There are some things you should know about steers before you get started.

**Objectives**

After studying the materials and completing the suggested activities for this section, you should be able to:

1. Name the two major products we get from a steer’s carcass and which is the most important in today’s society.

2. Write the scientific names for two species of cattle.

3. Explain the differences among the terms: cattle, calf, bovine, feeder calf, steer, finished steer, heifer, bull, and stag.

4. Name two traditional segments of the beef industry.

**Why Do We Raise Steers?**

For most of the history of beef production (before about 1950), steers were raised for both meat and fat, and sometimes beef cattle were used as draft animals. At that time, fat was very important in people’s diets. Rendered fat from cattle is called tallow and was used in cooking before vegetable oils became popular. Tallow was also used for waterproofing leathers. Before tractors, oxen were used to pull plows or wagons.

Today, we raise beef cattle for meat production. Steaks, roasts, and hamburger are examples of beef meats you may be familiar with. Beef fat, or tallow, is currently not very valuable. Therefore, modern market steers are bred to maximize meat production and optimize body fat (see “Things you need to know” in Section 5). A certain amount of fat is necessary in market animals for the meat to be juicy and flavorful.

Before you purchase your first steer for a market steer project, you must realize and accept that at the end of the project, your steer’s purpose is to produce meat for people to eat.

**What Do We Call Cattle?**

There are two scientific names for cattle. *Bos taurus* includes most beef and dairy breeds in the United States. *Bos indicus* are cattle with humps on their necks and long ears. They are normally found in tropical climates. *Cattle* is a general term used to encompass all animals in both species, and is often interchanged with *bovine*. *Beef cattle* refers to animals of either species when they are bred specifically for meat production. A *calf* is any young bovine up to a year of age. *Feeder calf* is a term usually associated with calves that have been weaned but not yet placed in a feedlot.

Cattle have different names depending on their gender. *Heifers* are young female cattle before they have had their first calf. *Steers* are castrated male cattle. *Finished steers* are steers ready for slaughter. *Cows* are female cattle after they have calved the first time. *Bulls* are
unchastrated male cattle. *Stags* are incompletely or improperly castrated bulls.

**The Beef Industry in the United States**
Traditionally, the beef industry has been segmented, which means that several different producers normally own an animal from birth to slaughter. The first owner of a market steer is a “cow-calf” producer who owns mother cows and sells calves each year after weaning. Unless you raise it yourself, your 4-H steer will most likely come from a cow-calf producer.

Beef cows consume mostly forages and are fed very little grain. They usually harvest their own feed from pastures during the summer months and eat stored forages such as hay (dried, baled grass) or silage (fermented grass or corn) in the winter. Cow-calf producers need access to large amounts of grazing land in order to feed their cows. Therefore, most large cow-calf operations are located where land is inexpensive or in warm climates where a long growing season allows grass to grow for most of the year.

States like Texas, Nebraska, and Florida are home to larger cow-calf producers, who typically own 300 to 1000 mother cows. Because land is more expensive in Pennsylvania and the growing season shorter, cow-calf herds are generally smaller here. A typical cow-calf producer in Pennsylvania owns fewer than 25 cows.

The second segment of the beef industry is called the *cattle feeding* segment. This part can be further divided into stocker feeders and feedlot producers. Stocker feeders, or “backgrounders,” buy weaned calves and feed them low-cost forages for a short time. They then resell the calves to feedlot producers, who place the cattle on a high-grain ration until slaughter. Feedlot producers also buy weaned calves directly from cow-calf producers.

Most larger feedlots are in western states such as Texas, Nebraska, Kansas, Oklahoma, and Colorado. Large feedlots in these states have the capacity to hold 30,000 to 50,000 head of cattle. Pennsylvania feedlots are normally smaller than those found in the West. A typical Pennsylvania feedlot producer feeds 100 to 300 head of cattle at a time, although some Pennsylvania feedlots can house 600 to 800 head. You are acting as a feedlot producer by raising a 4-H steer from weaning to slaughter.

Recently, the beef industry has become less segmented. “Retained ownership” programs allow cow-calf producers to contract a feedlot (often in another state) to feed and market their calves.

**Words You Should Know**
- **Tallow**: Rendered beef fat.
- **Bos taurus, Bos indicus**: Scientific names for domestic beef cattle.
- **Cattle or bovine**: Generic term for all *Bos taurus* or *Bos indicus*.
- **Beef cattle**: Cattle raised specifically for meat production.
- **Calf**: Young cattle less than a year old.
- **Feeder calf**: A weaned calf before placement in a feedlot.
- **Heifer**: A young female bovine that has not calved.
- **Cow**: A female bovine that has had at least one calf.
- **Bull**: A male bovine that has not been castrated.
- **Steer**: A male bovine that was castrated at a young age.
- **Stag**: Improperly or incompletely castrated bull.
- **Castration**: Removal of a male’s testes.
Cow-calf producer: Cattle producer who owns mother cows and produces feeder calves every year.
Stocker feeder/backgrounder: Cattle producers who feed weaned calves an inexpensive forage (grass, hay, or silage) ration before putting them in a feedlot.
Feedlot producers: Cattle producers who feed feeder cattle or backgrounded cattle to slaughter weight on a high energy ration.
Ration: Mixture of feed given to an animal, usually daily.

Suggested Activities
- Make a chart of the different names used for cattle.
- Have members of your club answer roll call at a meeting with one name used for beef cattle.
- Name the two major products we get from a steer’s carcass.

• Explain the difference between cow-calf producers, stocker feeders, and feedlot producers.

Extra Activities to Try
• Ask a local beef producer if the names they use for beef cattle mean the same thing as the names you’ve learned.
• List all the cuts of beef you can think of.

Ideas for Presentations and Talks
• The history of domesticated cattle
• How the uses of cattle have changed
• Changes in the beef industry

Things to Talk About
• How will you react when your project steer is sold for slaughter?
• Why would cow-calf producers want to retain ownership of their calves through slaughter?