





Update on the Selected Projects for 2016

U.S. Fish and Wildlife Service Region 4 AIS Program
Small Grants Program

Overview

ANS Small Grants Program



Stephen F. Austin State University

Field Trials of an Endocidal Compound of Giant Salvinia to Control Giant Salvinia.

- To develop spray formulas and dosage of a salvinia endocidal compound to effectively control giant salvinia;
- To determine the selectivity of the endocidal compound on 30 other plant species.
- June 1, 2016 September 30, 2017 (16 months).



USGS Tennessee Cooperative Fishery Research Unit

Effects of Asian Carp Invasion on the Food Web of a Mussel Biodiversity Hotspot in Tennessee.

- To evaluate diet niche overlap between native mussels and Silver Carp across three seasons in the Duck River.
- Evaluate indirect pathways in which Silver Carp could affect native mussels by quantifying diet niche overlap between the carp and representative host fish for mussel glochidia.
- June 15, 2016 Sept. 30, 2017 (15.5 months)

U.S. Geological Survey

Range Expansions of Introduced Aquatic Plants in the USFWS Southeast Region.

- Expand the newly reestablished aquatic invasive plant database by continuing to find new data sources to fill data gaps in states that have relatively few recorded AIS sightings
- Develop a report consisting of a compilation of the introduced aquatic plants in USFWS Region 4 that have expanded their ranges in the past 10 years. Maps will be a prominent part of the report; but text will accompany each species explaining the biology and range expansions.
- June 1, 2016 Sept. 30, 2017 (16 months).

California University of Pennsylvania

Developing Effective Environmental DNA Protocols for the Early Detection of Rusty Crayfish in Lotic Systems.

- Develop a standard sampling methodology for the early detection of rusty crayfish in lotic systems using environmental DNA (eDNA) techniques.
- Identify parameters most critical to the detection of rusty crayfish by eDNA methods.
- Field test the methodologies in lotic environments known to contain rusty crayfish and ones most likely to be invaded.
- June 1, 2016 Sept. 30, 2017 (16 months).

Jacksonville State University

Improved Monitoring of the Invasive Freshwater Snail, *Melanoides* tuberculata and Associated Trematode Pathogens in Florida Waters.

- Identify locations where *M. tuberculata* is infected by trematodes and establish habitat-specific associations for infected and non-infected snails.
- Identify *M. tuberculata*-associated trematodes via DNA barcoding and evaluate parasite risks to ecosystems health.
- Evaluate genetic relatedness of *M. tuberculata* populations to elucidate mechanism(s) of dispersal throughout Florida.
- June 1, 2016 Sept. 30, 2017 (16 months)

University of Georgia

Assessing the Potential for Trophic Transfer of a Novel Cyanotoxin Associated with Aquatic Plant Invasions.

- Measure whether tadpole feeding on toxic *Aeotokthonus hydrillicola* (*Ah*)-positive *Hydrilla* harbor cyanotoxins,
- Determine whether salamanders and juvenile watersnakes are vulnerable to *Ah* toxins through the consumption of tadpoles.
- August 1, 2016 November 30, 2017 (16 months).

University of Arkansas at Pine Bluff

Asian Carp Effects on Age-o Fish Dynamics in the Lower White River, Arkansas

 Quantify the impacts of invasive Asian carps (silver and bighead carp) on juvenile fish dynamics across fifteen previously studied oxbow lakes following the establishment

Photo by Naseka, A.M.

of Asian carp.

• June 1, 2016 – Sept. 30, 2017 (16 months)

Preparations for Next Year

- Possibly revise the RFP for 2017 to narrow the scope of proposed projects.
- Look at expanding the membership on the Review Committee.
- How do we want to display the findings from the funded projects that have been completed?

Questions?



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