

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

PROJECT INFORMATION	
Project Title: Javelina vaccine	Project No. 10-708
Region/GMU: Statewide	HPC: Statewide
Project Type: Wildlife (javelina) Vaccine test	
Project Description: We propose to test, for the first time, a vaccine in peccaries for possible translocations into the wild to build an immunity barrier to canine distemper in wild populations.	
Wildlife Species to Benefit: Javelina, mountain lions, deer, bighorn sheep	
Possible Funding Partners: ADA, ADBSS, AWF	
Implementation Schedule: Beginning: February, 2011 Completed: July, 2011	NEPA Compliance: (if applicable) Not applicable Projected Completion Date: July 2011
PROJECT FUNDING	
SBG Funds Requested: \$8,000	
Cost Share Funds: \$10,500	
Total Project Costs: \$18,500	
PARTICIPANT INFORMATION	
Applicant: Linda Searles (please print) Telephone: 602 677-6656	Address: PMB 115 · 8711 E. Pinnacle Peak Road · Scottsdale, AZ 85255 www.southwestwildlife.org
AGFD Contact and Phone No. Brian Wakeling 602 561-3732 (If applicant is not AGFD personnel)	
Coordinated with: Ron Thompson	Date: September 1, 2010
Applicant's signature:	Date: September 1, 2010

**SEND COMPLETED APPLICATIONS TO:
Game Branch
AZ Game and Fish Dept.**

**5000 W. Carefree Highway
Phoenix, AZ 85086**

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

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?

No

NEED STATEMENT/PROBLEM ANALYSIS:

In 1989 a disease epidemic of apparent high mortality occurred in javelina (*Pecari tajacu*) in southern Arizona. Serologic testing of clinically normal javelina in southern Arizona during the same time period and in subsequent years found a relatively high and persistent prevalence of serum neutralizing antibodies to canine distemper virus. Canine distemper virus is considered to be endemic in the wild canids, felids and the peccaries of the southern regions of the state of Arizona. A strategy to improve the success of translocations of javelina would be to vaccinate them for canine distemper virus. A canary pox vectored vaccine, Purevax® (Merial, Ltd.) is licensed by the USDA for use in ferrets (*Mustela putorius furo*) and has been shown to be safe and to stimulate an antibody response in giant pandas (*Ailuropoda melanoleuca*), and sea otters (*Enhydra lutris nereis*).

A concurrent issue with the loss of wild javelina populations is an adverse impact on large carnivore species. Mountain lions (*Puma concolor*) rely on javelina as one of their primary prey species in areas where they are sympatric. Loss of javelina populations results in mountain lions turning to domestic livestock as alternative prey or other vulnerable prey such as desert bighorn sheep

PROJECT OBJECTIVES:

The objective of the proposal is to demonstrate that a canary pox vectored canine distemper vaccine (Purevax® Ferret Distemper, Merial Limited) is safe and induces a serum antibody response in javelina in order to develop future strategies for the control of population declines due to canine distemper in wild populations using captive and relocated javelina immunized against canine distemper.

PROJECT STRATEGIES:

Captive held juvenile and/or adult javelina in captivity at the Southwest Wildlife Conservation Center will be vaccinated with Purevax® Ferret Distemper (Merial Limited) and evaluated for vaccine safety and serum antibody response. Healthy animals that are sero-negative for canine distemper will be identified by microchip (AVID) and ear tag, and randomly assigned to the test groups. The ear tags will provide a rapid visual identification method and the microchip will serve as a back-up in case the ear tags are removed by the animals.

PROJECT LOCATION:

**Southwest Wildlife Conservation Center
1 mile south of Pinnacle Peak Road on 156 ave.
PMB 115 · 8711 E. Pinnacle Peak Road · Scottsdale, AZ 85255**

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

Private Property owned by Linda Searles

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE

LANDOWNER AND THE DEPARTMENT?

Owner is an AZGFD permitted wildlife rehabilitator

HABITAT DESCRIPTION:

NA

ITEMIZED USE OF FUNDS:

All HPC funds requested are to be used for lab testing costs	<u>Subtotal \$8,000</u>
Matching funds - Construction of test facilities consisting of three pens at \$3,000/pen	<u>Subtotal \$9,000</u>
, provide vaccines and feed for animals @ \$1,500.	<u>Subtotal \$1,500</u>
	<u>Total \$18,500</u>

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Primary Cooperators are: Merial Limited and Southwest Wildlife Conservation Center

PROJECT MONITORING PLAN:

Vaccine safety will be assessed by observing all animals for approximately one hour post vaccination and once daily for adverse events that may be related to the vaccination. All observations will be documented in a study log. Serologic evidence of a response to the distemper antigen will be assessed via blood drawn from all animals at 7, 14, 28, and 56 days for antibody testing. Titer results will be analyzed with a statistical analysis software package (either R or SAS).

PROJECT MAINTENANCE:

NA

PROJECT COMPLETION REPORT TO BE FILED BY:

August 2011