Mini 4-H Beef



Kindergarten, 1st and 2nd Grades

PURDUE UNIVERSITY, INDIANA COUNTIES AND DEPARTMENT OF AGRICULTURE COOPERATING AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY INSTITUTION

Dear Parent:

As a Mini 4-H parent, your job will be to guide and encourage your child through the activity. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "Learn by doing"... and is the best educational tool that we can provide for youth.

It is the policy of the Purdue Extension Service that all persons shall have equal opportunity and access to its programs and facilities without regard to race, color, age, sex, religion, handicap, or national origin.



Welcome to Mini 4-H! You are now a member of the 4-H family. Mini 4-H'ers have lots of fun. There are many activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad or another adult can help you with your project, and you can bring your project to the 4-H fair. Many people will be able to see what you have done. You will receive a ribbon made just for Mini 4-H.

Things to learn –

The 4-H Symbol: A four leaf clover with an H in

each leaf

4-H Colors: Green and white

The 4-H Motto: To make the best, better.

The 4-H Pledge: I pledge my *Head*

for clearer thinking;

my *Heart* for greater loyalty; my *Hands* for larger service; and my *Health* for better living in my club, my community, my country and my world.



Mini 4-H Beef

Welcome to the Mini 4-H Beef project! You are going to learn a lot of exciting things about beef animals! Did you know that marshmallows contain a by-product from cattle? How many different breeds of cattle are there in the United States? 10? 30? Over 70? Do you know what cattle eat? You will learn the answers to all of these questions in the Mini 4-H Beef project. Beef animals are a great project for young people to show. Here are a few reasons to raise and show cattle.

- 1. You will meet many new friends!
- 2. You will get to spend quality time with your family.
- 3. You will learn how to be responsible.
- 4. You will learn to manage your time.
- 5. You will learn how to take care of an animal and watch it grow and mature.



What Will I Do?

If you are in 2nd grade, to complete the project, you will show a calf at the Hancock County 4-H Fair. The calf must belong to a 4-Her that is enrolled in the traditional 4-H Beef project. If you know a 4-Her that has a calf at the fair, ask them if it is okay for you to show their calf in the Mini 4-H Beef Show. Due to space limitations and health requirements, we cannot allow a Mini 4-Her to bring a calf that they may own. All calves shown in the Mini 4-H Beef Show cannot have horns.

While showing the calf, a parent, legal guardian, or another adult designated in writing by parent or legal guardian will have control of the animal at all times. This includes coming and going to the show ring. A Mini 4-H Animal Liability Release form must be completed and on file with the Extension Office before the Mini Beef show.

If you are in Kindergarten (Division 1) you will exhibit a poster on your favorite breed of cattle. Posters are displayed horizontally; 22" by 14", and mounted on a firm backing and covered in clear plastic or other transparent material. Attach a label to your exhibit in the lower right hand corner indicating your name and grade.

If you are in 1st grade (Division 2) you will exhibit a poster on the cuts of beef. Posters are displayed horizontally; 22" by 14", and mounted on a firm backing and covered in clear plastic or other transparent material. Attach a label to your exhibit in the lower right hand corner indicating your name and grade.

In The Show Ring

When you show a calf in Mini 4-H, you must use a halter. The halter will help you lead the calf.

The most important thing there is in showing a calf is to watch the judge. He may tell you to take your calf to another spot in the ring. If you don't keep eye contact with him, you might miss the chance to place your calf higher in the class.

Hold the head of the calf in a normal position or slightly higher. Keep the calf between the judge and you. Scratch the calf with a show stick. Show cattle enjoy being scratched on the belly. In addition, you will need to set the calf up. This means to have the front legs and the back legs square underneath the calf. This will take a lot of patience and practice.

Sometimes a judge will ask a few questions. You might try and learn where the tail head, loin, rump, and flank are on your calf. Other common questions that may be asked are: What is the weight of your calf? Breed? Age? What does your calf eat?

Do not worry about knowing all this information. If you can answer all these questions by the time you are in 3rd grade and ready to join 4-H, you will be a pro!

If you are in Kindergarten or 1st grade you will make a poster for your mini 4 –H project. This poster

Calf, Heifer, Cow, Steer, or Bull?

A baby beef animal is called a calf. A calf will weigh about 80 pounds when it is born. Calves nurse from their mother several times a day. They are weaned when they get to be around six months of age. A calf will usually weigh between 500 - 600 pounds when it is weaned. At this time it can eat grain on its own.

Heifers are young females that have not had a baby. They are not full grown. When heifers are bred to a bull, and have a calf, they are called a cow. Cows are female breeding animals and are the mother of the calf. It takes nine months for a calf to be born. Cows can have one calf every 12 months.

A bull is a male. It is the father of the calves. Steers are males which are neutered, like pets, so that they cannot reproduce. Steers are market animals. When they get to be about 1250 pounds they are taken to market and sold for their meat. It usually takes a steer 1 and half years from birth until they are ready to go to market.



What Do Cattle Eat?



Cattle are ruminants, which means they chew roughage, like hay, grass and other plant products. A pasture is a field of grass that is grown to feed animals. When cattle eat grass from a pasture it is called grazing.

Cattle can eat grass and hay because they are ruminants. They have four compartment stomachs. You have only one stomach. A beef animal needs four stomachs to digest or break down all of that roughage they eat. After eating, cattle chew their cud. Feed is brought back up from their stomach to chew. Cattle spend one-third of their life eating, one-third ruminating and one-third resting.

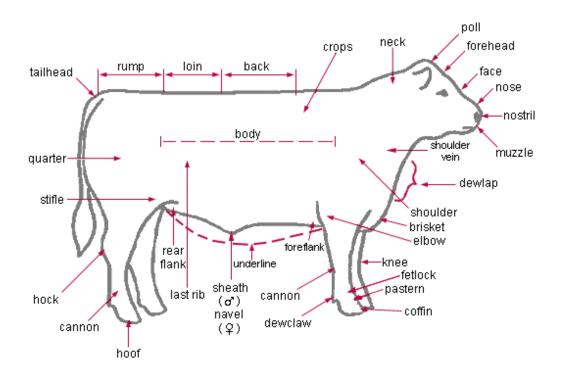
After cattle are weaned they go to feedlots. A feedlot is a pen that has a lot of space outside along with housing to protect the cattle from the weather. They are fed a diet that includes corn and hay. Feeding grain to cattle helps make the beef tenderer, juicy, and great tasting.

Cattle can live outside all year. In the winter, their hair grows thicker and longer to keep them warm.

Many of our favorite foods are made with beef. Cattle give us roast beef, hamburger, taco meat, meatballs, steak and many more foods. A few of the by-products that come from cattle are: glue, medicine, bone china, pet food, marshmallows, Jell-O, and Gummy bears.

Parts of a Live Beef Animal

Become familiar with the parts of your beef animal



Breeds of Beef Cattle

At the start of the Mini 4-H Beef project book, you were asked how many breeds of cattle are there in the United States. There are over 70 different breeds of cattle in the United States! Just like people, cattle come in different sizes and colors. The size, color, and shape of a calf help determine the breed of the cattle it may belong to along with its' mothering ability or quality of meat. A few of the major beef breeds are listed on the next few pages.

Angus cattle are naturally polled and can be black or red in color although black is the dominant color. They are resistant to harsh weather, adaptable, good natured, mature early and have a high carcass yield with nicely marbled meat. Angus is known as a carcass breed. They are used widely in crossbreeding to improve carcass quality and milking ability. Angus females calve easily and have good calf rearing ability.



Charloais is the leading terminal beef sire noted for its fast growth and excellent conformation. Charolais cattle are creamy white to wheat in color. Bulls are noted for muscling, with excellent loins, and good hindquarters. Females are less heavily muscled and have well developed udders.



Hereford/ Polled Hereford are dark red to red-yellow colored, , with a white face, crest, dewlap, and underline. Herefords with white flanks and white markings below the knees and hocks are also common. These cattle are known for their long life span and vigor. Herefords are generally very tame and fast growing with good beef quality.



Maine – Anjou are feed efficient, large cattle that provide high cutability and marbling qualities. The Maine-Anjou is one of the highest marbling of the continental breeds. It provides a favorable option for crossbreeding programs. Their disposition is very docile. These docile animals make great feedlot cattle that handle stress very well.



Simmental varies from gold to red with white, and black with blaze faces. Simmental can be horned or polled. They have a large frame with good muscling. Simmentals are bred all over the world for their high beef yields. The heavy muscling, length and overall size and weight of the animal are combined to produce a well fleshed carcass of solid red meat with a minimum of waste fat. In crossbreeding, the Simmental has proved very successful. It provides good growth, a large frame and thus a better beef yield to its crossbred progeny.



Photo courtesy of The American Simmental Association