

# DAIRY CATTLE PRODUCTION NOTES

## INTRODUCTION

Livestock production is an important part of farming in the United States. People are dependent upon livestock production for supplies of food and clothing. The production of livestock involves selection, breeding, feeding, care and marketing of animals. Cattle were probably the first tamed livestock. They were most likely tamed in the New Stone Age. Early man used cattle for draft, meat and milk. The early pioneers took dairy cattle as well as beef cattle with them and moved westward. Before the 1850s most farms had at least one or two dairy cows that provided milk and butter for the family. During the last half of the nineteenth century however, dairy herds began to develop in the growing cities of the United States. The number of dairy cattle in the United States continued to increase until they reached a peak in the mid 1940s. Since that time, the dairy cattle population of the United States has been declining steadily. Milk is still produced in all of the 50 states, but dairying as a major enterprise on the farm tends to be concentrated in several states. Dairy cows are found in every state in the United States. The leading states in dairy cow numbers are California, Wisconsin, New York, Pennsylvania, Minnesota, Texas, Michigan, Idaho, Ohio and Washington.

## TERMINOLOGY

In livestock production there are specific terms used to identify the gender of animals. These terms are used constantly throughout the dairy cattle industry. All mature, intact male cattle are called bulls. A bull has testicles, which means he is intact. The bull can produce semen to aid in the reproduction of more cattle. All mature female cattle are called cows. A cow has reached sexual maturity. A cow has given birth, and will most likely give birth again. Cattle are castrated when they are going to be used for meat production.

Castrated means that the testicles have been removed from the cattle's body and they can no longer aid in the reproduction of young. Castrated cattle are called steers. All young cattle are called calves. Calf is the singular pronoun. A calf can be either gender. If one would like to differentiate between a male and female calf, there are also different terms. Heifers are female cattle that have not given birth. They are usually less than one year of age and have not reached sexual maturity. Bull Calf is young male cattle that are still intact. Bull calves are either placed in the breeding stock to replace a retired bull or castrated and sent to market for meat production.

## BREED CHARACTERISTICS

There are five major breeds of dairy cattle in the United States – Ayrshire, Brown Swiss, Guernsey, Holstein, and Jersey. A sixth breed, the Milking Shorthorn, is considered a dual purpose breed. Cattle that are considered dairy breeds are selected for breeding on the basis of their ability to produce large quantities of milk for a long period of time.

### *Ayrshire*

The Ayrshire breed originated in the southwestern part of Scotland. The Ayrshire was developed in the last part of the eighteenth century with the original name, Dunlop. The first importation of Ayrshires to the United States was in 1822. The greatest numbers of Ayrshires are found in the northeastern states.

The Ayrshire may be any shade of cherry red. Other colors are mahogany, brown or white. White may be mixed with red, mahogany or brown. The preferred color is red and white. Ayrshires have very straight lines and well-balanced udders. These dairy cattle are very strong and vigorous. They also have excellent grazing abilities. Ayrshires are the third ranked dairy cow when it comes to milk production. They average about fourth in milkfat production.

### *Brown Swiss*

The Brown Swiss originated in Switzerland. They are probably one of the oldest dairy breeds. It is believed no outside breeding was used in the development of this breed. The Brown Swiss were first imported into the United States in 1869. Only a very small number have been imported into the US. There have been no importations since the early 1900s due to foot and mouth disease.

Brown Swiss are solid brown, ranging from light to dark. White and off-color spots are objectionable. The nose and tongue are black. The Brown Swiss are large framed cattle. This breed is typically quiet and docile, which makes for a very good temperament. They are considered to be good grazers. Brown Swiss are the longest lived of the dairy breeds. They have a high heat tolerance. The Brown Swiss ranks second in milk production and third in milkfat production.

### *Guernsey*

The Guernsey breed originated in the Isle of Guernsey, which is located in the English Channel off the coast of France. The Guernsey breed was developed through a selection of desired traits and elimination of crossbreeding. Guernsey's were first imported into the United States in 1831.

The Guernsey may be any shade of fawn with white markings. The skin is yellow. A clear or buff muzzle is preferred. The Guernsey is an early maturing breed. They are adaptable and have a gentle behavior. They can produce large amounts of milk on a small amount of feed. Guernsey's rank fourth in milk production. They rank second in milkfat production. Guernsey's produce a milk that is golden in color.

### *Holstein*

The Holstein breed originated in Europe. The breed is commonly called the Holstein in the US and Canada. Elsewhere in the world it is called the Friesian. The first importations into the United States came in 1621 and 1664. About 90 percent of all dairy cattle in the US are of Holstein breeding.

Holsteins are black and white in color. A recessive gene will occasionally cause a red and white color to appear. Holstein's are the largest of the dairy breeds. Cows have large udders. Holstein's have excellent grazing ability and a large feed capacity. Holsteins are known for their outstanding milk production. They rank number one in milk production. They rank fifth in milkfat production.

### *Jersey*

The Jersey breed originated on the Isle of Jersey, which is also located in the English Channel off the coast of France. The earliest importation of Jersey cattle into the US dates back to 1815.

Jersey's are cream to light fawn to almost black in color. Some animals have white markings. The muzzle is black. The Jersey is the smallest of the dairy breeds. Jersey cattle have excellent udders that are well attached. They are adaptable and efficient users of feed. Jersey's rank fifth in among the dairy breeds in milk production. They rank first among the dairy breeds in milkfat. They are well known for their high milk-fat production.

### *Milking Shorthorn*

The Milking Shorthorn came from England. Shorthorns were imported into the US in 1783. At that time they were called Durhams.

Milking Shorthorn cattle are red, white or roan. They are easily handled and have very good dispositions. It is a dual-purpose breed used for milk and meat production. They are sought out in crossbreeding populations to aid with milk production. They are extremely versatile being excellent producers with a good temperament and frame.

Assignment:

Look in the terminology section and define the following words:

Bull, Cow, Heifer, Steer, Bull Calf, Heifer Calf, Calf, Calving

Create a Breed Chart for all of the breeds on loose leaf. I have given you an example of the format.

Breed:

Origin:

Color:

Characteristics (List three):