

United States Department of the Interior

FISH AND WILDLIFE SERVICE POST OFFICE BOX 1306 ALBUQUERQUE, N.M. 87103



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In Reply Refer To: Region 2/FWE

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MEMORANDUM

To: Assistant Regional Director - Refuges and Wildlife, FWS,

Albuquerque, New Mexico

From:

Regional Director

Subject: Intra-Service Formal Section 7 Consultation - Proposed Sonoran

Pronghorn Capture, Collaring, and Monitoring Study on the Cabeza

Prieta National Wildlife Refuge

This responds to your request dated October 19, 1987, for formal intra-Service consultation pursuant to Section 7 of the Endangered Species Act of 1973, as amended, for the capture, collaring, and monitoring of Sonoran pronghorn (Antilocapra americana sonoriensis) on the Cabeza Prieta National Wildlife Refuge. The 90-day consultation period began on October 22, 1987, the date your request was received in the Phoenix Ecological Services Field Office.

The Arizona/New Mexico Refuge Supervisor provided an intra-Service Section 7 evaluation form for the proposal and, after its review, we requested additional data on the monitoring program. This request was submitted December 3, 1987, and we received the response on December 21, 1987. This opinion is based on information provided in the intra-Service Section 7 evaluation form, data in our files, subsequent data, the Sonoran Pronghorn Recovery Plan, and discussions with biologists familiar with the species.

Background Information

The Sonoran pronghorn is presently found in Arizona on the Cabeza Prieta National Wildlife Refuge, Organ Pipe Cactus National Monument, and the Luke Air Force Base Gunnery Range. It may also occur on portions of the Papago Indian Reservation. In Mexico it is believed to be confined to the northwestern part of the State of Sonora.

The preferred habitat of the Sonoran pronghorn is broad alluvial valleys separated by block-faulted mountains. Mean elevations of the valleys vary from 400 to 1,600 feet above sea level. Precipitation throughout the valleys is 3 to 15 inches yearly. This precipitation falls in the form of winter rains and intense localized thunderstorms in the summer.

This species was federally listed as endangered on March 11, 1967. Current population estimates in Arizona are 50-100 pronghorn and between 200-300 in Mexico.

Destruction of habitat and competition with livestock are the major threats to the continued existence of the Sonoran pronghorn. The objective of the 1982 Sonoran Pronghorn Recovery Plan is to maintain existing population numbers and distributions while developing techniques that will result in a United States population of 300 animals (averages for a 5-year period) or numbers determined feasible for the habitat.

The proposed action consists of a cooperative study involving the collection of natural history and other biological information from the Sonoran pronghorn. The Cabeza Prieta National Wildlife Refuge proposes to permit personnel from the Arizona Game and Fish Department to coda net capture, collar, and monitor up to 10 Sonoran pronghorn in order to obtain needed information on the species. This action is a continuation of studies initiated in 1983. The dates of capture are November 28-29, 1987. Members of the capture team are all highly capable and experienced in this type of work with both pronghorn and bighorn sheep. All capture operations will conform to the following constraints that are contained in the Refuge Special Use and Endangered Species Permits:

- Chase times will be held to a minimum. In no instance will an antelope be pursued in excess of 10 minutes.
- Animals will be pursued uphill when possible in order to limit chase speed.
- Captures in extremely rocky or broken terrain will not be undertaken. When possible, antelope will be captured in sand dune areas.
- 4. At all times, the animals pursued will be watched for signs of stress. Chases will be aborted when an animal demonstrates signs of severe stress.
- No capture will be initiated when ambient temperatures are in excess of 80°F.
- 6. The capture team will be accompanied by a support aircraft carrying a veterinarian with experience in the treatment of stress and trauma problems in large animals, a U.S. Fish and Wildlife Service representative, and an Arizona Game and Fish Department biologist with experience in the capture of free ranging ungulates.

- 7. If, at any time, it is determined that conditions are such that chase and/or capture of antelope are detrimental to the health of the animal(s), the U.S. Fish and Wildlife Service representative shall be empowered to about the operation.
- 8. Ice packs will be carried aboard the chase ship to be used to lower excessively high body temperatures of captured antelope.
- 9. Once an animal is restrained, the physical conditions will be immediately assessed. Heart beat, respiration, gum color (capillary response), and body temperature will be checked. If it is determined that the animal is stabilized and not in jeopardy, the radio-collar will be affixed and biological samples (blood, nasal, pharyngeal, vaginal, and ear swabs) will be taken.
- 10. If an animal appears to be stressed, appropriate stress treatment will begin immediately. Stress symptoms will include, but not be limited to, the following: body temperature in excess of 108°F, lack of gum capillary response, and an abnormal heartbeat.
- 11. On animals that are severely stressed, sampling will be limited, and the animals will be radio-collared and released as soon as treatment for capture myopathy has been completed and its physical condition permits.

The monitoring program will collect pronghorn movement data through a minimum effort to locate each animal on a biweekly basis from the air and on a weekly basis from the ground. Aerial tracking will be conducted in a small single engine aircraft equipped with wing-mounted fixed and rotary belly-mounted antennas. Flights will be at a minimum of 100 feet above ground level. Ground locations will be made from distances judged to be non-stressful to the animals. Because specific stress distances will vary by animal and season, no set limit has been established. However, at no time will monitoring be allowed to disturb the pronghorn to life-threatening stress points.

Impacts of the Action

The capture, collaring, and monitoring operation will not affect the habitat of the Sonoran pronghorn. Also, with the operations conforming to the conditions and constraints of the permits, no overall detrimental effects to this species should occur. The information gathered by this effort will contribute to the recovery efforts for the endangered Sonoran pronghorn. I acknowledge the capture and collaring segment of this study was completed

during November 28 and 29, 1987, and 10 pronghorn were captured and 9 collared. One pronghorn died as a result of this effort even though the best available precautionary measures were in place. I believe the overall effect of this proposed action will be beneficial to the species.

Incidental Take

I do not believe further incidental take will occur as a result of the proposed action. In the event that an incident occurs as part of and during the course of the activities covered by this opinion that could result in the incidental take of the Sonoran pronghorn, the activities causing the incident must be terminated and consultation must be reinitiated so the degree and amount of anticipated incidental take can be assessed and reasonable and prudent measures can be developed to eliminate or reduce the levels of such take.

Biological Opinion

Based upon the preceding information, it is my biological opinion that the capture, collaring, and monitoring operations are not likely to jeopardize the continued existence of the Sonoran pronghorn and that the information obtained as a result of these studies will promote conservation of the species.

Further consultation is not required unless new information reveals effects of the action not considered in this biological opinion, or new species are listed that may be affected by the proposed action, or the proposed action is subsequently modified in a manner not considered in this opinion or further incidental take occurs.

Thank you for your interest in conserving endangered species.

Russey & Carrest

cc:

Director, FWS, Washington, D. C. (EHC)
Director, Arizona Game and Fish Department, Phoenix, AZ
Regional Supervisor, Arizona Game and Fish Department, Yuma, AZ
District Manager, Bureau of Land Management, Phoenix, AZ
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