

PRONGHORN

2nd Quarter 2007



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COVER PHOTO BY JIM UNMACHT AAF PAST PRESIDENT AND SUSTAINING MEMBER

Pronghorn is a quarterly newsletter for the members of AAF. Letters, comments, news items, articles, pictures and stories are all welcome and will be considered for publication. Address all such items to:

Pronghorn Editor, PO Box 12590, Glendale, AZ 85318, or by email at info@ azantelope.org.

PRESIDENT'S MESSAGE

We have had an active few months! Our 5th annual fundraising banquet is around the corner and promises to be one of our best. Scott Anderson has done a terrific job of organizing work projects. The last one up on Anderson Mesa was a full two days of work rolling old fence. The fence rolling machine we purchased is a great piece of equipment! We rolled over 5 miles of fence in one and a half days!

We recently honored two professionals with our conservation award, long time board member Dave Brown, co-author of our new book Arizona Antelope, and Rick Miller who has been so instrumental in getting project work done on Anderson Mesa.

AAF is an affiliate of the Arizona Wildlife Conservation Council, Arizona Sportsmen for Wildlife and Arizona Wildlife Federation. Through these affiliations we try to be well informed on political and conservation issues that affect antelope and wildlife management in our state. We wrote a strong comment letter to the Kofa National Wildlife Refuge urging state authority for management of wildlife on the refuge, specifically mountain lions. The full content of the letter is at our web site.

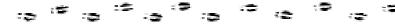
Another issue of grave concern is the now completed plans by the state legislature to sweep over \$8 million dollars of funds allocated to the Arizona Game and Fish Department. I hope by the time you read this you will have helped us successfully thwart that effort by contacting your elected representatives. The AAF with other conservation organizations signed a petition to the Arizona Game and Fish Commission that demands that the commission



represent our concerns and fight off any efforts by the legislature and governor to take ANY funds. This hard line in the face of overwhelming state budget deficits can only succeed if we, the sportsmen and women of the state, are loud and many. If the legislature and governor only hear from our commission they will ignore them. It is US, the voters, that can make the difference. If the \$8 million was successfully swept this year, they will be back for more next year! If they did not take the money then Thank you! to all of you who took the time to help with an email, letter or phone call.

Have a great summer and I hope you have a tag for the fall. I plan to be sitting in a tree with my bow waiting for a cow elk to walk by.

Tice Supplee



5TH ANNUAL FUNDRAISING BANQUET JULY 19TH

El Zaribah Shrine Phoenix
3:00 pm Doors Open Early This Year
3:30 pm AZ Big Game Super Raffle Drawing
4:30 Buffet Dinner
Auctions and Raffle to follow dinner

Start early, finish early. That's one of the themes for the banquet this year. As usual, we will have some great hunting and fishing trips, weekend getaways, guns, bows, hunting and camping gear, jewelry, art, and much more. Once again, we are sponsoring the AZ Chapter of Hunt of a Lifetime by donating a portion of every banquet ticket sold. HOAL is a nonprofit organization whose mission is to grant hunting & fishing adventures and dreams for children age 21 and under who have been diagnosed with life threatening illnesses. And the 3rd annual Arizona Big Game Super Raffle drawing will take place at our event.

Hope to see you there!

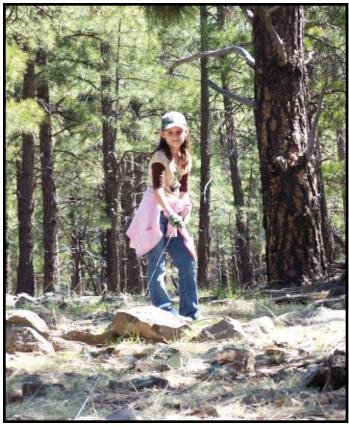
Ticket information and complete banquet details can be found on our website, www.azantelope.org.

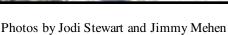
ANDERSON MESA PROJECT REPORT MAY 17-18

The AAF teamed up with the Arizona Wildlife Federation for this year's Anderson Mesa project, and proved the old adage there is strength in numbers. More than 50 volunteers worked over the course of 1 1/2 days to remove five miles of double strand electric fence, as well as improve a 0.6 mile section of boundary fence along the Lower Lake Mary Allotment. Though this project was not actually on the Mesa, there are formerly collared pronghom from the Mesa using the long meadows, which may be much more important to the overall Anderson Mesa pronghorn herd than has been realized in the past.

Fence rollers from the AAF and Game & Fish were humming all day, and made quick work of gathering up the fence. More than half a dozen children scurried around looking for stray strands of wire, untangling nasty bunches, and generally keeping the adults moving!









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A reporter and photographer from the Arizona Daily Sun newspaper joined us Saturday and a great article appeared in the paper the next morning.

Those working on Saturday were treated to a steak dinner sponsored by the AAF, topped off with 3 different cobblers prepared by Mary Keebler, Shane Stewart and Tracy Unmacht. The AAF and AWF conducted a raffle for all in attendance, with many winners of various logo gear. The usual socializing around the campfire took place, with many a fun story being shared.

The Sunday work force took two different paths. One small group tackled some remaining fence wire, and another larger group took the road less travelled! The "Black Ram" tour made the circuit all the way around the Pine Grove Quiet Area. After several miles of scenic and "rough" roads, they made it back in one piece, just in time for the BBQ lunch prepared by the AWF.

This event was truly a family affair, with many children outlasting some of the adults out in the field!



Volunteers included Kevin Parkes, Sandy Henwisch, Annie Rollins-Protas, Tim Vining, Doug & Gale Edwards, Robert Garcia, Chris Sather, Jacob Sather, Calvin Sather, Scott Sather, Allen Werkmeister, John Neff, Nathan Ragan, Shane & Jodi Stewart, Cade Stewart, Maci Stewart, Clair Harris, Bruce Belman, Vickie Belman, Sally Tyrrell, Rick Selting, Ken Chichester, Bonnie Glenn, Regina Eason, Jodi Allen, Cecil & Carlota Schmitz, Jim Barnes, Ken O'Dell, William Delinger, Donna Blomquist, Jaye & Kim Kruezer, Cory Kreuzer, Ryan Kreuzer, Jesse Provencio, Jenny Blue, Michael Barker, Cherie Barker, Tom Mackin, David & Sue Laird, Scott Anderson, Jimmie Petersen, Jim & Tracy Unmacht, Tice Supplee, Karen LaFrance, Bill & Mary Keebler, Troy Christensen, AZGFD, Henry Provencio, USFS

STORIES IN THE SNOW By Lee Luedeker, AZ GAME & FISH

A fresh sheet of snow records the stories of many wildland creatures, details soon erased by sun, wind or the next layer of flakes. When the elements print the tale, a reader needs to find the "document". On December 10, 2007 Wildlife Manager (WM) Dan Gaska found a critical page in the story of the Garland Prairie pronghorn herd.

Garland Prairie and the adjunct highland "parks" in Game Management Unit 8, east to Rogers Lake, south to Fry Park, and west to Barney Flat, provide warm-season habitat for a herd of about 150 pronghorn. Typical winter weather at the 7000 feet elevation near Flagstaff compromises the cold-season habitat capability. Water sources can freeze solid and forage hides under snow that piles deeper and morphs into ice. The summer pronghorn herd must migrate to more tolerant locales to weather the lean months of winter. Prior to construction of the railroad and Route 66 along the 35th parallel, pronghorn from Garland Prairie, Government Prairie and the Coconino Plateau could migrate southward to grasslands south of the Peaks.

When Interstate Highway 40 and the ATSF rail route became hardened barriers, the Unit 8 pronghorn herd adapted to an east-west migration route. This route arcs around the south side of Bill Williams Mountain and descends the western edge of the Mogollon Rim to Putney Flat south of Ash Fork. Much of this migration corridor was determined by telemetry collar data developed from 2000 through 2004 by an Arizona Game and Fish Department research project. (Fig. 1) This project was funded with Special Tag Funds through the Habitat Partnership Committee supplemented with corporate sponsorship from the Phoenix Cement Plant-Clarkdale and Arizona Public Service. Kaibab National Forest and Prescott National Forest also joined as project partners.

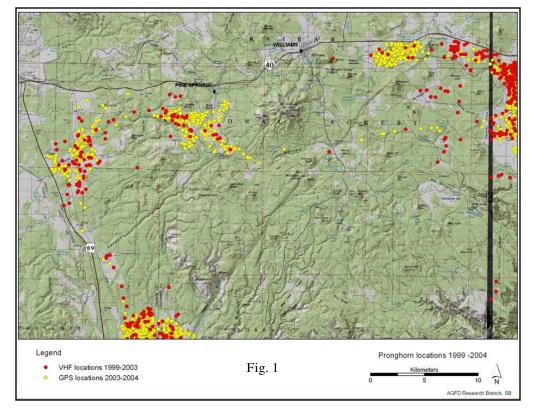


Photo by Dan Gaska

The radio-tracking technology available for this project required manual collection of data points from ground triangulation or from direct aircraft overflights. Pinning down these locations resulted in Mary Ann Koleszar logging so much Cessna flying time that she began to think of herself as a flight hostess. Accumulating data at the rate of one location fix per week as compared to the current technology, which stores several data telemetry locations per day was painstakingly slow. Still the habitat utilization pattern gradually became focused. Pronghorn use during the warm season concentrated on Garl and Prairie and

some of the smaller meadows while wintering pronghorn scrambled down to Wagon Tire Flat east of Drake at the onset of the first heavy snowfall. The route taken by the pronghorn during that scramble was the one big hole left in the data.

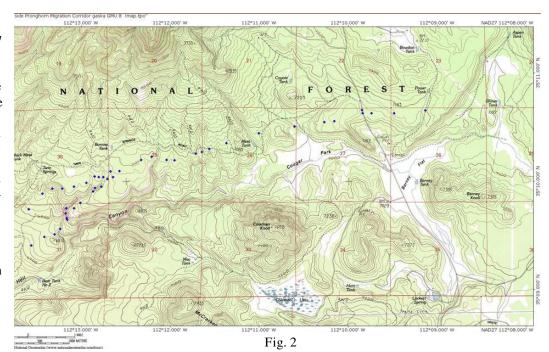
The pronghorn migration route required the herd to penetrate dense ponderosa pine forest and scamper down rocky ledges and canyons while skirting around Bill Williams Mountain. Although elk and bighorn sheep cope easily with such landscapes, pronghorn in these areas are like aliens from Kansas. In these habitats pronghorn are vulnerable to stalking predators, causing the animals to reduce their exposure by transiting the zone as quickly as possible. Since the migrating pronghorn herds passed through this inhospitable region so rapidly, very few radio data points delineated this critical bottleneck on the migration route.



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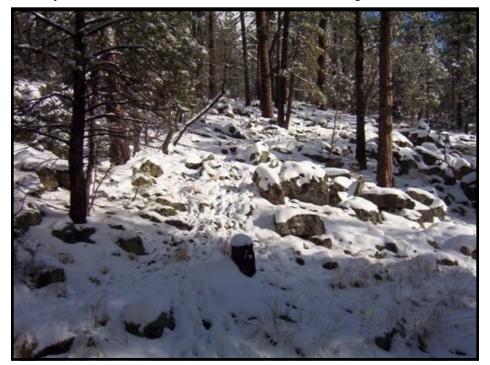
On December 10, 2007 WM Gaska found the trail of a westbound herd of pronghorn that crossed the Perkinsville Road south of Williams. The herd crossed the pavement near Barney Flat and traveled west toward the north rim of Hell Canyon. Gaska and Kaibab National Forest personnel scanned the Forest Road segments between Garland Prairie and Barney Flat that intercepted the trail and confirmed that the herd had departed from Garland Prairie as the first big snow storm blew in. Retracing the pronghorn's route, they recorded Global Positioning System (GPS) locations at each of the road crossings. (Fig. 2)



On December 12, Gaska and a neighboring WM walked the segment of the migration route that skirted Bill Williams Mountain from Barney Flat to Hat Ranch. They recorded over fifty waypoints along the route, effectively filling in the data hole. Evidence laid down in the snow showed that the migration had occurred in three surges by separate elements of the Garland Prairie herd. All three groups had transited the bottleneck within a 60-hour time span. The final group contained the largest number of pronghorn and crossed the barrier between late December 11 and early December 12.

The first group had followed a nearly identical path as the third group, the latter group laying down fresh tracks over hoofprints lightly dusted with snow. The second or middle group had wandered off the primary trail near the center of the bottleneck and then followed a parallel route along the north rim of Hell Canyon. This trail converged with the trail taken by the other two groups near Hat Ranch. The WM's walked approximately ten miles of the trail taken by the three groups each containing from 40 to 60 animals. Nonetheless, only one pellet group was observed along the route. All of the sign indicated that the pronghom had embarked on a linear, direct route without pausing to forage or rest. The herds avoided following primary and secondary roads, generally tending to cross the roads perpendicularly when necessary. Although the route generally conformed to the conformation of the topography, the second group of pronghorn had penetrated some steep, rocky terrain without any indication of hesitation.

The knowledge gained from this exercise illustrated the difficulties encountered by the pronghorn, but the responsibilities required of resource managers to safeguard critical passages within a given landscape. The viability of the Garland Prairie pronghorn herd depends on the traverse of this route between seasonal ranges. If the Perkinsville Road highway continues to evolve into a ma-



jor transportation link between Williams and Prescott, the movements of pronghorn, and likely other wildlife species, will become impaired. Opening up the forest through a change in Forest stand management could widen the current bottleneck, but the particulars of the entire route taken by the pronghorn needs further analysis. Actions such as pine stem reduction need to be limited until further tested and stamped "Pronghorn Approved" by the animals themselves. The Kaibab National Forest has already implemented some changes to an existing timber harvest treatment on the migration route. Hopefully, the pronghorn will keep printing their assessment evaluations on these actions in the springs and falls to come.

Photo by Dan Gaska

DESPERATE TIMES CALL FOR DESPERATE MEASURES FOR DESERT PRONGHORN

BY DAVID E. BROWN



"Water is scarce. The nearest supply being a good well ten miles from the mine. The deer, mountain-sheep, antelope, quail, rabbit, and hare abound."

So wrote Professor William P. Blake of Connecticut in his geological investigation of

the Castle Dome Mining District northwest of Antelope (Antelope Hill) and west of the Castle Dome Mountains. So much importance was attached to Blake's descriptions that portions of his report were reprinted verbatim in Lieutenant George Wheeler's 1875 report on the Southwest's natural resources and R. J. Hinton's 1878 Hand Book to Arizona.

Professor Blake was not the only one to comment on

antelope and other game along the Lower Gila River. On July 28th, 1862, Civil War soldier George Hand shot a buck antelope out of a herd of about 40 that he encountered south of Oatman Mountain, and other travelers reported killing pronghorn in Dendora Valley. Pronghom venison was a staple on the menu at the Butterfield Stage stop in Gila Bend, and on June 19, 1886, the Mohawk Valley News segment of Yuma's Arizona Sentinel reported:

"The Indians brought in four big, fat black-tail deer and several antelope Last Monday."

Such accounts dwindled after the coming of the railroad and the founding of such lower Gila farming communities as Roll, Wellton, and Dome Valley. Away from the river, cattle and sheep ranches sprang up wherever water could be found or brought to the surface with windmills. Subjected to increasing competition from livestock, cut off from traditional watering sources, and relentlessly hunted

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BABACOMARI AND ROSE TREE RANCHES GRASSLANDS RESTORATION PROJECT PROPOSAL-GMU 35 BY TICE SUPPLEE

On June 3rd Arizona Antelope Foundation board members Kara Jensen and Tice Supplee traveled with Arizona Game and Fish Department biologists Ron Thompson and Al Eiden to the Babacomari Ranch. We were joined by Tucson Region Landowner Relations Coordinator and we met with Doug Ruppel, ranch manager for the Babacomari Ranch and Bill Brake, owner of the Rose Tree Ranch.

We got oriented with maps on the dining table and discussed the vision of what both ranches hope to accomplish. The Elgin antelope herd spends time on the Babacomari and the Rose Tree Ranch has animals that are most likely coming from the herd on the Empire Ranch to the north.

The proposed treatment site on the Babacomari is in the "Headquarters Pasture" and is adjacent to the Rose Tree Ranch (and that ranch wants to include 350 more acres) so total treated acres will be around 850. About 600 acres have already been treated with good success.

The sites are all historic grasslands that have been brush invaded with whitethom acacia and sandpaper bush. Both brush species respond well to relatively low concentrations of "Spike" herbicide. We looked at treated sites and noted that agave, yucca and sotol seem to have survived. The dominant returning grass is Lehman's lovegrass. Subsequent fire management may encourage more of the native grasses, although lovegrass encroachment is a problem throughout this region on grazed and ungrazed lands alike.

John Millican, the unit Wildlife Manager, was with us and he was positive about the project benefits. As the work moves east the benefiting animal will become deer. The AZ Deer Association will be consulted on that phase, which is probably 3 years out.

We requested a landscape plan that will put the project in context and will include previous treatment work and antelope positive response to that work. Target dates to have the proposal ready for tag account fund consideration by August.

Our trip to the Babacomari was a good one. I feel comfortable that the planned project initial phase may yield long term benefit to the antelope herd. Stay tuned.





Sonoran Pronghorn



UPDATE

By JILL BRIGHT AZ GAME & FISH MAY, 2008

Captive Breeding:

North Half. All the pronghom are doing well. We have 13 fawns in this pen. All the adult does gave birth to twins, and all have survived except one.

<u>Southwest Quarter:</u> All the pronghorn are doing well. We have 12 fawns in this pen. All the adult does gave birth to twins, and all have survived except one. One yearling doe has twins, and the other yearling has one fawn.

Between the two pens, we think we have 15 male and 10 female fawns, but it is still hard to tell for sure on some of the younger ones.

Status of Pronghorn in Pen

(M = Male, F = Female)

	Wild pronghorn	2005	2006	2007	2008	TOTAL
	put into the pen	recruitment	recruitment	recruitment	recruitment	in pen
NORTH HALF						
In Pen	5F, 1M	2F		4F, 5M	13 fawns	30
Released		4M	3M			
SOUTHWEST						
In Pen	5F		2F, 1M	3F, 2M	12 fawns	25
Released			2M			
						55

Southeast Quarter: This quarter is now empty.

2008 Released Males: Based on our telemetry data, one of the released males (451) has been mostly by himself on South Tac, near several other groups of pronghom. Three of the released males (651, 751 and the uncollared one) have been staying north of the Crater range, as far north as about 3.5 miles south of Interstate 8, but have not been near or east of Highway 85 since right after they were released. These pronghorn have been recorded with GPS data very near the farm fields in the area. The other pronghom released this year (851) has not been heard with telemetry since March 30, when he was on the northwest edge of North Tac. We searched for him on the BMGR and east of Highway 85 this last Sunday, but could not find him anywhere. We will continue searching for him on future flights; hopefully his collar has not failed.

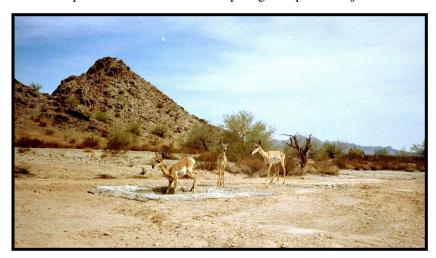
Water Projects: We flew 2400 gallons of water to Granite Mountains water, which filled it about half full. We also set up a digital camera, and put an evaporative cover on the water. We flew 550 gallons of water to the Organ Pipe water, which filled it up, and put a digital camera on it. We also put cameras and evaporative covers at Fawn Hills (80% full) and Sierra Pinta #1 (40% full). We fixed Antelope Hills water and it now is about 30% full. Point of

the Pintas and Devil's Hills waters are mostly full, and we have seen a group of several pronghom moving between these two areas on the telemetry flights.

Forage Enhancements: We have been irrigating at Charlie Bell forage plot, and it is staying green. We have seen up to 8 pronghorn at this forage plot recently. They seem to be moving between South Tac and the forage plot. We have also started watering at Lower and Adobe Well forage plots. We have also irrigated several times at Granite Mountains forage plot and it is very green.

Other Projects: The USFWS is soliciting bids for the NEPA analysis required for establishing a new captive breeding site on the KOFA NWR. We are also buying materials and planning for a new capture technique to be used within the captive breeding pen on Cabeza, modeled after the techniques used at the Peninsular pronghom pen in Baja.

Wild Pronghorn: On our last flight, we found one radio collared doe with 2 fawns in the Mohawk Valley, one group of 8 with 3 fawns in the burned area east of South Tac on Cabeza Prieta NWR, and a buck near Charlie Bell pass. One released buck was on South Tac, and 3 others were on the north edge of the BMGR towards Interstate 8. We didn't find 3 of the collared pronghorn on the Cabeza, as we spent a lot of time searching for the missing released buck on the BMGR. The habitat is highly variable throughout pronghorn range, with some areas being very dry and some areas still very green (Organ Pipe, Daniels Arroyo).



Pronghorn at the Point of the Pintas Water

WELCOME NEW MEMBERS

Len Albright, Phoenix Jodi Allen, Flagstaff Michael & Cherie Barker, Mesa Jim Barnes, Phoenix David Berard, Fort Mohave Donna Blomquist, Flagstaff Jenny Blue, Prescott James Borrelli, Glendale Ian Cassidy, Vail Steve Cernik, Tempe Ken Chichester, Scottsdale Joe Ciarametaro, Fountain Hills Gordon Clark, Tucson Rick Collins, Scottsdale William Delinger, Flagstaff Blaine Dominy, Casa Grande Matt Dorries, Yuma Nathan Easton, Peoria Doub & Gale Edwards, Yuma Nick Franklin, Peoria Robert Garcia, Happy Jack

Eli & Sawana Grimmett Joe Groff, Phoenix Darren Hanson, Fountain Hills Clair Harris, Flagstaff James Hart, Mesa Sandy Henwisch, Fountain Hills Terry Herndon, Glendale Stephanie & Gray Holbrook, Peoria Chuck Hoops, Prescott Valley Travis Jennings, Casa Grande Jeremy Johnson Jaye, Kim, Cory & Ryan Kreuzer, Apache Jct. John Latsko, Chandler Tim Lewallen, Vail Don Martin, Glendale Greg Matchett, Tucson Alan McGee Debbie & Dennis McKeown, Hereford Grant Mickelson, Mesa Steve Nav

John Neff, Flagstaff Ken O'Dell, Flagstaff Kevin Parkes, Flagstaff James & Shannon Perry, El Mirage Jesse Provencio, Tucson Nathan Ragan, Flagstaff Annie Rollins-Protas, Foundain Hills Paul Sandstrom, Prescott Chris & Jacob Sather, Scottsdale Scott Sather, Chandler Stan Schor Rick Selting, Tucson Greg Threlkeld, Phoenix Michael Tuhy, Peoria Sally Tyrrell, Flagstaff Tim Vining, Glendale Frank Walsh, Green Valley Ron Wilkins, Goodyear Dave Wright, Tucson Brian Wright, Tucson Richard Zapfe, Prescott Valley

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for the market, pronghorn became increasingly scarce on the desert plains and dunes both north and south of the Gila.

One of the last records of a pronghom sighting took place on December 1894, when the Sentinel reported H. R. Alfred shooting one of three antelope that he saw near Texas Hill. As far is known, no desert pronghom were by then found east of Arizona State Highway 85 or north of U. S. 80. The desert plains and valleys north of the Gila were no longer occupied by pronghom. The Castle Dome Plain, King Valley, Ranegras Plain, Nottbusch Valley, and Palomas Plain were only historic habitat.

With their key habitats compromised or no longer available, even these few animals were destined to disappear during the horrendous series of droughts that ravaged southern Arizona between 1891 and 1905. By the time Arizona attained statehood in 1912 the only desert pronghom remaining in Yuma County were a handful found along the Arizona-Sonora border. Able to subsist on dew from the Gulf, these pronghom sometimes ranged as far north as the Mohawk Dunes and as far west as the Lechugilla Desert. None were found north of the Gila and when President Franklin D. Roosevelt established Organ-pipe Cactus National Monument and the Kofa and Cabeza Prieta game ranges by Executive Order in 1937 and 1939. no mention was made of desert antelope. That about 40 of these animals were included in these reserves was not by design but by accident.



Sonoran Pronghorn Photo by George Andrejko

Then, in 1945, Vernon Bailey, on an expedition for the National Museum, collected a small female pronghom in Sonora, Mexico, inland from the Sierra Seri near the Costa Rica Ranch. Described by E. A. Goldman as a new subspecies, Antilocapra americana sonoriensis, the legal status of desert antelope changed with passage of the Endangered Species Act in 1973. Now essentially cut off from the population in Sonora by the construction of Mexican Highway 2, Arizona's Sonoran pronghorn went from being ignored by all but a few "desert rats" to become one of the most studied ungulates in the world.

Most of these studies were supervised by biologists with the Arizona Game and Fish Department and designed to determine the pronghorn's habitat preferences, food habits, and movements. To successfully accomplish these objectives, individual animals were captured and equipped with radio collars. One of the most important aspects of these efforts was to monitor the animal's status—a task admirably facilitated by the expertise and efforts of John Hervert and his colleagues within the Department's Yuma region. Only a few of us remembered that these antelope once also ranged widely in the deserts of Baja California, southeastern California, and north of the Gila River.

During the drought of 2001-2003, the U. S. population of Sonoran antelope suffered a near catastrophe. Recently estimated to have increased to as many as 200 animals, the drought shattered the population. Fawn recruitment essentially ceased and starvation took a terrible toll. Estimates of the population, based on systematic surveys and collared animals, shrank to fewer than 25 antelope! Global warming threatened to destroy this tiny remnant of what had recently been considered as a recovering population.

The thrill of seeing a desert antelope has to be realized to be appreciated. And what excitement must have there been in hunting these animals when they were numerous. Perhaps wanting to do so vicariously, my colleagues and I visited a number of sites formerly frequented by desert pronghorn-- Trez Pozos in Baja California, Milpitas Wash in southeastern California, and Standard Wash south of Lake Havasu City in Arizona. What struck us incredibly important was that although each of these areas still possessed vast areas of undeveloped desert, key seeps and dunes had been seriously impacted in each of these areas. The wells at Trez Pozos where Colonel Fuencke guided so many successful antelope hunters during the first quarter of the 20th Century had been pumped dry and the surrounding vegetation ravaged by cattle. That this had not happened to the pronghorn in Sonora and on the Cabeza Prieta we attributed to an extensive complex of inaccessible dunes and the proximity of the Gulf's moisture.

Alarmed by the near loss of Arizona's desert pronghom, Hervert and the Sonoran Pronghom Recovery Team concluded that establishing a second population of desert pronghorn was the only way to thwart extinction. This was a difficult but necessary decision. Expanding the range of

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the existing population was impractical in that no contiguous area of suitable size was available that was not isolated by paved highways, concrete canals or other structural barriers. Nor was the prospect of raising a population in captivity desirable—animals born in captivity rarely survive in the wild. Unfortunately, sufficient numbers of wild pronghorn suitable for a transplant were just not available. The only long term management strategy that made sense was to build an enclosure, stock it with a few wild pronghom, and begin building a population destined for translocation.

Such a program was fraught with difficulties. The Arizona population had only recovered to the point where the number of Sonoran pronghorn was estimated to number about 60. Therefore, only a few animals could be captured at a time, and they would have to be held in an enclosure where captive breeding would increase their numbers until sufficient animals were available for translocation. The enclosure would not only have to be predator-proof, it would have to be of sufficient size to allow the breeding stock to reproduce without losing their wild characteristics.

That such an enclosure was constructed and stocked with wild animals from Arizona and Sonora was only due to the cooperative nature of a joint program developed through the Sonoran Pronghom Recovery Team, Assisting in this effort were not only biologists and administrators with the Arizona Game and Fish Department and U. S. Fish and Wildlife Service, but those working for the Mexican government and the Barry M. Goldwater Gunnery Range not to mention the essential assistance of a host of veterinarians and other volunteers from organizations such as the Arizona Antelope Foundation for whom the Game

Department's Jill Bright has kept up a running series of progress reports (a regular feature of the publication, see the current report on page 9).

Raising pronghom in captivity is nothing new. Mexican biologists in Baja California Sur have been doing so for years. The difficulties with pen -reared pronghom are in keeping them wild and able to withstand the rigors of capture, transplanting, and becoming habituated to people Even the largest pen is unable to produce enough natural food, and the animals have to be artificially fed and watered without them losing the ability to know what wild foods are available. Even if these problems are solved, the biggest conundrum remains —the difficulty of released pronghorn adjusting to a totally foreign environment. The problem is not just that the

animals may no longer know how to find food and behave; the population's institutional memory is lost as the does no longer have any knowledge of the area's topography and resources. Once a population is taken into captivity, evolution stops and social and behavioral adaptations must begin anew and rely on natural instinct.

Despite some setbacks, the program is progressing. A square mile enclosure was completed in 2003, and divided into two and later three compartments. The enclosure's natural and irrigated forage proved insufficient, however, and after one of the animals starved to death, it was deemed necessary to provide the pronghom alfalfa hay and pellets in feeding stations. Much has been learned, however and there remains cause for hope. The number of animals from both Arizona and Sonora have been captured and fawn production has been better than anticipated. Four young bucks, deemed surplus to the operation and liberated from the enclosure, eventually began to explore new territory and show an ability to survive without assistance. Unfortunately three of these animals died while trying to disperse northward across a concrete irrigation canal in June 2008.

On a more positive note, more than two dozen fawns were born in the enclosure during the late winter and spring of 2008, and the pen is expected to contain 55 captives this coming fall. Seven more "surplus juvenile bucks" will be available for experimental release during the fall of 2008, and given these advancements, there might be sufficient antelope for a translocation to a new habitat in the fall of 2009.

The decision as to where this translocation will take place is critical. It is absolutely essential that the best possible site be selected. And finding a desert site with sufficient forage and escape cover will not be easy. The area



Fig. 1 (Continued on page 13)

(Continued from page 12)

will have to be within the historic range of desert pronghorn and huge—as great or greater than the 348,000 acre Cabeza Prieta National Wildlife Refuge itself., free of livestock conflicts, and managed with wildlife as a premier priority. Most importantly, the causes that resulted in the native pronghom's original demise must have been rectified, and whatever key areas were important to pronghorn must still be available. Given these parameters, Wildlife Biologist John Hervert and his federal cooperators identified King Valley in the Kofa National Wildlife Refuge as the site most suitable for a release.

King Valley and its environs are a logical choice. This and adjoining valleys are within the historical range of the animals as stated by Professor

Blake and the quotes presented at the beginning of this article. The area is large (250,000 acres) and adjacent to other valleys historically used by pronghorn. King Valley is also free of livestock, and managed by the U. S. Fish and Wildlife Service—the agency primarily responsible for endangered species such as the Sonoran Pronghorn. Much of the remainder is contained within the Yuma Proving Grounds and off limits to both livestock and people. That this area is within a 100 miles of the pen containing the captive population is still another advantage. Wanting to see these benefits, as well as any possible detriments, I determined to take a look for myself.

In April, 2008, I turned off of I-10 on Hovatter Road and headed south toward the Gila Valley, conducting a windshield survey of the Ranegras and Palomas plains before evaluating the dune habitats north of the Gila River between Hyder and Dome. Most of the former valleys consist of volcanic plains of "desert pavement" sparsely populated by creosote and white bursage with an occasional clump of galleta grass. It being springtime, flowering annuals and other forbs were also encountered, but only along the ironwood and paloverde choked runnels did I find perennial browse plants such as jojoba and range ratany. In truth, most of the country struck me as better deer habitat than antelope country, an impression no doubt influenced by the sight of several individuals of the former. Only in the south, in the sandy plains and dunes north of the Gila River did I see what I considered prime desert pronghorn country (Fig. 1). It also bothered me that I failed to find any of the galleta grass flats such as the one that Paul Webb showed me in the early 1970s near Coyote Mountain.

A trip the following day with three generations of the Hovatter family was even more illuminating. Members of



Fig. 2 Vizcaino

a pioneer family of desert rats, no one knows the Kofas and their environs better. Bill, the eldest Hovatter, used to be a bush pilot and knew Yuma county when it was just public domain and before it was divided up between wild-life refuges and military reservations. Gary, the Information and Education Specialist with the Yuma office of the Arizona Game and Fish Department, literally works in the area, and his son Blue practically grew up there. Together, we looked at the Castle Dome Plain, crossed over the mountains of the same name, and began our inspection of the proposed release site in King Valley.

Most of what we saw was a repeat of what I had seen the day before- expansive flats of desert pavement interrupted by the gravelly bajadas that are so characteristic of so much of the Lower Colorado Subdivision of the Sonoran Desert. Such country is very similar to many of the valleys seasonally used by pronghorn on the Cabeza Prieta National Wildlife Refuge. We also saw plenty of browse in the way of jojoba, ratany, and ironwood, a fact previously documented by a University of Arizona study of mule deer forage. And that was the problem; it looked like deer country and obviously was. What was also disheartening was the large number of small creosote plants on the level plains, indicating that these tall shrubs were increasing (Fig. 2). Bill, remarked that he could never land his Taylorcraft on these flats today, something he did frequently in the 1940s. We wondered, too, how much the country had changed since Professor Blake's day. Tall shrubs more than three-feet tall are anathema to pronghom. These animals need open country—both to out compete their mule deer competitors and flee from their enemies.

Then, as we proceeded southward, the country opened (Continued on page 14)

(Continued from page 13)

up as if by magic. The substrate changed to gravel and then sandy plains. A huge fire, estimated to cover more than 25,000 acres, had further altered the landscape, scorching the paloverde and ironwood trees and replacing them with a colorful array of orange flowering globe mallows and other herbaceous plants. Extending for miles, the burn continued off into the distance toward the dunes seen north of the Gila River the day before. This landscape was one of the key habitats I was looking for. The problem, Gary stated, was that much of what we were looking at was under the jurisdiction of the Yuma Proving Grounds and was subject to a military mission rather than a wildlife management one. Convincing the Army that harboring even an "experimental population" of an endangered species might require some serious negotiations and compromises.

No other desert habitats that I have seen appear as suitable for desert pronghom as the southern portions of King Valley. There may be other sites worthy of consideration, but if so, the Sonoran Pronghom Recovery Team has yet to evaluate them. Nonetheless, it would only be prudent to make additional evaluations, including some to areas that are not even known at this time. Such areas should not only include valleys adjacent to King Valley, but also his-

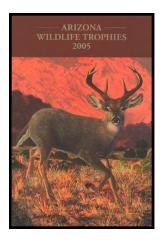
toric desert areas proposed by other biologists. It is imperative that the best possible site be located and that the chances for success be maximized. If it is indeed true, as I believe, that even the best habitats are not as good as they were 50 to 100 years ago, we need to provide the translocated antelope the greatest possible range of habitat quality and diversity to choose from.

That there is a great risk involved in any captive-release operation cannot be denied. Such an operation has never been successfully implemented and the odds against a new population becoming established without continual augmentation are great. But there are potentially even greater benefits to such an effort. Should the Recovery Team succeed, and another population of desert antelope becomes established, the chances of the Sonoran pronghorn surviving will be greatly enhanced. What is more, populations of desert antelope might eventually be reestablished at other sites historically inhabited by these animals. Sites such as Trez Pozos in Patty's Valley and San Felipe Valley in Baja California, in Imperial County's Milpitas Wash area, and perhaps even in such presently unsuitable sites in Arizona as McCracken and Hualapai valleys. Who knows, someday, it might even be possible to hunt desert antelope again. Now wouldn't that be something?

FOR THE BOOK BY BILL KEEBLER

This past year was a very good year for hunters in Arizona. There is a new state record Rocky Mountain Bighom sheep that scores 194 3/8. There are four pronghom entered in the 2007 competition. The largest and bronze award winner scores 94 2/8 taken by Shaun Friesen in Yavapai County. This is only 6/8 less than the world record held jointly by Dylan Woods and Dr. David Meyer. Both of these world record pronghoms are from Arizona. The second largest scored 92 2/8 taken by Chad Corbin also in Yavapai County. Shaun purchased one of the two pronghom tags sold at auction and Chad won his tag in the Arizona Big Game Super Raffle.

The Arizona Wildlife Trophies record book has been published every five years since 1970 by the Arizona Wildlife Trophies committee of the Arizona Wildlife Federation. Each year there is an annual competition. All entries received by May 1 of the year following the year the animal is taken are automatically entered in the competition. There are 13 categories. In addition to pronghom both typical and non-typical Coues deer, mule deer and elk plus both desert sheep and Rocky Mountain sheep and bison, javelina, black bear and cou-



gar. Entries received after the May 1 deadline are not eligible for the annual competition but are still entered into the next record book.

The annual competition awards given each year are Bronze Awards and Honorable Mention awards. The Bronze Award is awarded only to outstanding trophies in each category at the discretion of the Arizona Wildlife Trophies committee and any number of honorable mention awards can be awarded in each category. The Bronze Award is so titled because it is a bronze medallion presented in a shadow box. This year there will be 12 Bronze Awards presented at a luncheon on July 12th. This may be a record number. There are two cougar awards because of a tie so eleven of thirteen categories are represented.

The requirement for trophy entries, minimum scores and a list of measurers are on the Arizona Wildlife Federation web site at www.azwildlife.org. To order a copy of either the 2000 or the 2005 record book an order form can be downloaded from the web site or call the AWF office at 480 644-0077.



AAF POLICY FOR POACHING REWARDS

Poachers are thieves, and they are stealing from the citizens of Arizona. They are jeopardizing the future of wild-life resources in this state. Arizona Game & Fish's Operation Game Thief is a public awareness program that allows people to call in on a toll free hotline, 24 hours a day, 365 days a year to report wildlife violations. Poaching is serious business in Arizona.

Rewards are offered in certain cases, for information leading to the arrest of wildlife violators. Upon conviction, the AAF will match any rewards AZ Game & Fish awards in antelope poaching cases.

If you witness, or have any information regarding wildlife violations call

OPERATION GAME THIEF 1-800-352-0700 24 HOURS A DAY

THANKS!

To Brad Remfrey for assisting with the publication of our *Pronghom* magazine. Not only has Brad helped us upgrade to high quality color print, he has donated a good portion of the printing costs.

AAF ATTENDS WILDLIFE FAIRS

AAF hit the road in the last several months, spreading the word about our mission around the state. Perhaps you saw us at the AZ Game & Fish Expos in Phoenix, Prescott and Payson, or Tucson's Conservation Daze. Expanding our membership is a challenge, and our attendance at these events is crucial not only to attract new members, but to educate the public on the plight of antelope in our state.

Thanks to dedicated volunteers like Jim McCasland, Richard Ockenfels, and Shane Stewart, a few more people have been enlightened. A special thanks to Shane for hauling our equipment trailer to each of these events. For those of you who would like to get more involved in AAF activities, but don't have much time, assisting for an hour or two at one of these events would help greatly. Just send us an email at info@azantelope.org.

HAVE A QUESTION OR COMMENT?

"SHOOT BACK AT US" AT

INFO@AZANTELOPE.ORG

WWW.AZANTELOPE.ORG

16TH ANNUAL HUNTER CLINIC

Over 80 hunters and their guests were treated to a wide variety of presentations on subjects important to the outcome of their upcoming hunts. In addition to formal presentations on various topics, representatives of the 5 AZ Game & Fish regions with antelope hunts this fall were on hand to discuss the specific hotspots in those units.

There were 34 attendees who decided to become members of the AAF that evening and were entered into a special drawing for a \$100 Sportsman's Warehouse gift card, which was won by Justin Wilkins. Those who brought their mounts for display were entered into a drawing for a \$50 Sportsman's Warehouse gift card, which was won by Joe Moodie.

A few testimonials:

I attended the clinic last night and thought it was tremendous. I am grateful for the knowledge gained. Thanks again for the great clinic. Brian

I wanted to thank you for putting on a great seminar. I've been to a lot of seminars thoughout the many years I've hunted and I'd have to say this was undoubtedly the most informative. Every base of hunting this unique animal was covered. Things that stuck out above and beyond was 1.) The gentleman that gave that talk on field care. Many useful tips! 2.) The access to all the information to each of the units. Each Game and fish manager did a great job stepping up to help. 3.) I've seen Corky Richardson on a few hunting shows but this is the first time I've had the privilege of listening to him in a seminar. It sure is nice to hear someone, especially someone with his experience, to have so much passion in what he's talking about. When he was done, I just wanted to grab my bow and head out! I'm very glad I joined your organization and thanks again!

Michael Tuhy

A big thanks goes to Sportsman's Warehouse store manager Bruce Gibson and his folks for the outstanding support they provided in helping us plan, set up, and conduct the clinic. They also generously donated a Ruger model 77 rifle to the AAF, which was raffled off during the clinic to help offset our costs. The rifle was won by Ray Schroeder

We'd also like to thank presenters Pete Cimellaro, Dave Conrad, David Brown, Greg McBride, Corky Richardson, Rick Langley, Lee Luedeker, Darren Tucker, Jim Heffelfinger, and Jake Fousek. Finally thanks to Past President Warren Leek for organizing this event and for donating the \$150 prizes for our raffles.



ARIZONA ANTELOPE FOUNDATION

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WHAT?	WHEN?		WHERE?
The Arizona Antelope Foundation	July 14	6:30 PM	The Phoenix Zoo
Board Meetings	August 11	6:30 PM	455 N. Galvin Parkway
	September	6:30 PM	
AAF Work Projects	July 26-27		White Mountains
	October 18-19		Unit 21
	May 17, 2009		Yavapai Ranch
The Wildlife Conservation Council	July 22	6:30 PM	
Board Meetings	August 26	6:30 PM	
	September 23	6:30 PM	
AAF Banquet	July 19	3:00 PM	El Zaribah Shrine
AZ Big Game Super Raffle Drawing	July 19	3:00 PM	El Zaribah Shrine

SPORTSMAN'S CALENDAR OF UPCOMING EVENTS!