



## McDowell Sonoran Conservancy Biodiversity Fellowship

One McDowell Sonoran Conservancy Biodiversity Fellowship will be awarded for the 2016-2017 academic year in the amount of \$6,000 to a graduate student. The recipient will conduct research that will address high-priority natural resource management questions that have been identified by the McDowell Sonoran Conservancy Field Institute. Note that in addition to the monetary award, the Field Institute can provide trained citizen scientists to assist in field work. The School of Life Sciences (SoLS) and the McDowell Sonoran Conservancy jointly fund this fellowship. The fellowship funds will be dispersed by June 30, 2017 as follows: \$3000 during summer 2016, \$3000 upon completion, during summer 2017. The Center for Biodiversity Outcomes developed the partnership and helps to manage the fellowship.

## To apply, send the following materials to Wendi Simonson (wendi.simonson@asu.edu) by May 15, 2016. The recipient will be notified no later than June 1, 2016.

Required materials	Page limit
Detailed CV	No limit
Cover letter describing applicant's research interests and how this	1 page, 11.5
project fits with their graduate thesis or dissertation work	font
Research proposal (see priority research topics listed below;	2 pages, 11.5
include introduction, research questions, methods, expected	font
results, and how the research will inform management)	
Timeline of project (1 year, to be completed by May 15, 2017)	1 page
Budget (may be used for student salary, transportation, supplies)	1 page
Transcripts	No limit
Letter from the current or prospective applicant's graduate advisor.	1-2 pages
Letter should indicate their approval of the proposal and support in	
mentoring the student on the proposed research.	
Three references (list name, relationship to applicant, and contact	n/a
info).	

## Requirements for the fellowship:

- 1. The recipient must have a minimum GPA of 3.00.
- 2. The recipient should be studying a field that can be applied directly to natural resources management (e.g. plant-based or animal-based research including systematics, community or global ecology, physiology, geography, etc.)
- 3. Applicant must be a current or incoming graduate student in one of the graduate programs administered by SOLS at the time of application.
- 4. The student will have a faculty advisor from the ASU School of Life Sciences.
- 5. The recipient must maintain a minimum cumulative GPA of 3.0 throughout the tenure of the award.

- 6. The recipient will work with the Field Institute & ASU (faculty advisor) to draft a research proposal that outlines the project goals, methodology, timelines, and other project details.
- 7. The student will publish results of this work in a timely manner. Publications resulting from this work will acknowledge support from SoLS and the McDowell Sonoran Conservancy.
- 8. The \$6,000 will be dispersed as follows: \$3000 during summer 2016, \$3000 in the summer after the final report is completed and approved by ASU faculty advisor and the Field Institute (by May 15, 2017). All funds will be dispersed by June 30, 2017.

## **Priority research questions**

As noted above, the fellowship recipient will conduct research to address high-priority research topics identified by the <a href="McDowell Sonoran Conservancy Field Institute">McDowell Sonoran Conservancy Field Institute</a>. The goal of the Field Institute is to conduct ecological research by partnering with scientists and actively involving citizen scientists to inform long-term resource management of the McDowell Sonoran Preserve (MSP), educate, and contribute to broader scientific knowledge. Field Institute priority research topics are listed in the table below. It is highly advised to meet with the McDowell Sonoran Conservancy Field Institute Director (Helen Rowe, <a href="melen@mcdowellsonoran.org">helen@mcdowellsonoran.org</a>) or Manager (Melanie Tluczek, <a href="melanie@mcdowellsonoran.org">melanie@mcdowellsonoran.org</a>) to discuss your ideas and ensure that your proposed research aligns with the research priorities of the Field Institute.

Priorities	Description
Sensitive animal species monitoring	Analyze the population and habitat viability of one or more (preferred) sensitive animal species in the McDowell Sonoran Preserve (e.g. Chuckwalla, Banded gila monster, American Badger Townsend's big-eared bat, Phoenix talussnail, sensitive bird species) and how this connects to regional viability of these organisms.
Habitat connectivity	Assess the viability of the gooseneck corridor in the Preserve by studying the wildlife use and movement. Methods may include wildlife scat and track surveys, genetic studies, or camera trapping.
Arid ecological restoration techniques	Test restoration techniques including soil crusts, native seed planting, and/or cacti transplanting for use in the McDowell Sonoran Preserve.
Grazed area mapping	Develop a map of past grazing area use and intensity in the McDowell Sonoran Preserve for use in experimental design of long term vegetation monitoring and other uses.

Table 1: Research Priorities for 2016-2017 McDowell Sonoran Conservancy Biodiversity Fellowship