



2017 State Wildlife Grants Request for Proposals

Program Overview

As part of the U.S. Fish & Wildlife Service's State Wildlife Grant (SWG) program, Congress charged each state and territory with developing a state Wildlife Action Plan. The Arkansas Wildlife Action Plan (AWAP) provides an essential foundation for the future of wildlife conservation and an opportunity for state and federal agencies and other conservation partners to fit together individual and coordinated roles in conservation efforts across the state. As a part of this, the Arkansas Game and Fish Commission is responsible for requesting and administering State Wildlife Grants to support the implementation of the AWAP. State Wildlife Grants are distributed specifically for the protection and management of species of greatest need of conservation (SGCN) identified in the AWAP. The list of SGCN has been updated recently through the required formal revision of the AWAP. The revised Action Plan and the most recent federal guidelines for grants to states are provided online at www.wildlifearkansas.com.

Eligibility. State Wildlife Grants are available to state agencies, nonprofit organizations, citizen groups, and universities. Projects totaling \$10,000 to \$200,000 will be considered for funding.

Duration. The duration period for projects will be approximately October 1, 2017 – September 30, 2019.

Project Evaluation Criteria. Projects will be evaluated based on the following criteria:

- is feasible and practical in a 2 year time period,
- addresses priority actions of the Arkansas Wildlife Action Plan as outlined in Table 1,
- uses funds efficiently and effectively, and
- is within the qualifications and abilities of the organization(s) and individual(s) involved.

Review Process. Comments on proposed projects will be solicited from the scientific community and will be taken into consideration by the implementation team. The implementation team will review project proposals and request full proposals from selected applicants.

Match Requirement. All applicants will be required to provide matching funds. Matching funds can NOT come from federal funds. Cash match contributions, such as staff time, waived indirect costs, facilities, equipment or supplies and in-kind contributions, such as volunteer hours, are allowable as match. We expect this year's non-federal match requirement to be 35%.

Proposal Instructions. Project proposals should be submitted as Word or PDF files. Font size should be 12 point and margins should be 1 inch. Proposals should not exceed 5 pages and should adhere to the following layout:

1. Page 1 –single cover page that provides:
 - a. Project Title
 - b. Project Summary (short paragraph highlighting project goals and objectives)
 - c. Project Leader (name, job title, affiliation, and contact information)
 - d. Project Partners (name, affiliation, contact information)
 - e. Project Budget (include SWG amount requested, match amount provided, and total amount of project).
2. Pages 2-4 – Project Statement. This is the principal component of the proposal and should be written as clearly and concisely as possible. Tables, graphs, maps, and photos may be used. Required elements of the project statement are:
 - a. Need – Explain why the project is necessary and list the priorities that your project is addressing.
 - b. Purpose and Objectives - State the purpose and objectives, and base them on the need. The purpose states the desired outcome of the proposed project in general or abstract terms. The objectives state the desired outcome of the proposed project in terms that are specific and quantified.
 - c. Location – Describe where the project will take place (list ecoregion, county, habitats targeted). Provide a map.
 - d. Approach – Describe the methods that will be used to accomplish objectives. Include an expected timeline for accomplishments.
 - e. Expected Results and Benefits – Describe the anticipated benefits to SGCN as a result of your project. Include a list of SGCN that will be impacted, indicating which SGCN are known from the project location(s). Proposals that include habitat and/or capital improvements should include a commitment to maintain improvements for a proposed number of years (identify useful life of capital improvements/continued maintenance of habitat).
 - f. Budget – Provide budget elements (salary, equipment, travel, etc.) and sources. Student tuition is an allowable cost, but the amount applied should be commensurate with the amount of time devoted to the project.
3. Page 5 – Qualifications. Provide a short description of the qualifications/experience of the project leader and project partners involved.

Deadline for Proposals. Project proposals are due *February 24, 2017*.

Proposal Submissions. Proposals should be submitted via email to:

Allison Fowler, Wildlife Diversity Program Coordinator

Wildlife Management Division, AGFC

Email address: allison.fowler@agfc.ar.gov

Table 1. 2017 State Wildlife Grant Funding Priorities.

Scientific Name	Common Name	Action	Comments
Mammals			
<i>Geomys bursarius ozarkensis</i>	Ozark pocket gopher	Conduct a study of the current distribution and fall dispersal of this species and collect DNA samples that could be used to determine if range restrictions have caused a decline in genetic diversity of the subspecies.	
<i>Myotis leibii</i>	Eastern small-footed bat	Study the distribution in the Ouachita Mountains using mist-netting at the base of cliffs and manually searching for roosts under flat rocks in glades and within talus slope boulder fields.	
Birds			
<i>Euphagus carolinus</i>	Rusty Blackbird	Determine the effect of winter habitat selection on survival and carry-over effects to breeding season.	Based on recent full life-cycle population modeling completed by the Smithsonian Migratory Bird Center, the greatest driver of Rusty Blackbird population decline is winter survival (specifically of juveniles). This includes Rusty Blackbirds wintering in all of eastern Arkansas. The Rusty Blackbird Working Group now recognizes the importance of this relatively unstudied life history stage and has prioritized research that involves improving our understanding of age-specific habitat requirements and survival during the winter.
<i>Rallus elegans</i>	King Rail	Restore herbaceous wetlands.	Emergent wetlands are a high priority habitat upon which some of the rarest birds in the state depend, especially the King Rail, which is listed by the USFWS as an "imperiled species." Emergent wetlands have declined sharply in Arkansas due to drainage, conversion and succession. Robust emergent wetlands were identified by AWAP research and monitoring as a critical habitat, and the species that depend on emergent wetlands were found by the AWAP research to be some of the rarest in the state. Emergent wetlands must be managed every 4-5 years to prevent their succession into shrubby or early bottomland hardwood swamp habitat.
<i>Rallus elegans</i>	King Rail	Determine current distribution and abundance.	The most recent surveys for marshbirds in the Arkansas Delta were conducted in 2012, and detected King Rails at 3 of 82 survey sites. Research in 2005 detected King Rails at 10 sites and at 5 sites in 2006. Recent data from a similar effort in Missouri reveals low numbers in that state as well, finding only 3 king rails in 2012. Surveys are needed to better define the king rail population by focusing in on areas where their detections have occurred over multiple years. Surveying wetlands known to be occupied by the king rail, as well as wetlands adjacent to those hot spots could better define the number of king rails known to occur in Arkansas. These surveys will also provide data regarding the preferred habitat types used by the king rail, further improving emergent wetland habitat management recommendations.
Reptiles and Amphibians			
<i>Plestiodon obsoletus</i> , <i>Plestiodon septentrionalis</i> , <i>Tropodoclonion lineatum</i> , <i>Regina grahamii</i> , <i>Terrapene ornata</i> , <i>Ophisaurus attenuatus</i> , <i>Lithobates areolatus</i> , <i>Gastrophryne olivacea</i> , <i>Scaphiopus hurterii</i> , <i>Spea bombifrons</i> , <i>Ambystoma tigrinum</i>	Great Plains Skink, Prairie Skink, Lined Snake, Graham's Crayfish Snake, Ornate Box Turtle, Slender Glass Lizard, Crawfish Frog, Great Plains Narrowmouth Toad, Hurter's Spadefoot, Plains Spadefoot, Eastern Tiger Salamander	Conduct presence/absence surveys and determine distribution of prairie species in historic tallgrass prairies in Northwest AR and the AR River Valley.	These species potentially occur in historic prairie patches which have not been thoroughly surveyed in recent years. Thus, there is a need to identify current populations in relation to habitat characteristics and historic/current land use.
<i>Pseudacris illinoensis</i>	Illinois Chorus Frog	Reassess current populations.	Assess current distribution and abundance for comparison with last survey work over a decade ago and model land use projections to population declines. Surveys should also include sites that have conservation/protection potential.

Fish			
<i>Etheostoma cragini</i> , <i>Etheostoma microperca</i> , <i>Etheostoma pallidiorsum</i> , <i>Noturus lachneri</i> , <i>Crystallaria asprella</i> , <i>Percina uranidea</i> , <i>Noturus taylori</i> , <i>Etheostoma fragi</i>	Arkansas Darter, Least Darter, Paleback Darter, Ouachita Madtom, Crystal Darter, Stargazing Darter, Caddo Madtom, Strawberry River Darter	Maintain, protect, and restore habitat, with monitoring requirement.	These species are sensitive to land use and habitat conservation will be required to prevent further imperilment. Purchase Healing Springs for the Least and Arkansas Darters if landowners are selling their property.
<i>Alosa alabamiae</i>	Alabama shad	Status and distribution surveys.	Determine current status and distribution of Alabama shad.
<i>Etheostoma microperca</i>	Least Darter	Species description with additional genetic analysis.	Genetics survey indicate this is a new cryptic species. The priority score does not reflect that this is likely a new species.
Mussels			
All SGCN Mussels	All SGCN Mussels	Develop Statewide Large River Monitoring Program Protocol	A large data set exists for Arkansas' large river mussel fauna. A monitoring program needs to be developed to monitor SGCN mussels in large rivers utilizing bed data collected beginning in the early 1990's. Stream segments will be selected from the lower White River (Batesville to mouth), Ouachita River, Black River, Little River, St. Francis River, Cache River, Spring River, Strawberry River, Little Missouri River, Saline River and potentially other rivers for which data exist.
<i>Lampsilis rafinesqueana</i> , <i>Quadrula cylindrica</i> , <i>Alsasmidonta marginata</i> , <i>Fusconaia sp. cf. flava</i> , <i>Venustaconcha ellipsiformis</i> , <i>Pleurobema sintoxia</i> , <i>Villosa iris</i> , <i>Villosa lienosa</i> and <i>Toxolasma parvum</i>	Neosho Mucket, Rabbitsfoot, Elktoe, "Elongate" Pigtoe, Ellipse, Round Pigtoe, Rainbow, Little Spectaclecase, Lilliput	Determine hydrologic alteration in the Illinois River Watershed due to impervious surfaces.	The Illinois River Watershed has undergone significant alterations due to urbanization. We wish to determine whether geomorphic instability is due to altered hydrology and/or other land use factors (just in case it's not altered hydrology that is causing the geomorphic instability) and develop a watershed protection plan that identifies conservation actions that communities and resource agencies need to implement to restore and maintain natural channel conditions, protects the aquatic fauna and ensures good water quality. Community input in the development of the plan is critical to its success.
<i>Obovaria sp. cf arkansasensis</i>	"White" Hickorynut	Perform surveys in White River Basin to locate species outside of Little Red River.	Vouchered specimens of the nominal species <i>Obovaria arkansasensis</i> exist in multiple collections around the U.S. However, no live individuals have been located within the White River Basin except in the Little Red River system.
Crayfish			
<i>Cambarus causeyi</i>	Boston Mountains Crayfish	Assess persistence of previously reported populations, determine habitat constraints, and identify threats posed to the species from natural gas exploration and other land use activities.	The Boston Mountains Crayfish is the only Arkansas Ozark endemic primary burrowing crayfish. It is found along upland spring branched in the Boston Mountains, where it is very difficult to collect. A recent status survey by Robison et al. (2009) only found specimens at 4 of 39 sites examined. It appears that this species has declined and deserves urgent attention, especially since natural gas exploration is causing landscape alteration in portions of its range.
<i>Cambarus hubbsi</i>	Hubbs' Crayfish	Determine distribution, status, and habitat use by Hubbs' Crayfish. Determine taxonomic and genetic status of subpopulations.	Hubbs' Crayfish is an Ozark endemic stream dweller that has been recorded from less than 20 locations in Arkansas. It is frequently encountered in riffles in the Spring and Eleven Point rivers. In the remainder of the White River basin it exhibits different coloration and has been recorded in very small numbers from a few scattered locations. In Crayfishes of Missouri, Pflieger also recognizes the coloration differences. If these differences mirror a distinct taxon or management unit, their very low abundance and/or difficulty of collection warrants conservation concern.

Insects			
<i>Allocapnia jeanae</i> , <i>Allocapnia oribata</i> , <i>Allocapnia ozarkana</i> , <i>Allocapnia warreni</i>	Winter Stoneflies	Obtain baseline information on distribution and population status.	Very little is known about many of Arkansas's aquatic insect species and many insect SGCN have aquatic life stages. The Steering Committee recommends distribution and population status surveys, as well as studies that determine habitat requirements and life histories of SGCN. Such work should lead to conservation action recommendations.
<i>Callophrys irus hadros</i>	Texas Frosted Elfin	Obtain baseline information on distribution and population status.	Many species of pollinators, including butterflies and bees, have experienced drastic declines. The severity of the problem prompted a Presidential Memorandum (2014) designed to place emphasis on pollinator conservation. The Texas Frosted Elfin occurs in open areas (tallgrass prairies) and woodland edges and is known from seven counties in Arkansas. This species has been petitioned to be listed by the USFWS. Surveys for this species should be conducted between mid-March and early June, with maximum effort in mid-April.
Karst			
Karst SGCN	Karst SGCN	Restore and maintain native terrestrial habitats in karst recharge zones.	Action must be for the benefit of SGCN. Projects will be evaluated on the degree of imperilment and number of imperiled species benefited.
<i>Apochthonius titanicus</i> , <i>Allocrangonyx hubrichti</i> , <i>Bactrurus pseudomucronatus</i> , <i>Caecidotea ancyla</i> , <i>Caecidotea dimorpha</i> , <i>Caecidotea salemensis</i> , <i>Dendrocoelopsis americana</i> , <i>Eurycea spelaea</i> , <i>Lirceus bicuspidatus</i> , <i>Lirceus bidentatus</i> , <i>Pymarrhopalites clarus</i> , <i>Stygobromus ozarkensis</i>	Cave Obligate Pseudoscorpion, Hubricht's Long-tailed Amphipod, Amphipod, Isopod, Isopod, Isopod, Cave Obligate Planarian, Grotto Salamander, Isopod, Isopod, Springtail, Ozark Cave Amphipod	Address data gap needs for species in order to develop conservation actions.	These species occur in karst habitats in rapidly urbanizing northwest Arkansas. Land use changes will have deleterious impacts on these species. Conservation actions should focus on addressing data gaps (continued existence of populations, recharge area assessments) that will provide baseline information that can be used to develop karst BMPs, which cities and counties can adopt to minimize impacts. A significant proportion of efforts should be focused on working with cities and counties to ensure BMPs are implemented. A series of BMP demonstration sites will be used as examples of techniques.

Habitats		
Habitat Type	Action	Comments
Prairies and Native Grasslands	Habitat management to maintain or increase habitat quality or increase patch size - including management for species of greatest conservation need. Management examples - structure manipulation, prescribed fire, cedar removal, shrub control, invasive species eradication, conversion of cool season grasses, etc.	Action must be for the benefit of SGCN. Projects will be evaluated on degree of imperilment and number of imperiled species benefited. Restoration projects that emphasize pollinators will be given preference, specifically the Monarch Butterfly (<i>Danaus plexippus plexippus</i>).
Woodlands (to include sandhills, oak woodlands, and pine-oak flatwoods), Savannas, and Glades and Barrens	Habitat management to maintain or increase habitat quality or increase patch size - including forest management for species of greatest conservation need. For example - overstory and mid-story manipulation, cedar removal, prescribed fire, shrub control, invasive species eradication, etc.	Action must be for the benefit of SGCN. Projects will be evaluated on the degree of imperilment and number of imperiled species benefited. Restoration projects that emphasize pollinators will be given preference.
Spring, Eleven Point, Strawberry, and Current River Basins	Survey physical, chemical, biological, and water quantity parameters within these priority watersheds.	Land use practices within these watersheds are rapidly changing. These watersheds contain a high number of SGCN. Projects should identify major threats and recommend conservation actions.
Spring and Groundwater	Survey of spring presence, density, flow, volume, and water quality in the Ozarks and Ouachitas.	Many SGCN are suspected to be strongly associated with spring habitats.
Strawberry River, Middle Ouachita River, Upper Ouachita River, Little Missouri River, Caddo River	Temperature and Water Quality & Quantity Monitoring	Install flow and temperature gages in select rivers to monitor changes overtime in relation to climate change.