

SHEEP

in Alaska



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Description



Dall sheep are stocky, white mammals with amber horns, yellow eyes, and black nose and feet. Males (rams) weigh about 200 pounds and have large curling horns. Females (ewes) weigh about 120 pounds and have shorter, more slender, slightly curved horns. Dall sheep of both sexes stand between 3 and 3.5 feet high at the shoulders.

As rams mature, their horns form a circle when seen from the side. Ram horns reach half a circle in about two or three years, three-quarters of a circle in four to five years, and a full circle or "curl" in seven to eight years. Rams generally live 10-12 years, and ewes usually live 12-14 years.

Biologists estimate there are about 40,000 to 50,000 Dall sheep in Alaska. Hunters generally take about 1,400 each year.

Habitat



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Dall sheep inhabit the mountain ranges of Alaska, except those in Southeast. They are found in relatively dry country and use a combination of open alpine ridges, meadows for feeding, and steep slopes with extremely rugged "escape terrain" nearby for resting. Ram groups are often found near glaciers.



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Dall sheep produce excellent meat, but retrieving the meat from rugged alpine areas can be strenuous. This has limited sheep hunting to a relatively few, hardy individuals whose interest is as much in the challenge and personal satisfaction of mountain hunting as it is in getting food. In a few areas, Dall sheep are also hunted to satisfy subsistence needs.

Ewes seek solitude and protection from predators in the most rugged cliffs available; Ewes bear a single lamb, and the ewe-lamb pairs remain in steep terrain until the lambs are strong enough to travel.

Life History

Lambs are born in late May or early June. As the time to give birth approaches, ewes seek solitude and protection from predators in the most rugged cliffs available. Ewes bear a single lamb, and the ewe-lamb pairs remain in steep terrain until the lambs are strong enough to travel.

Dall sheep have well-developed social systems. Adult rams live in bands which seldom associate with ewe groups except during the winter mating season. The horn clashing for which rams are so well known does not result from fights over possession of ewes, but rather is a means of establishing a social hierarchy. These clashes occur throughout the year but are more frequent just before the rut, when rams are moving among the ewes and meeting unfamiliar rams of similar horn size. Dall rams can sire offspring at 18 months of age but normally do not breed successfully until they reach full curl age and size.

The diet of Dall sheep varies from range to range. During summer when food is abundant, sheep eat a wide variety of plants. Their winter diet is much more limited, consisting primarily of dry, frozen grass and sedge stems available when snow is blown off open ridges. Some populations eat significant amounts of lichen and moss during winter. Dall sheep groups visit mineral licks during the spring to replenish their own mineral reserves, often traveling many miles to eat the soil at these unusual geological formations.

Conservation

Dall sheep populations in Alaska are generally healthy. The remoteness of their habitat and its unsuitability for human development have protected Dall sheep from most problems in the past. However, an increasing human population and certain human uses of alpine areas could cause problems in the future. For instance, mountain sheep are extremely susceptible to disease introduced by domestic livestock. When grazing of domestic sheep (or possibly cattle) occurs on their ranges, mass die-offs from disease can occur.

Sheep numbers fluctuate in response to a number of environmental factors. Populations tend to increase steadily during long periods of mild weather. Then populations can suddenly decline as a result of dry summers, unusually deep snow or other severe winter weather. Low birth rates, predation (primarily by wolves, coyotes, and eagles), and a difficult environment tend to keep the growth rate of Dall sheep populations lower than for many other big game species. In most of Alaska, sheep hunting is limited to the taking of old rams at or past prime breeding age.



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Research

State biologists monitor the health of Alaska's sheep populations by periodically counting and surveying sheep in selected areas. The Alaska Department of Fish and Game also conducts research on sheep populations to help identify important habitat areas, factors affecting reproduction and horn growth, the importance of mineral licks, the significance of social structure in maintaining healthy populations, and the effect of various diseases.



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Dollars for Wildlife

Each year, hunters pay a 10 to 11% federal excise tax on the purchase of firearms, ammunition and archery equipment. These funds are distributed to the states for wildlife conservation programs. Since this system was created in 1937, Alaska has received more than \$108 million in revenue from the tax on hunting equipment. This critical source of funding, called the Federal Aid in Wildlife Restoration Program, provides roughly half of the state's wildlife management budget, including about \$100,000 a year for Dall sheep research and management. In addition, all proceeds from the sale of hunting licenses in Alaska are used to support research and management programs. License and tags sales generate more than \$5 million annually.

This brochure was produced by the Alaska Department of Fish and Game, Division of Wildlife Conservation.



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