



MAMMALS

Status: Reintroduced Native, West River

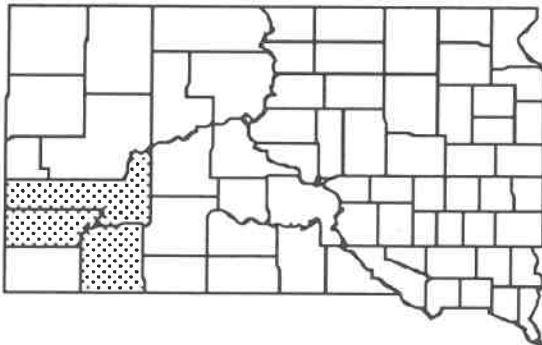
BIGHORN SHEEP

(*Ovis canadensis*)

Description

The Rocky Mountain bighorn sheep is most notably distinguished by its large curved horns. These horns continue to grow in length and *circumference* during the life of the animal and are not shed annually like the antlers of deer and elk. Both sexes of sheep have horns, with the male or ram having the largest horns. They average over 43 inches (109.2 cm) long and almost 16 inches (40.6 cm) in *circumference*, and weigh up to 29.9 pounds (13.6 kg) per pair. Female, or ewe, sheep horns are much smaller, and do not have the strong curl displayed by males.

Body color is variable from light brown or grayish brown to a deep dark brown. They also have a large white rump patch, and white outlining the back of all four legs. Bighorn rams weigh 160 to 316 pounds (72.6-143.3 kg), while mature ewes weigh 117 to 200 pounds (53.1-90.7 kg).



Location of Bighorn Herds



Distribution

To survive, bighorn sheep require extremely rugged terrain with steep canyon walls adjoining open grassy meadows. Because of this strict habitat requirement, fewer than 45,000 bighorns are scattered throughout the western United States and Canada in small isolated herds. Only three herds occur in South Dakota; one in Custer State Park, one in Badlands National Park, and one in Spring Creek Canyon in the Black Hills.

Natural History

Audubon's bighorn sheep were native to the Black Hills and Badlands of South Dakota. Uncontrolled hunting caused the extinction of this *subspecies* of bighorn sheep by 1916. Therefore, the three herds now in South Dakota are a result of transplanted sheep from other states. In 1964, bighorn sheep from Wyoming were transplanted into Custer State Park and sheep from Colorado were transplanted into the Badlands National Park. The most recent transplant occurred in 1991, when 26 bighorn sheep from Colorado were released in Spring Creek Canyon in the Black Hills. Presently, there are approximately 300 to 350 bighorn sheep in South Dakota among the three herds.

Bighorn sheep are very social animals and are generally separated into two groups. One group consists of mature rams or ram bands, while the other group consists of ewes, lambs, and young rams or nursery groups. These groups join during the *rut* in mid-November through late December, and occasionally in early spring for a short period of time. Lambs, one per ewe, are born in late May or early June. Very rarely will a ewe have twins. Young rams will eventually break from the nursery groups at two or three years of age and join the ram bands that are governed by a social *hierarchy* based on body and horn size. Much head butting occurs between mature rams during the establishment of the social *hierarchy*, which determines what rams will dominate the group. After dominance has been established, rams live in the same groups with little further conflict. Life span is normally 10 to 12 years.

Significance

Bighorn sheep are some of the most highly sought after big game animals in North America. In South Dakota alone over 1,200 sportsmen and women applied for only 3 hunting licenses for Custer State Park during 1993. This location is the only place in the state where hunting for bighorn sheep is allowed. The demand for viewing bighorns is growing and equals or exceeds the demand for sport hunting of the species.

Conservation Measures

Due to the limited number of bighorn sheep within the United States and Canada, most hunting seasons have revolved around a limited ram harvest dependent on horn length and/or age. Rarely are ewes harvested in a hunting season, and then only to reduce herd size due to limited habitat.

Most conservation measures applied to bighorns have been in the area of habitat management. Bighorns need open grassy meadows adjacent to steep slopes and cliffs. Due to fire suppression and forest protection, considerable bighorn habitat has been lost in South Dakota. Management strategies have therefore turned from population control through hunting, to habitat improvement through timber harvest and/or prescribed fire in former bighorn ranges. Control of livestock grazing within bighorn sheep habitat has become a more recently used tool to preserve habitat and bighorn populations.

Glossary

Circumference - the measurement of the perimeter of a circle.

Subspecies - a group whose members are distinctly different from others of the same species.

Rut - a specific time of year in which ungulates mate.

Hierarchy - ranking of individuals in a group with each subordinate to the individual above.

Ungulates - mammals with hooves.

References

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- Wildlife Management Institute, 1978. Big Game of North America, S.L. Schmidt and D. L. Gilbert eds. Stackpole Books. Harrisburg, Pa.

Selected Resources of Teachers

- A Field Guide to the Mammals*, The Peterson Field Guide Series. 1964. Houghton Mifflin Co., Boston. Riverside Press, Cambridge.
- Mountain States Mammals* by Ron Russo. Nature Study Guild, Rochester, N.Y.
- Golden Guide: Mammals* by Herbert S. Zim. Golden Press, New York, N.Y.
- Field Guide to Mammals Colorbook* by Peter Alden and Finona Reid. Houghton Mifflin Co., Boston, MA.
- Mountain Wildlife Colorbook* by Marj Dunmire. Pegasus Graphics, Estes Park, CO.
- Audubon Society Pocket Guide - Familiar Animal Tracks* by John Farrand Jr.. Alfred A. Knopf. New York, N.Y.

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