Aravaipa Canyon Desert Bighorn Sheep Project

The first attempt to reintroduce desert bighorn sheep into historic range/habitat in the United States was at Aravaipa Canyon, at the extreme northern end of the Galiuro Mountains of Arizona. In 1955, a cooperative agreement between the state wildlife agencies of Arizona and Texas, also the U.S. Fish and Wildlife Service, the Wildlife Management Institute, and the Boone and Crockett Club, was signed. It provided for 50 desert bighorn sheep (O.c. mexicana) to be captured in Arizona, with 25 to go to the Black Gap WMA in Texas and 25 to the Aravaipa Canyon area.

In 1957, a 112-acre enclosure was constructed in upper Horse Camp Canyon, a tributary to Aravaipa Canyon on the north side. Capture was to take place on the Kofa Game Range (now designated as the Kofa National Wildlife Refuge), utilizing corral traps at certain watering sites.

Between the summers of 1958 and 1960, a total of eight sheep was captured and released into the enclosure, including five rams and three ewes. The rams included two 6-year olds, two 2-year olds, and a lamb. The ewes were all mature animals. However, by 1964 only two rams remained. Losses were documented as all occurring within the enclosure -- no sheep escaped. During this time drug research was progressing, as a promising tool for sheep captures, using Cap-Chur equipment. In July of 1967, this drug capture equipment was utilized to capture a yearling ewe on the Kofa and release her into the enclosure. However, in the fall of 1967 the remains of a large ram (10 years old) were found at the bottom of Horse Camp Canyon within the enclosure. Therefore, at this time the remaining sheep numbered two -- a large ram (7 years old) and a young ewe.

In reviewing the capture history for acquiring and maintaining bighorn sheep for this project, it was decided that for the greatest success only young animals (yearlings or 2-year olds) would be future targets for capture. They appeared to withstand the trauma of capture better and would more easily adapt to their new surroundings. With the new criteria for capture, a 2-year old ewe was captured on the Kofa, using drug equipment, in July of 1968 and released into the Aravaipa enclosure.

The overall success of the project was still not satisfactory. The effort to capture target animals from ground blinds around watering sites was not efficient, therefore, an aerial method of capture was investigated and initially attempted.

In mid-February 1971, three yearling ewes were captured in the N. Plomosa Mountains of western Arizona, utilizing a helicopter, Cap-Chur equipment, and a new drug combination. The drug "cocktail" included a knockdown drug, a tranquilizer, and a stress suppressant. This was the first aerial capture of desert bighorn sheep in the United States/world. The operation was such a success that in January, 1972 another three desert sheep were captured -- a 2-year old ram from the Crater Mountains, and two ewes, one yearling and one 2-year old, from the Sauceda Mountains. The captured sheep were removed from different gene pools than those of 1971 and earlier. These were the last desert bighorn to be captured and then released to the Aravaipa enclosure.

Reproduction in the enclosure was excellent, with 100% lamb production from mature ewes. However, over the years from 1969-1972, there were some losses of young sheep, especially lambs. Apparently, the entire 1970 lamb crop (2 rams, 1 ewe) escaped late fall of 1971, with no remains or evidence of predation found.

A major partner with the Arizona Game and Fish Department, on-site, was Duard Sanford, the local rancher whose ranch included the Aravaipa enclosure. Duard would periodically patrol the area about the enclosure, walking the fence line to rock up any holes under the fence that he might find. This was particularly important after significant rainfall with high flows within the Horse Camp Canyon drainage. His effort, along with the routine checks of the enclosure by the Department, whereby sheep location and classification occurred, and vegetation use transects were accomplished, helped to maintain a successful and thriving population within the enclosure.

With the monitoring of range conditions and sheep numbers within the enclosure, it was determined that 15 adult desert bighorn sheep was about the maximum holding/carrying capacity. Therefore, in January of 1973, a portion of the fence on the southern boundary of the enclosure was cut and tied back. The sheep were not forced out of the enclosure, but allowed to find the opening and exit the enclosure on their own volition. At that time, the population within the enclosure had reached the goal of 15 adult and yearling animals, including one large ram (Old Granddad - 13 years old), one 4-year old ram, one 3-year old ram, one 2-year old ram, one yearling ram, 9 mature ewes, and one yearling ewe. The 1973 lambing season produced another seven lambs within the enclosure. Therefore, a total of 22 sheep were released from the Aravaipa enclosure in 1973.

With the release of the sheep from the Aravaipa enclosure, the project was completed. No further use of the enclosure for future desert bighorn sheep releases was anticipated. However, upon monitoring of the area/enclosure the next year it was found that most of the mature ewes, once again, lambed within the enclosure. The remains of Old Granddad were found in 1978, in a canyon to the west of Horse Camp Canyon. He was aged at 15 years when he died. Today, the Aravaipa Canyon desert bighorn sheep population is doing quite well. In fact, the state record, to date, for hunter-harvested desert bighorn sheep in Arizona was taken from the Aravaipa Canyon population in 1988.

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