



MAMMALS

Status: Common Native Species

WHITE-TAILED DEER AND MULE DEER

(*Odocoileus virginianus* and *Odocoileus hemionus*)

Description

White-tailed deer

The common name for this deer comes from its characteristic large white tail, which is raised when the animal is alarmed. Antlers are found only on males and consist of a main beam with points projecting from it. The number of branches or points increases as the animals grow older, until approximately 5 to 6 years of age. Points then decrease as the deer gets older. Antlers are skin derivatives entirely made of bone covered with skin called velvet. They lack the horn covering found on the true horns of animals such as cattle and pronghorn. Unlike horns, antlers are shed each year. White-tailed deer lose their antlers in January and February.

Mule deer

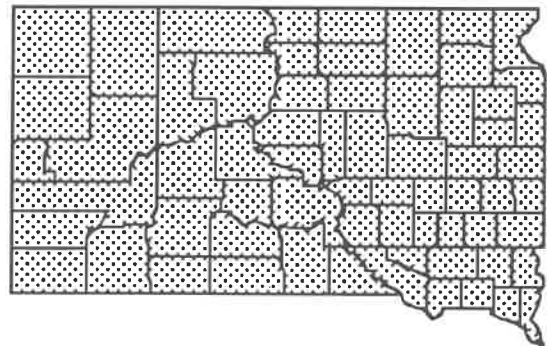
This deer's common name comes from its uniquely shaped, large ears. The tail is narrow, brownish in color with a black tip. As in white-tailed deer, antlers are found only on male mule deer, but points branch equally rather than projecting from a main beam as in white-tailed deer (see Figure 1). Mule deer commonly shed their antlers in February through March.

Common Characteristics

Both species are approximately 3 to 3.5 feet tall (0.92 to 1.07 meters). Males



weigh from 100 to 400 pounds (45 to 180 kilograms) while females weigh from 80 to 250 pounds (36 to 113 kilograms). Coloration is reddish in summer and blue-gray in winter. Adults have 32 teeth and 4 *mammary glands* for nursing young.



Distribution of Both Deer Species



White-tailed Deer



Mule Deer

Figure 1. Comparison Of Antler Branching Patterns

Distribution

There are 30 *subspecies* of white-tailed deer found throughout North and Central America. The 7 *subspecies* of mule deer are found from Central North America and Mexico westward to the Pacific Ocean. In South Dakota white-tailed deer are found throughout the state. While mule deer are found in every county of South Dakota, most of the population is found from the Missouri River Breaks westward to the Wyoming border.

Natural History

White-tailed deer

This species' breeding season occurs from late November to early December. Spotted fawns are born 6.5 months later in early to mid June. Does, 1.5 years old and older, average 1.75 fawns per birth. In areas of intense agriculture, does only 6 months old also will breed, but they average 0.7 live fawn per birth. White-tailed deer prefer wooded areas such as in the Black Hills or river drainages on the prairie. Habitats with intense

agriculture are also preferred. However, expansion to less typical prairie grassland habitats has occurred in the last 30 years. White-tailed deer food habits vary with the season of year. In early spring, grasses are consumed. In late spring through fall, *forbs* are important. During winter, *browse* plants become vital to survival. Agricultural crops such as corn and alfalfa are consumed year round where available.

Mule Deer

Breeding occurs in mid to late November. Fawns, also spotted, are born 7 months later, in early to mid June. Does, 1.5 years old and older, average 1.5 fawns at birth. Six month old mule deer does do not breed. Mule deer prefer wooded areas such as the Black Hills and rugged prairie habitats. Mule deer have greater dependence on *forbs* and *browse* than do white-tailed deer. Agricultural crops such as alfalfa are consumed during bad winters.

Significance

Deer in South Dakota traditionally have had high aesthetic value to both hunters

and wildlife enthusiasts. Monetary value of white-tailed deer nationally has been estimated at \$27.3 billion or about \$1,657 per animal. This total does not include values associated with mule deer.

American Indians have long used deer for food sources, tool utensils, fabrics, and ornaments for ceremonies. Indeed, the Lakota, Nakota, and Dakota people call the white-tailed deer *tahca* or *tahinca* meaning "the true meat, the real meat."

Conservation

Before pioneer settlement in the mid to late 1800's, deer numbers in South Dakota were far lower than present populations. Larger herbivores, such as bison and elk, numbered in the millions. Deer could not compete successfully with these larger animals to any great degree. Unregulated hunting in the late 1800's caused deer populations to be eliminated, except in the Black Hills. Through progressive wildlife management in the 1900's, deer in South Dakota have been at record levels for a number of years. While populations are regulated by hunter harvest, average deer numbers for the past 20 years far exceed historical population levels.

Management Considerations

It must be emphasized that deer and most *ungulates* have no built-in method of controlling their population levels. Historically, large predators such as wolves and bears preyed on deer. Today, when large predators are not a significant part of the natural community, humans must imitate the controlling influence of predation through regulated hunting. Without such harvest, and with abundant food supplies, deer numbers would become overpopulated. These large populations could cause unacceptable crop damage or overbrowsing of habitat, resulting in widespread death due to starvation and disease.

Scientific management of the two deer species is very different. White-tailed deer produce more fawns, are adapted to a wider variety of habitats, and are less vulnerable to hunter harvest than mule deer. However, due to the characteristics of their antlers, mule deer are more sought after by South Dakota hunters. Landowners, on the other hand, prefer to have more mule deer than white-tailed deer in the state because mule deer generally cause less crop damage. All these factors must be considered in management efforts in order to maintain healthy deer populations both now and for future generations.



Glossary

Browse - twigs, leaves, and other vegetative parts from trees and shrubs.

Forbs - herbaceous plants other than grass (many weeds).

Mammary glands - tissue, found only in mammals, which produces milk.

Subspecies - a subdivision, with distinguishable characteristics, of a taxonomic species, usually based on geographic distribution.

Ungulates - hooved mammals.

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Selected Resources for Teachers

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