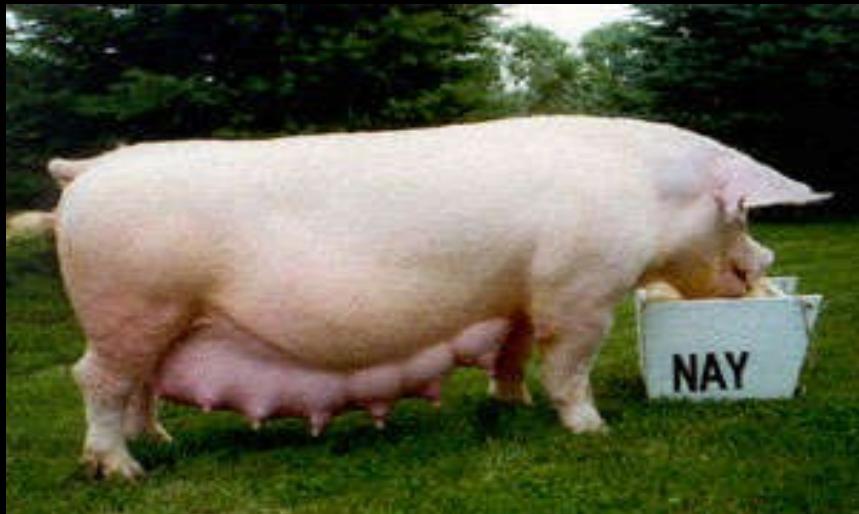
HAMPSHIRE

- Originated in England
- black hogs with a white belt that encircles the forepart of body, starting behind head and neck
- erect ears
- foraging ability
- leanness of carcass
- muscling
- used as show animals or in crossbreeding programs



provided by National Swine Registry

YORSHIRE

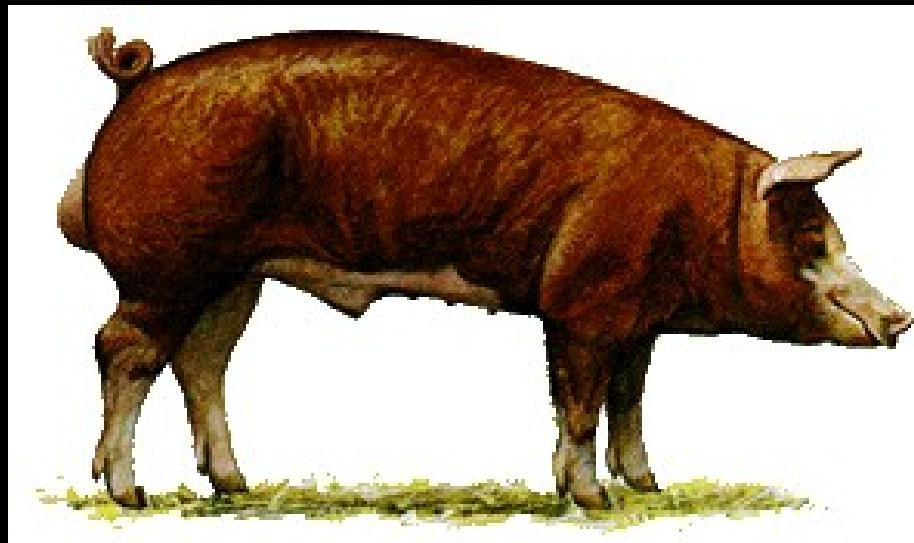


provided by National Swine Registry

- Originated in Yorkshire, England
- color is white, can have black freckles
- long bodies
- erect ears
- large litters
- good mothering ability
- good feed efficiency
- rapid growth
- used as bacon-type hogs or in crossbreeding programs

Hereford

- Originated from the Poland China, Duroc and other breeds
- color is red with a white face
- droopy ears
- prolific
- good mothering ability
- foraging ability



Berkshire



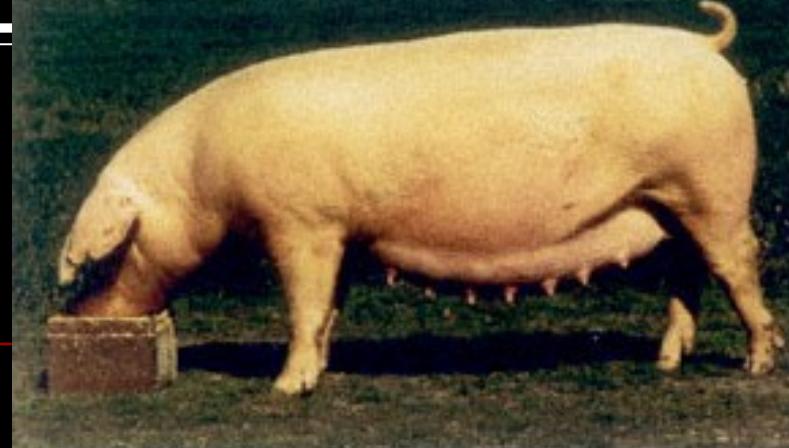
- Originated in Berkshire & Wiltshire Counties in England
- color is black with 6 white points (feet, tail, snout)
- erect ears
- medium-sized hog
- lean carcass

- Originated in Ohio
- color is black with six white points (feet, tail, & face)
- drooping ears
- large breed
- produces carcasses with large loin eyes
- very little back fat
- commonly used in crossbreeding programs

Poland China



Landrace



- Developed in Denmark in the late 1800's and early 1900's
- Long backs and underlines make a lot of bacon and pork chops
- Droop eared
- White hairs and pink skin
- Good breeders and farrowers
- Great milk production

Chester White



- Developed in Chester Co Pennsylvania in mid 1800's
- Good mothering abilities
- Known for their soundness
 - Soundness is the ability to walk and move on their feet
 - A problem for many pigs

What are the different production systems and how do they work?

Terms

- **Farrowing**
 - process of a female pig giving birth
- **Feeder pigs**
 - a pig that has been weaned and weighs approximately 40 pounds

Sow and Litter Systems

- Pigs are farrowed and fed up to slaughter weight at the same farm
- confinement or pasture systems
- most common swine operations

Feeder Pig Production System

- breed & farrow litters of piglets
- this system farrows and weans and sells the feeder pigs
- keeps a breeding herd of sows that farrow between 14 to 16 piglets each
- minimal investment is required
- must manage to keep a steady supply of feeder pigs to sell
- less feed is required in this system

Finishing Feeder-Pig System

- operations that buy feeder pigs and feed them until they are market weight approximately 240 pounds
- profit is based upon how much feed it takes to produce 1 pound of pork
- the less feed it takes the more profit
- balancing feed rations is very important in this system

Processing Piglets

- When a sow farrows, we must “process” the piglets to allow for healthy identifiable piglets.
- We notch ears, cut needle teeth, castrate males, dock tails, and give iron shots.
- Usually done within 24-48 hrs of birth.
- The earlier, the better – less trauma.

Ear Notching

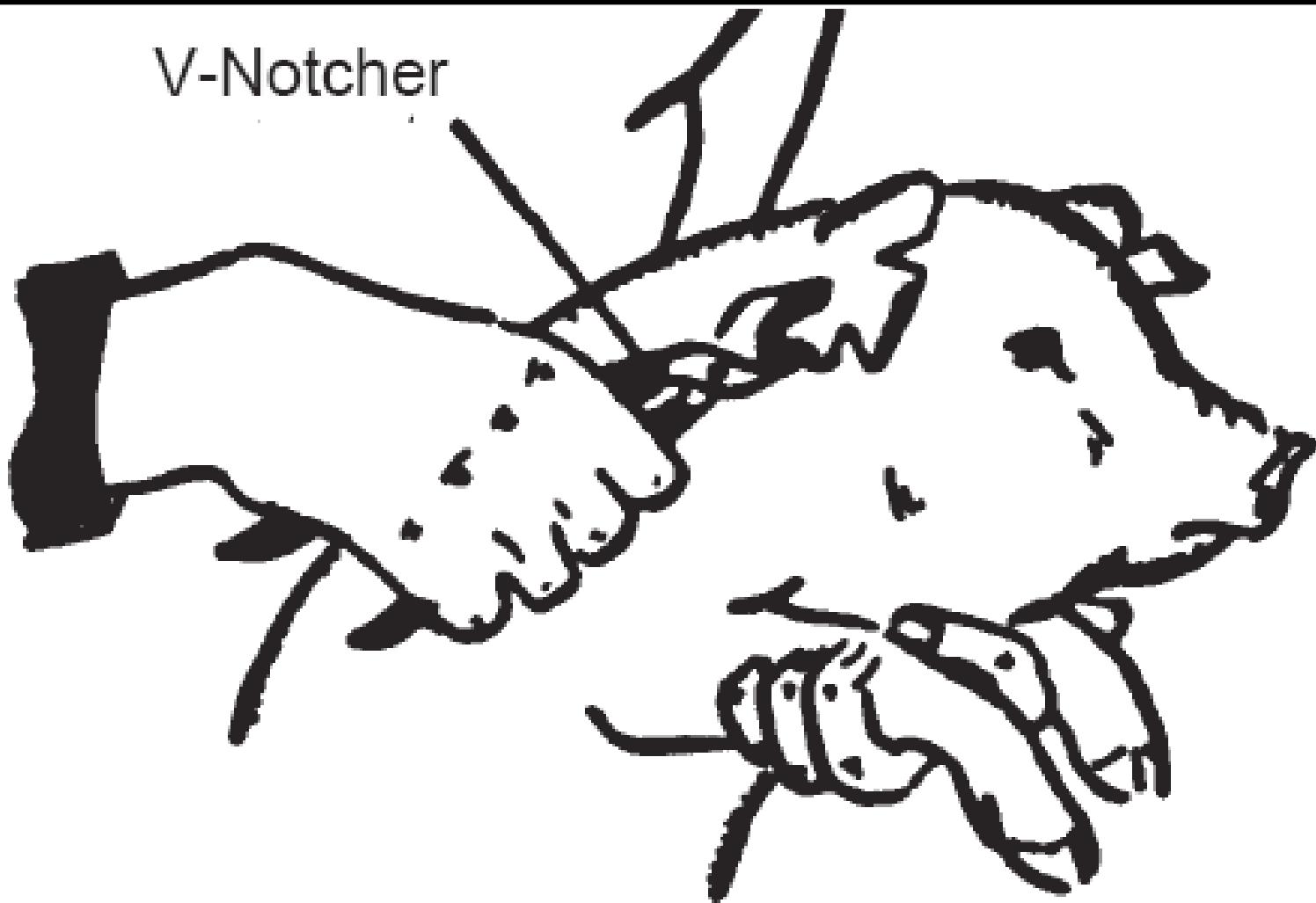


Litter Number

The Key

Pig Number

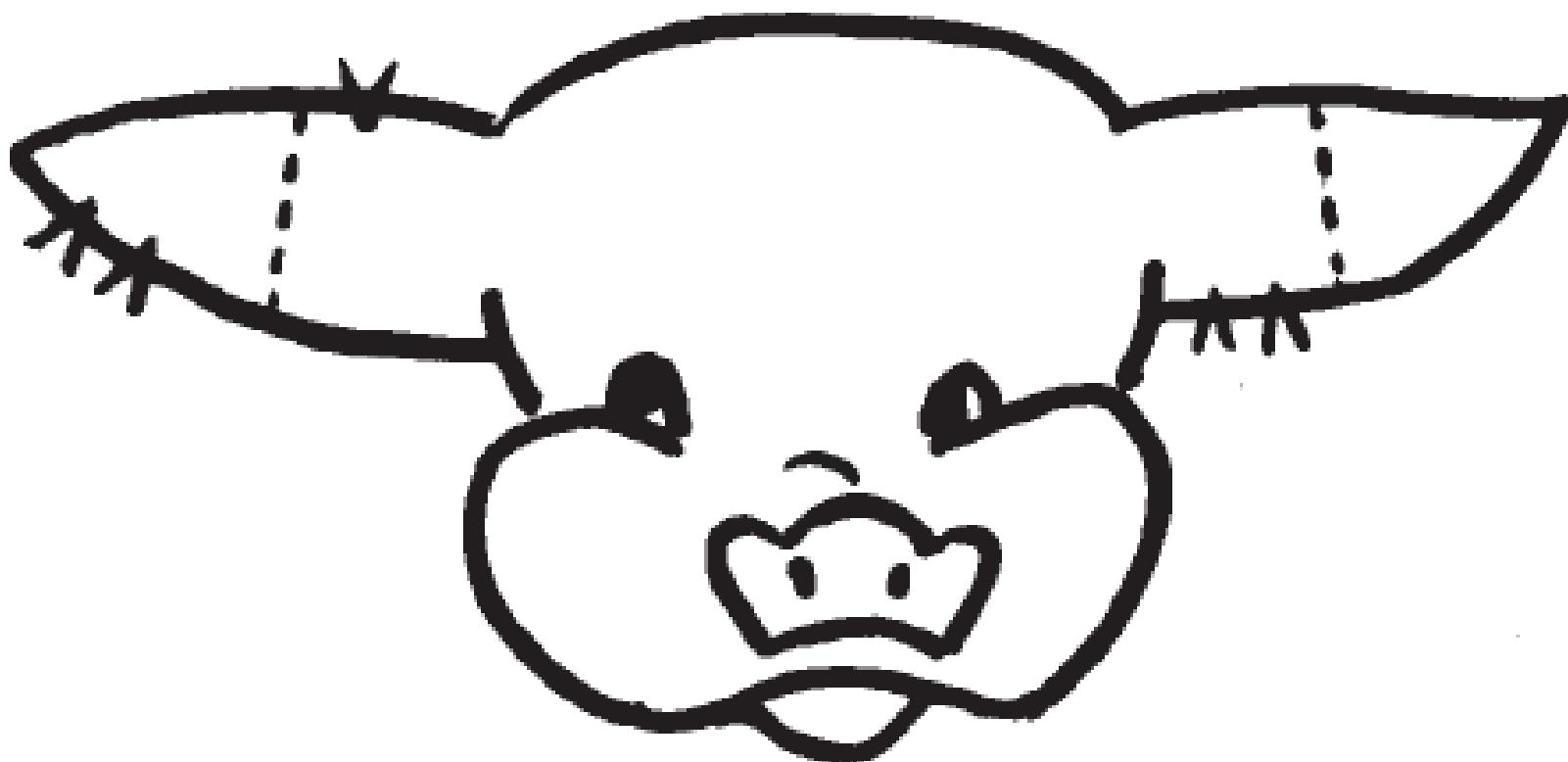
V-Notcher



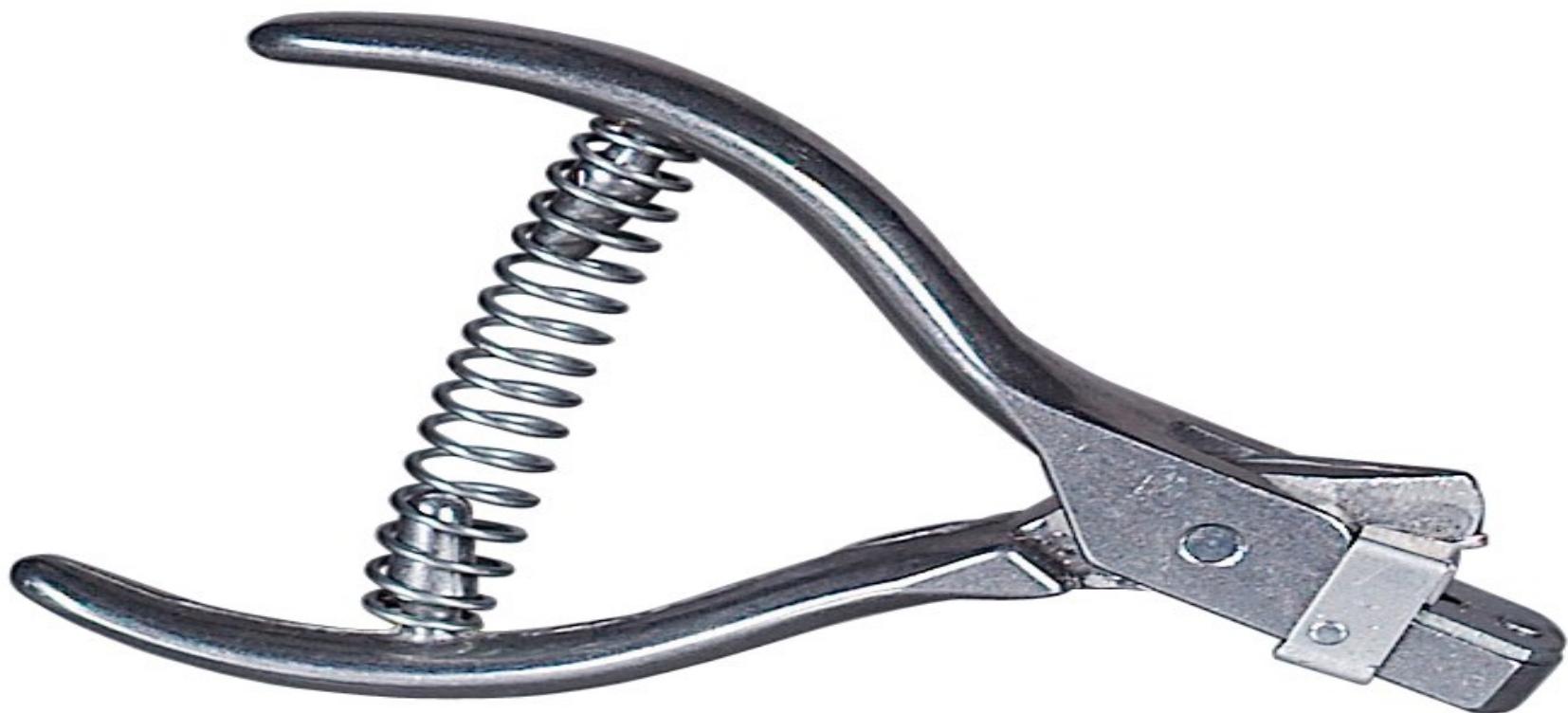
Notching small pigs for identification

Example

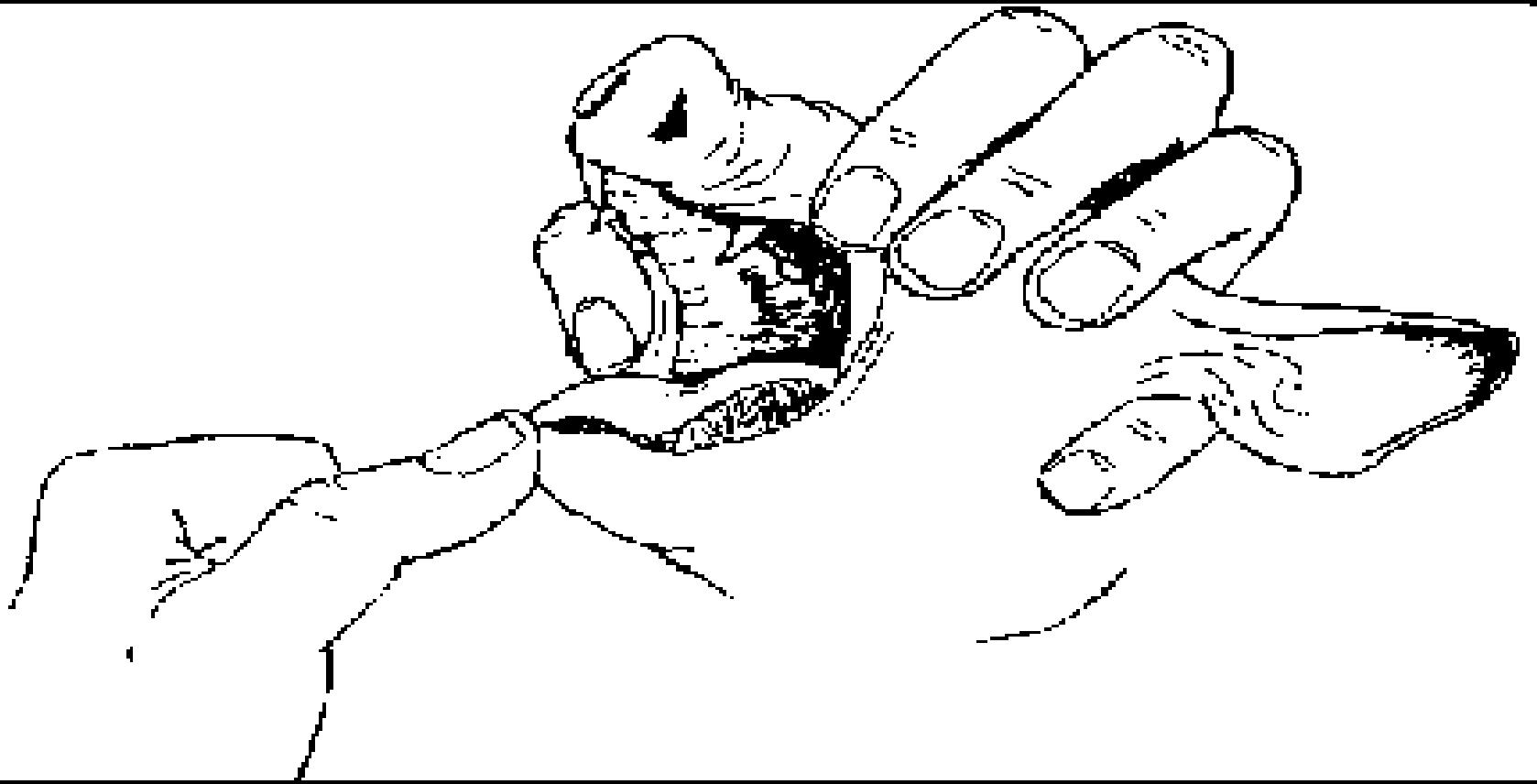
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Ear notcher



Clipping teeth



Clipping teeth

- Piglets bite the sow in their fight to get hold of one of her teats and suckle
- The pain disturbs the sow causing her to get up and prevents her young from feeding
- The cuts to the sow's udder also allow germs to infect the udder
- Piglets will also bite and injure one another

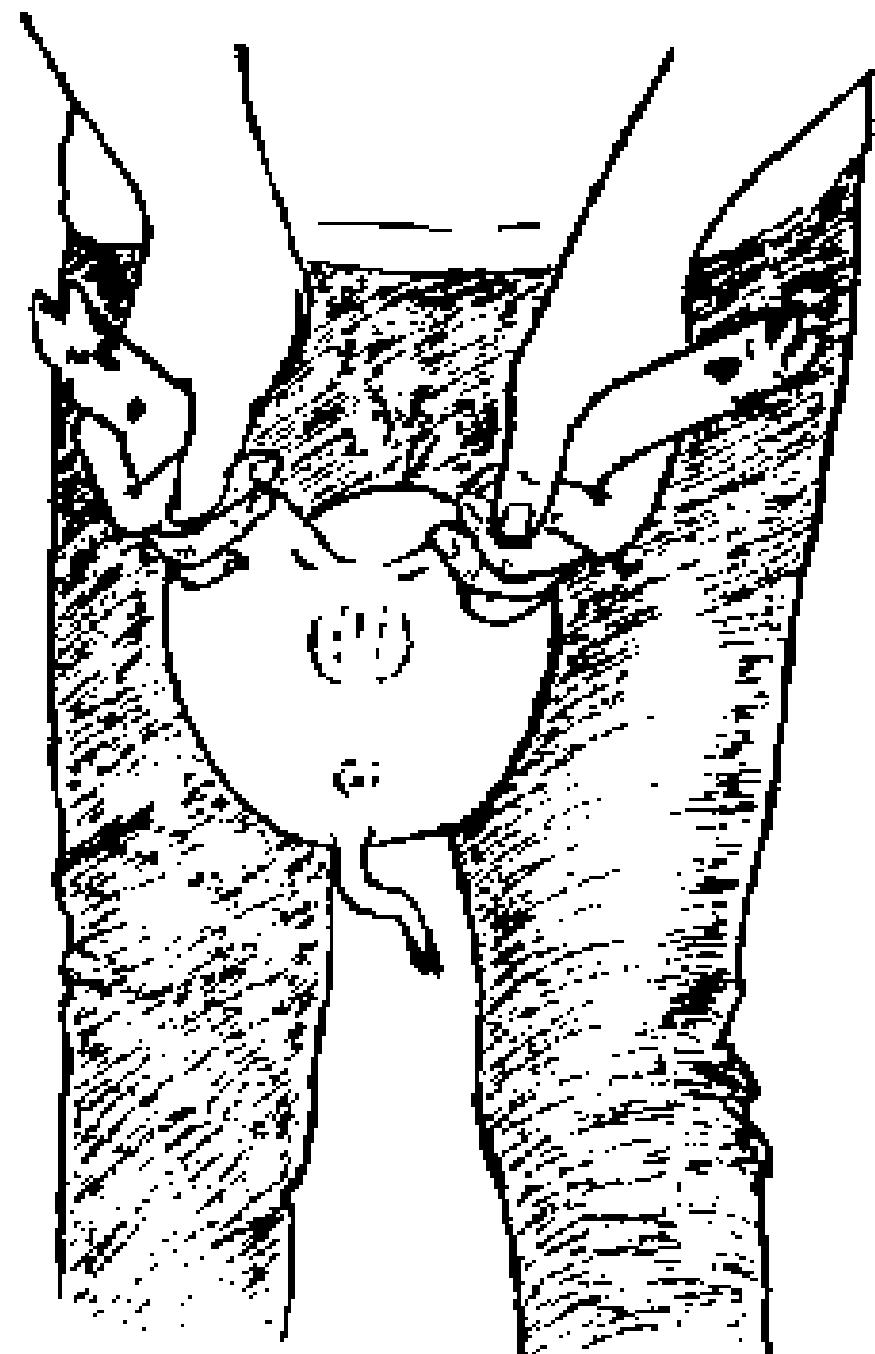
Tail docking



Tail docking

- Must dock tails in large operations because other pigs will chew on the tails and become more aggressive.
- The chewed tails often become infected and the animal becomes sick.

Castration



Poultry

Poultry Products

- Meat
- Eggs
- Feathers/Down

What is poultry?

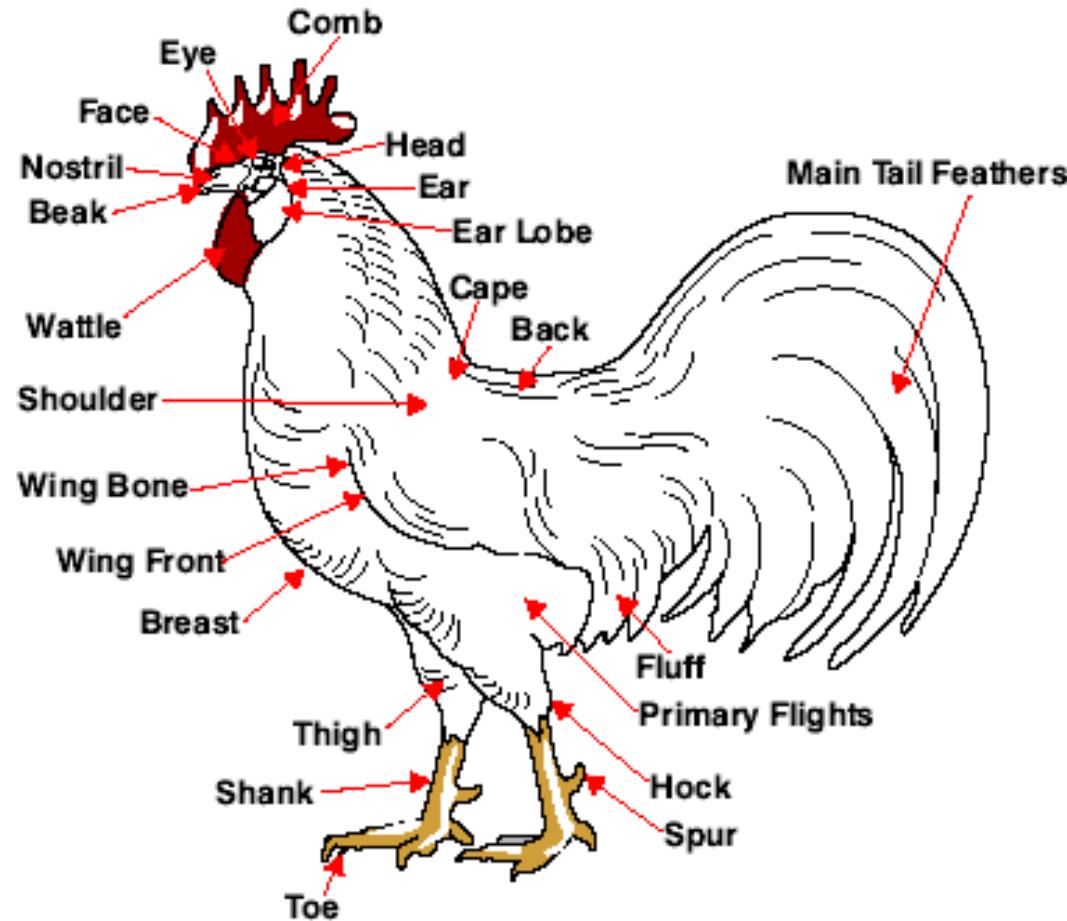
■ Poultry

- group name for all domesticated birds
- referred to as fowl
- have wings, backbones, & feathers
- some can swim

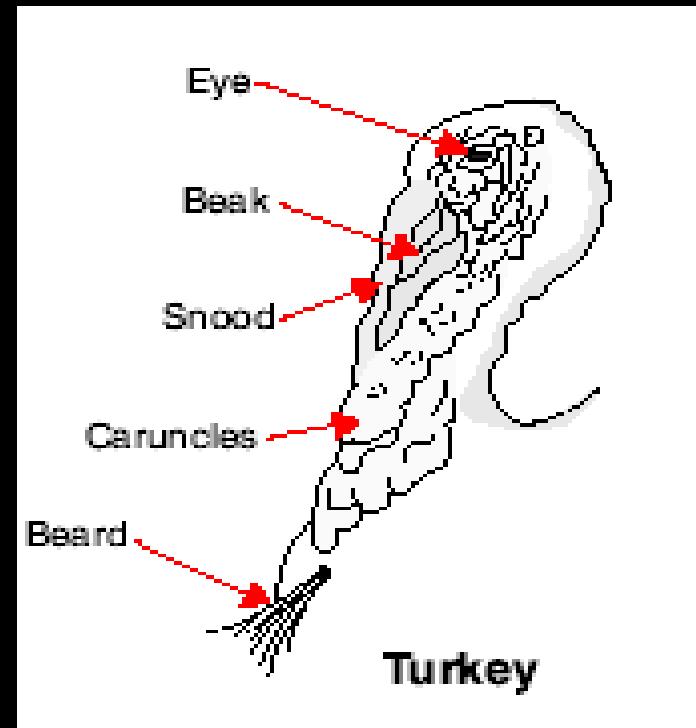
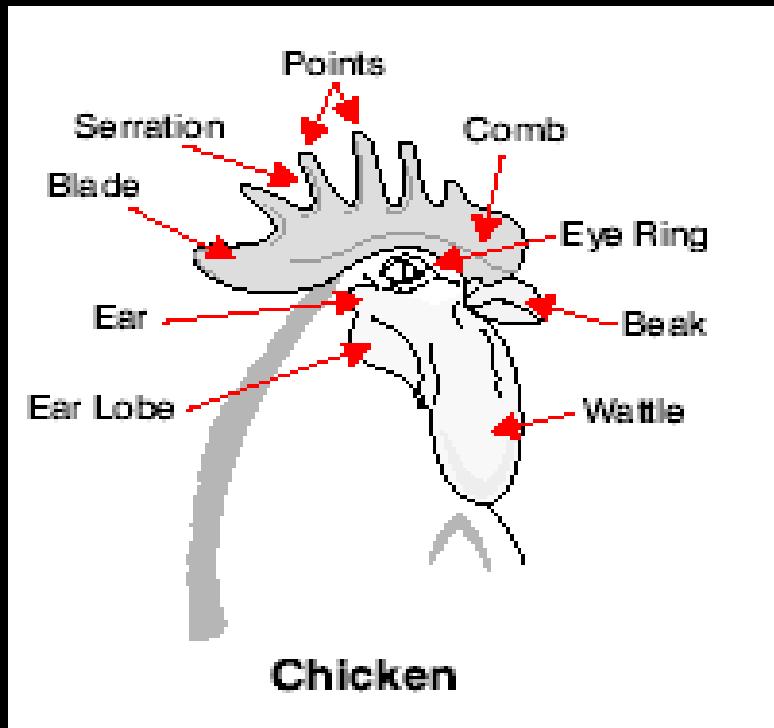
Species

- Chickens
- Turkeys
- Ducks
- Geese
- Game Birds

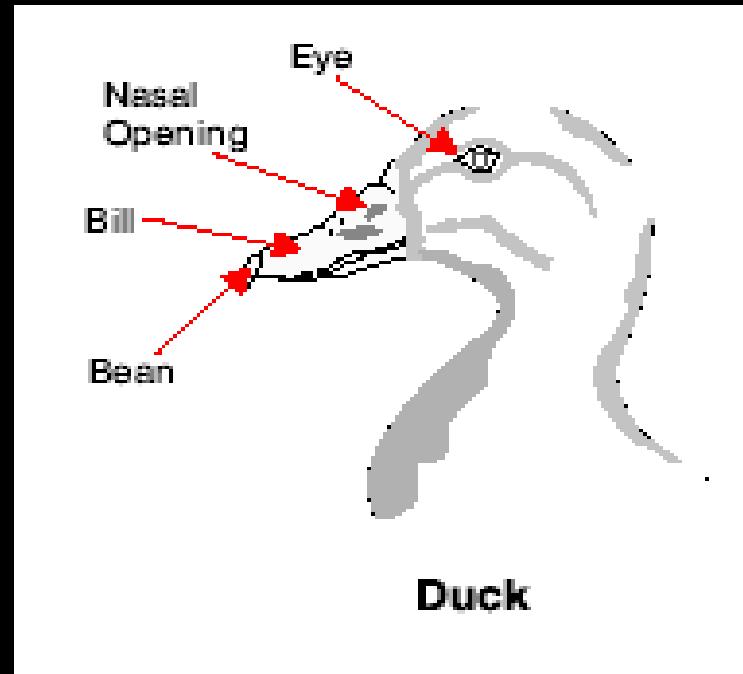
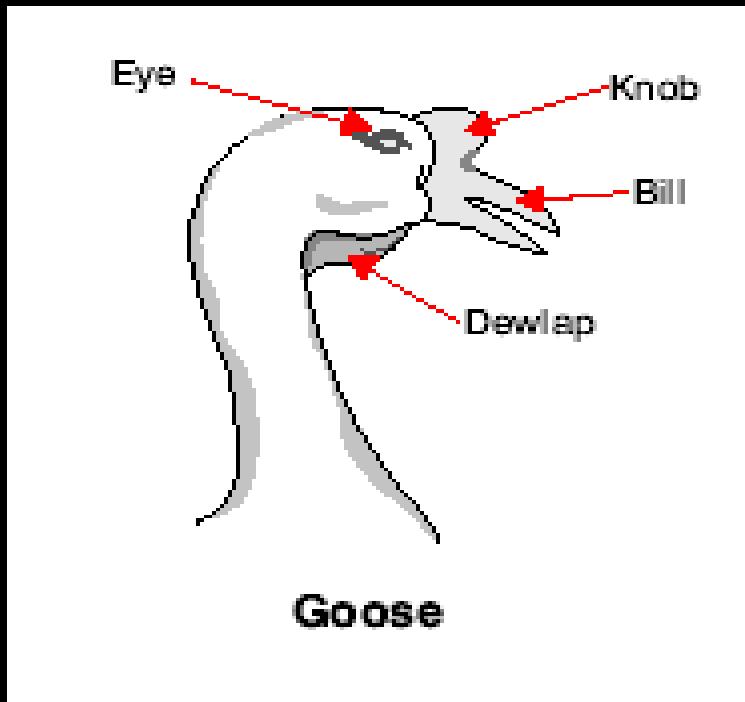
External Parts of Poultry



External Parts of Poultry



External Parts of Poultry



What are terms associated with poultry?

Chickens

- **Layers**
 - chickens that are used to produce large quantities of eggs
 - eggs used for food and produce chicks
- **Broilers**
 - young chickens that weigh about 4 pounds, are 6 to 7 weeks old and used for meat
- **Chick**
 - baby chicken of either sex
- **Cockerels**
 - young male chicken

What are terms associated with poultry?

Chickens

- Roosters
 - mature males
- Pullets
 - young female chickens
- Hens
 - mature females
- Bantams
 - miniature chickens

Turkeys

- Hens
 - mature females
- Tom
 - adult male
 - gobbler
- Poult
 - young turkey of either sex

What are terms associated with poultry?

Ducks

- have down that grows under feathers
- Hens
 - mature female
- Drake
 - mature male
- Duckling
 - young duck of both sexes

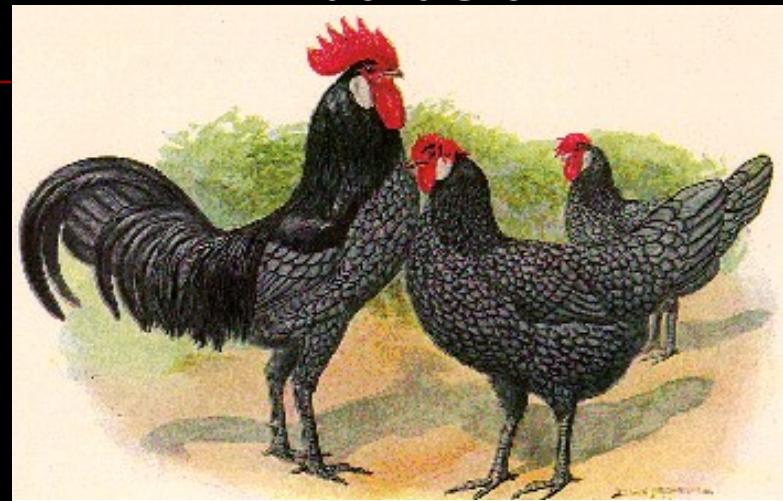
Geese

- Goose
 - female at maturity
- Gander
 - male at maturity
- Goslings
 - young geese

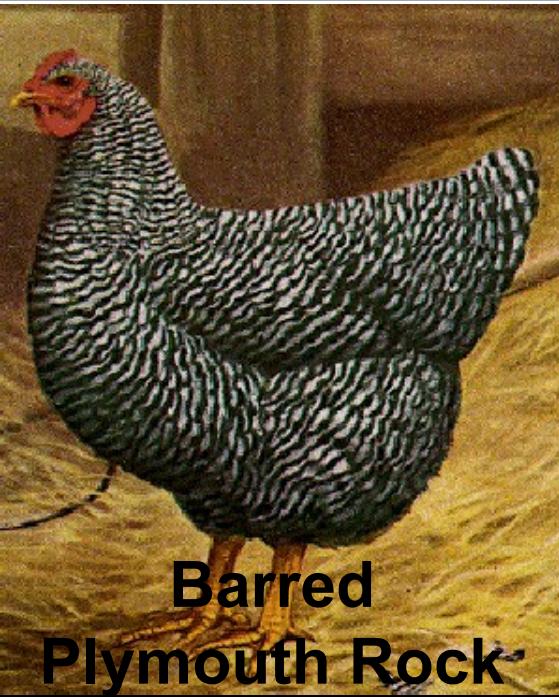
Chickens

- 4 classes of chickens
 - Mediterranean
 - American
 - English
 - Asiatic
- Identification Characteristics
 - color of eggs, skin, eyes, earlobes, and plumage

Andalusian



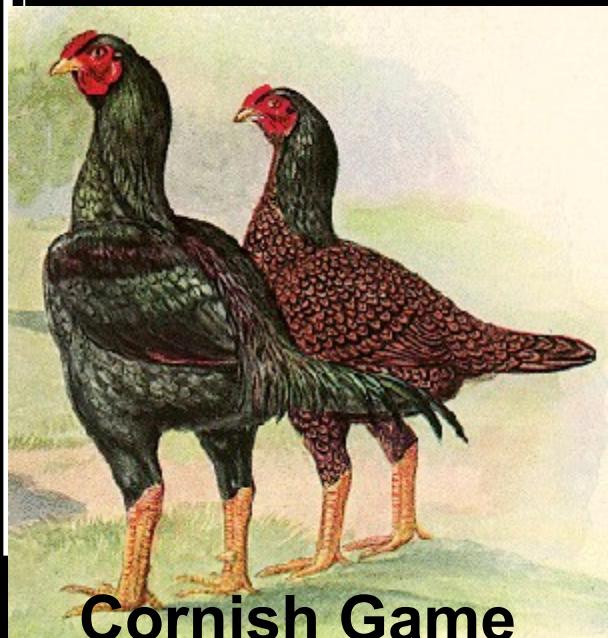
Australorp



**Barred
Plymouth Rock**



Brahma



Cornish Game



**Single-Comb
White Leghorn**

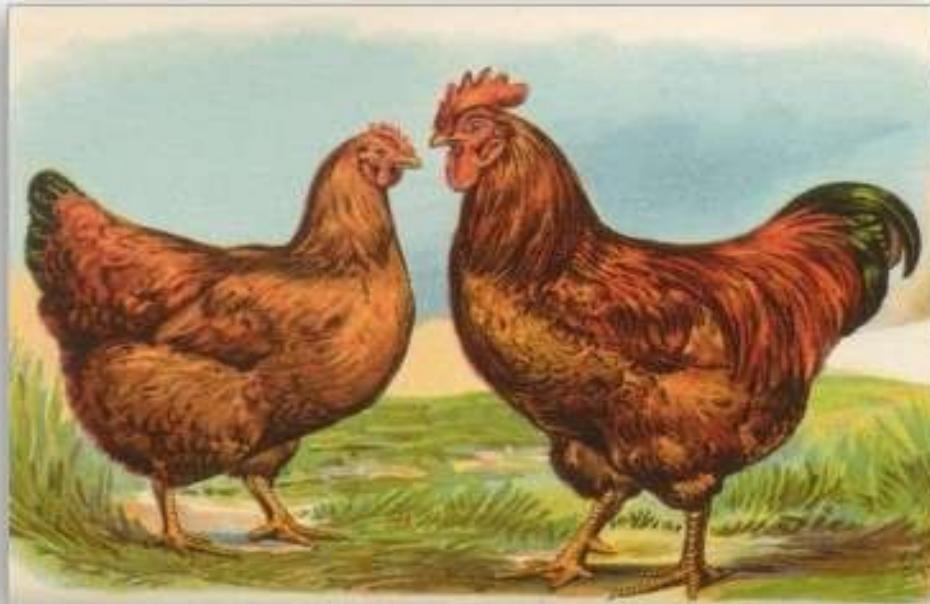


Minorca



New
Hampshire

Rhode Island
Red



CHARACTERISTICS OF SOME TYPICAL BREEDS OF CHICKENS

Turkey Breeds



provided by Mike Walters



Provided by Lynn Magedson

Broad-Breasted Large White

- most popular breed
- developed from crosses
- males have black beards
- all have white feet, beaks, & shanks

Ducks

- Breeds used for meat
 - Call -Aylesbury
 - Swedish -Muscovy
 - Rouen -Cayuga
 - White Pekin
 - Breeds used for eggs
 - Khaki Campbells
 - Indian Runners
- White Pekin
- most commonly used
 - originated in China
 - Weigh 8 pounds
 - white feathered with yellowish skin
 - nervous birds
 - White tinted eggs

Pekin



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Khaki Campbell



Geese

Embden

- Used for meat, eggs, feathers, down and weeding crops
- Most common breeds
 - Toulouse
 - Embden
 - Chinese
 - Pilgrim
 - African



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Sheep & Goats

Sheep and Goat Products

- Lamb, Mutton, Cabrito, Chevon (Meat)
- Milk
- Wool
- Leather
- Keep fields clean

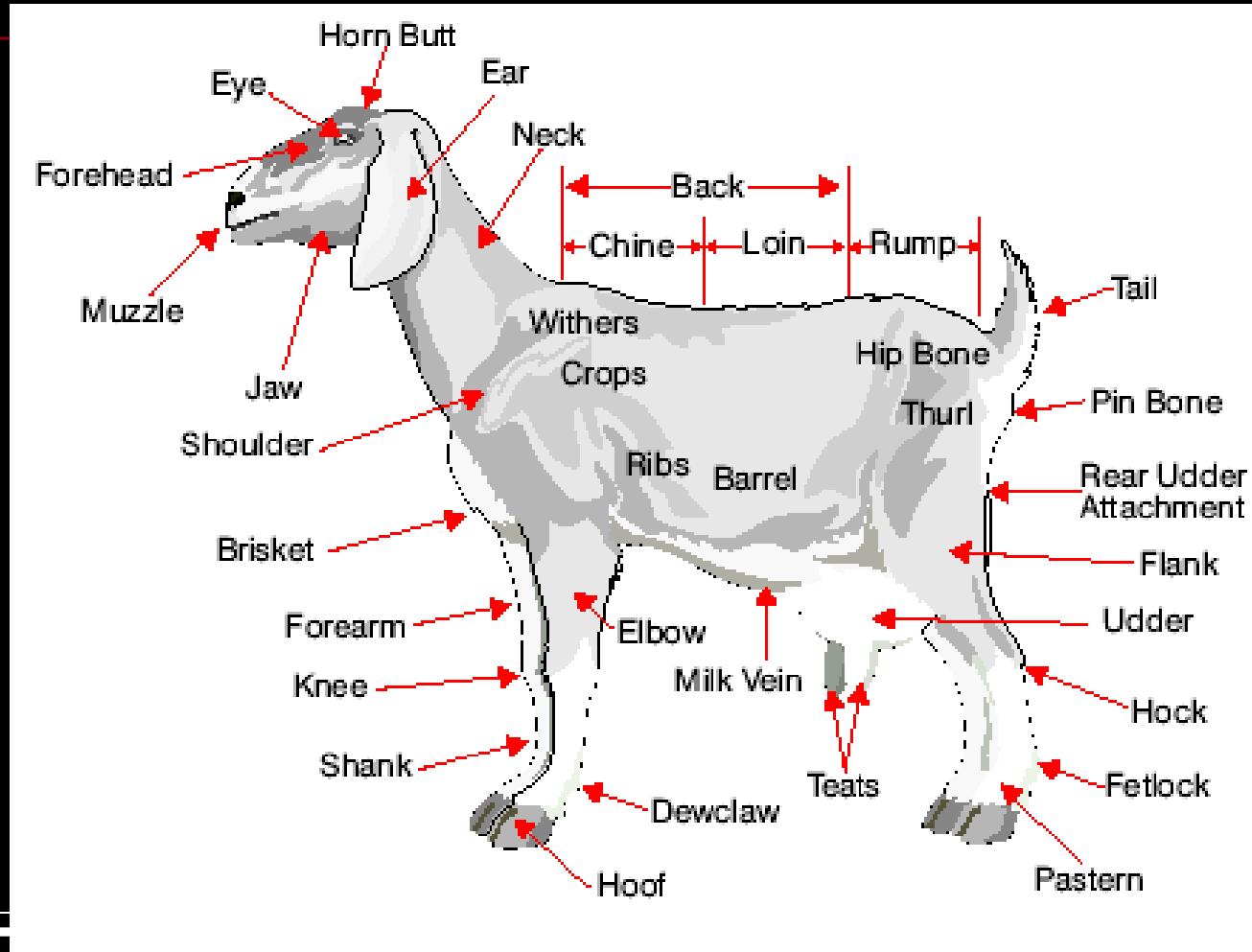
Terms

- Doe - female goat or sheep
- Buck - male goat at any age
- Kid - goat of either sex under 1 year of age
- Yearling - goat of either sex over one year, but under 2 years of age
- Wether - male goat or sheep that has been castrated when young
- Ram - male sheep used for breeding purposes

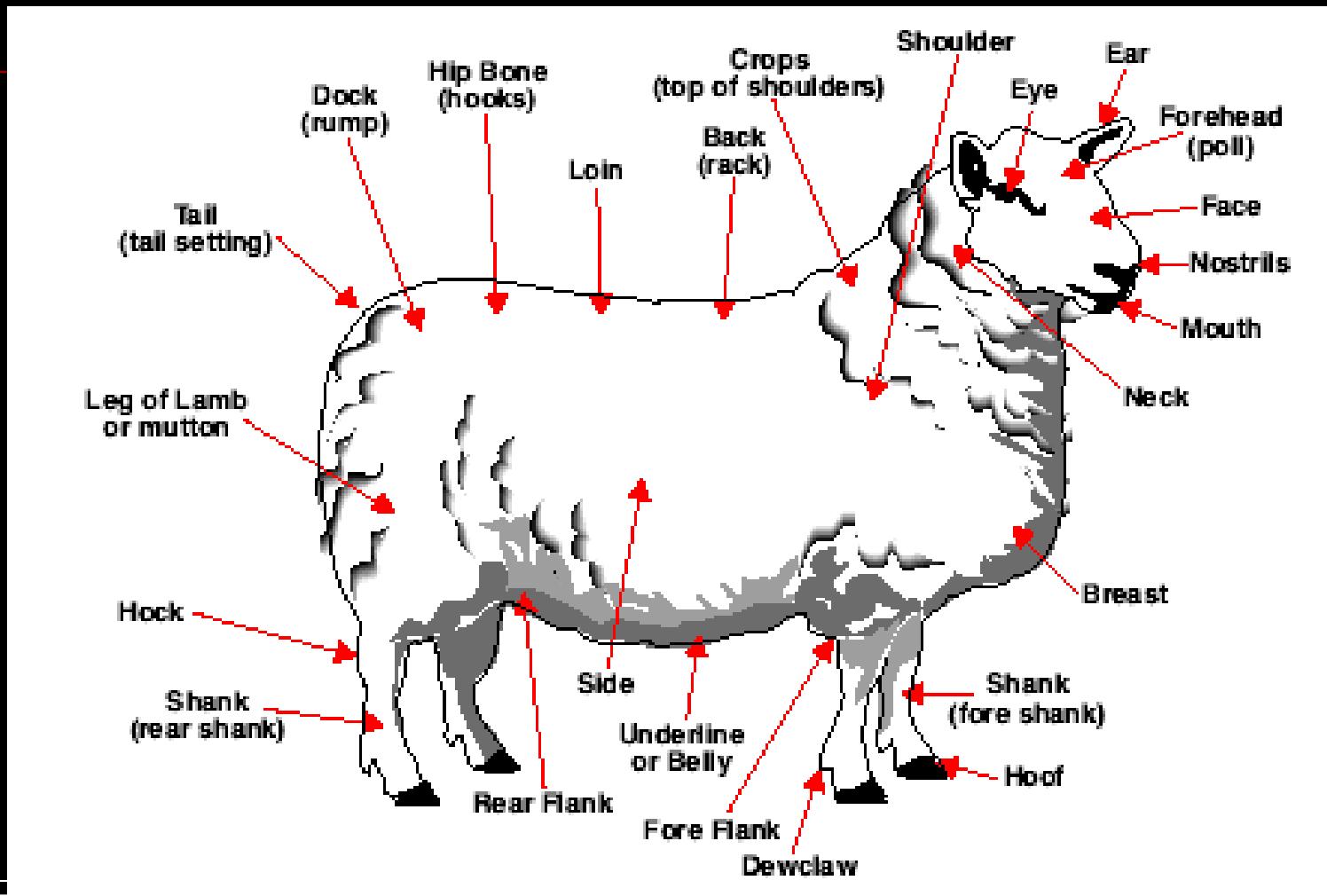
Terms (cont.)

- Ewe - a female sheep
- Kidding - process of a goat giving birth
- Lambing - process of a sheep giving birth
- Lamb - sheep under one year old / meat from a young sheep
- Mutton - meat from a sheep that is over one year of age
- Chammy - leather made from sheep and goats
- Wool - a sheep's coat that is used as a fiber for products such as clothing

External Parts of a Goat

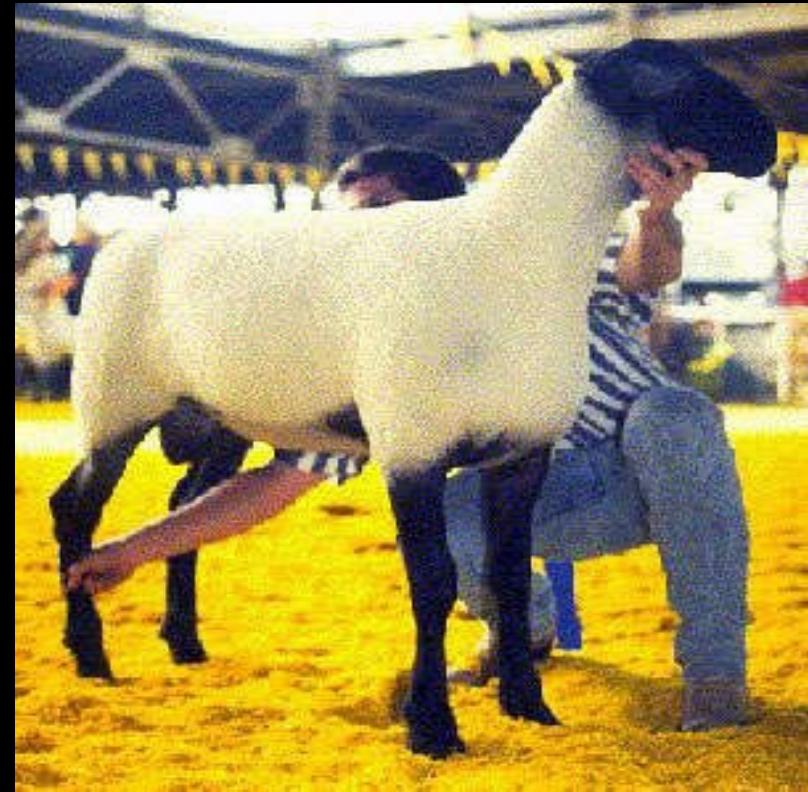


External Parts of a Sheep



Suffolk

- most popular sheep breed
- medium wool breed
- originated in England
- large bodied
- head, legs, ears are black
- polled
- 8 – 10 lbs. fleece
- 150% lamb crop



Dorset



- Originated in England
- medium-wool breed
- polled or horned
- completely white
- medium sized body
- 7 – 8 lbs. fleece
- Ewes breed out of season for fall lambs
- muscular carcasses
- good milk producers

Hampshire

American Hampshire Sheep Association,
1557 173rd Ave.
Milo, IA 50166
Phone: (515) 942-6402

- Originated in England
- large sheep
- polled
- black faces, noses, ears, and legs
- early maturing
- good milkers
- 7 – 8 lbs. fleece



American Oxford Sheep Association
1960 E 2100 North Road
Stonington, IL 62567

Oxford



- Originate in England
- medium-wool breed
- very large breed
- polled
- face, ears, & legs gray to brown
- 10 – 12 lbs. fleece
- lambs grow quickly
- used in crossbreeding

American Angora Goat Breeders
PO Box 195
Rocksprings, TX 78880

Angora

- Originated in Turkey
- well adapted to areas not fit for others
- almost totally white at maturity
- produce 7 lbs. mohair
- horned
- long droopy ears
- buck weigh 125 – 175 lbs
- does weigh 80 – 90 lbs.



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Dairy Goats



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Provided by Karen Lee

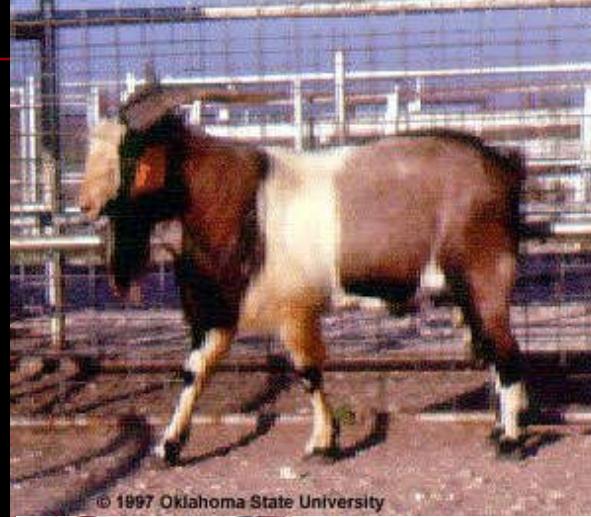


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- produce 5 lbs. of milk daily
- more minerals than cow's milk
- easier to digest
- Dairy breeds
 - French Alpine
 - LaMancha
 - Nubian
 - Saanen
 - Toggenburg

Meat Goats

- Known as Spanish goats
- produce both milk and meat
- sometimes called brush goats
- largest meat goat population in Texas



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Cashmere Goats

- Developed by selective breeding
- Cashmere
 - soft undercoat of fine down produced by goats
- large demand for cashmere
- Solid colored goats are preferred in cashmere production

Pygmy



- Originally exported from Africa
- only 16 to 23 inches tall at withers
- horned
- any color or combination
- research, pets, 4-H and FFA projects, zoos

Horses

(Equine)

Horse Products

- Recreation / Sport
- Cheval (meat)
- Dog/cat food (meat)
- Glue (hooves)

What are some terms you may need to know to understand horses?

- Horses are also referred to as equine.
- Horses, ponies, donkeys, & mules are members of the horse family.
- Hand
 - unique measurement for horses or racing
 - 4 inches or 10.2 centimeters
- Height of horses
 - measured from ground to highest point of the withers

What are the classifications of horses?

■ Light horse

- used for riding or racing
- stands 14.2 to 17 hands high
- weighs between 900 and 1,400 pounds

■ Pony

- under 14.2 hands tall
- weighs between 500 and 900 pounds

■ Draft horse

- used for work
- stands 14.2 to 17.2 hands tall
- weighs over 1,400 pounds

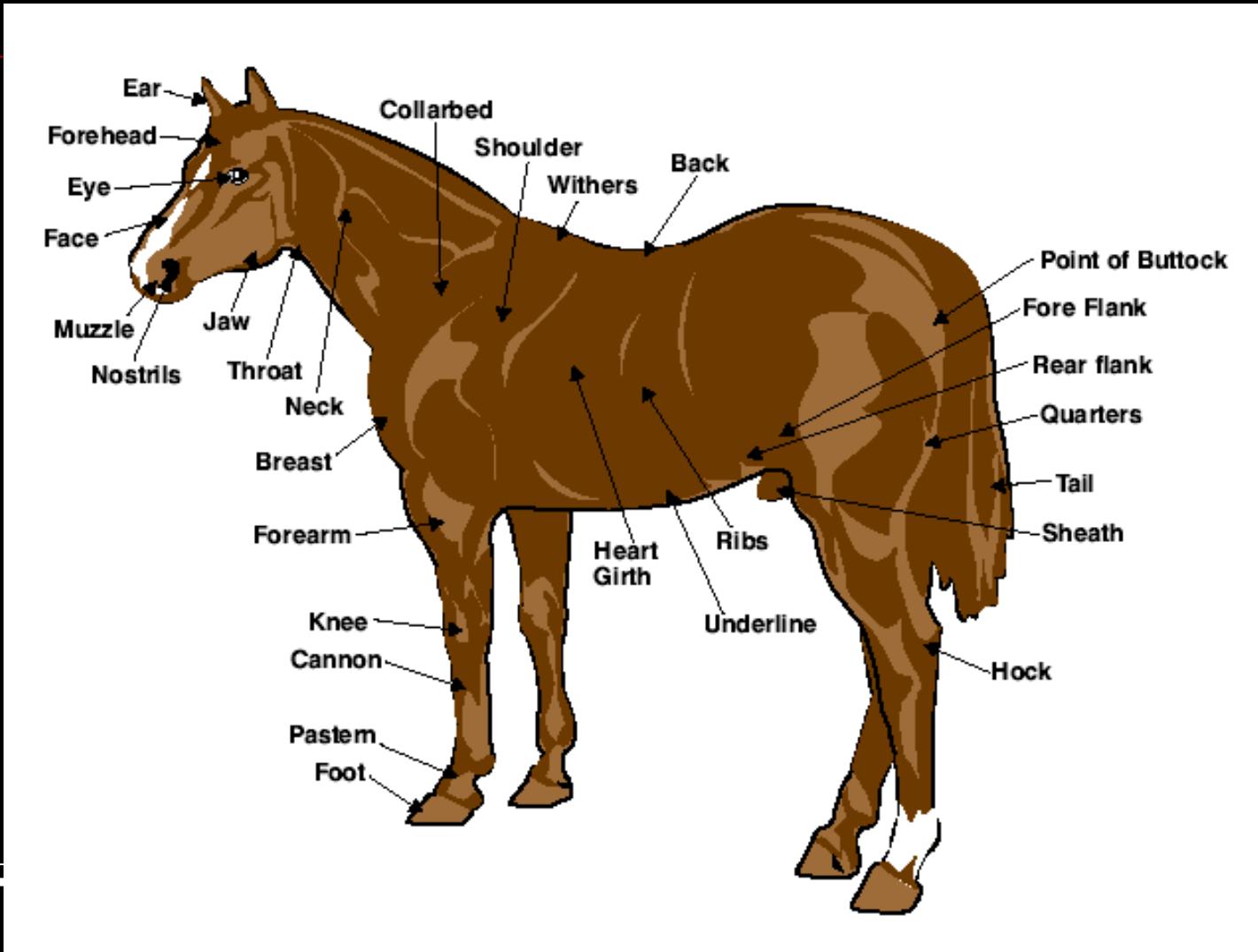
Equine Terms

- Filly
 - Thoroughbred under 4 years of age or any other breed under 3 years of age
- Stud horse
 - male that is kept for breeding
- Foal
 - horse of either gender that has not been weaned

More Horse Terms

- **Gelding**
 - male horse that has been castrated before reaching sexual maturity
- **Mare**
 - mature female horse
- **Stallion**
 - mature male horse
- **Colt**
 - male horse that is not mature

Horse Parts



Horse Coat Colors

■ Colors

- Bay
- Black
- Brown
- Chestnut
- White

■ Color variations

- dun
- gray
- roan
- pinto
- palomino

Paints

- used for racing, shows, pleasure, & stock purposes

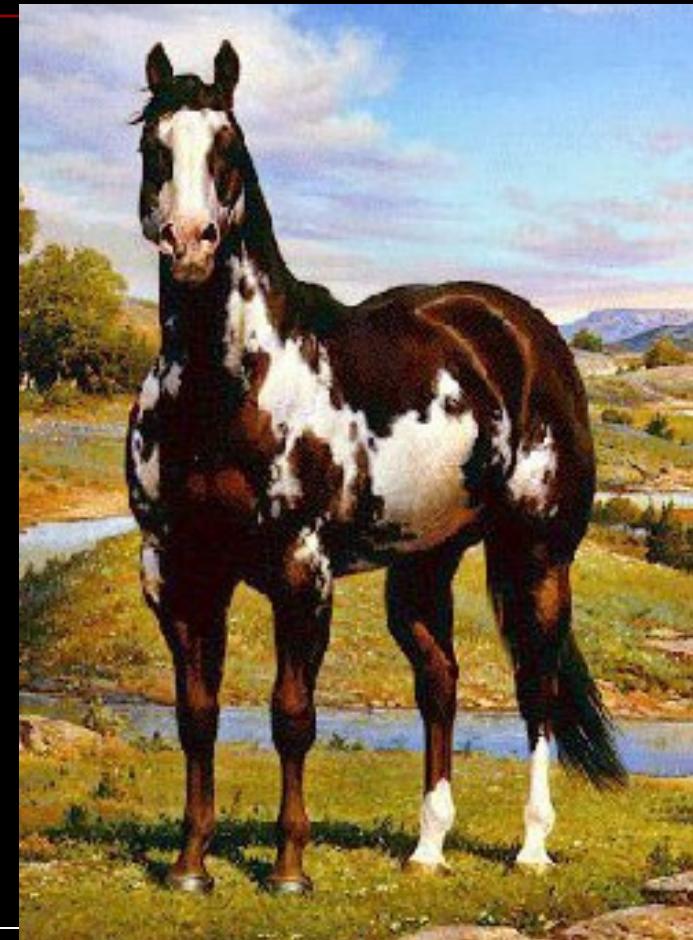
- two color patterns

- Tobiano

- white legs below the knees and hocks, regular spots and heads are marked like a solid-colored horse

- Overo

- variable head markings, one or more leg is dark colored, scattered body markings



Leopard app

Appaloosa

Blanketed App

- Traditional mount of the Nez Perce Indians
- Used for riding, showing, racing, and stock horses.
- Coat pattern predominant but not mandatory



Arabians



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- Originated in Arabia
- 850 to 1,100 pounds at maturity
- Color may be bay, gray, chestnut, and occasionally black or white
- Used for pleasure, racing, and showing

Quarter Horses

- Originated in the United States
- named for short stretches they originally raced
- Colors may be black, brown, bay, sorrel, dun, chestnut, buckskin, gray, roan, and grullo.
- Used for riding, showing, racing, and stock horses.



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Thoroughbred

- Traditional Race Horse
- Breed originated in England by crossing English mares with Arabian stallions
- Typically from as small as 15.2 to as large as 17.0 hands
- usually bay, brown, chestnut, black, or gray



Belgians



- Originated in Belgium
- Colors are bay, chestnut, or roan.
- 15.2 to 17 hands tall
- weighs 1,900 to 2,200 pounds at maturity
- mainly used for their power

Clydesdale

- Originated in Scotland
- Colors are mainly bay and brown with white markings
- averages 16 to 17 hands tall
- 1,700 to 1,900 pounds at maturity



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LLAMAS

& ALPACAS

How do I raise llamas and alpacas?



- domesticated thousands of years ago
- traditionally used as pack animals
- In the camelid family
- first imported for zoos but now used for shows, pets, guarding sheep and production of fiber.
- Good guards of livestock

Llamas

- wool can be black or white with shades of brown, red, or roan
- maturity weight of 280 to 450 pounds
- stand 5 to 6 feet tall from head to ground
- live for 20 to 25 years
- Babies are called crias



Alpacas

- 22 different colors
- 2 different classes based on type of fleece
- Haucaya
 - dense, crimped fiber
- Suri
 - white fleece that is not crimped but hangs down and is curly
- weighs between 100 to 175 pounds
- stand 4 ½ feet tall
- live for 20 to 25 years
- both llamas and alpaca graze and are suited to live on harsh terrains

How do I market my llamas and Alpacas?

- done mainly from grower to grower
- few places to that slaughter and process the animals
- breeding stock cost between \$300 to \$6,000 per animal
- Used mainly for show in U.S.

FISH

Terms used in fish production

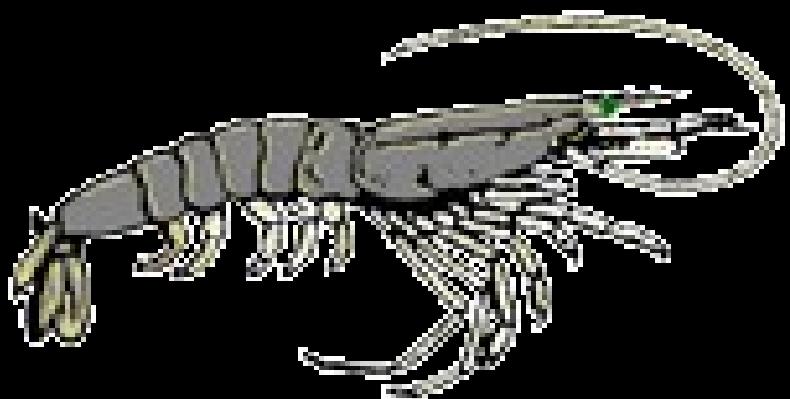
- aquaculture
 - production of aquatic vegetation and animals
- aqua-crop
 - commercially produced water species
- freshwater
 - water that contains little or no salt
- saltwater
 - water containing over 16.5 parts per thousand of salt
- fish
 - animals that have gills instead of lungs and are vertebrates (having backbones)
- hatchery
 - facility where eggs are incubated and hatched by artificial means
- Fry
 - a newly hatched fish

Tilapia

- fish well suited for aquaculture
- originally found in Africa
- grow & reproduce very quickly
- Sensitive to cold temperature
- used to control vegetation in ponds and lakes



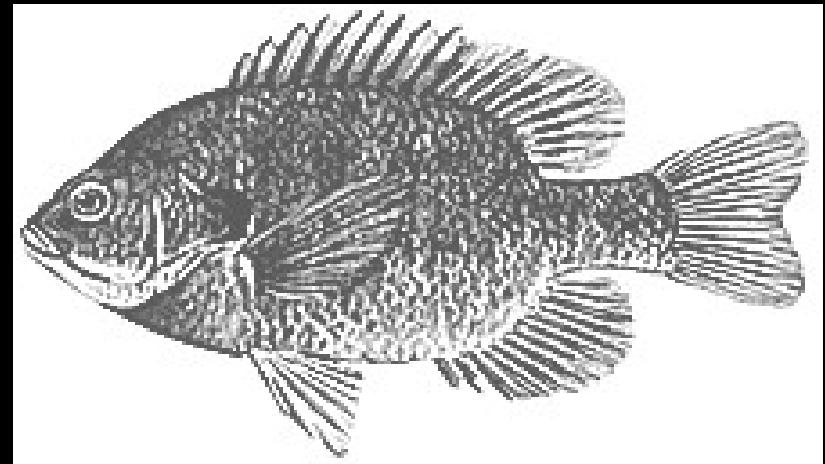
Shrimp



- name used to describe 2,000 species of crustaceans
- bottom dwellers and scavengers
- feed slowly on plant and animal organisms
- Prawn
 - any large shrimp

Bluegill

- a sunfish that has a deep compressed head and a small mouth
- fairly easy to produce
- well adapted to various climates



The End

(thank goodness)