

# **IIAPM FUNDING WINDOW**

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

July 2013

*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 the 2014 grant cycle year there is a total of **\$200,000** available to support IIAPM grant proposals submitted. IIAPM grant applicants can request a grant amount minimum of **\$500** with no maximum amount set.

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/swap.shtml](http://www.azgfd.gov/w_c/swap.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 and Sonoran talussnail.
- 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 and/or improve refuge ponds for Gila topminnow, desert pupfish, chub (roundtail or Gila) or razorback sucker in coordination with Department species leads.
- Conduct fish health assessment analysis of wild and captive populations of ESA-listed and candidate native fish as part of ongoing needs for conservation actions and mitigate stressors on native fish populations.
- Conserve desert pupfish populations in northern Mexico to help recover the species across its entire range and to facilitate the translocation of pupfish to exchange genetic material among wild and captive populations in both Arizona and Sonora.
- Conduct Yaqui drainage fish surveys and population status post-Horseshoe 2 Fire. Assist land management and wildlife resource agencies with the completion of compliance documents and current habitat assessments to establish additional populations of Yaqui chub into Rucker Canyon (source stock from West Turkey Creek);
- For roundtail chub, headwater chub, and Gila chub, investigate taxonomic and genetic relationships 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 actions on Chiricahua leopard frogs.
- Conduct field studies to investigate the distribution of nonnative invasive plants within the range of the Sonoran desert tortoise.
- Conduct field studies in urban and remote areas to evaluate the effects of urbanization on home-range, movement, and habitat use on Sonoran desert tortoise populations.
- Conduct field experiments to evaluate efficacy of fencing and use of crossing structures by Sonoran desert tortoises, and implement a study to determine the types of culvert design necessary for effective crossing by Sonoran desert tortoises.
- Conduct field studies to investigate the distribution of Sonoran desert tortoises in Mohave and La Paz counties.
- Design and implement experiments to evaluate the effects of conservation and wildlife management actions on northern Mexican and narrow-headed gartersnakes.
- Determine current breeding population status and distribution of Yellow-billed Cuckoo.
- Determine the status of black-tailed prairie dog populations in Sonora and Chihuahua, Mexico.
- Conduct New Mexico meadow jumping mice surveys in appropriate habitat near the Verde River and the White Mountains.

## **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 2013).
- 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.
- Investigate effects of life history variation in Sonoran tiger salamanders (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).
- 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.

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