

Ovis canadensis
(Bighorn Sheep)

Order: [Artiodactyla](#)

Order Description: [Hoofed Mammals or Ungulates](#)

Family: [Bovidae](#)

Family Description: [Goats and Sheep](#)

Description:

Bighorn, or mountain sheep are [large, muscular appearing](#), with dark [brown hair](#) on top in northern populations, to a tan color in southern populations. Underneath they are white. They have a distinctive white rump patch, along with a white muzzle and eye patch. Their tail is short and brown. [Rams](#) have massive, curled horns that curl upward and back, the tips of which can eventually reach the same level as the base of the [horn](#) . This is called a “full curl”. [Ewes](#) have shorter, more slender horns that curl much less, usually not more than a half curl. Their thick winter coat is shed in patches during the summer. Being expert climbers, their hooves are very well adapted to their climbing on rock ledges and cliffs. They have a very hard outer layer with a straight outer edge, and with a softer, almost rubbery inner section, which provides them with excellent traction. Their skull is a labyrinth of bone with hollow areas supported by bony trusses, which accommodates their head banging behavior during the mating season. Rams weigh 127 to 316 pounds (58-142 kg) and stand 3 to 3 ½ feet (90-100 cm) high at the shoulder, while ewes weigh between 74 and 200 pounds (34-86 kg) and stand 2 ½ to 3 feet (76-90 cm) at the shoulder.

Range:

Bighorn sheep range from mountains of southwestern Canada, south through the Rocky Mountains, into the Sierra Nevada range, and in desert mountains of the southwestern U.S. into portions of Mexico. Recently, in Idaho, bighorn sheep have been transplanted into historic ranges along the southern border of the state with Nevada and Utah. California bighorns, a subspecies, are found in desert canyons of southwestern Idaho, while Rocky Mountain bighorns are found in the central Idaho mountains.

Habitat:

They are found in a variety of habitats from alpine meadows high in the mountains to desert grasslands associated with southwestern U. S. mountains. With their excellent climbing abilities they are found on cliffs and canyon walls, but also in grassy foothills.

Diet:

They rely heavily on grasses which probably provides the majority of their diet, but they also include significant amounts of woody shrubs like [junipers](#), especially in the winter, and [forbs](#) .

Ecology:

Bighorn sheep exhibit feeding peaks in early morning and at dusk that alternate with rest and [rumination](#)  (chewing their cud, like cattle) periods. They are [gregarious](#) , but most of year, adult males live apart from females with young. In the winter their elevation range is often between 2500 to 5800 feet (760 to 1523 m); in the summer their elevation range varies from over 6000 to 10000 feet (1828 to 3100 m). One study reported that the January through June home range of adult females was 19-27 km², while a Nevada study found male annual home range reached 37 km². The carrying capacity for bighorns can be reduced by the grazing of other ungulates (cattle, burros in the southwest, etc.). In Idaho, seasonal elevation movements occur in response to winter snows or lack of water in summer. In the desert, individuals can survive 10 or more days in summer without drinking. Bighorn sheep seem susceptible to diseases. In some areas, [lungworm](#)  infections may predispose bighorns to respiratory bacterial infections, and they do contract lungworms, whose life cycle involves a gastropod intermediate host. Lungworm infections has been known to cause major mortalities in some populations. Some bighorn populations, such as in Yellowstone National Park, have been known to contract “pink eye” caused by a bacterial infection of the eye. In severe cases it can cause blindness, not a good situation for an animal that lives in and around cliffs and rocky ledges.

Predators include mountain lions, wolves, bobcats and coyotes. Golden eagles have been documented carrying off young lambs and even knocking them off cliffs.

Reproduction:

Their mating season varies from July through January throughout their range, but it occurs in November and December in Idaho. [Gestation](#) ^{gt} lasts about 175 to 180 days which in Idaho, leads to most births in May. Females usually produces 1 lamb, occasionally 2, but twins are rare. Young are [weaned](#) ^{gt} in 4 to 6 months (September in Idaho). Females usually begin breeding in their second year in their southern range, and third year in the northern part of their range, and occasionally in first year in some areas. Annual [precipitation](#) ^{gt} may affect reproductive success. Males join the ewe-lamb herds during the breeding season. Dominant males claim females in estrus, but are challenged by other males. Males then face off and batter each other head to head with incredible force. The bone structure in their skull and their large horns absorb the force, but visibly seems to occasionally leave them a bit stunned. The larger, dominant males do most of the breeding.

Conservation:

Status:	Game species
Global Rank:	G4
State Rank:	S4

Important State References:

Taylor, E., M. McCoy, and W. Bodie. 1993. California bighorn sheep ecology: habitat selection. Job completion report, Idaho Dept. Fish & Game, Boise. 38pp.

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