

IIAPM FUNDING WINDOW

ARIZONA GAME AND FISH DEPARTMENT IIAPM IIAPM Grant Proposal's – GOALS& OBJECTIVES

July 2012

Heritage – Identification, Inventory, Acquisition, Protection, and Management (IIAPM) grants are for projects that preserve and enhance Arizona's natural biological diversity. The sensitive elements (e.g. species and habitats) for which IIAPM grant proposals may be submitted are listed in this document. Projects must align with at least one of these objectives to be considered for grant funding.

Our intent is to fund projects that will give the greatest return for the Heritage funds invested. For grant cycle year **2013** there is a total of **\$200,000** available to support IIAPM grant proposals submitted.

IIAPM projects for which IIAPM grant proposals are submitted must be consistent with one or more of the **Priorities** listed below in order to be fully considered. Any proposal not in full compliance with the following guidance will not be considered for Heritage Grant award:

Priority 1. These project needs focus on species the Department actively manages, or for which we need additional information to allow us to actively manage, including “traditional” recovery activities necessary to achieve down- or de-listing, and practical solutions to threats; species for which 1) additional information is required to inform a listing decision, 2) significant threats might be reduced, or 3) conservation agreements or other conservation tools might be developed to preclude the need to list, and/or provide assurances to the Department and/or non-federal landowners if the species is listed in the future; species that require actions or information to meet the needs identified in the 2012 Arizona State Wildlife Action Plan (SWAP) “to keep the common species common.” These include:

- Federally listed species
- Listed or candidate species identified in the Department's Conservation and Mitigation Program
- Candidate species identified in the Multi-District Litigation settlements (= MDL species)
- Species of Greatest Conservation Need (SGCN) Tier 1A and 1B.

Priority 2. These projects may include listed or candidate species for which additional information or techniques development will contribute to pending listing decisions or to down- or de-listing, but are not an immediate Department priority. Projects in Priority 2 also include SGCN species and/or their threats not identified in Priority 1, or for which there are significant information needs.

Priority 3. These projects address other SGCN information needs.

Please contact the Department's IIAPM Wildlife Management Project Leader or Assistant Project Leaders (623-236-7500) regarding any questions about elements or priorities eligible this year.

Note: The list of Species of Greatest Conservation Need (SGCN) that are referenced in this document are also available from the Department's Nongame Branch (5000 W Carefree Highway, Phoenix, Arizona 85086; phone 623-236-7507; fax 623-236-7926) or by download from the Department's website http://www.azgfd.gov/w_c/cwcs.shtml

Priority 1 Projects

- Develop captive propagation techniques and protocols to aid in the establishment of refugia for ESA-listed Three Forks springsnail or San Bernardino springsnail.
- Conduct field surveys and literature search to determine historical and present occurrence, population status and trends, and management needs of one or more SWAP Species of Greatest Conservation Need (SGCN) mollusks. Preference is on those mollusks identified in the 2011 Multi-District Litigation (MDL) settlement for future listing decisions: Huachuca springsnail, Rosemont talussnail and Sonoran talussnail.
- Conduct genetic and morphological analysis to resolve taxonomic uncertainties of SWAP SGCN mollusks. Preference on those mollusks identified in the 2011 MDL settlement for future listing decisions: Huachuca springsnail, Rosemont talussnail and Sonoran talussnail.
- Develop a Safe Harbor Agreement for state and county vector control agencies to use AGFD-supplied mixed-lineage Gila topminnow for stocking urban sites and backyard ponds, instead of using nonnative and invasive mosquitofish for vector control.
- Develop a Safe Harbor Agreement for non-federal landowners to provide new habitat for refuge populations of endangered Gila chub.
- Secure¹ or establish¹ a population of: loach minnow, headwater chub, roundtail chub².
- Remove key stressors¹ in the Verde, Salt, Little Colorado, middle Gila, or Bill Williams watersheds benefitting one of more the following species: lowland leopard frog, longfin dace, speckled dace, Sonora sucker, desert sucker, Little Colorado sucker, bluehead sucker².
- For roundtail chub, headwater chub, and Gila chub, investigate known information on conservation taxonomy and conduct additional taxonomic analyses (including genetic analysis as appropriate) in coordination with the Department's species lead and Fisheries Branch.
- Design and test an area-based approach, using occupancy modeling, to gauge progress in establishing, managing and monitoring populations of Chiricahua leopard frogs.
- Design and implement experiments to evaluate the effects of conservation and wildlife management tools on Chiricahua leopard frogs.
- Provide a thorough analysis of the Department's 10-year Sonoran tiger salamander occupancy dataset.
- Investigate effects of invasive exotic plant species and catastrophic wildfires on Sonoran desert tortoise population biology.
- Conduct field studies to investigate the distribution of Sonoran desert tortoises in Mohave and La Paz counties in Western Arizona.
- Design and implement experiments to evaluate the effects of conservation and wildlife management tools on northern Mexican and narrow-headed gartersnakes.
- Projects that assess the current status, population estimates, and demographic information of Harris' Hawks.
- Determine current breeding population status and distribution of Yellow-billed Cuckoo.
- Conduct a genetic analysis of Arizona black-tailed prairie dogs in museum collections and evaluate the relatedness to the populations in Texas (east of the Pecos River), New Mexico and Mexico.
- Determine the status of black-tailed prairie dog populations in Sonora and Chihuahua, Mexico.
- Investigate the impacts of Abert's squirrels on Mount Graham red squirrel.
- Conduct New Mexico meadow jumping mice surveys in appropriate habitat near the Verde River and the White Mountains.

Notes:

¹See the AGFD's Conservation and Mitigation Program for definition and guidance for these terms.

²Proposals may address or benefit one or more target species or as a part of a larger group of compatible species or communities.

Priority 2 Projects

- For Huachuca springsnail, develop landowner site-specific management plans for protecting and conserving this mollusk with existing land use practices. These site-specific plans should tie into the Candidate Conservation Agreement with Assurances for Huachuca Springsnail (draft 2012).
- Design and/or implement habitat enhancement and restoration activities at extant sites or at sites approved by AGFD for reintroduction for the following species: Gila topminnow, Yaqui topminnow, desert pupfish, Rio Sonoyta (Quitobaquito) pupfish, Yaqui Basin fishes, Sonoran chub, roundtail chub, headwater chub, Gila chub, flannelmouth sucker, bluehead sucker, Zuni bluehead sucker, Little Colorado sucker, Little Colorado spinedace, loach minnow, spikedace, Page springsnail, Three Forks springsnail, and/or San Bernardino springsnail.
- Develop a Candidate Conservation Agreement with Assurances for non-federal landowners to provide new habitat for refuge populations of roundtail chub and headwater chub.
- Investigate mechanisms by which disease (chytridiomycosis, rana viruses) contributes to decline of Chiricahua leopard frogs.
- Determine habitat use, needs, selection, and home range and territoriality of the Chiricahua leopard frog.
- For Sonoran tiger salamanders at the local level, investigate effects of life history variation (i.e., maturation as branchiate or metamorphosed animals) on demography and on disease maintenance and spread.
- Develop and field test a box turtle distribution model based on field surveys (including occupancy and capture-recapture) and landscape variables (specifically woody shrubs, riparian areas, and fire).
- Conduct northern Mexican gartersnake population monitoring through intensive mark/recapture along the upper Santa Cruz River.
- Implement population monitoring for breeding pinyon pine/juniper SGCN birds.
- Implement population monitoring for breeding or wintering grassland SGCN birds.
- Determine current breeding population status and distribution of mountain plover.
- Assess raptor migration corridors.
- Investigate the status of Arizona bat species during the winter months (November 1 to March 30).
- Through habitat modeling, identify areas of suitable New Mexico meadow jumping mice habitat to conduct long-term monitoring.

Priority 3 Projects

- Through field surveys identify distribution, habitat requirements, and current population status of any SGCN.
- Connectivity
 - A. Public information activities, materials, and/or plans on open space planning and its benefits to wildlife in suburban/rural development areas, statewide.
 - B. Research and development of criteria for habitat enhancement in grasslands ecosystems, with particular emphasis on grasslands restoration in juniper invasion areas and development of measurement parameter guidelines and locally valid prescriptions for wildlife management.
 - C. Research on the impacts to wildlife in Arizona due to renewable energy development
 - D. Research methods to effectively restore connectivity of fragmented habitat (vegetative or human caused).
 - E. Identify through modeling and then ground truth, existing and historic wildlife movement corridors in central and southeastern Arizona.
- Smart Growth

Any project or program supporting and /or promoting smart growth efforts that incorporate wildlife habitat conservation. Project species must be at least one of the Wildlife Elements listed above.