

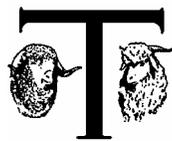
Learning About Sheep

Secondary Level Packet



Texas Department of Agriculture

Sponsored By
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Learning About Sheep

Introduction

Ever since Biblical times, sheep have been used for food and wool. Sheep provided the necessary warm clothing early civilizations needed to allow them to explore and inhabit colder regions of the world. For thousands of years **shepherds** have been the symbol of tender caring, while at the same time protecting and developing their industry and its traditions of caring and stewardship. Today, in a world full of disposable products and chemical substitutes for just about everything, this tradition continues. Using renewable resources, sheep and their products are one of nature's most versatile and environmentally compatible animal resources.

Sheep Basics

Sheep are probably the most widespread species of domesticated animal in the world. They were domesticated about 11,000 years ago in the area that is now northern Iraq. There are more than 150 breeds of domestic sheep, in addition to several other distinct species of sheep such as the bighorn sheep, argali sheep, Dall's sheep, and mouflon sheep.

All sheep are even-toed, hoofed animals. They are called **ruminants** because they are cud-chewing animals that lack upper incisor teeth, and have a four-compartment stomach. Adult males, depending upon the breed and species, can weigh anywhere from 165 to 440 pounds. Adult females weigh between 100 to 250 pounds. Sheep live an average of 6 to 7 years but can live as long as 20 years.

Female sheep are called **ewes**, while the males are called **rams**. Baby sheep are called **lambs** and are born after a gestation period of about 150 days. A lamb can stand up within a few minutes after birth. A lamb can identify which ewe is its mother by her smell and by the sound of her **bleat**. The ewe knows which lamb is hers by the smell of her milk passing through the lamb's digestive system. Young lambs will stay with their mothers until they are about five months old. By the time the lamb is six months old it will weigh between 80 and 120 pounds, and can live on its own.



When the lamb is still very young it will have its tail removed. The procedure is simple and has many benefits for the young lamb in terms of cleanliness and overall good health. The lamb will probably also receive several vaccinations and a numbered ear-tag. This ear-tag helps to identify the individual lamb as it grows up so that accurate health and production records can be

kept for each animal.

Sheep live in groups called **flocks**, although large flocks consisting of over 1,000 sheep are frequently called herds.

Production

Sheep are adaptable to a wide range of climates and management systems, which makes it possible to raise them all over the United States. The leading sheep producing states are primarily in the western half of the United States. Texas, California, Wyoming, South Dakota,

and New Mexico produce the most sheep, followed by Colorado, Utah, Montana, Arizona, Oregon and Iowa.

Sheep are raised primarily for either food, such as in mutton, lamb, cheese making and milk, or for their wool, which is used mainly for the manufacture of clothing and carpets.

Sheep bred for their fine wool account for nearly half the world's sheep population. Most of these sheep belong to the Merino breed, and are adapted to semiarid conditions. The Rambouillet, which is similar to the Merino, is the other major breed of fine-wool sheep.



Sheep that are raised primarily for mutton consist of the medium and long-wool breeds. Suffolk, Hampshire, Shropshire, and Dorset are some of the more common medium-wool breeds. The Leicester, Lincoln, Cotswold, and Romney Marsh are some of the more common long-wool breeds. In the United States, the long-wool breeds are frequently bred with fine-wool breeds to produce such breeds as the Columbia and Corriedale.

Sheep and Predators

Predators, are animals such coyotes, mountain lions, bobcats, wolves and other types of meat-eating animals that hunt for food. Sheep, particularly young lambs, are essentially defenseless. Lambs are often killed and eaten by foxes, raccoons, and golden eagles. Attacks by wild animals or domestic dogs can cause great stress, suffering, and even death. Predators have been a problem for sheep for as long as people have been raising them. A small percentage of sheep lost to predators is a fact that most ranchers accept. Many ranchers use specially trained dogs to guard their sheep, to help move them from place to place over the **range**, and to locate them when they get into areas too steep or rocky for a person to go. Donkeys and even llamas are also used to help protect sheep. Pens, electric fences, and noise-making devices are also used to help foil predators. This mixture of management tools helps, but does not eliminate the problem of predation. Since each sheep lost to predators costs the rancher money, when losses get too severe ranchers have no choice but to employ more drastic measures to protect their sheep and their livelihood.

Sheep and the Environment

Sheep are **herbivores**, which means they eat plants. Like most types of grazing animals, sheep will eat many different kinds of plants, which are referred to as **forage**. The three types of forage are grass, **forbs**, and **browse**. Browse refers to woody plants and forbs are broad-leafed plants often referred to as weeds. Sheep prefer eating forbs. Grass is their second choice, with browse being their least favorite food. Unlike many other types of grazing animals though, sheep will eat a variety of plants that other animals either won't eat, or are poisonous to them. Sheep will eat both grasses and **forbs**.

Ranchers are constantly moving their flocks of sheep from place to place so they do not damage the land. This also gives plants a chance to rest and grow again before the sheep are brought back into the same area again. Because sheep are adapted to arid and semiarid climates, sheep can produce food and fiber by utilizing land that is otherwise unsuitable for any other type of agriculture. The proper movement of sheep on a



range actually makes the land healthier and more productive for plants to grow and for the wildlife that also rely on the range vegetation. The sheep break up the soil to provide seedbeds for new plants, fertilize the land with their wastes, and help to keep undesirable plant species under control. By using sheep to help control these undesirable plants, ranchers and other land managers save money because they do not have to use **herbicides** to do the same job the sheep do for free.

In California sheep are used to help prevent wildfires by keeping the firebreaks outside Los Angeles free of invading plants. In Oregon, Washington, as well as California, sheep are used in new forests to eat the plants that would otherwise tend to crowd out the young conifer seedlings. Ski resorts in Vermont and Alberta, Canada use sheep to control unwanted vegetation from growing on the ski slopes during the summer months. Virginia uses sheep to control brush invasions on Civil War battlefields. In North and South Dakota, Montana, and Wyoming sheep are used to control a very serious plant pest called leafy spurge. This plant is toxic to most other animals, kills the plants growing around it, decreases available water, and causes soil erosion. If left alone, these brushy plant invaders would choke out the native grassy vegetation and cause severe damage to the ecosystems of all those areas.

Products from Sheep

Sheep provide us with a wide variety of products. Wool is probably the product that most people think of when they think of sheep. The wool is removed from the sheep in a process called **shearing**. Shearing is nothing more than a haircut, and does not hurt the animal. The wool from one sheep, referred to as a **fleece**, is generally removed so that it holds together in one piece. Within a week the sheep have re-grown enough wool to keep them warm in all but the coldest of weather. The various grades of wool are used to make luxurious garments, warm suits and coats, and in the weaving of long wearing, high quality rugs and carpets.



The meat, from mutton to lamb, is nutritious and tasty. Milk from sheep is also used in cheese making. Fat from the animal is used in products such as medicines, chewing gum, crayons, cosmetics, shampoos, conditioners, paints, tires, even antifreeze and explosives.

Sheep can also provide creative alternatives to traditional waste-handling methods. The digestive system of sheep can process materials that otherwise would be treated as waste. In Oregon sheep are used to graze the non-usable portions of broccoli plants in farmers' fields after harvest, saving the expense of plowing up the field. Sheep manure is used in Minnesota to help clean up contaminated soil caused by leaking underground storage tanks. The microbes in the manure digest the petroleum product, leaving only harmless carbon dioxide and water.

Low-grade wool is being converted into absorbent booms, pads, mats and other oil spill cleanup items. The wool pads can be reused up to eight times, and the petroleum wrung from them can be recycled. And of course wool is biodegradable!

Sheep are Earth-friendly animals that provide us with natural, renewable, and high quality products. With their commitment to quality and conservation, the nation's sheep producers are committed to producing the best food and clothing for America.