This lesson addresses the selection process when managing a sheep operation. Within Missouri and throughout the Midwest, producers can choose many different breeds of sheep. Each breed possesses unique qualities that may benefit the operation. In addition to being familiar with the various breeds, producers must know how to select individual animals that possess desirable traits. This lesson also identifies the parts of a sheep and defines other terms important to the sheep-selection process.

Major Breeds in Missouri and the Midwest

More than 30 breeds of sheep are raised in the United States. The breeds discussed in this lesson are those that are most commonly raised in Missouri and the Midwest, according to the American Sheep Producers Council. Sheep are divided into three basic classes based on their commercial use: ewe (maternal) breeds, ram breeds, and dual-purpose breeds. See Showing Sheep in the appendix for information on exhibiting market and breeding sheep.

Ewe (Maternal) Breeds

Both ewes and rams can be classified as a ewe breed. The classification "ewe breed" refers only to the characteristics that both the ewes and rams have in common.

Replacement ewes (one of the breeds listed in Table 2.1 or a cross of the breeds) have characteristics related to maternal abilities. Ewe breeds are generally white faced; have strong traits in mothering, multiple births, longevity, and milking abilities; and can adapt to certain environmental conditions. They are also known for their large body size and wool production. Refer to Table 2.1 for the characteristics of some ewe breeds.

Table 2.1 - Ewe (Maternal) Breeds

Breed	Characteristics
Corriedale	• Polled • White face, ears, and legs • Acceptable carcass qualities
Delaine-Merino	• Rams horned, ewe polled • Fine white wool • Do well on poor grazing ground
Finnsheep	• Small frame • White ears, nose, face, and legs • Medium to coarse fleece • High lambing rates
Rambouillet	• Large, blocky frame • Ewes polled, rams both horned and polled • White, fine wool • Very hardy
Targhee	• Large, blocky frame • Polled • White face with no wool • Long reproductive life
Columbia	• Large, blocky frame • White face, ears, and legs • No wool on face • Long legs

Ram Breeds

The second class of sheep is the ram breed. These animals are strong, muscular, and have good carcass quality. They also have good growth rates. Ram breeds make efficient use of feed and can be marketed at a younger age.

Ram breeds are also known for sexual aggressiveness and fertility, which are qualities that enable the producer to breed and crossbreed them readily. Refer to Table 2.2 for characteristics of some major ram breeds.

Table 2.2 - Ram Breeds

Breed	Characteristics
Cheviot	• Small, blocky frame • Polled • White face, black nostrils, white legs
Hampshire	• Large, blocky frame • Polled • Black face, ears, nose, and legs • Medium to fine wool • Ewes – good milkers
Oxford	• Very large, blocky frame • Polled • Gray to brown face, ears, and legs
Suffolk	• Large, blocky, and muscular frame • Polled • Black face, ears, and legs • No wool on legs and head • Rapid growth • Desirable, muscular carcasses

Dual-purpose Breeds

Dual-purpose breeds are raised to improve wool and meat qualities in production. E. H. Mattingly developed the Montadale breed in St. Louis, Missouri, in 1933. Mattingly started with a Columbia ram and purebred Cheviot ewes. He spent several years selectively breeding the offspring to obtain what has become one of the most popular dual-purpose breeds known for its high-quality carcass and wool. See Table 2.3 for information on dual-purpose breeds.

Table 2.3 - Dual-purpose Breeds

Breed	Characteristics
Dorset	• Blocky frame • Medium sized • Can be polled or horned • White ears, nose, face, and legs • Medium to coarse fleece • Muscular carcasses
Montadale	• Blocky frame • Polled • White face, ears, and legs • No wool on legs or face

There are also other breeds such as hair breeds and milk breeds.

Factors in Selecting a Breed

When a producer selects a sheep breed, he/she has to consider many variables to ensure that the production goals are met. The following factors help determine which breed the producer will choose to raise.

The type of enterprise a producer chooses is not only important to a successful operation, but it also determines which breed is the best one to select. To determine the most suitable enterprise, the producer must consider the region of the country he/she lives in and available resources such as forages, land, finances, time, and labor and management requirements. This information guides the producer in selecting the appropriate breed for those conditions.

Another important factor a producer should consider is the adaptability of the breed. Researching how well different breeds can adapt to the environment and knowing their flocking instincts provide valuable information to a producer that will affect the success of the operation.

Other critical components are the availability of food and fiber resources and marketing opportunities. The pro-

ducer should ensure that a market is nearby that sells sheep and that a demand exists for the breed he/she intends to raise. The producer must also be able to identify the availability of breeding stock in the area and conclude if the local breeding stock exhibits preferred traits. If the desired traits are not available nearby, then production costs will rise due to added travel expenses.

Factors in Selecting a Sheep

Producers must consider many factors when selecting an individual sheep and should know what they are purchasing before making a decision. Several selection factors can help determine if a producer will make or lose money in the operation. Five of the most common factors are soundness, production records, conformation, health, and economic traits.

When selecting a sheep, a producer should examine the animal for soundness. A sound animal is free of blemishes, has no defects, and has good feet and legs.

The producer should ask to see the production records of the animal. Those records should contain information on heredity, nutrition, fertility, age at puberty, any birthing difficulties of the ewe, and any diseases or parasites the animal has had. This information can be very useful in determining the animal's reproductive characteristics and general health.

Conformation is another important consideration when selecting sheep. Conformation deals with height, length, and depth of the body. Good conformation features include a straight top line; good-sized, strong, straight legs so the sheep can carry itself properly; good length of body; and in ewes, a wide rump with a 15° angle from hips to pins to promote easier lambing.

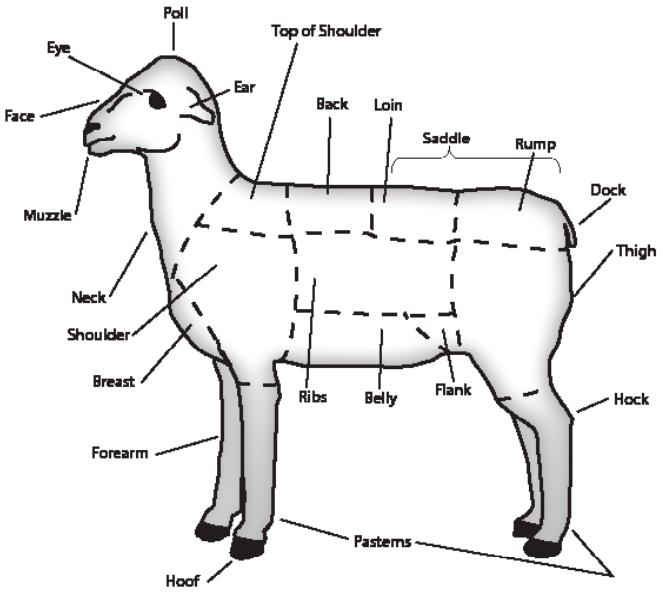
When selecting sheep the producer should be aware of the animal's health. The producer should learn characteristics of common diseases before purchasing sheep to distinguish between a healthy and sick animal. The producer should also ask for health records that are signed by a veterinarian. Another way to avoid buying sick sheep is to buy an animal that comes from a well-known and respected breeder. Even if the animal is purchased in this manner, the producer should still obtain its health records.

A final consideration in selecting sheep is to determine the economic traits each animal offers the producer's operation. This term refers to the amount of feed required for the sheep to gain weight. Because the rate of gain varies with each breed, the time it takes to market the animal also varies. This affects when the producer may realize a profit on his or her investment.

Parts of a Sheep

It is important for sheep producers to know the different parts of the animal so they can communicate with veterinarians, consumers, and other producers more effectively. Producers should be able to identify the parts of a sheep as illustrated in Figure 2.1.

Figure 2.1 - Parts of a Sheep



Terms Associated with Sheep and Sheep Production

Producers must understand common terms associated with sheep and sheep production. Knowing correct terminology enables them to communicate effectively with a veterinarian about what is wrong with their sheep and about the affected area of the body. Many terms are associated with sheep and sheep production; this lesson identifies only some of them in Table 2.4. Refer to the Glossary for additional sheep terms.

Summary

When selecting sheep, the producer should know what breeds are available and what traits the different breeds exhibit. It is also important to be able to distinguish between a healthy and an unhealthy sheep by examining the animal's soundness, production records, and conformation. This knowledge, combined with an understanding of the terms associated with sheep production, is an invaluable tool for the producer with plans to establish or expand his or her flock.

Table 2.4 - Common Sheep Terms

Banding	(1) This is a method of castration in which a tight rubber band is placed around the scrotum. This process cuts off circulation to the testicles and destroys them. (2) This is a method of docking in which a tight rubber band is placed around the tail, which cuts off circulation and destroys the tail.
Creep feeding	A penned-in feeding system for young lambs that has an opening that prohibits mature sheep from entering; the feeder contains special feed for the young lambs while they are nursing
Dock	(Noun) the stub end on a sheep's or lamb's tail; (verb) to cut short the tail of a lamb for sanitary reasons
Dry lot management	A bare, fenced-in area used as a place to feed and fatten lambs
Ewe	A female sheep of any age
Lamb	The offspring (of either sex) of a sheep; meat that is less than 1 year old
Mutton	The meat of a grown sheep that is more than 2 years old
Ram	A male sheep that has not been castrated and is used for breeding purposes
Wether	A castrated male sheep

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