

Pronghorn capture not as successful as hoped

The Sonoran pronghorn recovery team has been working on a plan to breed the endangered species in a semi-captive facility on Cabeza Prieta National Wildlife Refuge. The plan is for animals to be captured and moved to the facility from a herd on the same species in Mexico.

Scientists are concerned that the population of Sonoran pronghorn in the United States could die out. Surveys have shown that the US population has declined drastically from approximately 250 animals in 1993 to around 21 animals in 2001, which was the driest year in Arizona's history.

Seven pronghorn were captured in Mexico on January 16 and 17 and two ewes were successfully released into a semi-captive breeding facility on the Cabeza Prieta National Wildlife Refuge near Ajo. During the capture-relocation effort one animal died from a medical problem and others died due to a syndrome called "capture myopathy."

Capture myopathy results due to the build up of lactic acid in the system following overexertion, which is combined with overstimulation of the nervous system. The result is a disruption of the animal's normal metabolic processes. The end result is the animal suffers hyperthermia, which is overheating. For human athletes, a similar process is often referred to as "muscle melt down," which has also resulted in deaths.

"Unfortunately, capture myopathy is a delayed reaction. When we saw what was happening to the animals in the field, we immediately shut down the capture operation on the first day until we could come up with a solution," says Jim DeVos, research chief for the Arizona Game and Fish Department.

During the first day of the operation, animals were given a sedative to help calm them, held at a collection area, then transported across the border simultaneously via helicopter. On the second day, once an animal was captured, it was sedated fully, then flown immediately across the border to the semi-captive breeding facility on the Cabeza Prieta National Wildlife Refuge.

"On the second day, we didn't even put the animals in crates for transporting. That way the veterinarians had direct access to each animal at all times. It worked. We feel confident we can replicate the process successfully in the future," DeVos says.

The two pronghorns successfully captured using the revised protocol are now doing well in the semi-captive breeding facility located on the refuge.

"It was devastating to lose those animals from the first day

of the capture. Many of the people involved in this operation have devoted a significant part of their adult lives to recovering Sonoran pronghorn. While we were heartsick, as scientists we also knew that without our intervention, we would lose our Sonoran pronghorn population in Arizona," DeVos says.

DeVos, who has more than 25 years experience with capture operations, says the original capture plan took six months to create. The planning involved wildlife biologists with decades of experience along with veterinarians and experts from zoos, including the Phoenix Zoo, Los Angeles Zoo, and Disney World. "We knew going in that pronghorn in general are difficult to capture and transport. We designed the capture plan accordingly. When it didn't work as hoped, we went back to the drawing table, revised it based on what we had just learned, and came up with something that did," DeVos says.

The two pronghorn does were placed in a large, predator-proof 640 acre natural environment on the refuge. The animals are alert, feeding, and responding naturally, biologists said. Their welfare is being closely monitored by both federal and state resource managers.

This captive breeding program is a cooperative effort between the US and Mexican governments, the Arizona Game and Fish Department, Arizona Department of Agriculture, other partnering agencies and organizations, and many dedicated volunteers working together. The Pronghorn Recovery Team of

expert scientists and veterinary specialists worked to design a capture and import protocol based on science, while attempting to avoid undue risk to the pronghorn's safety.

Cabeza Prieta National Wildlife Refuge wildlife biologist and Sonoran Pronghorn Recovery Team Coordinator Dr. John Morgart, biologists with the Arizona Game & Fish Department and other agencies continue to be optimistic with future prospects for the recovery effort. "This is a highly significant action toward the continuing welfare of the species," said Morgart. "We are optimistic that we can refine and continue the breeding effort to avoid extirpation of the animal in the United States," said Morgart. "We have the nucleus of a breeding population."

The Sonoran pronghorn was listed as endangered in 1967.