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CALIFORNIA BIGHORN SHEEP HARVEST REGULATIONS IN NORTH DAKOTA 1975-1990

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<u>Abstract</u>: Harvest of the re-introduced California bighorn populations is controlled by permit and limited to 3/4-curl and larger rams. Hunters are trained to identify legal rams in classes for those obtaining permits.

BACKGROUND

Bighorn sheep, <u>Ovis canadensis auduboni</u> historically inhabited the Badlands of what is now western North Dakota. Such notables as Lewis and Clark, Maxmillan, Audubon, and Theodore Roosevelt observed and recorded bighorns along the Missouri River and in the Badlands adjacent to the Little Missouri River (Boldt et al. 1973); however, few bighorns remained on the Great Plains by statehood in 1889. The last recorded sheep was taken in 1905 (Murdy 1957). Their extirpation was probably due to hunting, heavy homesteading, and settlement of the Badlands (including competition from and association with domestic livestock) (Boldt Op. cit.).

In 1956, 18 California Bighorns (Ovis canadensis californiana) were translocated from British Columbia to Magpie Creek in the northern Badlands of McKenzie County, North Dakota (Murdy Op. cit.). Since that time, 23 transplants have been made into 10 other areas of the Badlands. These 10 bighorn population centers support an aggregate of about 300 animals.

The 44th session of the North Dakota Legislative Assembly enacted the law allowing for the first managed harvest of bighorns in North Dakota in 1975. It limited the number of residents-only permits to 12 each year and allowed for the harvest of "mature" rams with 1/2-curl or greater horn development (North Dakota Century Code 1975). omitted landowners living within an open hunting area from receiving preference in the lottery for one of these once-in-a-lifetime licenses. Each hunter was to be accompanied by a Game and Fish Department employee who would designate what animal was a legal target. There was a sunset clause of June 30, 1977 attached to this legislation. Legislative Assembly revoked many of these restrictions, including the 1/2-curl minimum; however, it retained the resident-only provision and the once-in-a-lifetime hunt opportunity clause in the new law enacted at that time (North Dakota Century Code 1977). An amendment to this law was passed by the 49th Legislative Assembly that authorizes the auction of one bighorn permit to the highest bidder, resident or nonresident to North Dakota (North Dakota Century Code 1985).

Harvest Summary

Since the first managed season in 1975, 91 bighorn permits have been issued to 87 resident applications by lottery and 4 nonresidents through the auction process. These permittees harvested 86 bighorns for a cumulative hunter success of 94.5% for the 11 seasons held during the intervening 15 years 1975-1989 (seasons were not held in 1980, 1981, 1982, and 1983).

CURRENT REGULATIONS

Since 1977, all hunting seasons have specified 3/4-curl or larger rams as legal game. However, North Dakota's management of bighorns has not always accommodated managing strictly for trophy value. The 44th Legislative Assembly included the 1/2-curl minimum in the original law that authorized an annual bighorn hunting season in both 1975 and 1976. Subsequently, they established the present 3/4-curl regulation.

BIOLOGICAL/GEOMETRIC RATIONALE

Three-quarter-curl rams harvested in North Dakota have ranged in age from 3.5 years to 9.5 years with a median age of 6.5 years (the average age is about 1 year less than this).

Data indicate that horn development of bighorns in North Dakota can reach entry level 3/4-curl dimensions in as little as 3.5 years but more commonly at 4.5 years. Rams remaining in this geometric equivalent classification through age categories older than this do so because of brooming (horn breakage). The 3/4-curl segment of the harvest over the years has accounted for exactly 1/2 (50%) of the animals legally taken.

Horn curls larger than 3/4 of a circle equivalent and through the 7/8-curl category include rams that have been harvested at ages from 5.5 to 11.5 years with a median age of 8.5 years and an average age of about 7.5 years. All rams with horn sizes in this category have been broomed to a greater or lesser degree. They represent 35.8% of the bighorns harvested since 1975.

Only 6 (7.1%) rams harvested in North Dakota have been classified as full-curl animals. They have ranged in age from 7.5 to 13.5 years. Both the median and the average age of these animals is in the 10.5 year range. Additionally, each of these animals exhibited some degree of brooming.

ENFORCEMENT/PROSECUTION

There have been no arrests made involving infractions of existing regulations by bighorn sheep permittees in North Dakota.

INTERPRETATION TO HUNTERS IN THE FIELD

Prior to each hunting season (usually the evening before the season opens) an informal hunting meeting is held and each permittee is urged to attend. Among other things, the meeting is for the purpose of instructing hunters on identification of legal rams in the field. The instructional method works. Of all rams harvested, 6 (7.1%) had horns less than 3/4-curl and they were all taken during the 1975-77 time frame when 1/2-curl rams were legal. The remaining animals were 3/4-curl rams or larger.

PRAGMATIC CONSIDERATIONS

In view of the fact that bighorn habitat is a finite commodity in North Dakota, and that the continued expansion of the range for this game animal through translocation efforts is only remotely possible, it is the opinion of this writer that recreational hunting of bighorn rams will never be afforded to all North Dakotans who may wish this opportunity. A case in point is the 4,544 residents who applied for one of the 7 lottery permits offered at the recent 1990 Bighorn Drawing. The once-in-a-lifetime ram permit will likely remain in effect.

At some point in time, bighorn ewes may have to be harvested through recreational hunting. Up until now, nonconsumptive harvest of ewes and lambs has occurred through trapping and translocation efforts and the separate herds have generally been maintained at or below prudent levels. This will change when acceptable, unoccupied release sites no longer exist. When this occurs, recreation hunting of all bighorns may become a necessary reality.

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