

**ARIZONA GAME AND FISH DEPARTMENT  
HABITAT PARTNERSHIP COMMITTEE  
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 13-519

**PROJECT INFORMATION**

**Project Title:** Pronghorn Antelope Fawn Enhancement GMU 34/35

**Region and Game Management Unit:** Region 5 / GMU 34 and GMU 35

**Local Habitat Partnership Committee (LHPC):**  
SEAZ-HPC

**Was the project presented to the LHPC?**  
YES[X] NO[]

**Has this project been submitted in previous years?** YES[x] NO[]

If Yes, was it funded? YES[x] NO[]

→ HPC Project #:

**Project Type:** Predator Control

**Brief Project Summary:**

Removal of coyotes to include gunning, trapping and associated hunting practices in GMU 35 and GMU 34 grassland habitats to improve the recruitment rates for Pronghorn Antelope and Desert Mule Deer populations.

**Big Game Wildlife Species to Benefit:** Pronghorn Antelope, Desert Mule Deer

**Implementation Schedule (Month/Day/Year):**

**Project Start Date:** January 1st, 2014

**Project End Date:** December, 2014

**Environmental Compliance:**

NEPA Completed: YES[X] No[] N/A[]

Projected Completion Date: \_\_\_\_\_

**State Historic Preservation Office - Archaeological Clearance:**

YES[] No[] N/A[X]

Projected Completion Date: \_\_\_\_\_

**Arizona Game and Fish Department EA Checklist:** N/A[]

To be Completed by: Arizona Game and Fish Department

Projected Completion Date: January 31, 2012

**PROJECT FUNDING**

**Special Big Game License Tag Funds Requested:**

\$ 10,000.00

**Cost Share or Matching Funds:**

\$ 5,000.00

**Total Project Costs:**

\$ 15,000.00

**PARTICIPANT INFORMATION**

**Applicant** (please print):  
Matt Braun –WM GMU 35  
AZGFD

**Address:**  
555 N. Greasewood Rd.  
Tucson, AZ 85745

**E-mail:**  
mbraun@azgfd.gov

**Telephone:** 623-237-1821

**Date:** August 28, 2013

**AGFD Contact and Phone No.** (If applicant is not AGFD personnel):

**Project has been coordinated with:** Arizona Antelope Foundation, Arizona Deer Association, Mule deer Foundation, SCI-Tucson Chapter, AZGFD Game Branch, USFS-Sierra Vista Ranger District, BLM-Sierra Vista Field Office, Department of Defense: Fort Huachuca, Arizona State Land Department, Arizona State Parks, Private Landowners and Lessees

## **NEED STATEMENT – PROBLEM ANALYSIS:**

### **History:**

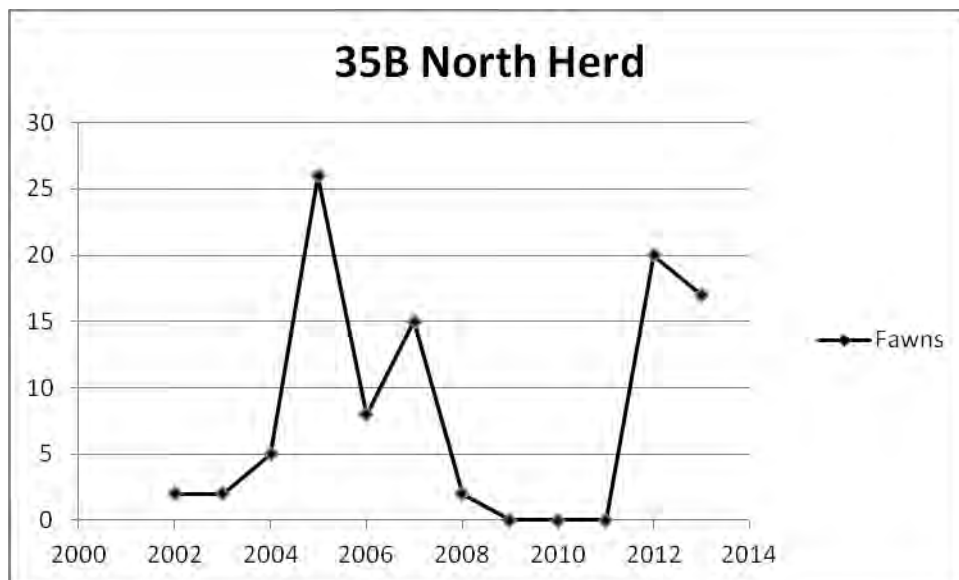
Pronghorn Antelope have continuously occupied the project area having been documented as early as 1851 by the Graham and Bartlett parties (Davis, 2001). Early prospectors in the Patagonia Mountains frequently observed pronghorn right up to the oaks in the late 1850's". The following information summarizes the trends and distribution of pronghorn herds in the San Rafael Valley and the grasslands south and east of Sonoita, Arizona. Pronghorn were common on the 40,000 acre Babocomari Ranch, located between the Huachuca and the Mustang Mountains. The lower foothill plains of the Mustang's were occupied by resident herds when purchased by Frank Brophy senior in 1935. These herds traveled the valley, east and west and occupied areas on the east and west range of Fort Huachuca. By 1949, there were just 4 pronghorn remaining on the west boundary of Ft. Huachuca. The Arizona Game and Fish Department (AGFD) and Fort Huachuca began restocking efforts in 1949 to augment the diminishing herds.

Grassland habitat in the San Rafael Valley exceeds 44,000 acres of which 60% is USFS property with the remaining 40% private property controlled by five ranches. This International Border area is secure from urbanization due to a mixture of public land, open space conservation easements and continued cooperation from landowners. Pronghorn populations were extirpated by 1945, which led to AZGFD pronghorn reintroductions in 1950. Thereafter, populations reached their high in the mid-1960's, when Wildlife Manager John Carr reported more than 100 animals distributed from the Vaca Ranch south to the Sharp Ranch, east to the Parker Canyon steppes and further east on the Campini Mesa. On Campini Mesa, located in the southeastern portion of the Valley, as many as 27 Pronghorn used the grassland mesa.

In 2011 aerial surveys, the numbers total approximately 25 animal in the GMU 35, of which only one animal was a fawn. The Elgin herd consisted of 16 animals and the San Rafael consisted of 9. From 2009 to 2011, only 1 fawn per year was surveyed in the San Rafael Valley herd. There was zero fawn recruitment in the Elgin herd from 2009-2011.

In 2011/12, to combat the dwindling pronghorn population numbers, habitat projects, fence modifications, predator control, and a translocation were planned for GMU 35. Plans were to receive 70 additional animals from Chino Valley in the spring of 2012 with predator control continuing for three years. An unsuccessful capture in 2012 and lack of archeological clearances in 2013 prevented GMU from GMU 35. However, the habitat improvements and predator control continued.

Predator control, aided by fence modifications, water improvements, burns, and improved moisture, increased the fawn survival for the Elgin herd from 0 to 20 fawns in 2012 and 17 fawns in 2013. A translocation from New Mexico and Chino Valley are scheduled for January 2014. GMU 35 is scheduled to receive 70-80 pronghorn in January 2014. (see graph)



GMU 34 has also been the recipient of many pronghorn habitat improvements, namely fence improvements. Limited predator control was completed in GMU 34 during 2013. The 2013 aerial survey only resulted in 37 animals, of which only 6 were fawns. Surveys were consistently in the 50-60s in this area in recent years. GMU 34 is slated to receive 30-40 Pronghorn from Chino Valley in the spring of 2014.

Desert Mule Deer herds were also more abundant in the high desert grassland of Pima/Santa Cruz/Cochise Counties and the adjacent transition zones in the oak woodlands. Similar to pronghorn in the units, the mule deer population trends has also declined over the past 8 years. Preliminary data from the 2012/13 winter survey flights indicates a higher than normal fawn to doe average of 75:100 in areas where coyote control was practiced in 2012. This is, however, only one year's population trend.

#### **PROJECT OBJECTIVES:**

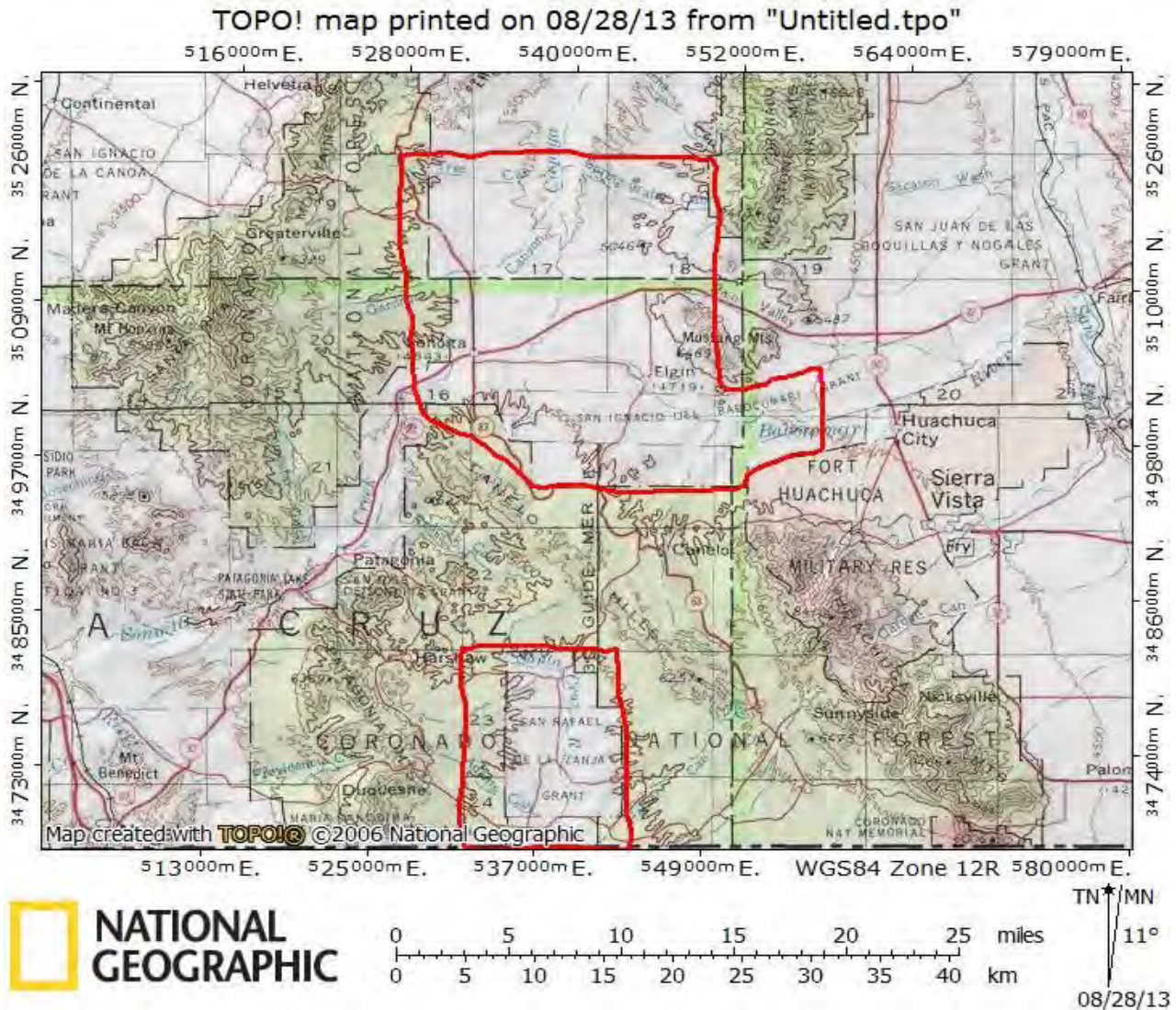
- 1) Increase the pronghorn fawn:doe ratio to at least 40 fawns:100 does in support of ongoing habitat improvement/augmentations in GMUs 34 and 35.
- 2) Increase GMUs 34/35 post hunt adult pronghorn antelope population to 250 animals.

Standard summer and early fall surveys will be conducted to assess pronghorn fawn:doe ratios as well as total pronghorn antelope observed. Mule deer surveys will be conducted in the winter months and the population and fawn:doe ratios will be monitored during predator control treatments.

#### **PROJECT DESCRIPTION AND STRATEGIES:**

This project will remove coyotes from the prescription areas specifically in GMU 35A/B and 34B to increase fawn survival in pronghorn and mule deer populations. Coyotes will be removed by predator calling, sitting waterholes, as well as opportunistically. This will be done by Department contractor, personnel, volunteers, and the general public prior to and during the peak of the fawning season (March-May). Trapping by private individuals will also occur on private land during the normal 2013/14 trapping season.

PROJECT  
LOCATION



**GMU 35:**

The public lands surrounding the San Rafael Valley and possibly private lands of the Vaca Ranch pending landowner approval. In the Elgin/Sonoita area, The predator control will done on the Babocomari Ranch and surrounding Forest Service Lands, Rosetree Ranch, State Trust and BLM lands on the east side of the Upper Elgin Road, the BLM/State Trust lands south of Highway 82 and north of the Lower Elgin Road commonly referred as the Davis Pasture.

**GMU 34:**

The Las Cienegas National Conservation Area(BLM) and surrounding State Trust lands and on private ranches pending landowner approval.

**LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):**

San Rafael Contacts:

Bob Hudson - Vaca Ranch  
Ross Humphries - San Rafael Ranch  
Sidney Spencer

Ki He Kah Ranch  
Bud Bercich

Elgin/Sonita Contacts:

Ben Brophy - Babocomari Ranch  
Rukin Jelks III – Diamond C Ranch  
Bill Brake/Al Wilcox - Rose Tree Ranch  
Scott Martin – Rain Valley Ranch  
Bill Shrock – Elgin  
Ian Thompson – Sonoita; Empire, Vera Earl and Sands Ranches

USFS-Sierra Vista Ranger District  
Bureau of Land Management- Sierra Vista Field Office  
Arizona State Land Department  
Arizona State Parks

**IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP or LANDOWNER AGREEMENT  
BETWEEN THE LANDOWNER AND THE DEPARTMENT?**

YES[X] NO[]

**HABITAT DESCRIPTION:**

Gentle rolling hills bisected by small cuts and riparian areas to include the Santa Cruz River, the Babocomari River and Cieniga Creek drainages forming the most proximate riparian habitats. The surrounding grasslands are dominated by blue grama, with tobosa, three-awn, and side oats grama. Shrub species diversity includes cat claw, whitethorn acacia, false mesquite, yucca, cholla and prickly pear cactus species, with invasive mesquite and Manzanita, cedar and juniper species in the transitional breaks in adjacent habitat.

The area has been identified as one of 7 priority Pronghorn populations in Region V by the Arizona Antelope Foundation (AAF) and the Southeastern Arizona Grassland Collaborative Workgroup (SEAGrass). These groups will support grassland restoration and habitat enhancement projects in the 7 priority areas over projects in other areas (SEAGrass minutes, May 31, 2011.)

**ITEMIZED USE OF FUNDS:**

Special Big Game License Tag Funds: **\$10,000**

The Big Game License Tag funds will be used to pay the a contract hunter to remove coyotes from March to June.

**Treatment Areas:** Public and some private lands around Sonoita, Elgin, and in the San Rafael Valley. See map above.

Cost Share or Matching Funds **\$5,000.00** reflects the cost for a contract trapper for the 2013/14 trapping season.

**LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:**

Arizona Game and Fish Department – Technical advice, project planning, coordination and financial contribution  
Arizona Antelope Foundation – Technical advice and support, funding partner  
Arizona Deer Association – Funding support  
SCI-Tucson Chapter – Funding support  
Mule Deer Foundation – Funding support  
USFS; Sierra Vista Ranger District – Project support and potential partner in the future Pronghorn Management Plan  
BLM-Sierra Vista Field Office – Project Support and potential partner in the future Pronghorn Management Plan  
Arizona State Parks – Project support  
Arizona State Land Department – Project support  
USDA-AHPIS Director; Dave Bergman – Contract for services and technical support  
Private Landowners/Lesseees – Project support and possible financial match contributions (listed above).

**PROJECT MONITORING PLAN:**

Standard summer and early fall surveys will be conducted to assess pronghorn antelope and winter surveys will be conducted for mule deer. In each case, the fawn:doe ratios and total population observed and associated population estimates will be determined annually by AZGFD employees and compared to past survey data.

Upon notification of a supplemental transplant source, Region V will coordinate with the Game and Research Branches to formalize a monitoring plan of a predetermined number (20) of released pronghorn to be fitted with GPS tracking collars. There is an ongoing effort to plan for the Pronghorn release which includes developing a formal monitoring plan to collect data to support future management needs of the populations. .

**PROJECT MAINTENANCE:**

NA

**PROJECT COMPLETION REPORT TO BE FILED BY:**

Matt Braun-Wildlife Manager GMU 35; AZGFD - Region V

**WATER DEVELOPMENT PROJECTS (*see attached worksheet*):**

NA

**TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (*see attached worksheet*):**

NA

**ARIZONA GAME AND FISH DEPARTMENT**  
**WATER DEVELOPMENT WORKSHEET**

**PROJECT NAME:** \_\_\_\_\_

- 1) Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"
- 2) Please list the Development Branch personnel and date coordinated with for this project.
- 3) What is the estimated annual inches of precipitation for the area? (mark one)  
☐2-4   ☐4-6   ☐6-8   ☐8-10   ☐10-12   ☐12-14   ☐14-16   ☐ >16
- 4) Is there a perennial water source available to big game within four miles of this project?  
YES ☐ (please complete #5 below)      NO ☐ (skip #5 below)
- 5) For the accessible, perennial water source nearest this project:  
Name of water source:  
Type of water source (catchment, spring, dirt tank):  
Ownership of water source:  
Distance in miles from project:
- 6) Is the target wildlife species a result of transplant efforts? YES ☐   NO ☐
- 7) Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument). If private land, list landowner.
- 8) Please provide the following information about access to the proposed site:  
Type of access (mark one): ☐2x4 vehicles   ☐4x4 only   ☐foot only\*\*  
\*\*If foot access only: Distance in miles: \_\_\_\_\_ Approximate hiking time: \_\_\_\_\_  
  
-- Does access to this site require crossing private or tribal lands? YES ☐   NO ☐  
  
-- Please describe any restrictions to public access:  
Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.

Was a site visit completed? Yes[X]   No ☐

If Yes, please list personnel that attended and date.

- \*Arizona Antelope Foundation
- Arizona Deer Association
- Mule Deer Foundation
- SCI-Tucson Chapter

\*indicates the group that participated in the site visit. The other groups have been provided the proposal and phone discussions have taken place regarding the project.



**ARIZONA GAME AND FISH DEPARTMENT**  
**TREE SHEARING WORKSHEET**

**PROJECT TITLE:** \_\_\_\_\_

- 1) What is the estimated acreage of the project?
- 2) How are the trees going to be cleared? (agra axe, chain saw, push):
- 3) What is the estimated number of trees per acre?
- 4) Describe trees to be cleared (species, estimated diameter, single stem, multi-stem):
- 5) Describe terrain (slope, soil type, rocks)
- 6) **Please list any special land management status for the project site (e.g. Wilderness, National Park, National Monument). If private land, list landowner.**
- 7) Please provide the following information about access to the proposed site:  
Type of access (mark one): ☐ 2x4 vehicles ☐ 4x4 only ☐ Foot only\*\*  
\*\*If foot access only: Distance in miles:      Approx. hiking time:

Does access to this site require crossing private or tribal lands? YES ☐ NO ☐

Is the site relatively accessible for tree shearing equipment? YES ☐ NO ☐

Please describe any restrictions to public access: