

## MINI 4-H

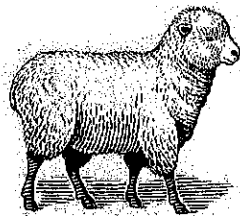
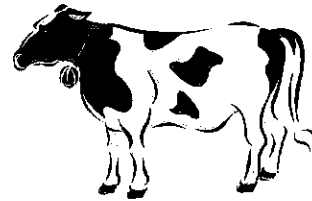
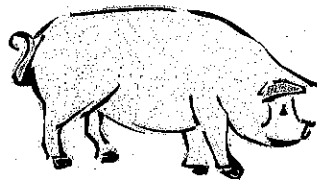
### PIGS, COWS, SHEEP & GOATS

Welcome to Mini 4-H. In Mini 4-H Livestock project you will learn something about the different kinds of pigs, cows, sheep and goats.

Your exhibit will be a 14"x22" poster about a pig, cow, sheep or goat or show a animal brought to the fair by an active 4-H member. Cows must be a poster only.

I hope you find your project fun and hope that you learn lots of new things. Why not ask mom and dad if they know all this!!!

See you at the 4-H Fair.



**Purdue University, Indiana Counties and U.S. Department of Agriculture Cooperating  
An Affirmative Action/Equal Opportunity Institution**

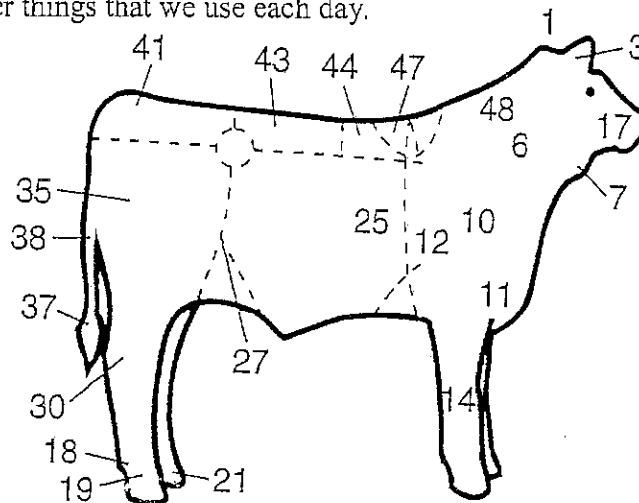
## BEEF CATTLE

Beef cattle mainly eat **grass, hay and grains**. They are different from most animals because they have a stomach with four different sections. Animals with this kind of stomach are **ruminants**. The four-section stomach lets beef cattle eat large amounts of hay, grass and silage that simple stomach animals cannot digest. Because beef cattle eat a lot of grass they can be raised on land that is not suitable to growing crops. Beef animals also may eat grains such as corn, barley, oats, milo and soybean meal. Plenty of water is also needed.

The adult male is called a **bull** and the female a **cow**. The young are called **calves**. A **heifer** is a young female that has not had a calf. Some cattle have horns and others are naturally **polled** (born without horns).

There are over 40 breeds of beef cattle in the United States. They are different in size and color. Examples include the **Hereford** which is red in color and has a white face. It originated in England. The **Angus** is all black or all red. It is naturally polled and originated in the highlands of Scotland. The **Simmental** originated in Switzerland and may be a variety of colors. The **Charolais** is white and originated in France.

Beef cattle provide us with a variety of meats. The **hamburger** is probably the most familiar and popular. By-products that come from cattle include gelatin, leather, medicines, buttons, glues and other things that we use each day.



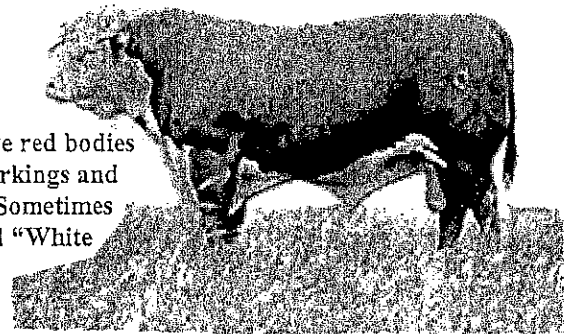
CATTLE BODY PARTS

- |              |             |           |
|--------------|-------------|-----------|
| 1. Poll      | 18. Dewclaw | 38. Tail  |
| 3. Ear       | 19. Pastern | 41. Rump  |
| 6. Neck      | 21. Hoof    | 43. Lion  |
| 7. Dewlap    | 25. Ribs    | 44. Back  |
| 10. Shoulder | 27. Stifle  | 47. Crops |
| 11. Brisket  | 30. Hock    | 48. Crest |
| 12. Elbow    | 35. Round   |           |
| 14. Knee     | 37. Switch  |           |

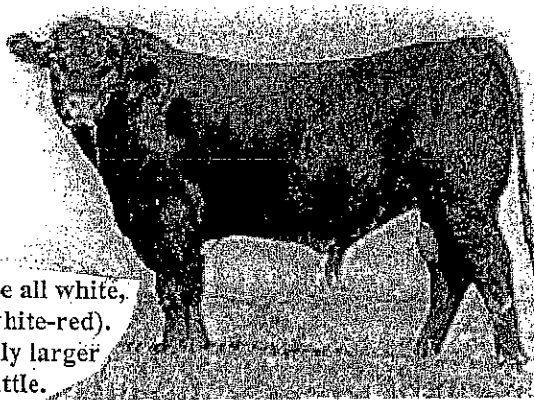
## BREEDS OF CATTLE

**HEREFORDS** became popular around 1880. They are good range animals because they like to graze and can withstand heat, drought and winter exposure better than other breeds.

**HEREFORD**  
Herefords have red bodies with white markings and a white face. Sometimes they are called "White Faced" cattle.

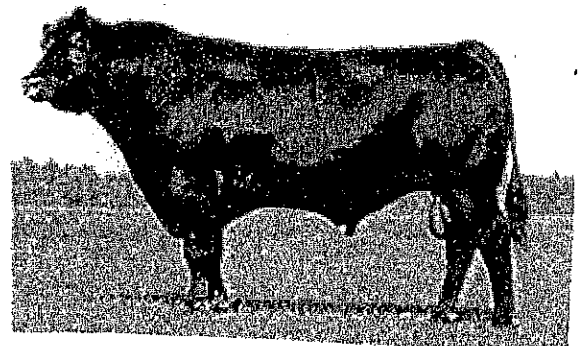


**SHORTHORN**  
Shorthorns may be all white, all red, or roan (white-red). They are all slightly larger than other beef cattle.

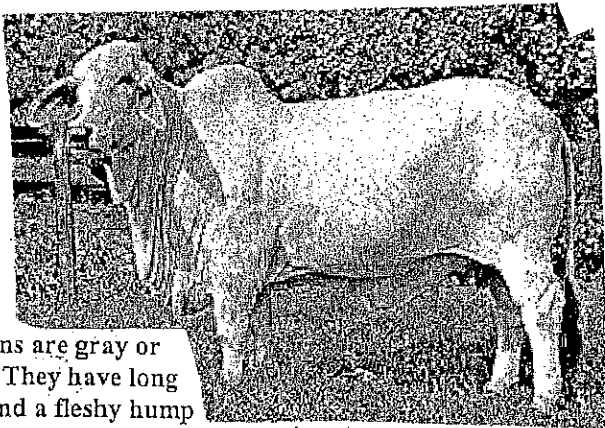


**SHORTHORNS** are notable for gaining weight rapidly without a great deal of grain, and for their good natures.

**ANGUS** cattle are easy to recognize because of their coal black hair. They can be raised in almost any climate and they produce an especially high-quality meat.



**BRAHMAN**  
Most Brahmans are gray or nearly black. They have long droopy ears and a fleshy hump over their shoulders. They like heat and are often grown in Southern states.



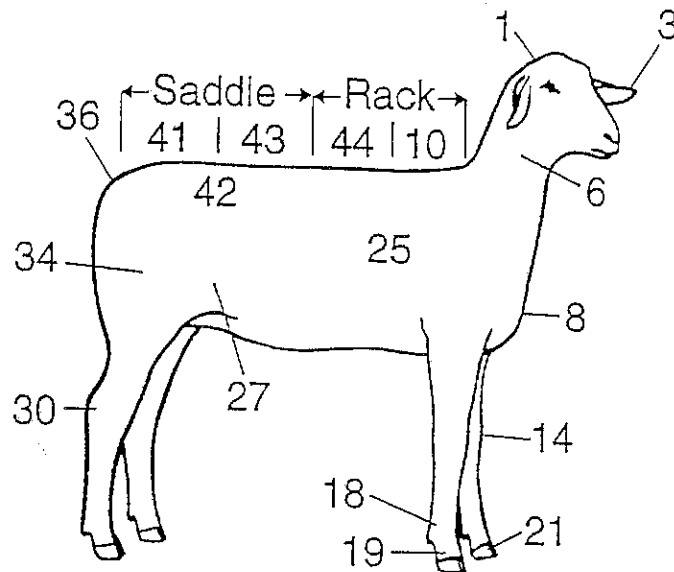
The **BRAHMAN** breed has a very unusual appearance because of the hump on its shoulders. Brahman cattle (whose ancestors came from India) are especially popular in the southern states. They are tolerant of heat, have excellent mothering abilities, and are resistant to diseases. However, they do not do well in cold climates and mature later than other breeds.

## SHEEP

Sheep are raised for their **meat** and **wool**. Poplar sheep wool breeds are the **Columbia**, **Rambouillet**, **Corriedale** and **Targhee**. These breeds and others are known for their ability to provide a large amount of heavy wool. Poplar meat breed such as **Hampshires** and **Suffolks** have large bodies, dark faces and dark legs. Twins are quite common with these breeds. Dual purpose breeds like the **Dorset**, **Lincoln** and **Montadale** provide both good spinning wool and meat.

The female sheep is called an **ewe**, the male a **ram** and a young sheep a **lamb**. A group of sheep is called a **flock**. It takes about five months from the time of mating until the lambs are born. Some ewes may have **single**, **twin**, or **triplet** lambs. The lambs **nurse** (obtain milk) from the ewe until they are **weaned**, when milk is no longer needed.

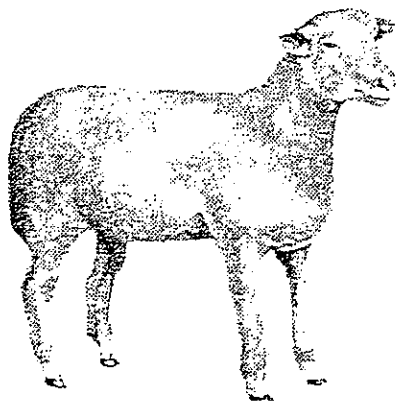
Sheep like to graze on grass **pastures** when these are available. They will also eat hay and grain. Lambs weaned from their mothers are fed a growing diet of grains and minerals so they will grow fast.



### Sheep Body Parts

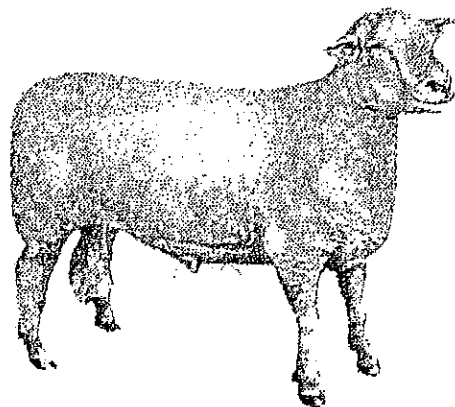
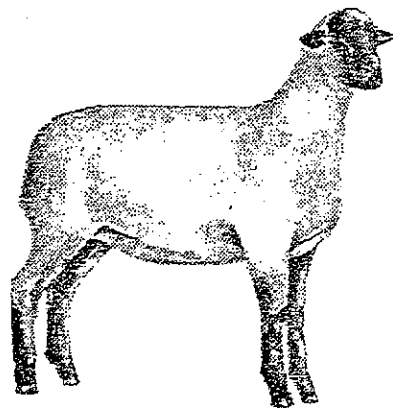
- |              |             |                 |
|--------------|-------------|-----------------|
| 1. Poll      | 18. Dewclaw | 34. Leg of Lamb |
| 3. Ear       | 19. Pastern | 36. Dock        |
| 6. Neck      | 21. Hoof    | 41. Rump        |
| 8. Breast    | 25. Ribs    | 42. Hip         |
| 10. Shoulder | 27. Stifle  | 43. Lion        |
| 14. Knee     | 30. Hock    | 44. Back        |

## BREEDS OF SHEEP



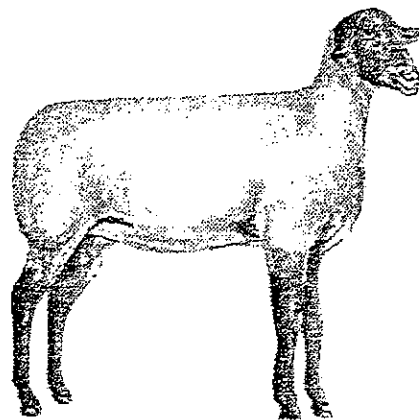
The **Dorset** is a medium sized sheep that is white in color. The Dorset has a very white, strong, close fleece that has no dark fibers. A fleece weight of seven pounds is normal.

The ideal **Hampshire** has wool over the forehead and down to the eyes. The lower part of the face is black and is practically free of wool. The legs are deep brown to black in color and may have some wool on them. The Hampshire produces a fleece weighing seven to eight pounds.



The **Southdown** has wool that completely covers the face and legs. The Southdown produces the finest wool of the medium-wool breeds. Few mature ewes will produce more than five or six pounds of wool in a year.

The **Suffolk** breed has a very black head, ears and legs. The head and ears do not have any wool. The average fleece weight does not exceed six or seven pounds.



# SWINE

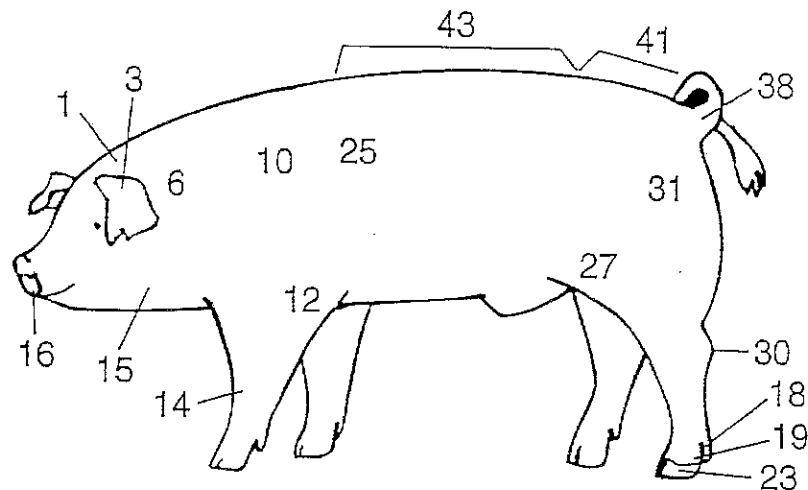
A female pig is called a **gilt**, a male pig a **boar**, a female pig with young a **sow**, a younger pig a **pig** and a group of pigs a **herd**.

Pigs have sparse, coarse body hair and need shelter from the cold. In most cases, **straw** is used to keep pigs comfortable. The farmer cleans the building regularly removing manure and wet bedding. When the weather is hot, pigs need a shaded area from the hot sun with access to plentiful fresh drinking water. Pigs do not sweat so they keep their body cool by panting. The farmer can help keep the pigs cool by using fans and water sprinklers.

Pigs need a balanced diet, just like people to grow strong and healthy. Corn, oats, milo, barley, soybean meal, minerals and vitamins are used to make up the pigs' **ration**. Special feed equipment is used so that many pigs can eat at the same time. Pigs drink water from metal water nipples, waterers or water tanks.

A **farrowing house** is where the sows or gilts give birth to their baby pigs. It takes 3 months, 3 weeks and 3 days (114 days) from the time a sow or gilt is mated to the boar to the time that she gives birth (**farrows**). Eight to ten pigs are the average number of the litter per sow. The pigs range in size from 2 pounds to 4 pounds in weight. The sow calls to her pigs by grunting when it is time for them to nurse. The farmer may give **vaccinations** to keep the pig herd healthy.

When the pigs are **weaned** (because they no longer need the mother's milk, and weight 40-60 pounds) from the sow, they are put in another barn and they are now called **feeder pigs**. It takes about 4 ½ to 6 months for a feeder pig to weigh 220-240 pounds. Most farmers then truck their pigs to a place called a **meat packing plant**.



**PARTS OF A PIG**

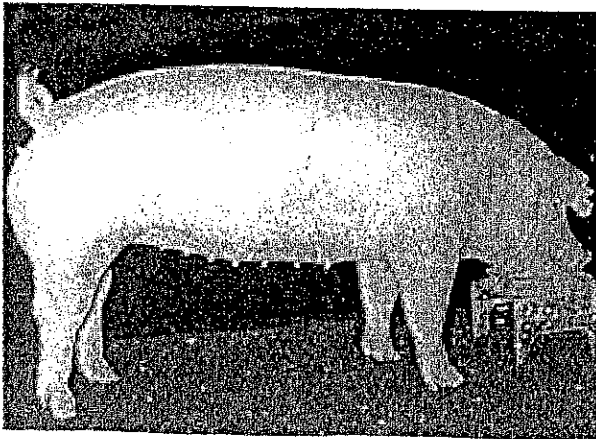
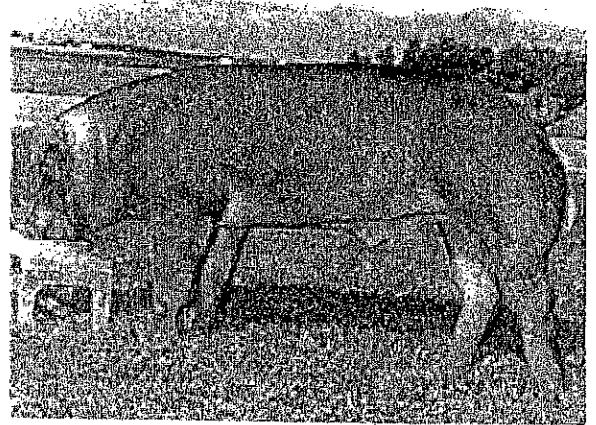
- |              |             |            |
|--------------|-------------|------------|
| 1. Poll      | 15. Jowl    | 27. Stifle |
| 3. Ear       | 16. Snout   | 30. Hock   |
| 6. Neck      | 18. Dewclaw | 31. Ham    |
| 10. Shoulder | 19. Pastern | 38. Tail   |
| 12. Elbow    | 23. Toe     | 41. Rump   |
| 14. Knee     | 25. Ribs    | 43. Lion   |

## BREEDS OF HOGS



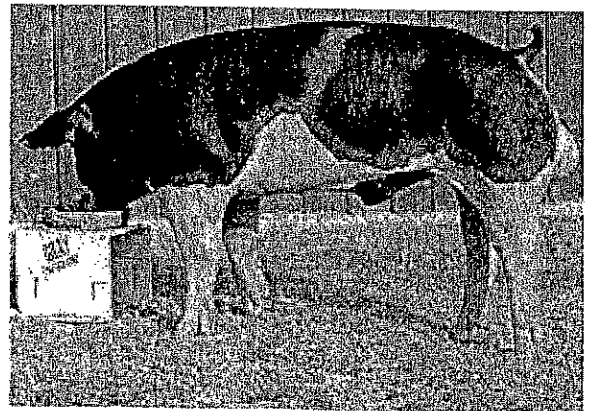
The **HAMPSHIRE** is well-known and easily recognized black hog with a white belt around the shoulders and front legs. It is known for producing a long lean carcass. It also is a good mother and gains weight rapidly.

The **DUROC** is noted for its excellent rate of weight gain per pound of feed eaten. Duroc sows mature early, have large litters, and are good mothers. The Duroc is considered a good meat-type hog.

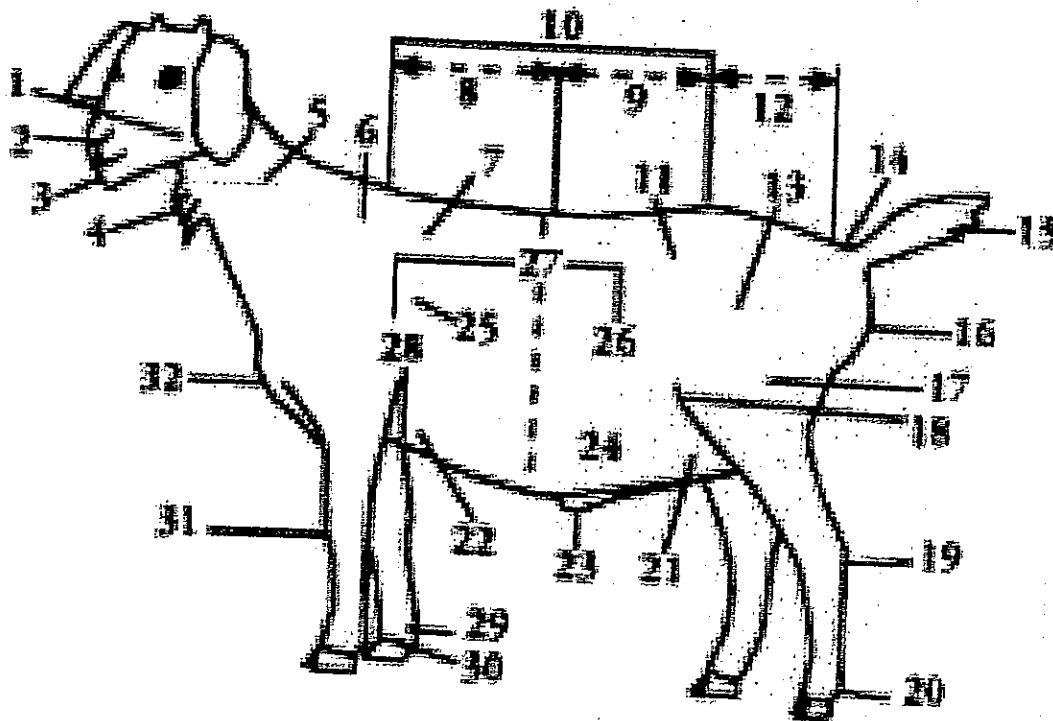


The **CHESTER WHITE** breed is noted for its mothering ability, large litters and having a carcass with large hams. Chester Whites need more shade than other hogs because their white skins sunburn easily.

The **SPOT** (or spotted Poland China) breed was developed for and has achieved an excellent rate of gain and carcasses with heavy hams. Feeder pig producers like Spots because of their hardiness.



# PARTS OF A MEAT GOAT



- |               |                 |
|---------------|-----------------|
| 1. Jaw        | 17. Thigh       |
| 2. Muzzle     | 18. Stifle      |
| 3. Throat     | 19. Hock        |
| 4. Wattle     | 20. Dew Claw    |
| 5. Neck       | 21. Rear Flank  |
| 6. Withers    | 22. Fore Flank  |
| 7. Crop       | 23. Sheath      |
| 8. Chine      | 24. Belly       |
| 9. Loin       | 25. Fore Rib    |
| 10. Back      | 26. Rear Rib    |
| 11. Hipbone   | 27. Barrel      |
| 12. Rump      | 28. Heart Girth |
| 13. Thurl     | 29. Pastern     |
| 14. Tail Head | 30. Hoof        |
| 15. Tail      | 31. Knee        |
| 16. Pin Bone  | 32. Chest       |



# BREEDS OF GOATS

## Myotonic

This breed is known by several different names: Wooden Leg, Stiff Leg, Fainting Goat, Nervous Goat, Scare Goat, Fall Down Goat and Tennessee Fainting Goat. They are known as fainting goats because they have an inherited muscle condition (myotonia) that causes temporary muscle stiffness of the hind legs and neck when they are startled. This stiffness causes them to fall over and lie very still for 10 to 20 seconds.

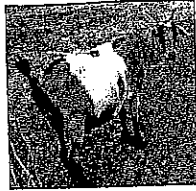


Photo courtesy R Fainting Farm, © 2002 Goat World.com. Used with permission.

Myotonics that have been selected for meat production are heavy-rumped and deep-chested animals. They are excellent crossbreeding stock for Boer goats. The resulting kids possess superior meat quality. The *loin eye muscle* tends to be bigger around, but also somewhat shorter. The myotonic gene is recessive, therefore "fainting" is not always expressed in *crossbred kids*.

The breed is usually black and white, but multiple colors are not uncommon. Compared to other goats, they are not good climbers or jumpers, making them somewhat easier to keep. They are a small to medium-sized breed, with a mature buck weighing 100 to 175 pounds and a mature doe weighing 75 to 125 pounds. Production traits include ease of kidding, a kidding rate of 190%, relatively good milk production, and an average daily gain of 0.25 to 0.35 pounds.

## Nubian

Some people refer to this breed as Anglo-Nubian. The Nubian was developed in England as a dual purpose breed for milk and meat using African, European, and Indian breeds. It has been in the United States since the late 1890s or early 1900s and has become the most popular breed in the U.S.

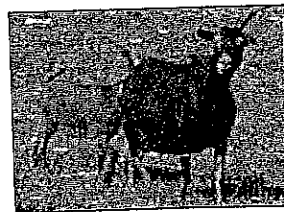


The Nubian has a Roman nose and very long ears that hang close to the head. The hair is always short and any solid or parti-colored coat is permitted. However, black, red, and tan are the most common colors and any of these may be carried in combination with white. It is a large breed, with a mature buck weighing 175 to 300 pounds and a mature doe weighing 135 to 200 pounds. Production traits include a kidding rate of 160% to 190% and an average daily gain of 0.16 to 0.26 pounds.

## Spanish

When Spanish explorers came to America, they brought goats as a meat source. It is believed that some of these goats escaped and some were released as other meat sources were discovered. This means that goats were in Oklahoma and Texas as early as the 1540s. Although they do not have a specific breed ancestry, the Spanish goat developed through natural selection and became known as Spanish Goats or Brush Goats. They have been bred and raised in Texas since the 1700s.

Spanish goats are very hardy and fairly disease resistant. There is no consistent color pattern within the breed. They are a small to medium-framed breed. A mature buck weighs 120 to 220 pounds and a mature doe weighs only 65 to 100 pounds. The average daily gain is 0.2 to 0.3 pounds and the kidding rate is 150% to 170%. Males have large twisting horns that grow outward.



## Pygmy

Pygmy goats are smaller than any other recognized breed of goat in the United States. A full-grown buck stands about 20 to 22" tall and is usually 60 to 80 pounds, and is gray-blue to black in color. On the average, a doe will produce about one quart of milk per day.

Since they are very small, they are easier to handle and therefore they make excellent animals for smaller children.



## Kiko

Some sources indicate that this breed originated in New Zealand, but other sources state that it originated in Australia. However, all sources relate that the breed was developed by crossing native flocks with imported dairy breeds. They were selected and developed based on twinning ability, growth rate, and survivability under extensive range conditions.

Kikos are very similar in size and meat quality to the Spanish breed. They are a large breed. A mature buck weighs 175 to 225 pounds and a mature doe weighs 100 to 150 pounds. Most common colors are white or cream but all colors can be seen.



Photo courtesy An Paschel, Goats Unlimited.

## San Clemente

The San Clemente Island Goat is a descendent of the Spanish goats that were planted on the Pacific Coast islands to supply a meat source for ships' crews. These goats did very well on the island until around the turn of the 20th century when they were hunted to near extinction. There are currently about 200 purebred animals left. All the goats are marked the same, with variations in the base color from tan to amber. The horn set should start to spread within a couple of inches of the base and keep spreading and trailing outward giving a light, airy look. The horns should twist about a half-to three-quarter turn to the tip, depending on the animal's age.

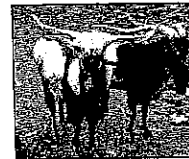
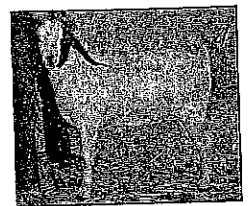


Photo courtesy Earth Spirit Preserve.

## Boer

This breed is also known as Africander or South African Common Goat. The Boer originated in South Africa as the result of uncontrolled crossbreeding between the native goat and the Angora, European, and Indian goats that were brought by explorers. Selection started in the 1820s, and a breed registry was started in 1959. The name comes from the Dutch word "Boer," which means farm or farmer, and it was probably used to distinguish native goats from those that were imported.

The Boer is a meat goat with several adaptations to the region in which it was developed. It is a horned breed with lop ears. It has a white body, tail, and legs with a reddish brown to black head and neck. The Boer is a very large breed. A mature buck weighs 250 to 350 pounds and a mature doe weighs 200 to 225 pounds. Performance records usually show a kidding rate of 200%, a weaning rate of 160%, and an average daily gain of 0.3 to 0.4 pounds, with exceptional individuals having an average daily gain of 0.5 pounds.



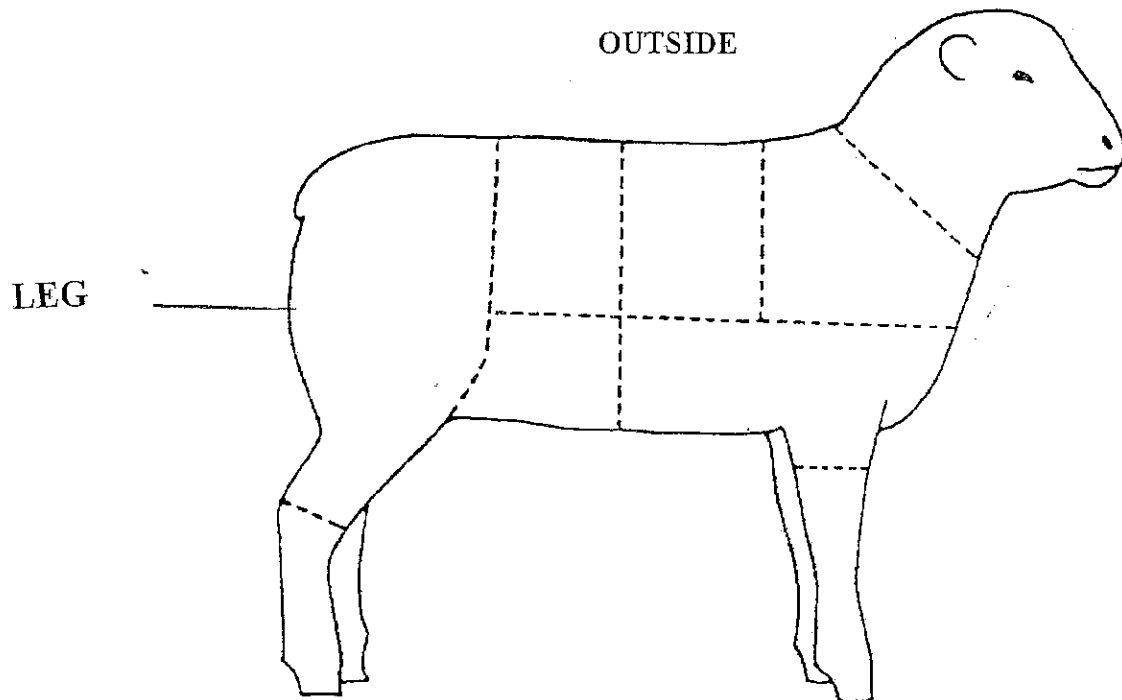
## LET'S LEARN ABOUT LAMBS

Lambs are born in the winter and early spring. The mother sheep is called a ewe(you). The father or sire of the lambs is called a ram. Farmers should manage and care for their flocks so that a ewe will raise more than one lamb per year. Some ewes will only have one lamb but others may have two or more lambs. More lambs will mean more money for the farmer.

Lambs are sold to make food for people. The meat from a lamb carcass less than 12 months old is called "lamb." Lamb is a very good food. It is very tender and tastes delicious. Meat from older sheep is called "mutton."

The better cuts of lamb come from the "rack," "lion," and "leg of lamb." These cuts are called the "high-priced cuts." Lamb chops come from the lion.

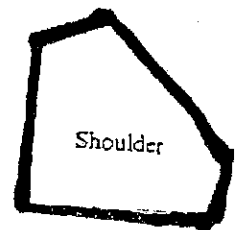
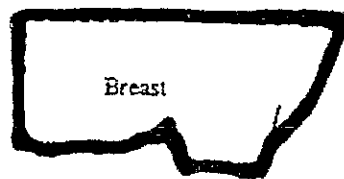
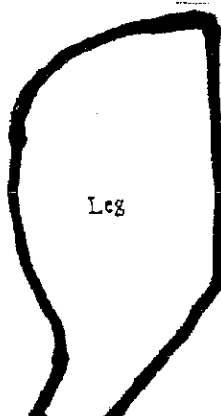
**DIRECTIONS:** At the bottom of the page, you will find some of the favorite "cuts" or kinds of meat that are obtained from sheep. Cut out each one and piece it over the proper place on the outside of the sheep animal where it could be found. Leg has been labeled for you.



INSIDE

High Priced Cuts: rack, lion, leg

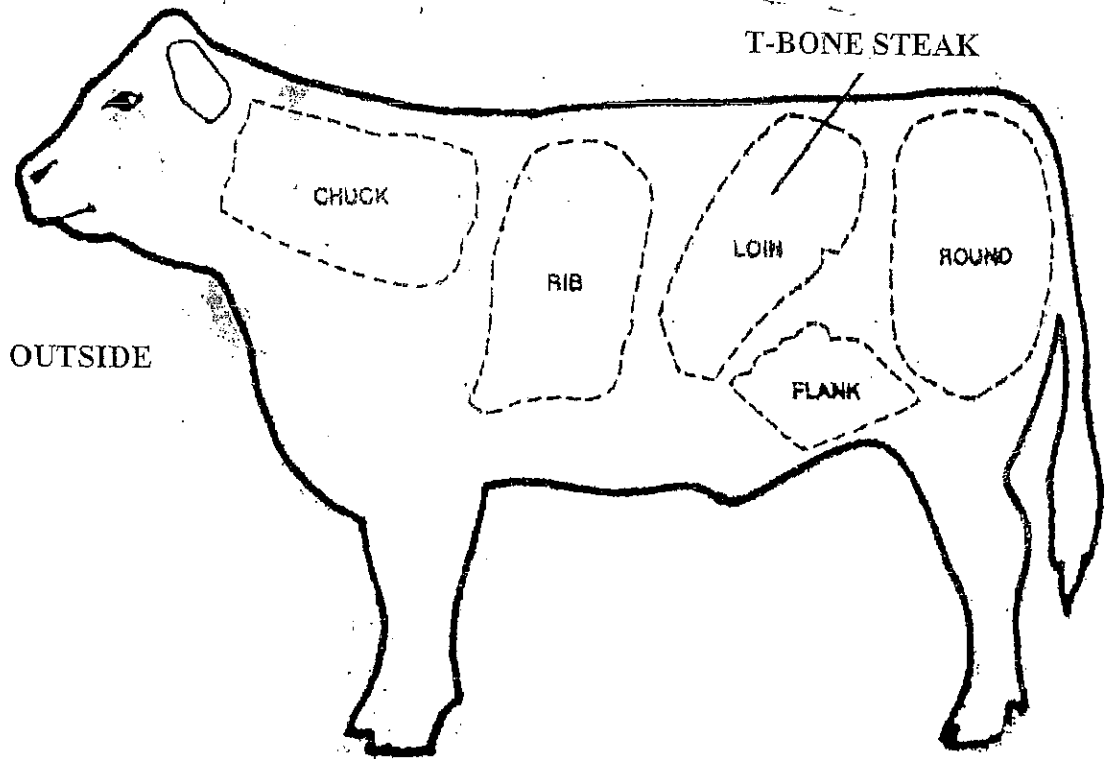
Low Priced Cuts: shoulder, breast, flank



# INTRODUCING THE CATTLE KING

**BEEF CATTLE** are among the most **WHO NEEDS A KING?** We all need important farm animals. Each the Cattle King. Why do you think that eats an average of 125 pounds per year we need him? (How many of your class of roast beef, veal, hamburger, hot dogs, said "for hamburgers?") Here is another and other beef products. American farmers important reason. About 83% of our land sell more beef than any other product. So, can't be used to grow crops for humans beef cattle are truly the "Kings" of the to eat. But grass that feeds cattle grows on almost 1/2 of that land. Without King Cattle, a great deal of our land could not be used to grow food.

**DIRECTIONS:** At the bottom of the page, you will find some of the favorite "cuts" or kinds of meat that are obtained from cattle. Cut out each one and piece it over the proper place on the outside of the beef animal where it could be found. Then re-label each cut to help you remember it. T-Bone steak has been labeled for you.



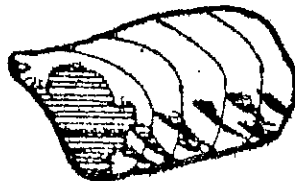
## INSIDE

Major cuts from the forequarter (or front) chuck and rib.

Hindquarter cuts are lion and round



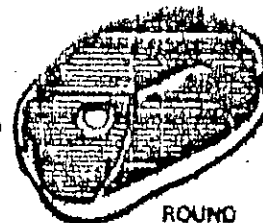
**CHUCK**  
Arm Pot-Roast  
or Steak Rib



**RIB**  
Rib Roast  
Small End



**FLANK**  
Hamburger



**ROUND**  
Round Steak

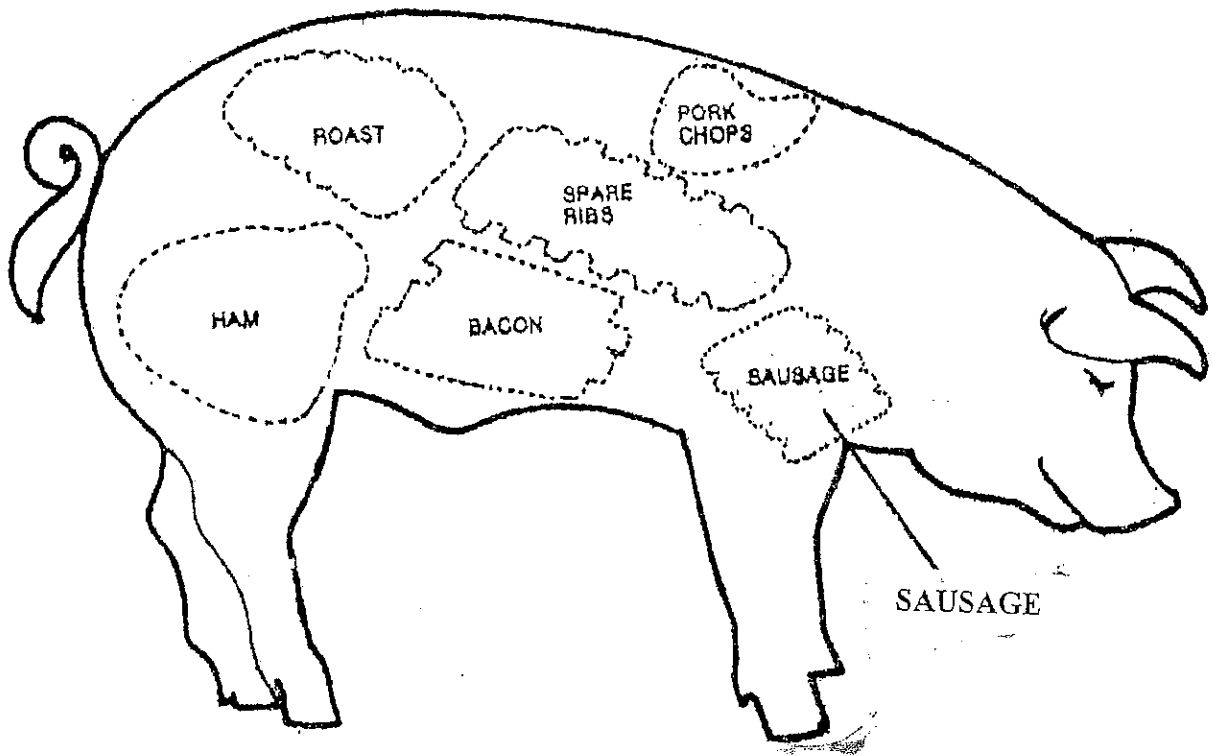


**LOIN**  
T-Bone  
Steak

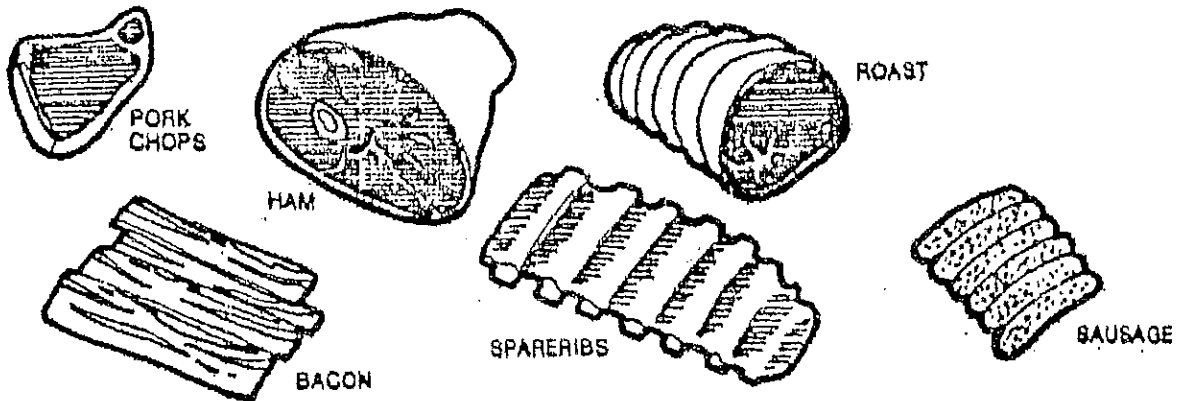
# PLEASE MEET "PRINCE PIG"

**DIRECTIONS:** At the bottom of the page, you will find some of the favorite "cuts" or kinds of meat that are obtained from the pig. Cut out each one and place it over the proper place on the outside of the pig where it would be found. Then re-label each cut to help you remember it. (Sausage has already been labeled for you.)

## OUTSIDE

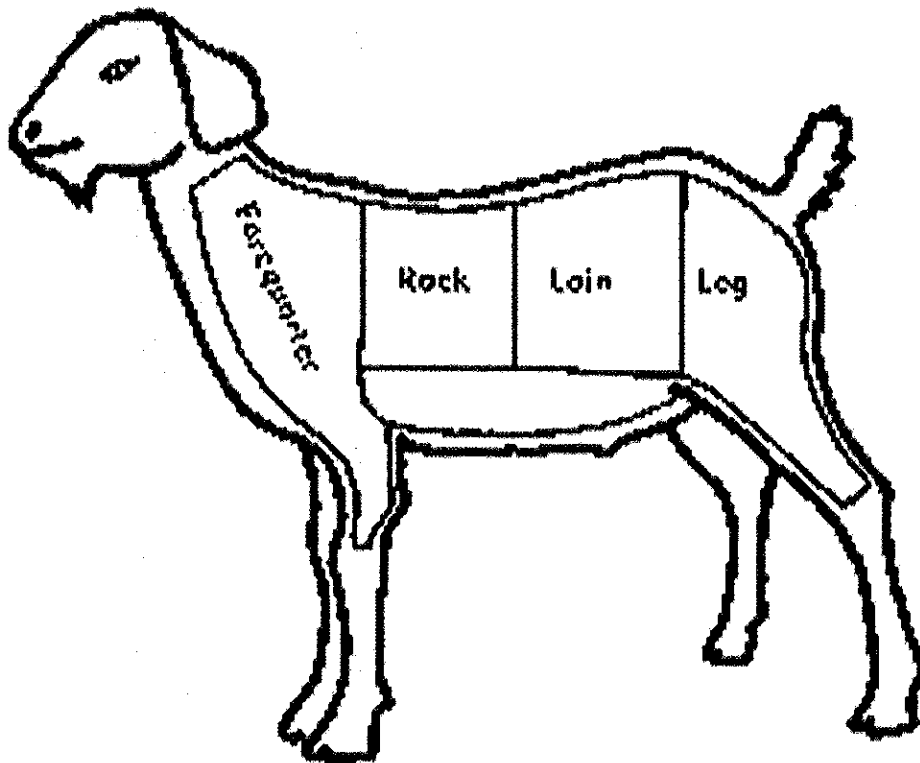


## INSIDE



## Why raising goats is fun

Goats are fun because they all have different personalities and have different little habits that can be amusing or interesting. Goats are very affectionate and especially during the summer, when they are too hot to be active, they like to just hang around people and get a good scratch. Most goats' favorite scratchy spot is around their shoulder but some even liked to be scratched in between their toes. It is very rewarding to see a goat you have raised from a baby grow up and have kids and grandkids of her own. With goats that doesn't have to take too long, maybe about 3 or 4 years at most, because they are able to breed when they are just a year old. It's also neat to learn how to milk or trim hooves and other things that you wouldn't ordinarily be able to do.



MINI 4-H LIVESTOCK RECORD SHEET

NAME \_\_\_\_\_ GRADE \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIPCODE \_\_\_\_\_

TELEPHONE NUMBER \_\_\_\_\_

WHICH IS YOUR FAVORITE? PIGS \_\_\_\_\_ COWS \_\_\_\_\_ SHEEP \_\_\_\_\_

WHY IS THIS YOUR FAVORITE ANIMAL? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I HAVE REVIEWED THIS RECORD AND BELIEVE IT TO BE CORRECT.

SIGNATURE OF PA RENT \_\_\_\_\_

DATE \_\_\_\_\_