SONORAN PRONGHORN CAPTURE AND PROGRESS REPORT 12/21/1987

The Sonoran pronghorn capture took place on November, 28-29, 1987. The base camp was located on Range 1 of the Barry M. Goldwater Range. The search crew consisted of personnel from Arizona Game and Fish, Cabeza Prieta National Wildlife Refuge and Luke Air Force Base. Two fixed-wing aircraft were used to located the animals prior to calling in the capture crew consisting of two Game and Fish biologists and a veterinarian. Observers were ferried to the capture site in helicopters provided by the U.S. Army and Marines.

Ten pronghorn were captured during the two days. Nine were fitted with telemetry equipment and were released. One animal, an adult doe was injured during the capture and was euthanized in the field. A summary of the events of the capture for each animal is as follows:

COLLAR FREQUENCY 148.401

The first capture occurred in the area east of the Aguila Mountains on November 28. Chase was initiated at 8:51 with the capture occurring two minutes later. The buck was aged as being 4+ years old. The radio collar used was completely covered with red tape to aid in field identification. Blood samples were collected and medications were administered as proposed in the capture permit. Body temperature at the time of capture was 102^0 f. The only unusual feature of this capture was that it was noted at the time of capture that there were bruises on the head and neck of the animal that were capture related, however, the animal was released without incident.

COLLAR FREQUENCY 148.341

Capture of this animal, which was part of the herd that 148.401 was captured from, occurred in the north end of Growler Valley. Chase was initiated at 9:07, with the capture occurring at 9:08. This doe was aged as 4+ at the capture. The collar that was used was covered with green tape. Blood samples were collected and medications administered. Body temperature was recorded as 102^0 f. There was no unusual factors in this capture and the animal was released without incident.

COLLAR FREQUENCY 148.260

The herd that this animal was captured from was first observed in Growler Valley, west of Charlie Bell Pass. The chase was initiated at 10:09, with the capture being accomplished after a one minute chase. This buck was also aged as being 4+ years old. The collar used was covered with black tape. No temperature was recorded at the time of capture,however, the animal was in good condition at the time of capture and all blood samples collected and medications were administered as required. The animal was released without incident.

COLLAR FREQUENCY 148.240

This doe was captured from the same herd as 148.260 (west of Charlie Bell Pass). Capture occurred after a prolonged chase.

Temperature immediately after capture was 105^0 f. In addition to high temperature, other signs of stress were present. Capillary response and heart rate were good and no emergency treatment was deemed necessary. Because of the long chase time and concern for the animal, no samples were collected. Require medicines were administered. The collar used was covered with yellow and green bands. This was the first instance were an animal captured in 1983 was observed and recaptured. Radio collar number from the previous study was 149.290. Three minutes after the capture, this doe was covered with water to reduce body temperature, the temperature was lowered to 104^0 f. The animal was released without problems at 10:35.

COLLAR FREQUENCY 149.099

When first observed, this herd of pronghorn was south of the Granite Mountains. This represented the second instance where an animal captured in 1983 was refitted with biotelemetry equipment. The previous collar frequency for this doe was 149.311. Capture was completed 15:45, after a one minute chase. At the time of capture, body temperature was recorded as 102.8^0 f. The collar had no tape covering, resulting in a beige color. Blood samples were taken. Required medicines were administered. Release was made without incident.

COLLAR FREQUENCY 148.280

Capture of this animal was from the same herd as 149.099. Capture occurred at 16:02 after a two minute chase. At the time of capture, this buck was aged at 4+ years. The collar used was covered with red and yellow bands. Body temperature at the time of capture was somewhat high (104^0 f), however, no signs of stress was exhibited. Blood samples were collected and medicines were administered. Release was made without incident.

COLLAR FREQUENCY 148.380

Capture occurred west of Bates Mountains, just east of the Organ Pipe Cactus National Monument. When captured in 1983, this buck was fitted with radio collar number 149.281. The chase was initiated at 16:20, with the capture effected three minutes later. The collar used on this buck was covered with blue tape. Body temperature was recorded as 104.3^0 f. Required medicines were administrated. Blood samples were taken. The left eye was diagnosed as having an eye condition known as caratitis pigmentosa. This is suspected to be secondary to trauma that occurred earlier, however, probably not at the time of the previous capture. Vision was approximately 10% of normal. Release was made without incident.

COLLAR FREQUENCY 149.250

This was the first capture completed on November 29. When first observed, this herd was located in San Cristobal Wash, between the Aguila and Mohawk mountains. Chase was initiated at 8:45, with the capture effected at 8:51. Body temperature was recorded as 105^0 f. The collar used was covered with red and green bands. Age for this doe was estimated to be 4+ years.

Blood samples were collected and medicines administered prior to an uneventful release.

COLLAR FREQUENCY 148.360

Capture of this three year old buck occurred in the Mohawk Valley, east of the Sierra Pinta Mountains. Chase was initiated at 10:33 with the capture completed after a one minute chase. The collar used was covered with yellow tape. Body temperature was recorded as being 105^0 f. Blood samples were collected and medicines given. Release was made without incident.

In addition to the nine pronghorn discussed above, there was one additional animal captured. The capture site was in the Mohawk Valley, east of the Sierra Pintas. The chase appeared to be normal, with total chase time of five minutes. After the animal was restrained she appeared to have a progressive degeneration of muscle function in the hindquarters. Upon inspection by the veterinarian, he concluded that the spine had been broken. It was decided that the location and severity of the fracture precluded a satisfactory recovery and the animal was euthanized. It was transported to the base camp in a helicopter and then to a refrigerator in Phoenix by airplane.

On Monday, November 30, the carcass was transported to the University of Arizona where a necropsy was conducted by Drs. Ted Noon and Ed Bicknel. One of the first steps taken was to try and determine the cause of the fractured spine. Upon dissection, it was apparent that the fracture was the result of one of the weights used to carry the net from the capture gun striking the pronghorn in the spine. The basis for this decision was the fact that there was extensive evidence of trauma including bruising that ran from the base of the neck posterior to the base of the tail. Preliminary findings were that the fracture occurred at the third or fourth lumbar vertebrae, with the lateral processes on the right side of the forward three vertebrae being fractured. There was little damage to the lateral processes on the left side of the spine, which the pathologists felt further indicated that the weight had hit the spinal column a glancing blow with the weight traveling from left to right.

Samples from all of the internal organs were taken, as were a number of tissue samples. The results of these tests will be reported as they become available. The blood samples were also submitted to the UofA for serology testing. Other samples have been placed in a super cold freezer and will be used in other testing.

The first telemetry flight, scheduled for Sunday, December 13, was canceled due to adverse weather conditions. The flight was rescheduled for December 20, at which time all pronghorn were relocated. No mortalities were observed, although one collar was in the mortality mode at the time the signal was first heard. After the plane approached, the animal became active and the collar returned to the normal mode.

A summary of information on each of the pronghorn is as follows:

COLLAR #	COLLAR COLOR	SEX	AGE
148.401	red	M	4+
148.341	green	F	4+
148.260	black	M	4+
148.240	green/yellow	F	7+
149.099	beige (no tape)	F	4+
148.280	red/yellow	M	4+
148.380	blue	M	4+
149.250	red/green	F	4+
148.360	yellow	M	3

All future correspondence will refer to these collar frequencies as animal identification numbers.