



Wildlife Notes

Desert Bighorn Sheep (*Capra aegagrus*)

Almost Lost

Once, thousands of desert bighorn sheep roamed the Southwestern United States and Mexico, but due to diseases from domestic sheep, unregulated hunting and overgrazing by livestock, numbers declined to near extinction by the early 1900s.

By 1955, New Mexico's desert bighorn could be found only in the San Andres and Hatcher Mountains. Less than 70 animals remained statewide by 1980, prompting New Mexico to add the desert bighorn to its endangered species list. Numbers fluctuated in the following years — rising in the 1990s to over 200, but falling to less than 170 by 2001.

Collared sheep studies indicated cougars were the primary cause, constituting 85% of bighorn deaths. With concerted management efforts by the New Mexico Department of Game and Fish (NMDGF), desert bighorn were down-listed from endangered to threatened status in 2009. As the population grew and proved stable under the Desert Bighorn Sheep Recovery Plan, desert bighorn sheep were delisted in 2011.

Description

This handsome native sheep stands 30–39 inches at the shoulder. Rams (adult males) are crowned with a large set of horns, in contrast to the much smaller horns of ewes, adolescent males and lambs. Their coats are generally buff brown, but the color can vary from pale cream to dark chocolate. Like their close relative, the Rocky Mountain bighorn, desert bighorn sheep can be identified by the characteristic white patch on the rump.

Habitat

Desert bighorn require open country with mountains or canyons that provide 'escape terrain' (steep cliffs with 60 percent or greater slopes). Keen eyesight enables them to spot predators from great distances and retreat into rough country where predators are less agile. Escape terrain is particularly important for ewes during lambing and while rearing young. To seek areas of higher quality vegetation, rams sometimes will stray further from escape terrain than maternal groups.

Behavior

Social animals, desert bighorn travel and forage in bachelor bands of adult rams or herds of females, lambs and adolescents.

Rams and ewes come together to rut (breed) from July until September. After the rut, most rams return to bachelor bands and seek habit away from ewes to reduce competition for available resources.

Desert bighorn in New Mexico breed for the first time at 1-½ to 2-½ years of age. After a six-month gestation period, females give birth to one lamb, usually between January and March but possible anytime during the year. Unlike species whose young disperse as they mature, desert bighorn remain together and pass on knowledge about their home range from one generation to the next.

Feeding

Desert bighorn sheep in New Mexico usually are found within a mile of water, and during hot and dry weather often much closer. Shrubs are the predominant diet, but desert bighorn eat a variety of plants and prefer new grasses and forbs (flowering plants) that sprout during summer and fall rainy seasons. A favorite delicacy is the pulp of prickly pear cacti, which desert bighorn reap by scraping off the spines with their horns.



Restoration

Though desert bighorn sheep populations have increased in recent years, habitat degradation, disease from domestic livestock, poaching and cougar predation continue to threaten herds. Working tirelessly to conserve and increase the number of self-sustaining populations, recovery projects in New Mexico include:

Red Rock This captive facility encompasses five square kilometers of natural desert habitat. Established in 1972 with 22 animals from Sonora, Mexico and the San Andres, desert bighorn are free to roam cliffs, canyons and springs, feed on natural vegetation and are exposed to natural predators. To ensure a healthy population, the herd is closely monitored and provided supplemental feed if needed. The population is not allowed to exceed 100 animals which allows periodic transplant of healthy animals to other areas.

Ladron Mountains New Mexico's most northern range for desert bighorn sheep, the Ladron Mountains offer a more austere habitat than found elsewhere in the state. In 1992, twenty-three desert bighorn were introduced, and an additional eight in 1993. Presently, the population remains at 50–60 animals (ca. 2013).

Peloncillo Mountains In 1980, twenty desert bighorn from Red Rock, NM and Kofa National Wildlife Refuge, AZ were combined and introduced. Initial efforts experienced a shaky beginning when the herd suffered heavy die-offs due to disease. With several new transplants, the herd has slowly recovered. The current population is estimated at 110–135 animals (ca. 2013).

Fra Cristobal Mountains Located in the Fra Cristobal Mountains, New Mexico Ranch Properties Inc. is a major initiative of the Desert Bighorn Sheep Recovery Plan. This vast private-land holding is dedicated to protecting wildlife. In 1995, thirty-seven desert bighorn were released, and through joint management by the land holder and NMDGF the population quickly increased to more than 200 animals. In 2011, the first transplant from one fully wild herd to another in took place. Wild source transplants improve herd recovery by maintaining genetic diversity.

Caballo Mountains In the early 2000s, small groups of desert bighorn sheep from the Fra Cristobal Mountains began travelling into the Caballos and established a new herd. In 2009, additional animals were transplanted to encourage the population which is estimated currently at 75–85 animals (ca. 2013). Interestingly, since this new herd established itself, rams have been observed travelling to and from the Caballo and San Cristobal ranges.

Hatchet Mountains A long established home for desert bighorn, populations dramatically declined from approximately 125 animals in the early 1950s to less than 20 by the 1960s. Multiple transplants initially achieved limited success, but larger subsequent transplants in 2005–2006 has resulted in a slow recovery which is currently estimated at 140–160 animals (ca. 2013).

San Andres Mountains In 1979, more than 200 desert bighorn were decimated by scabies (scabies mite epizootic) to only 75 animals in a locale where bighorn were historically healthy. Further declines from scabies and cougar predation persisted until only one ewe remained. Six rams were introduced in 1999, and a study was begun to determine if further reintroductions could remain healthy. After two years, rams remained scabies free, and between 2002–2005 eighty-one desert bighorn were transplanted from Red Rock, NM and Kofa National Wildlife Refuge, AZ. The current population is estimate at 115–135 animals (ca. 2013).

Funding

Bighorn sheep recovery is expensive. The New Mexico Department of Game and Fish's budget for Rocky Mountain and desert bighorn sheep restoration is approximately one-half million dollars annually. These programs receive no state tax dollars, but instead are funded by hunting conservation groups, such as the Wild Sheep Foundation (which has raised over \$2 million from the sale of bighorn hunting licenses) and from excise taxes on firearms, ammunition and sporting equipment.



New Mexico Department of Game and Fish www.wildlife.state.nm.us
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