

THE STATUS OF THE DESERT BIGHORN IN THE UNITED STATES

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ABSTRACT

Desert Bighorn Sheep (Ovis canadensis nelsoni, O. c. mexicana, O. c. cremnobates) occur in seven states and number approximately 16,000 animals. The overall trend in numbers is up. This can be attributed to intensive management programs. New Mexico is an exception with a declining desert bighorn population. Three states allow limited hunting, offering approximately 180 permits per year. The following review is based on the most recent literature as well as an unpublished personal communication. For more detailed assessments on the status of individual herds and management problems in specific states, the reader is referred to annually published Proceedings of the Desert Bighorn Council.

RESULTS AND DISCUSSION

TEXAS

Estimates currently put the number of desert bighorns in Texas at 120. Historically, all the mountain ranges west of the Pecos River had bighorn sheep. In 1903 the hunting of bighorn was prohibited. Less than 150 bighorn remained in Texas by the 1940's and they were extirpated by 1960. The first attempt to reintroduce desert bighorn anywhere, was made in Texas in 1957. Stock was waterhole trapped in Arizona and released in a 400 acre paddock. The current management program centers around propagating bighorn in enclosures for release into the wild. By using four enclosures totalling 38 acres, Texas hopes to release into the wild 20 or more animals annually until they have fully stocked five mountain ranges deemed suitable. Bighorn for the propagation facility have been obtained from Arizona, Utah, Nevada as well as retrapped in Texas.

NEW MEXICO

It is estimated that there are at present 100 desert bighorn in New Mexico. Bighorn are found free ranging in three mountain ranges. Historically, most of

the mountain ranges in the southern one-half of the State were desert bighorn sheep habitat. By 1930, these sheep were found in only four mountain ranges and by the late 1940's they occurred in only two. In 1941 the San Andreas Mountains were made a National Wildlife Refuge. In 1972, New Mexico began captive breeding for reintroduction. In 1978, an outbreak of scabies mites depleted the San Andreas Mountain population. It is estimated that this population fell from 250 to 25 that year. Desert bighorn were state listed as endangered in 1979. Also that year an introduction was made into the Big Hatchet Mountains to augment a declining population. In 1980, a reintroduction was made into the Peloncillo Mountains with stock obtained from Arizona. More reintroductions are planned. Scabies is still found in the San Andreas Mountain bighorn in spite of treatments with Ivermectin. Mountain lions made inroads into the small remnant and introduced populations and the State went into a removal program.

ARIZONA

The current estimate of desert bighorn in Arizona stands at 4,000. Historically, all the mountain ranges in the western one-third of the state were considered bighorn habitat. There are two National Wildlife Refuges in Arizona, the Kofa and the Cabeza Prieta. Approximately 50 hunting permits are available each year. The Arizona Desert Bighorn Sheep Society is a very active group, working cooperatively with the Game and Fish Department to raise funds for management programs. The State has improved 85 water catchments. The State also has a very successful reintroduction program dating back to 1958. Thirty-three transplant sites have been identified.

CALIFORNIA

Estimates currently put the numbers of desert bighorns in California at 4,000. These sheep historically occurred in most of the desert mountain ranges in the southeastern portion of the State. Today they occur in about 50 mountain ranges. Bighorn have been fully protected in California for more than 100 years. Bills have been introduced to change the legal status but always fail to pass in the Legislature. Water development programs with the aid of volunteers and some private funding have been the main thrust of management. The first reintroduction of desert sheep in California was made in 1983 when captures were made on two mountains and releases into two historic ranges. It is anticipated that trapping and reintroductions will be made every year, subject to funding, until all the suitable range is restocked. It is believed the bighorn numbers can be doubled. The Santa Rosa Mountain populations of Riverside County have been experiencing low lamb recruitment and a declining trend for several years. The Bighorn Research Institute is investigating this problem. Titers for the following viral diseases have been found in this population: Bluetongue (BT), contagious ecthyma (CE), Epizootic hemorrhagic disease (EHD), para influenza (PIz). One or some combination of these viral diseases is believed to be predisposing the lambs to bacterial pneumonia.

NEVADA

Nevada's desert bighorn population is presently estimated at 5,200. Historically, all the mountain ranges in southern Nevada were desert bighorn habitat. Today desert bighorn occur in 24 mountain ranges. The Desert National Wildlife Range was established to provide protection for bighorn.



Figure 1:
Distribution of Desert
Bighorn in the United States

Study Area
Bighorn Present [solid black shape]

0 100 200 300 400 500 Miles

Bighorn hunting was closed in 1917 and reopened in 1952. The number of tags issued are based on helicopter counts made every two years. There were 119 tags available in 1982. Nevada has a very active and successful reintroduction program. Beginning in 1968 and through 1983, 13 reintroductions have been made in 8 mountain ranges. Additionally, animals have been provided for Zion National Park in Utah, Colorado National Monument in Colorado and Texas. In 1983, 117 animals were successfully trapped for reintroduction both in and out of the State.

UTAH

The desert bighorn population in Utah is currently estimated at 2,500. Historically, desert bighorn occurred in all canyons of the Colorado, Green and San Juan Rivers. In 1899, the State was closed to bighorn hunting and reopened in 1967 with about 10 permits per year available for trophy hunting. Relocation efforts began in 1973. Through 1983, 133 bighorn have been relocated onto seven historic sites. Helicopter drive netting is the method of choice that works well in this State. Studies, captures, and reintroductions are cooperative efforts with the National Park Service that administers large blocks of habitat.

COLORADO

This State has minimum population of desert bighorn of 60 animals. It is not well documented that the bighorn found in the extreme western portion of the State and in adjacent Utah are desert bighorn. However, it is a desert type of habitat. Reintroductions were made beginning in 1979. Releases have been made in and near Colorado National Monument and near Grand Junction. Stock was obtained from Nevada and Arizona.

CONCLUSION AND SUMMARY

Conflicting land uses are the most common problem experienced in desert bighorn habitat, which includes recreation, mining, and grazing of both domestic and feral animals. Disease, although identified in several areas, has been documented as a problem only in New Mexico and California herds.

Texas and New Mexico are propagating bighorn in an enclosure for reintroduction. The other states are making free releases into the wild. Waterhole trapping, baiting with apple pulp and drive netting and darting have been used successfully to capture bighorn. Bighorn have been drop netted and driven into nets. Netting and drop netting is a method of preference but it is not always possible to get addiction to bait.

Water development programs to enhance the habitat are widely used and perhaps have the greatest success in increasing bighorn population in Arizona and California.

Arizona, Nevada, and Utah have successful hunting programs. Hunter clinics are conducted in Arizona and Nevada to educate the tag holder on the legal ram requirements and other information.

The future looks bright for bighorn in the desert areas. The private sector is playing an important role in this conservation effort.