In this project, Breeds of Beef Cattle . . . members will learn about:


Requirements to Complete This Project

* Enroll as a 4-H member in the beef project.

* Read and study Unit 2.

* Review Unit 1.

* Complete the exercises and activities at the end of this publication.

* Finish the records and activities as indicated by either your 4-H agent or leader.
Breeds of Beef Cattle

The 4-H Beef Project will open the door to many learning and fun-filled experiences. Learning about the different breeds is one of the real interesting parts of the beef project. A breed of cattle is a group of animals that has similar characteristics. Also they can pass these characteristics on to their young. There are many breeds of cattle commonly found on farms in Tennessee. Beef breeds are used to produce meat, while dairy breeds are used primarily to produce milk. In this publication a picture and a short history of the more common beef breeds found in Tennessee will be shown.

Let's Learn About the Hereford:
The Hereford breed of cattle came from Herefordshire County in England. The breeders in this area raised cattle that could produce beef on grass and with very little grain. The first records on the beginning of the Hereford breed go back to 1742 when a nine-year-old boy, named Benjamin Tompkins, received, through his father's will, a dark red, mottle faced cow named "Silver." His breeding program started later with two cows named "Pigeon" and "Mottle," plus a bull produced from "Silver." Other breeders in the area later started breeding Hereford cattle.

The first Hereford cattle were brought to the United States in 1817 by Henry Clay and Lewis Sanders of Kentucky. In 1825, Admiral Coffin, of the Royal British Navy, sent the bull "Sir Isaac" and a cow as a gift to the Massachusetts Society for the Promotion of Agriculture. The first breeding herd of Herefords in the United States was started by William H. Gotham and Erastus Corning of Albany, New York. Later, Hereford cattle were tried in other parts of the United States. They grew so well that they eventually were sent to all parts of the country.

The Hereford differs from all other breeds by its red body and white face. It also has horns. White extends over the throat, brisket, flanks, belly, switch, crest and below the knee and hock. White back of the crops (called a "line back"), high on the flank, or too high on the legs is criticized. A red neck is also undesirable. Herefords are often called "white-face" cattle.

Hereford cattle are noted for being muscular, medium to long in length of side, adequate in length of leg, large in size, trim and smooth. They are well developed in the area of high priced carcass cuts; back, loin and round. Herefords rate high on reproductive efficiency. Herefords have been criticized for low milk production and susceptibility to cancer eye and pinkeye.
Let's Learn About the Polled Hereford

Polled Herefords came from the same place as Herefords, since they are polled animals from horned cattle. The Polled Hereford breed was started by Warren Gammon of Des Moines, Iowa, in 1901. Mr. Gammon wrote all members of the American Hereford Cattle Association asking if they had cattle that were polled (no horns). He located 10 hornless cows and 4 bulls. He purchased 7 of the cows and all 4 bulls. From this small group of cows and the use of these polled bulls on horned females, he developed the Polled Hereford breed.

Polled Hereford cattle look like Hereford cattle. The major difference is that the Polled Herefords do not have horns. Horns or "scurs," small, loose horns which sometimes appear on Polled Hereford cattle, are objectionable.

Polled Hereford cattle have been criticized for lack of quality and thickness in the rear quarters. However, much improvement has been made in these areas during the last few years.

Let's Learn About the Angus

The first Angus Cattle were brought to the United States in 1873 by George Grant of Victoria, Kansas. Since then, many more Angus cattle have been imported.

Angus cattle are black; white is not allowed except a small amount on the underline behind the navel. The breed is polled. A very desirable characteristic is that when Angus cattle are crossed with horned cattle, the offspring are polled.

Angus cattle are noted for being well muscled, smooth and trim. They are known for producing very desirable carcasses. Other desirable characteristics include few calving problems and resistance to some eye problems.

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Let’s Learn About the Red Angus

Sometimes a red animal is produced by an Angus cow and an Angus bull. This is because some Angus carry a red gene. When Red Angus are mated, they always produce a red calf. Only recently, has Red Angus been recognized as a breed. The Red Angus breed has adopted high standards for registration. They require weight records and an inspection before registration.

Red Angus have characteristics similar to the Angus except color. The Red Angus have a deep red color. They have excellent beef characteristics like the Angus.

Let’s Learn About the Shorthorn

The Shorthorn breed of cattle came from the Tees River Valley of Northeastern England. The breed was given its name because early English breeders were able to shorten the horns by selective breeding of the long-horned cattle in the area. In 1783, Charles and Robert Colling started working with these cattle. They later made the first marked improvements in Shorthorn cattle and made them into a true breed.

The first Shorthorn cattle were brought to America in 1783. They were brought to America by the firm of Miller and Gough, of Virginia and Maryland.

Shorthorns may be red, white or any combination of the two colors. The red and roan are the most popular colors.

Shorthorn cattle are known for their milking ability. They also work well in crossbreeding programs. Lack of uniformity has been one of the major criticisms of the breed. However, this would be expected since certain strains have been developed for beef and others for milk. Shorthorns have also been criticized because slaughter animals do not have a smooth and even finish (fat cover).

Let’s Learn About the Polled Shorthorn

The Polled Shorthorns were developed by breeding naturally polled Shorthorn cattle. The Polled Shorthorn were developed in Ohio, Indiana, Illinois and Minnesota between 1870 and 1890. The Polled Shorthorn are similar to the Shorthorn, except for the horns.

Let’s Learn About Charolais

Charolais cattle came from the old French province of Charolles in the hill country of East-Central France. In 1773, Claude Matthew was given credit for starting the Charolais as a breed. These cattle were used as beef animals and work animals until World War I.

The first Charolais cattle brought into North America went to Mexico in 1910. From there the cattle moved to Texas, Louisiana, and Florida. Charolais are light, cream colored cattle that may be horned or polled. They are large, heavily muscled animals that gain well and produce a high percentage of lean meat. Charolais have been criticized for not marbling well at a young age. Also, calving problems have been encountered when Charolais bulls were crossed with smaller British breeds of cattle.
Let's Learn About the Limousin

The Limousin breed came from West-Central France. The first animal brought into North America went to Canada in 1967. The first crossbred calves came in the summer of 1969. Later, these cattle came into the United States.

The Limousin breed is noted for its rich, red-gold color over the back, shading to light buckskin or straw color under the belly and around the legs and muzzle. The animals are long-bodied, heavily muscled and relatively light-boned. They are slightly smaller than the Charolais.

Limousin are noted for having a high yield of lean meat in the carcass and for ease of calving. Double muscling has been an undesirable characteristic found in some blood lines.

Let's Learn About the Simmental

The Simmental breed came from the Simmer Valley of Switzerland. In 1967 the first Simmental bull was brought into North America by Simmental Breeders, Cardston, Ltd. of Alberta, Canada. By 1968 the first calves arrived in the United States.

In color, the Simmental are light red or cream with faces much like the Hereford. Usually they have some white spots or a white band over the shoulders. The breed is known for its large size. Mature cows weigh 1450 to 1800 pounds, and bulls weigh from 2400 to 2800 pounds.

Because of their size, muscling, gentle nature and milking ability they are popular in crossbreeding programs.

Let's Learn About the Red Poll


The breed is characterized by a solid red color. It may have some white in the switch of the tail and below the underline. They are a polled breed. Mature cows weigh 1200 to 1500 pounds, while bulls weigh 1800 to 2000 pounds.

They are noted for their production of milk and easy fleshing qualities. They are lighter muscled than many of the other beef breeds.

Let's Learn About the Brahman

The modern beef-type Brahmans were developed in the United States by combining different breeds of cattle from India. The first Indian cattle, "Brahman", were brought into the United States in 1849 by Dr. James Bolton Davis, of Charleston, South Carolina. Basically, four breeds of Indian cattle were used to produce the American Brahman.

The Brahman is characterized by a large hump over the shoulders. They also have loose skin, particularly around the dewlap, and have large drooping ears. They are usually gray in color; however, red is acceptable.
Brahman are noted for their ability to stand heat and resist flies and ticks. They are also able to graze in areas where only poor quality forage is available. Brahman are criticized for being wild and ready to stampede. However, much of this has to do with the manner in which they are handled.

Let's Learn About the Brangus
This breed was developed in the United States during the 1930's and 1940's. In 1932, the U. S. Department of Agriculture studied the Brahman-Angus cross at the Livestock Experiment Station in Jeanerette, Louisiana. Three men, Frank Buttram, Raymond Pope and Tom Slick have been given credit for starting the breed.

The Brangus breed is 3/8 Brahman and 5/8 Angus. They are black in color, polled and are smoother and more compact than Brahman. The Brangus have a good growth rate, are resistant to flies and pinkeye, and can withstand high temperatures. The most serious fault is that some animals have bad dispositions. Also, they lack thickness in the hindquarters.

Let's Learn About the Santa Gertrudis
The Santa Gertrudis breed was started by Captain Richard King in 1851 on the King Ranch in Southeast Texas. The Santa Gertrudis breed was started by crossing the Shorthorn and Brahman breeds. The breed is considered to be 3/8 Brahman and 5/8 Shorthorn.

The Santa Gertrudis is cherry-red in color. It may be either horned or polled. It has large ears like the Brahman. It has a loose hide similar to the Brahman.

They are noted for their ability to make large gains on grass. They can tolerate heat and insects. Santa Gertrudis have been criticized for lacking the ability to marble at a desirable weight and age. Low reproductive efficiency has also been a problem with the breed.
Characteristic: A trait, property or marking that distinguishes one breed from another.

Crossbreeding: The mating of two breeds to produce an offspring that has some characteristics of each of the parent breeds.

Disposition: The temper or mood of an animal.

Double Muscling: A condition in animals where all muscles in the body are enlarged. Double muscled animals usually have a low reproductive efficiency.

Dual Purpose Breed: A breed that is used to produce both milk and meat.

Gene: This is a complex chemical compound that allows parents to pass their characteristics to their offspring.

Marbling: The fat that is mixed in the lean meat of a carcass.

Offspring: The young produced from the mating of a male and female animal.

Registration: The process of writing information about an animal in the official record book of a breed association.

Reproductive Efficiency: A term used to compare the number of offspring actually produced to the maximum number that could have been produced.

Resistance: The ability to keep an animal from having a disease.

Ruminant: These are animals that have more than one compartment in their stomach.
PROJECT RECORD "BREEDS OF BEEF CATTLE"
4-H Beef Project
UNIT II

<table>
<thead>
<tr>
<th>NAME</th>
<th>ADDRESS</th>
<th>COUNTY</th>
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AGE _____
1. Exercise 1 completed Date ______
2. Exercise 2 completed Date ______
3. Exercise 3 completed Date ______

4. Attach a picture of your favorite breed of beef cattle.

5. The title of this Unit is "Breeds of Beef Cattle." Why do we have so many breeds?

Extension Agent or Leader Signature ________________________________
NAME THE BREED

1. List all the breeds of beef cattle found in your county. If you have a favorite, circle that breed:

2. List three breeds of beef cattle that may have horns:

3. List three breeds of beef cattle that do not have horns (polled):

4. List two breeds of beef cattle that were developed by crossing two or more breeds:

EXTRA CREDIT

5. List the names of all purebred breeders in your county.

Also list the breed of cattle:
MORE THINGS TO DO
(You must complete at least four of these activities to finish the Project.)

1. Show a steer or heifer in a 4-H show.          Date Completed

2. Visit a purebred beef cattle breeder.         

3. Attend a purebred beef cattle auction.        

4. Attend a beef cattle show.                    

5. Visit a livestock auction barn.               

6. Attend a breed association field day.         

7. Attend a 4-H Beef Leadership Conference.      

8. Attend a 4-H Beef Project meeting.            

9. Take part in a 4-H livestock project tour.    

10. Give a demonstration on breeds of beef cattle. 

11. Give a demonstration on how to groom different breeds. 

12. Prepare an exhibit showing the different beef breeds.
Additional information may be obtained from the Breed Associations. Addresses of the Breed Associations are as follows:

**ANGUS:**
American Angus Assn.
3201 Fredrick Blvd.
St. Joseph, MO 64501

**BRAHMAN:**
American Brahman Breeders Assn.
1313 La Concha Lane
Houston, Texas 77054

**BRANGUS:**
International Brangus Breeders Assn.
9500 Tioga Drive
San Antonio, Texas 78230

**CHAROLAIS:**
American International Charolais Assn.
1610 Old Spanish Trail
Houston, Texas 77054

**HEREFORD:**
American Hereford Assn.
715 Hereford Drive
Kansas City, MO 64101

**LIMOUSIN:**
North American Limousin Foundation
100 Livestock Exchange Bldg.
Denver, CO 80216
POLLED HEREFORD:
American Polled Hereford Assn.
4700 E. 63rd Street
Kansas City, MO 64130

RED ANGUS:
Red Angus Assn. of America
Box 776
Denton, Texas 76201

RED POLL:
American Red Poll Assn.
3275 Holdrege Street
Lincoln, Neb. 68503

SANTA GERTRUDIS:
Santa Gertrudis Breeders Int.
Box 1257
Kingsville, Texas 78363

SHORTHORN:
American Shorthorn Assn.
8288 Nascall Street
Omaha, Neb. 68124

SIMMENTAL:
American Simmental Assn.
1 Simmental Way, Box 24
Bozeman, Montana 59715