

Livestock

Species

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

Cattle

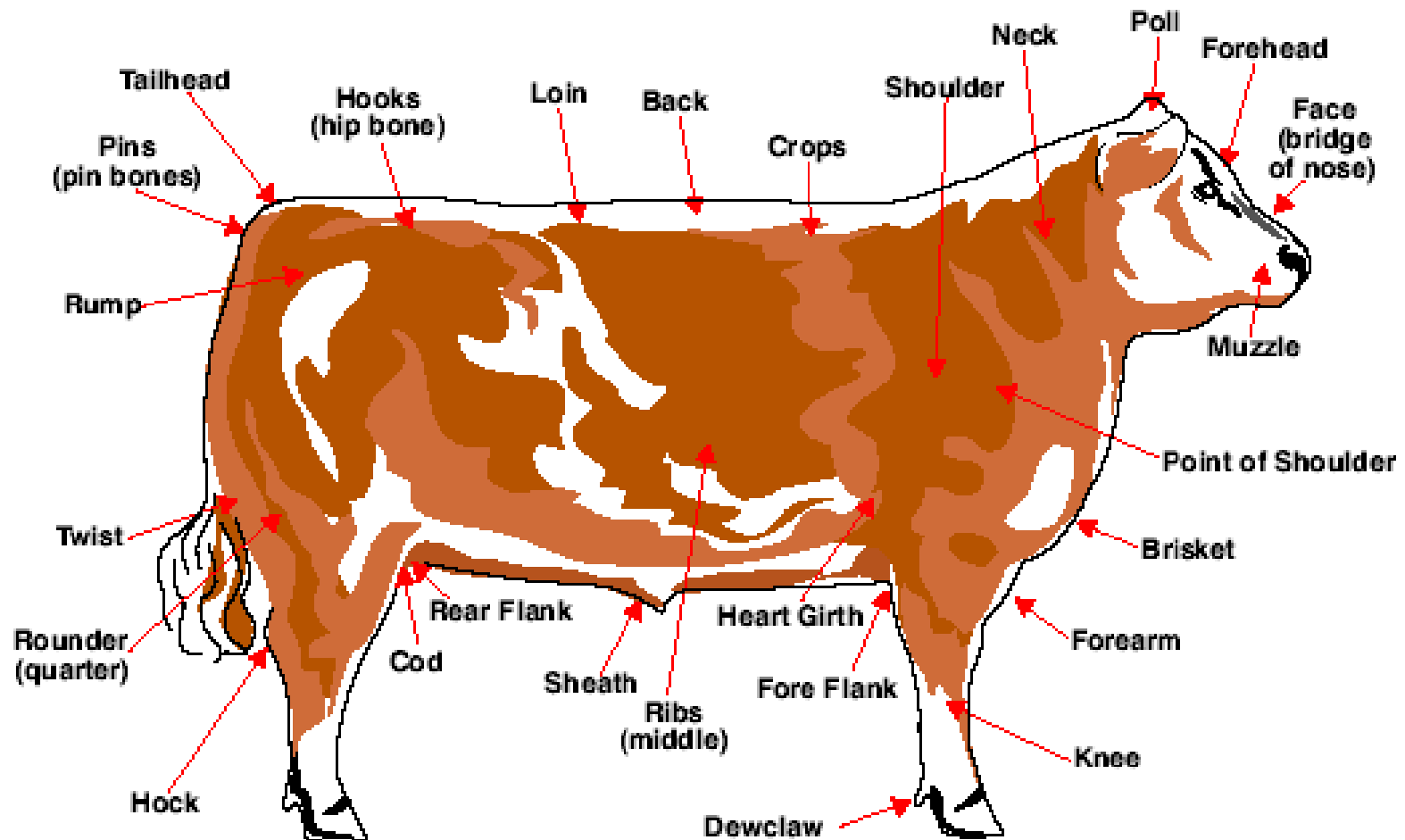
Terms

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

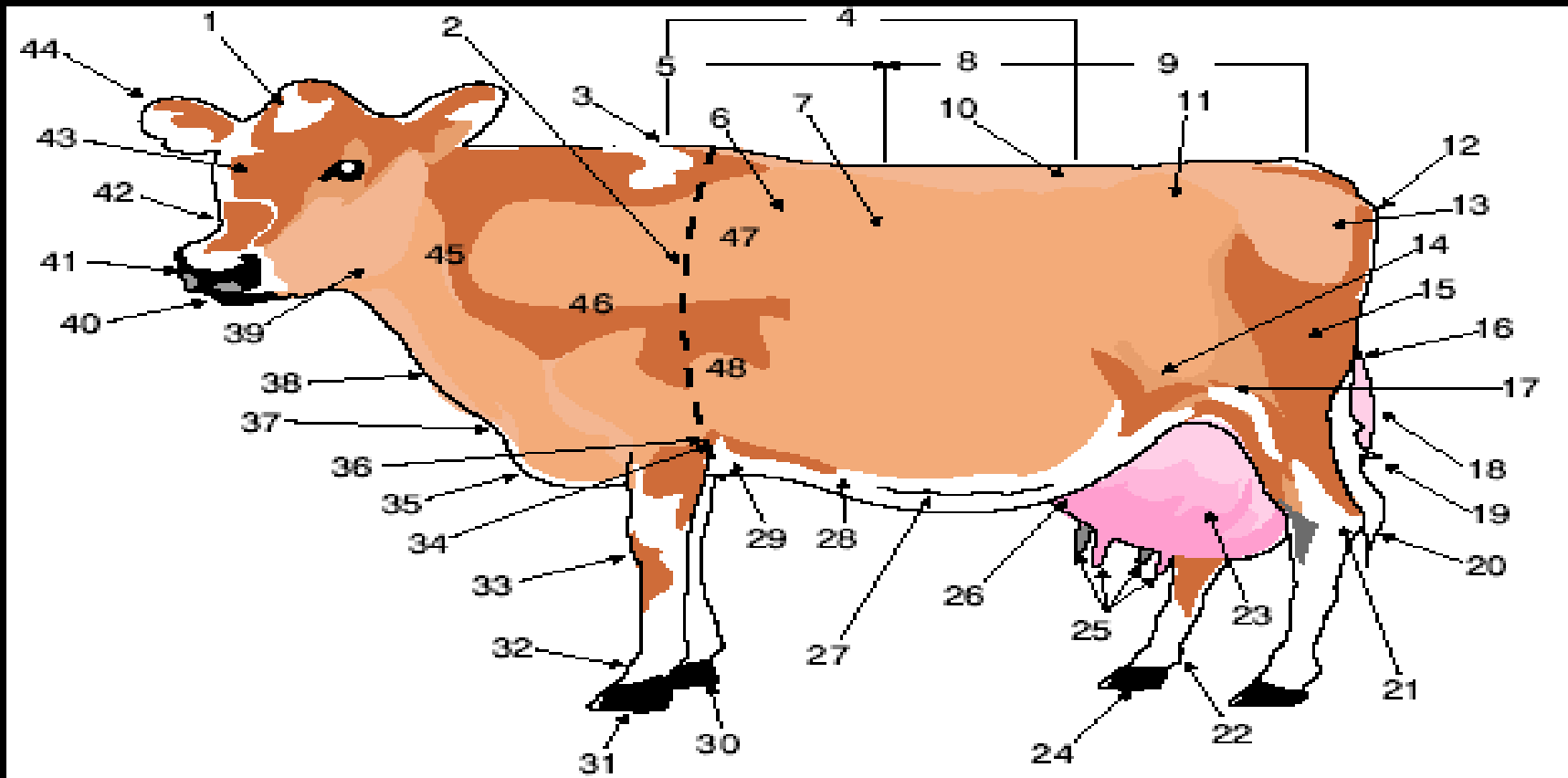
CATTLE PRODUCTS

- 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



- 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



provided by Beate Milerski

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

BRAHMAN

- 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



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



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

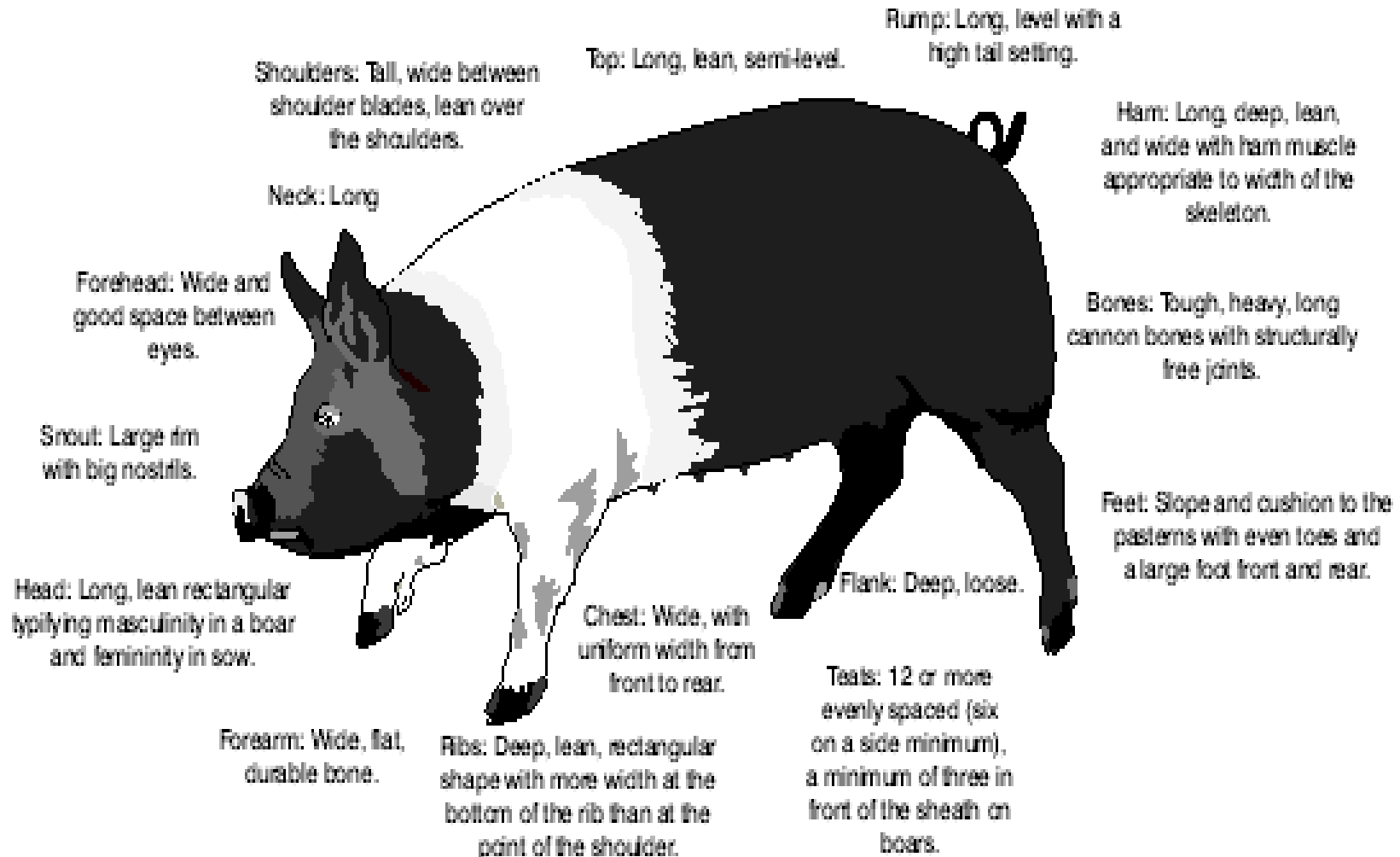
Swine Products

- 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

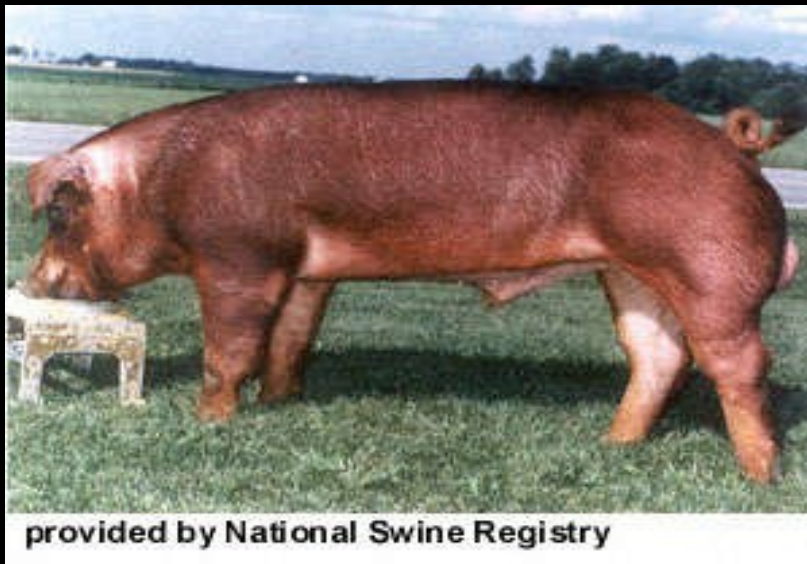
What are the major parts of a hog?



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



- 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

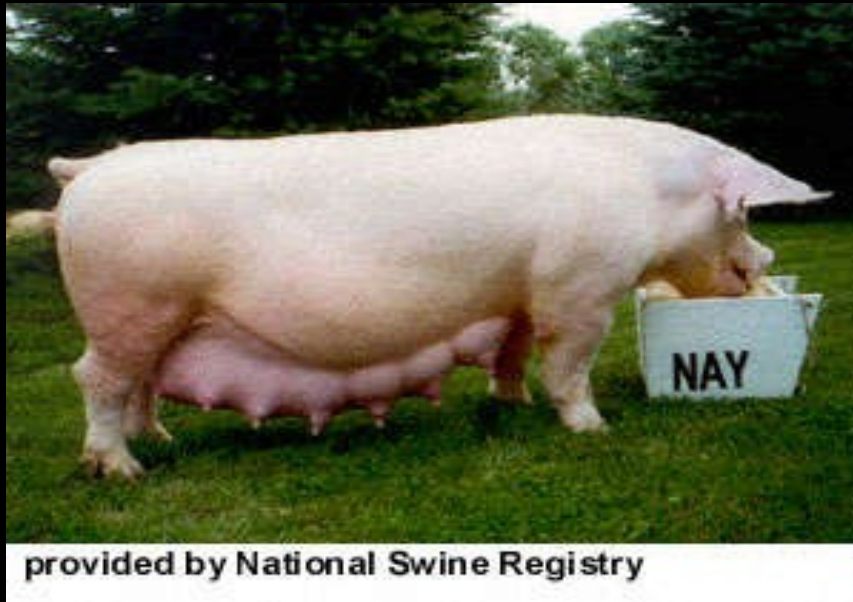
HAMPSHIRE

- 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

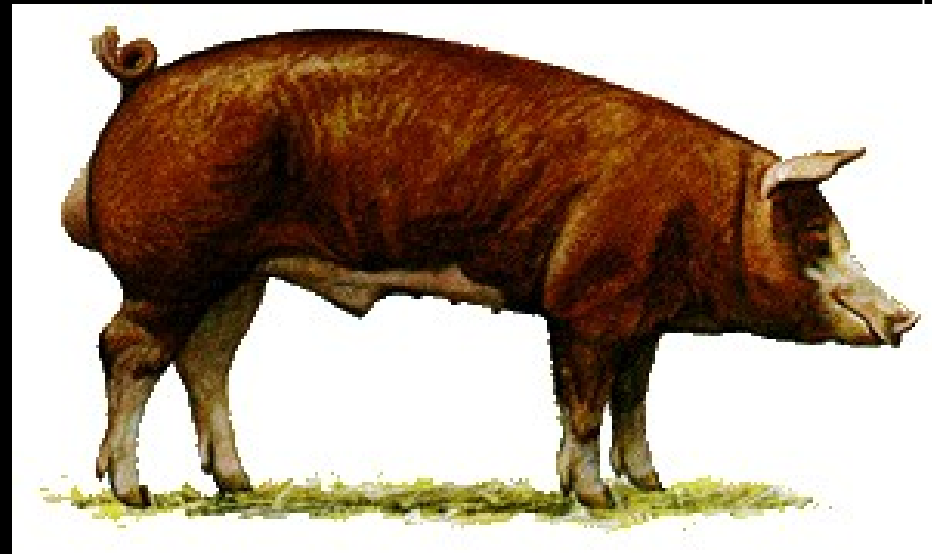
YORSHIRE



- 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



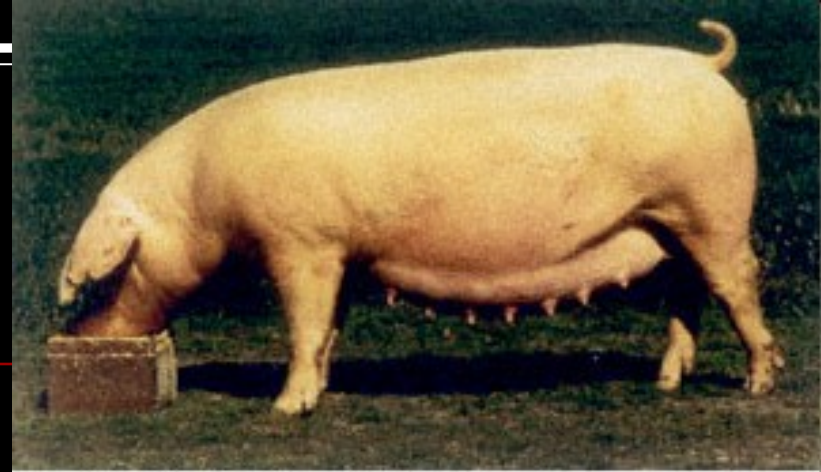
- Originated in Berkshire & Wiltshire Counties in England
- color is black with 6 white points (feet, tail, snout)
- erect ears
- medium-sized hog
- lean carcass

Poland China

- 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



Landrace



- Developed in Demark ins 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 systems 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

Pig Number

The Key

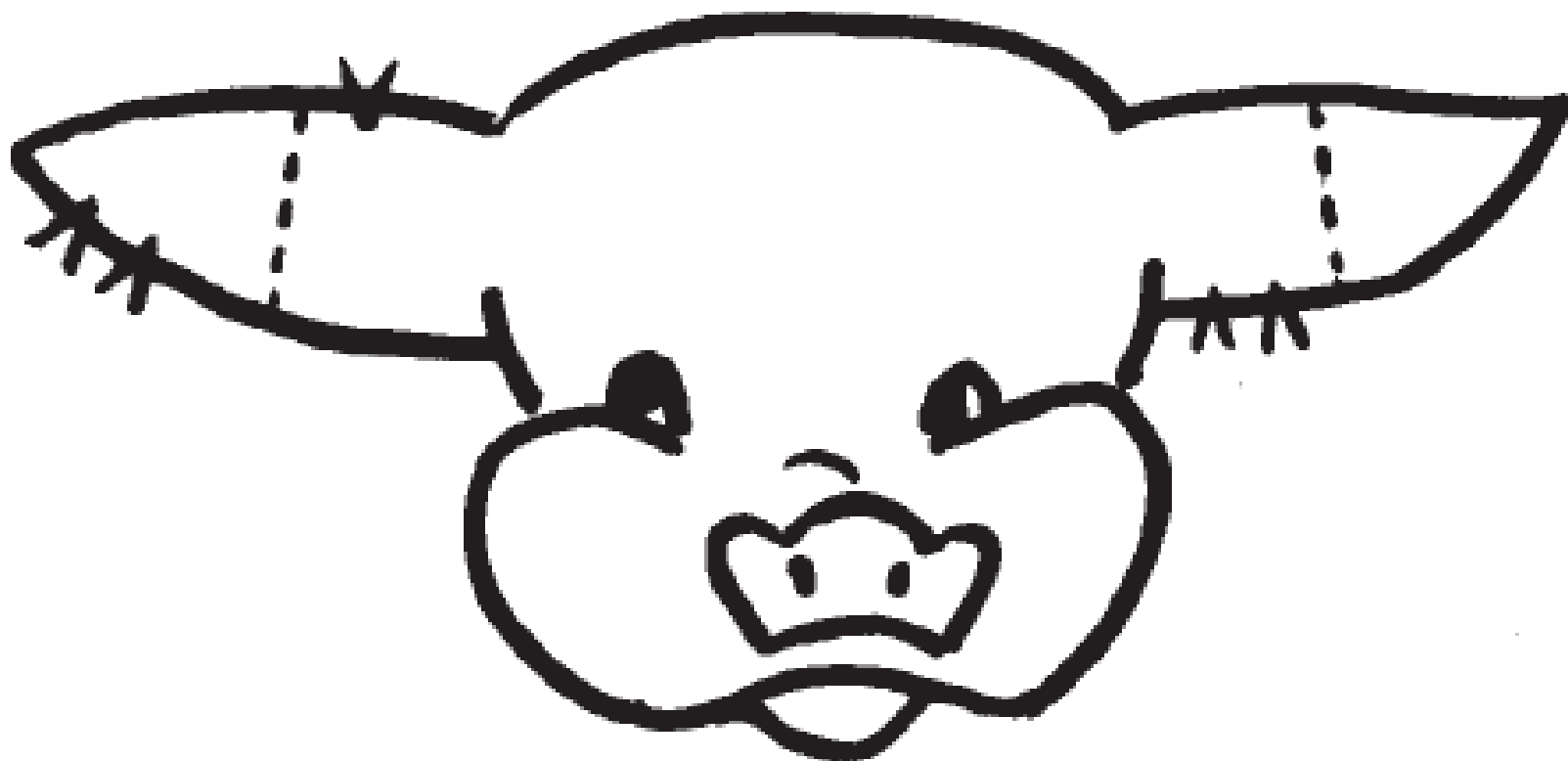
V-Notcher



Notching small pigs for identification

Example

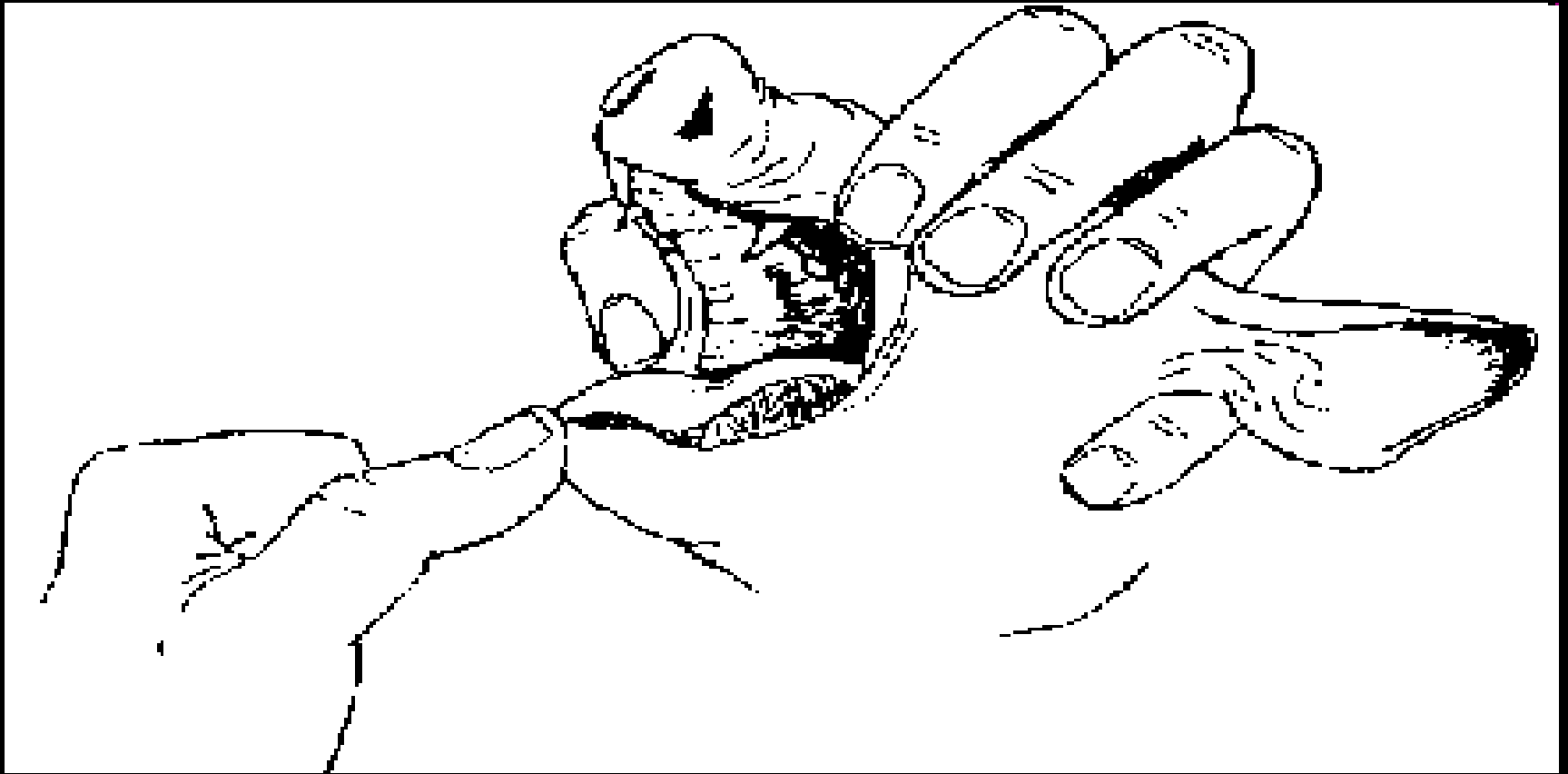
33-2



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

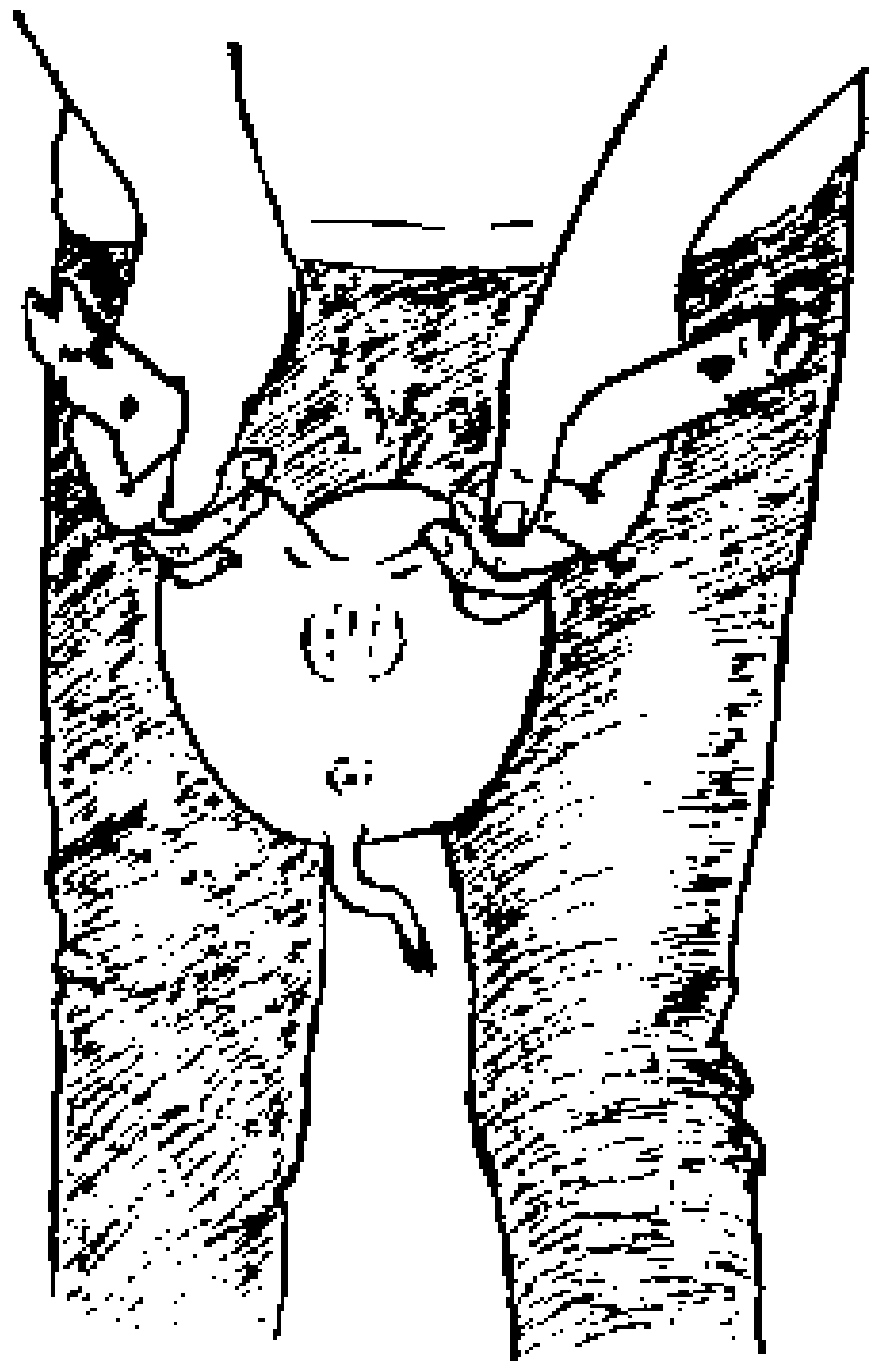
Tail docking



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?

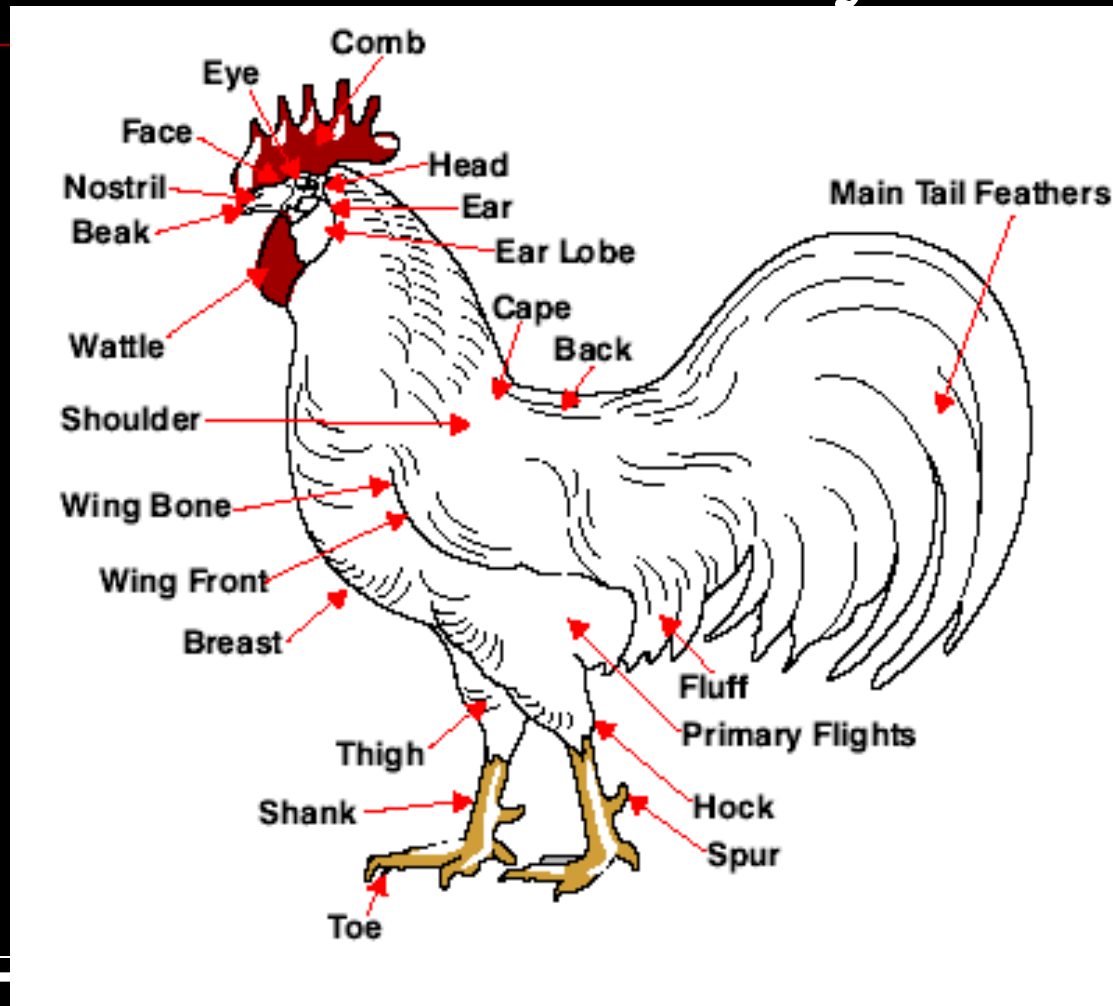
■ Poultry

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

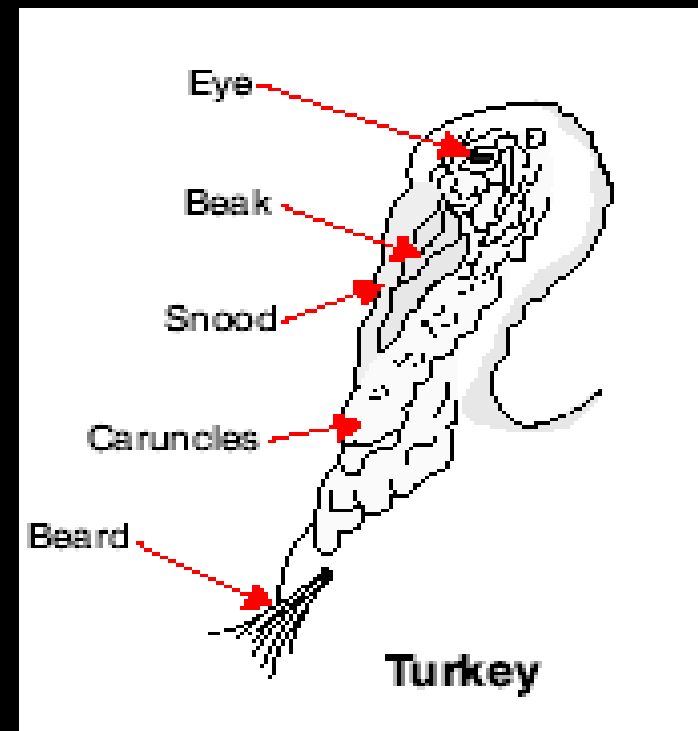
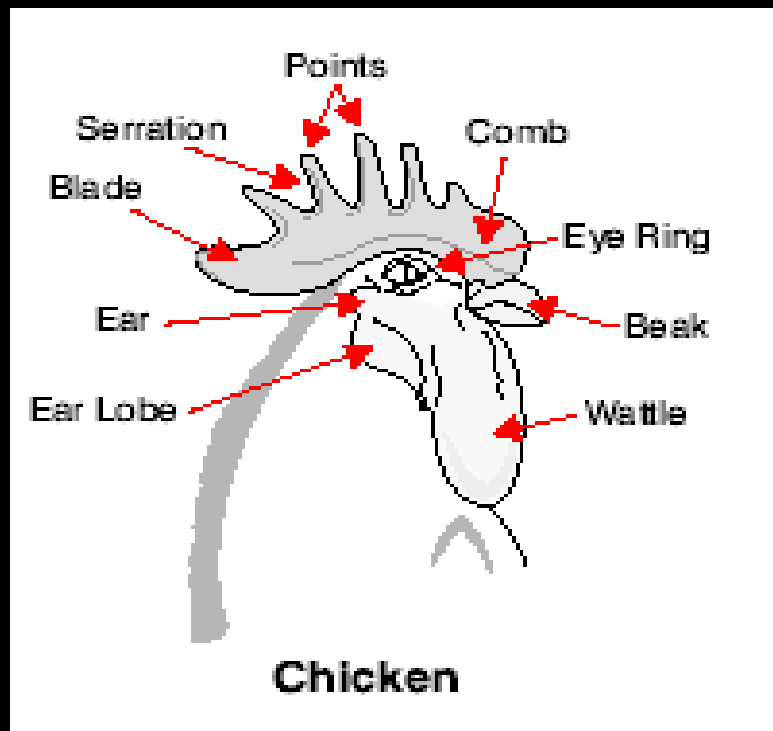
Species

- Chickens
- Turkeys
- Ducks
- Geese
- Game Birds

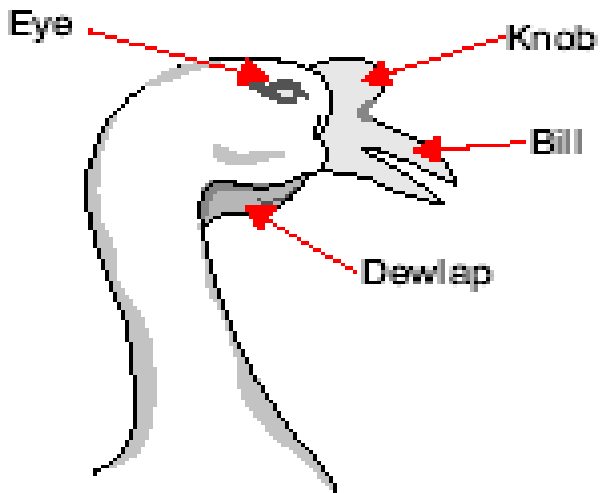
External Parts of Poultry



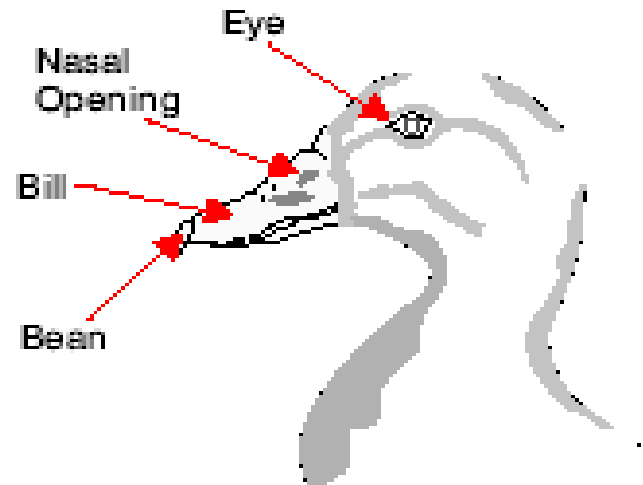
External Parts of Poultry



External Parts of Poultry



Goose



Duck

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

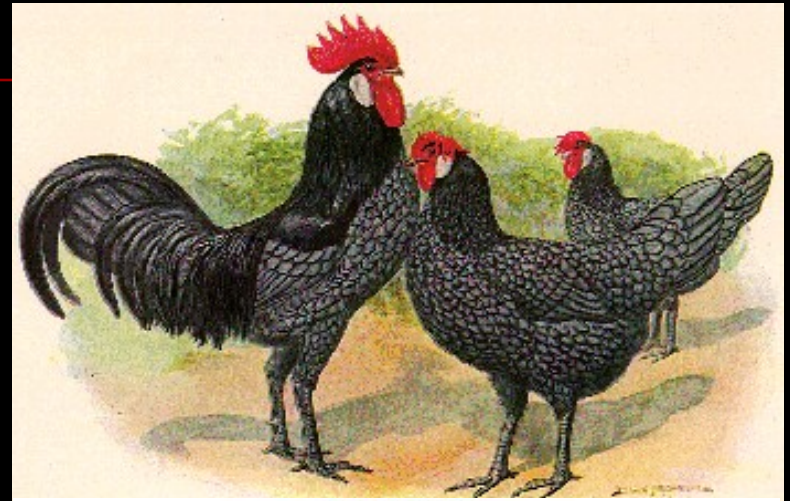
Geese

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

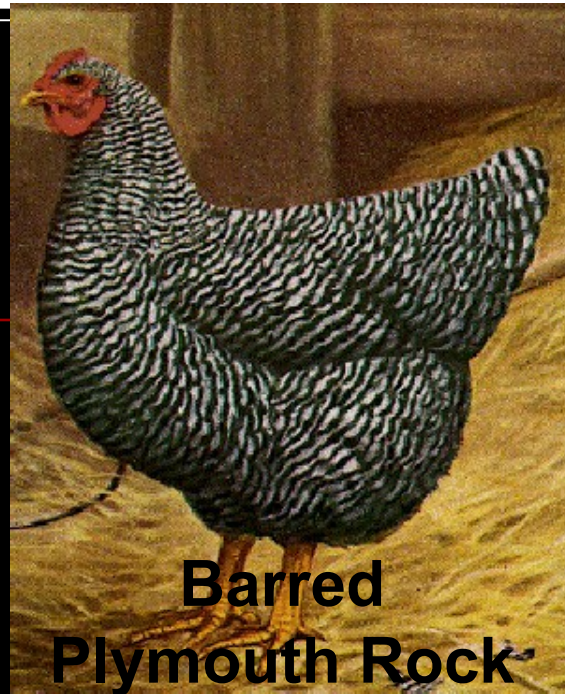
Chickens

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

Andalusian



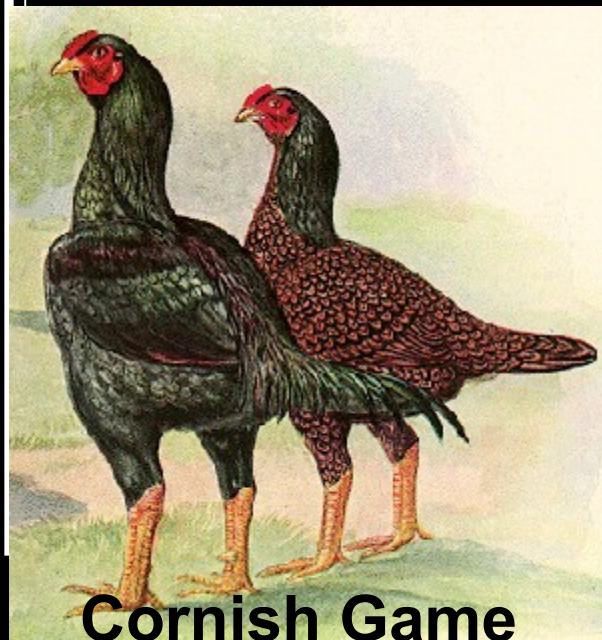
Australorp



**Barred
Plymouth Rock**



Brahma



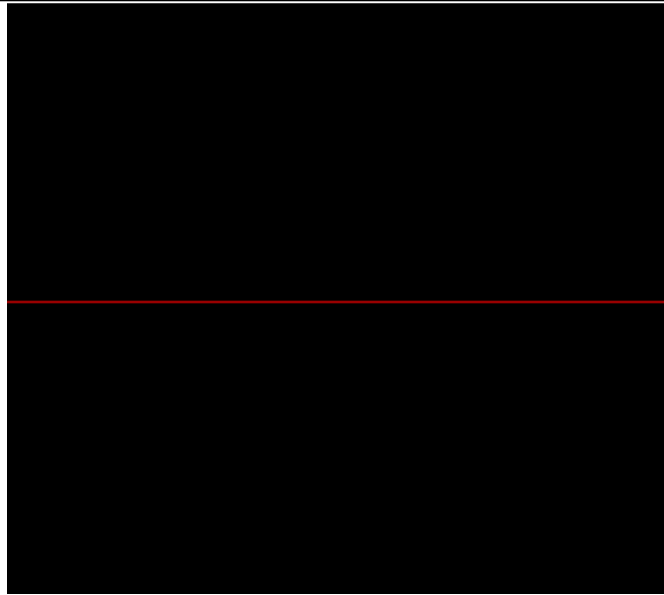
Cornish Game



**Single-Comb
White Leghorn**



Minorca



New
Hampshire



Rhode Island
Red

CHARACTERISTICS OF SOME TYPICAL BREEDS OF CHICKENS

Class and Breed	Eggs	Skin	Comb	Eyes	Earlobes	Shanks	Plumage
Mediterranean:							
Leghorn (White)	White	Yellow	Single	Reddish bay	White	Yellow	White
Comments: All three are small in size and are used mainly for egg production—Leghorn most popular							
Minorca (Black)	White	White	Single	Brown	White	Dark Slate	Black
Andalusian (Blue)	White	White	Single	Reddish bay	White	Dark Slaty Blue	Slaty Blue
American:							
Plymouth Rock (Barred)	Brown	Yellow	Single	Reddish bay	Red	Yellow	Barred (Sex-linked)
Comments: Dual purpose; used in crosses for sexing chicks at hatching.							
Plymouth Rock (White)	Brown	Yellow	Single	Reddish bay	Red	Yellow	White
Comments: Primary Use—Broiler							
New Hampshire	Brown	Yellow	Single	Reddish bay	Red	Yellow	Red
Comments: Primary Use—Broiler							
Rhode Island Red	Brown	Yellow	Single	Reddish bay	Red	Yellow	Dark Red
Comments: Dual Purpose							
English:							
Cornish (White)	Brown	Yellow	Pea	Pearl	Red	Yellow	White
Comments: Used in development of male lines for crossbreeding.							
Australorp	Tinted	White	Single	Brown	Red	Dark Slate; Bottom feet white	Black
Comments: Used in production of crossbreeds.							
Asiatic:							
Brahma (Light)	Brown	Yellow	Pea	Reddish bay	Red	Yellow; feathered	Columbian (white & black)
Comments: Used in crossbreeding for meat production.							

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

Emden

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



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Sheep & Goats

Sheep and Goat Products

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

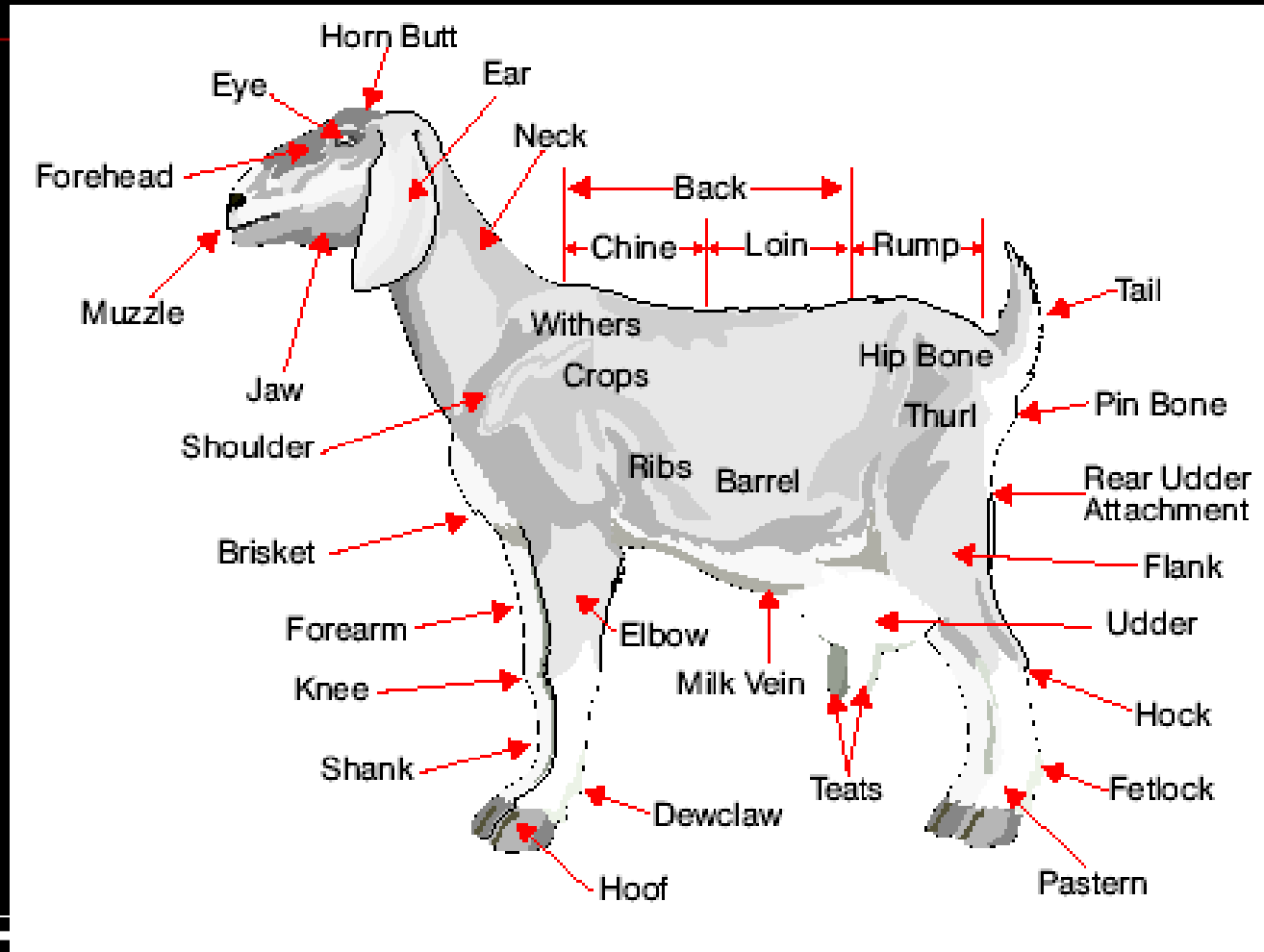
Terms

- 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

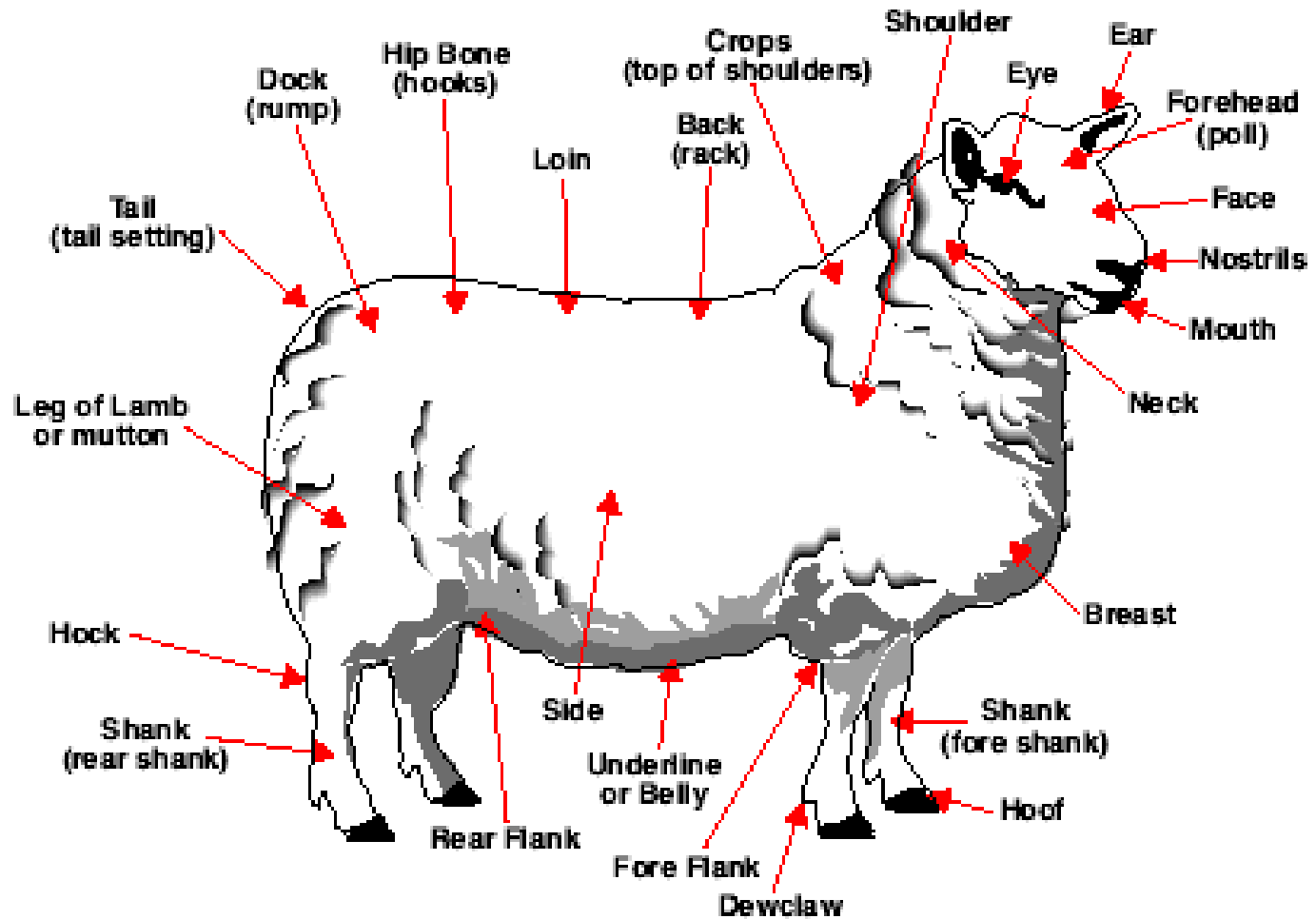
Terms (cont.)

- 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

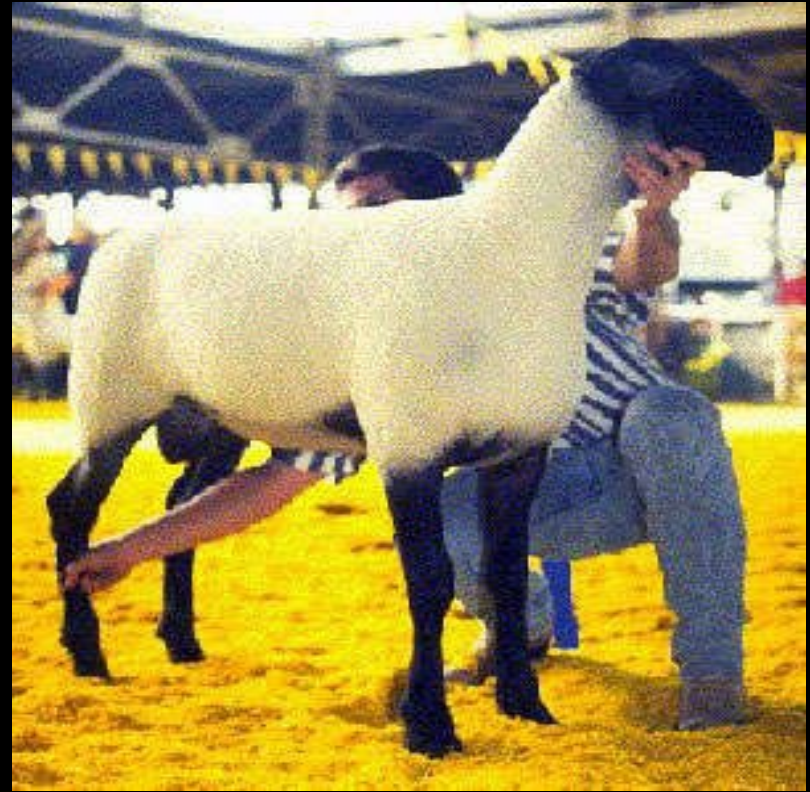


External Parts of a Sheep



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

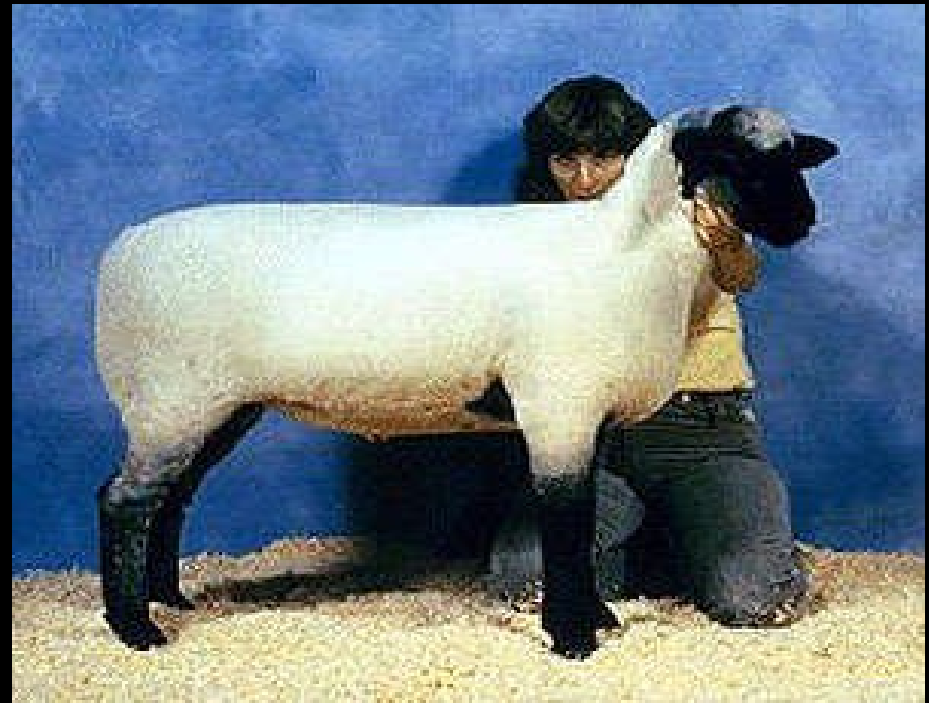
Hampshire

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, Ill 62567

Oxford



- Originate din 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.



Dairy Goats



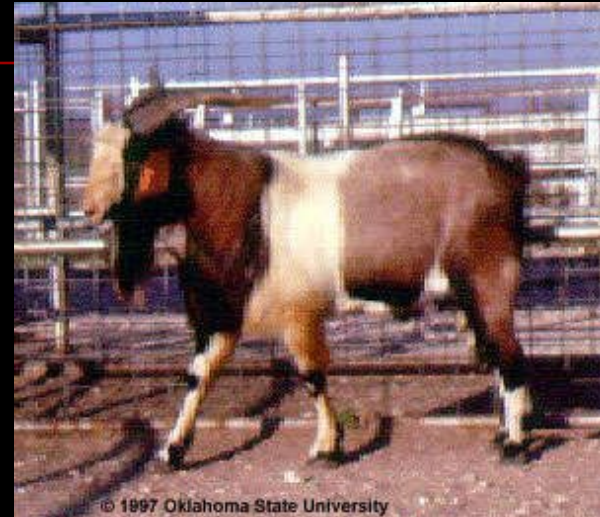
Provided by Karen Lee



- 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



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

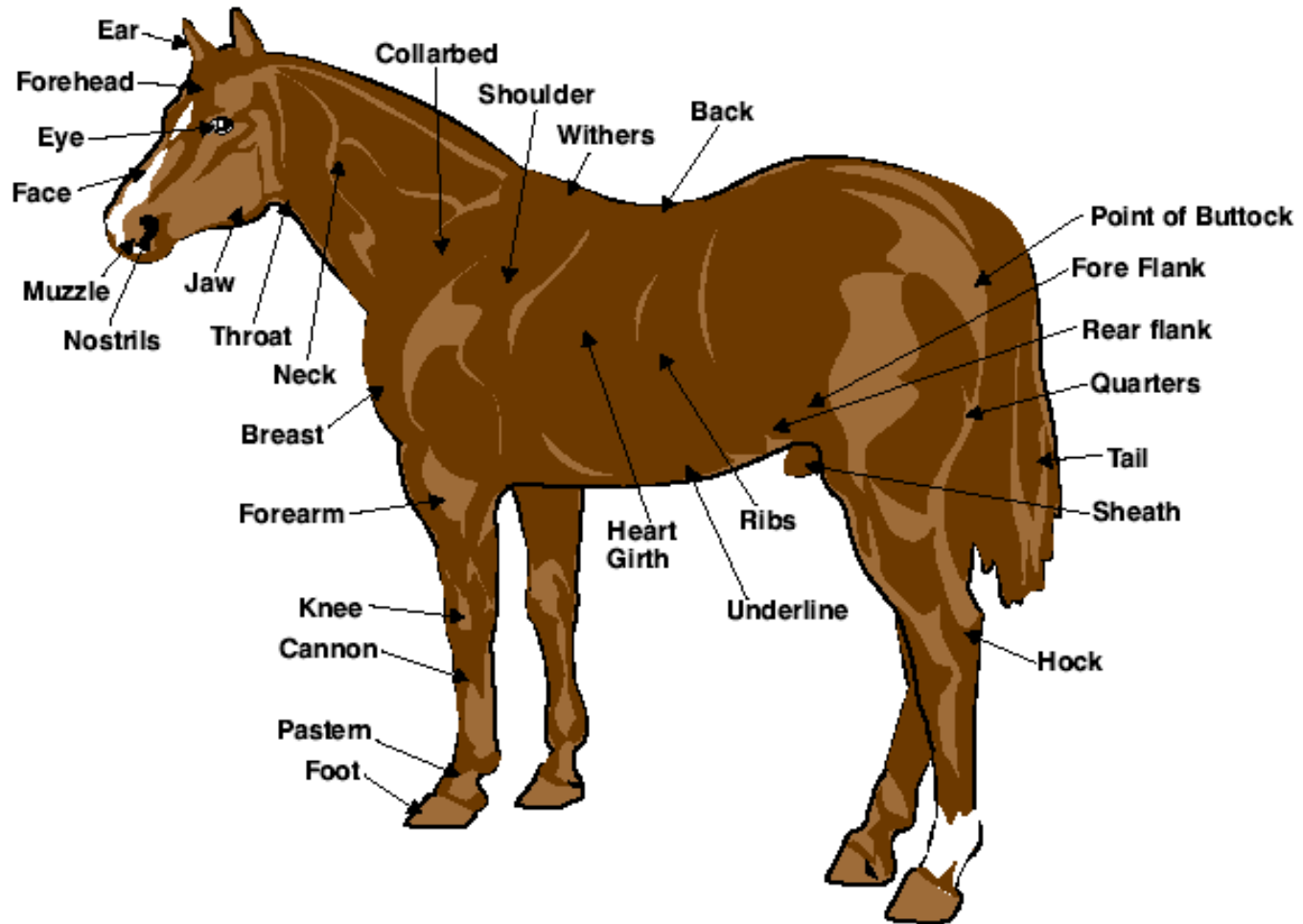
Equine Terms

- 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

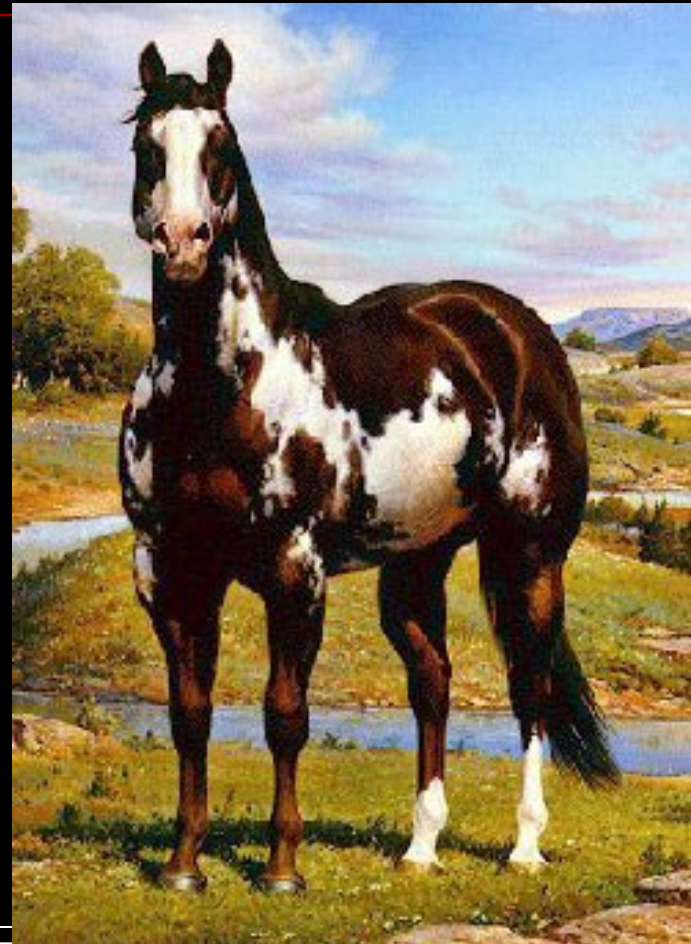
- Bay
- Black
- Brown
- Chestnut
- White

■ 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



- 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.



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

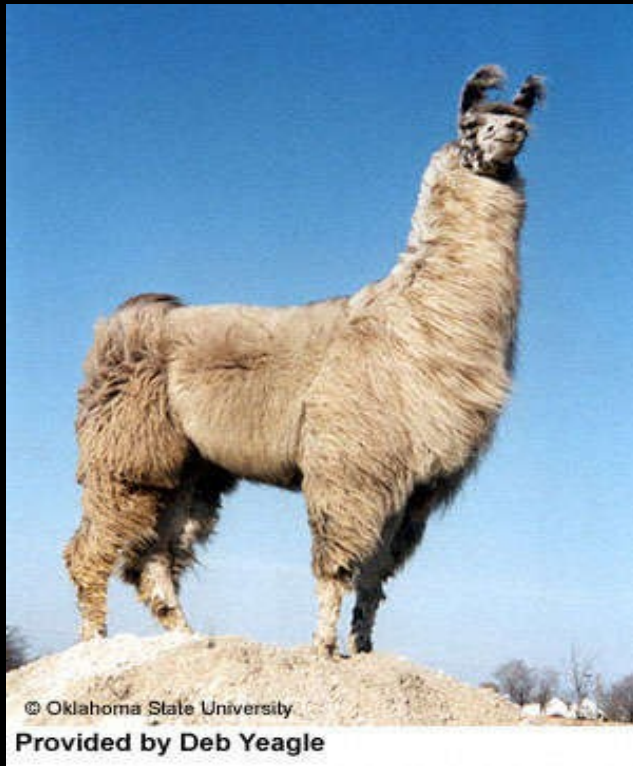
- Originated in Scotland
- Colors are mainly bay and brown with white markings
- averages 16 to 17 hands tall
- 1,700 to 1,900 pounds at maturity



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

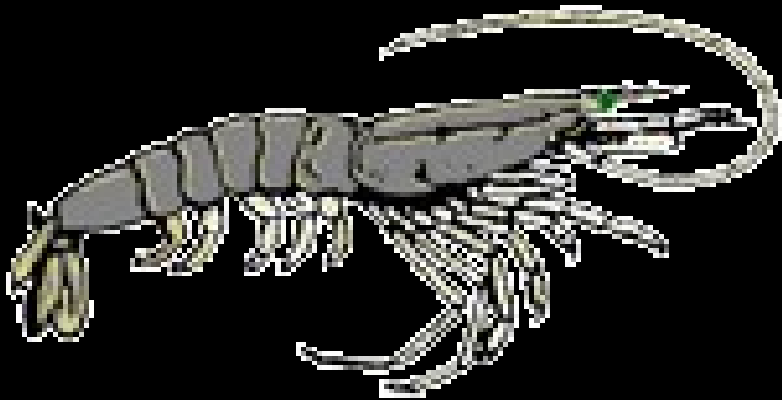
- **aquaculture**
 - production of aquatic vegetation and animals
- **aqua-crop**
 - commercially produced water species
- **freshwater**
 - water that contains little or no salt
- **saltwater**
 - water containing over 16.5 parts per thousand of salt
- **fish**
 - animals that have gills instead of 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



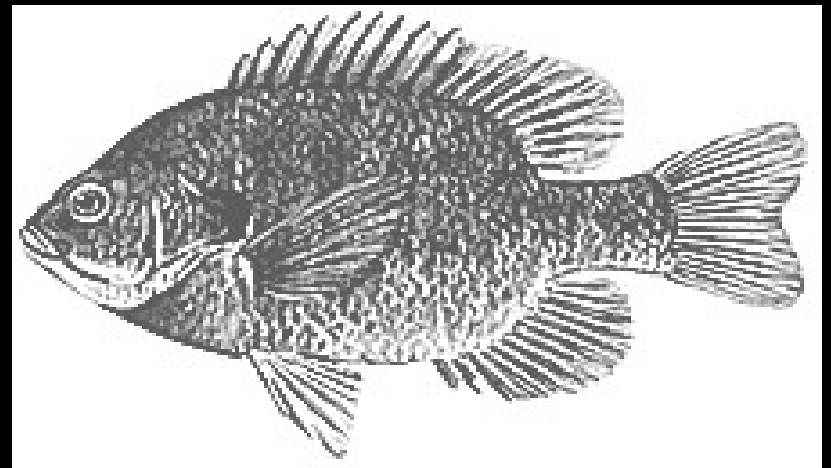
Shrimp



- 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)