

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

PROJECT INFORMATION	
Project Title: Unit 10 Coyote Control	Project No. 09-704
Region/GMU: Region III/ Unit 10	HPC:
Project Type: Predator Control	
Project Description: This project is intended to increase the antelope population through increased antelope fawn survival. This project will fund two private trappers to trap the private lands of GMU 10 during the months of March, April, and May.	
This project is scheduled to run for three consecutive years from 2010 to 2012.	
Wildlife Species to Benefit: Pronghorn Antelope and Mule Deer	
Possible Funding Partners:	
Implementation Schedule: Beginning: March 2010 Completed: May 2012	NEPA Compliance: (if applicable) Completed: Yes ___ No ___ Projected Completion Date:
PROJECT FUNDING	
SBG Funds Requested: \$16,200/ year \$ 48,600/ 3 years	
Cost Share Funds: \$ 9,000/year \$ 27,000/3 years	
Total Project Costs: \$ 25,200/year \$ 75,600/3 years	
PARTICIPANT INFORMATION	
Applicant: Ron Day (please print) Telephone:	Address: 5000 W. Carefree Highway Phoenix, Az 85086
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with: Region III	Date: August 31, 2009
Applicant's signature:	Date: August 31, 2009

SEND COMPLETED APPLICATIONS TO:
AZ Game and Fish Department
Attn: Game Branch
5000 W. Carefree Highway
Phoenix, AZ 85086
rgregory@azgfd.gov

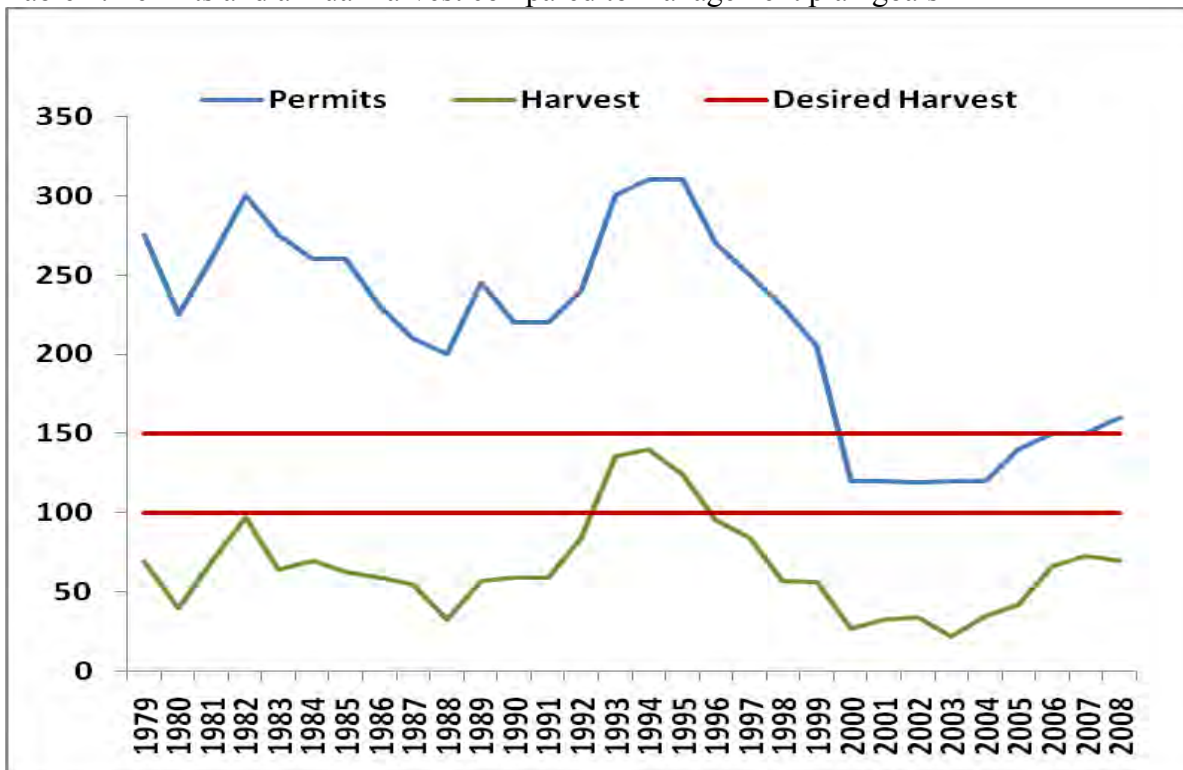
WAS PROJECT PRESENTED TO THE LOCAL HPC? YES _____ NO X

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? No IF SO WAS IT FUNDED? N/A

NEED STATEMENT/PROBLEM ANALYSIS:

Historically GMU 10 has supported one of the largest antelope herds in the state and provided a significant portion of the statewide pronghorn antelope hunting opportunity. During the last 15 years this herd has been in a steady decline as evidenced by a decrease in the number of animals surveyed from 1650 in 1993 to 550 in 2005. During this same period the combined number of archery and general pronghorn antelope permit-tags has declined from 310 to 145.

Table 1. Permits and annual harvest compared to management plan goals



The Department’s Pronghorn Herd Management Plan for GMU 10 is found in the Arizona Statewide Pronghorn Management Plan. This comprehensive plan gives a detailed description of GMU 10 and identifies the Department’s goals as a post-hunt adult pronghorn population between 1,350 to 2,700, with a desired harvest of 100-150 bucks annually. The current estimated population of pronghorn antelope in GMU 10 is 1455.

PROJECT OBJECTIVES:

- 1) Increase the fawn:doe ratio to at least 50 fawns:100 does for the last two years of the project.
- 2) Increase the Unit 10 post hunt adult pronghorn antelope population to at least 2000 in 2012.

Standard summer and early fall surveys will be conducted to assess fawn:doe ratios as well as total pronghorn antelope observed.

Throughout the duration of the project a nearby game management unit of similar habitat type and quality will be used as a control area. The control area will not be treated with coyote removal allowing a comparison of fawn survival between treated and non-treated areas under similar habitat and climatic conditions to assess the effectiveness of the coyote removal efforts on fawn survival.

PROJECT STRATEGIES:

Methods

- 1) **Trapping.** Trapping has been a historic method to control coyotes for many years and has several advantages over aerial gunning. Trapping may be used in areas where tree density prevents the safe or effective use of aerial gunning. In addition, trapping is not negatively impacted by wind or low visibility as is aerial gunning.

The land status in GMU 10 is typical of many Arizona antelope herds. There are large amounts of private land interspersed with state trust lands. Private lands are exempt from the restrictions imposed by ARS 17-301D and the use of foot hold traps to control coyotes are allowed.

This project proposes to use the services of two individuals contracted to trap those private lands in Unit 10 where permission is granted in each project year during the months of March, April, and May. The contractors will be expected to use their own equipment including their vehicle, camp equipment, and foot hold traps meeting the standards set in R12-4-307. The total area to be trapped will be divided into six sub units. Each contractor will be expected to run a trap line of no less than 60 traps for 10 days in each subunit.

It will be the trapper's responsibility to ensure they are trapping on those private lands where permission has been obtained for this project.

All non-target wildlife will be released immediately. No portion of any coyote taken as part of this project may be possessed unless specifically permitted or desired by the Department.

- 2) **Aerial Gunning.** Currently the only form of coyote control used by the Department to increase antelope fawn survival, this method is very effective under the right circumstances but has several drawbacks. A) The first drawback is expense. The current cost of aerial coyote control is approximately \$9,000.00 per GMU/year. This amounts to about 6 days of actual flying per unit costing roughly \$ 1,500.00/ day. This cost is prohibitive and does not allow for the intense removal necessary to remove an adequate number of coyotes over a large number of units. B) Timing of control effort. Due to scheduling conflicts or delays caused by high winds the removal effort may in certain years occur too late and a large number of fawns are already lost to predation.

The advantage to aerial gunning is that it is effective and can be done on state trust lands found in Unit 10. The aerial gunning efforts will concentrate on those areas where foot hold traps cannot be used or where it appears from the presence of sign that there are still a large number of coyotes remaining after the trapping effort.

- 3) **Hunting.** Though the least successful method, coyotes will be removed by predator calling, sitting waterholes, as well as opportunistically. This will be done by Department personnel, sportsman groups and other volunteers from the general public.

PROJECT LOCATION:

Private lands in Game management unit 10.

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

All pronghorn antelope fawning habitat on private lands in GMU 10 where permission to trap with foot hold traps is obtained.

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

HABITAT DESCRIPTION:

All pronghorn antelope habitat in GMU 10.

ITEMIZED USE OF FUNDS:

Budget

- 1) Aerial Control. This effort will be conducted using approximately \$9,000 annually from Department funds.
- 2) Contract Trappers. This effort will cost roughly \$ 2,700.00/ month/ trapper (\$1,700 salary/ \$1,000 per diem gas/food) for a total of \$ 16,200.00/ year. A request will be placed with the Arizona Antelope Foundation and the Arizona Deer Association to split fund this effort using HPC dollars.

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

PROJECT MONITORING PLAN:

Standard summer and early fall surveys will be conducted to assess fawn:doe ratios as well as total pronghorn antelope observed.

Throughout the duration of the project a nearby game management unit of similar habitat type and quality will be used as a control area. The control area will not be treated with coyote removal allowing a comparison of fawn survival between treated and non-treated areas under similar habitat and climatic conditions to assess the effectiveness of the coyote removal efforts on fawn survival.

PROJECT MAINTENANCE:

N/A

PROJECT COMPLETION REPORT TO BE FILED BY:

Ron Day
Small Game, Predator and Furbearer Biologist
AZGFD