

Annual Report for USFWS Grant F12AP01037

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Fiscal Agent: Maryland Sea Grant College

Annual Report to the Aquatic Nuisance Species Task Force for 2015

The mission of the Mid-Atlantic Panel (MAP) is to assist state and federal agencies and other stakeholders in developing and implementing strategic, coordinated, and action-oriented approaches for the prevention and control of aquatic invasive species (AIS) in the mid-Atlantic region. The driving force behind the Panel's mission is to strengthen cooperation, coordination, and communication on AIS issues within the region and beyond.

Funding from USFWS is used to support MAP business, including coordination and logistics for MAP meetings and travel for MAP representation at ANSTF meetings, the MAP small grants competition, and payment for fiscal management services provided by Maryland Sea Grant.

Panel Coordination

The spring MAP meeting was held June 30, 2015 in Annapolis, MD. The meeting focused on ongoing and completed work accomplished by our small grants competition awardees. The panel reviewed completed work on environmental DNA monitoring of *Didymo* and the development of an invasive species management plan and app for Bushkill Township, PA. Additionally, current grantees updated the panel on an education campaign led by Maryland Department of Natural Resources, the "Mid-Atlantic Field Guide to Aquatic Invasive Species", and a project with the National Sea Grant Law Center about AIS eradication on private lands. The panel also deliberated and made decisions on the spring 2015 Small Grants competition as well as the budget for 2015-2016.

The fall MAP meeting was held November 17-18, 2015 in Lewes, DE. The meeting focused on AIS issues of current importance within Delaware as well as updates on ongoing projects and business. Updates were provided on the status of the Mid-Atlantic Field Guide and the New Zealand mud snail projects. The panel also discussed the conclusion of the project on accessing private lands for AIS control and potential next steps. Waterwheel, a new aquatic plant invader threatening the Mid-Atlantic States, was discussed and raised as a potential new species of concern. The panel also approved priorities for its next RFP (February 2016) and discussed recommendations and actions for the next All Panel and ANSTF meetings.

The MAP decided to move forward on a website redesign at the spring meeting. The Executive Committee decided to have Maryland Sea Grant lead the web redesign as part of their administrative effort. At the fall meeting, the web designer presented a plan and initial logos for the redesign. The project will proceed during the six months between the fall and spring meeting and be guided by an ad hoc committee of the panel.

Ray Fernald, as MAP Chair, attended the spring ANSTF meeting in Florida and the fall ANSTF meeting in Washington, DC.

Small Grants Competition

The Panel has conducted an annual grants competition to fund on-the-ground activities addressing MAP's mission and regional priorities. Since 2007, the Panel has awarded \$318,684 in project funding, and has leveraged over half a million dollars in partner funds. At our spring meeting, the panel reviewed small grant proposals and decided to fund one new project as well as provide funding for printing the Mid-Atlantic Field Guide.

Three small grants projects were initiated using FY2014 funds (starting October 2014). Following engagement throughout the year, a final report was received by the panel from the University of Mississippi School of Law in September. Ms. Catherine Janasie presented the results of the project at our fall meeting. The MAP is considering the results of the project and is planning to discuss potential steps beyond the region at the next All Panel meeting.

The Pennsylvania Sea Grant and Penn State University projects are continuing two year projects. Dr. Levri from Penn State attended the fall meeting and provided an update on invasive New Zealand mud snail populations in Pennsylvania. The project is proceeding on schedule. Additionally, Ms. Stahlman from Pennsylvania Sea Grant presented on progress toward completing the Mid-Atlantic AIS Field Guide. More than half of the entries are completed for this 200 page guide, which is anticipated to be finished in August 2016.

CY 2015 annual and/or final reports for projects funded by the MAP are included as an attachment to this report. Maryland Sea Grant administers the subawards for all projects, including the ongoing projects in the chart below. As of November 2015, \$62K in MAP funds are encumbered to complete these projects.

Current Small Grants Portfolio

Cultelli Cillan Gla	Current oman Grants I ortiono					
Engaging Lawyers	National Sea	The National Sea Grant Law Center, the National	Final Report			
to Facilitate Access	Grant Law	Association of Attorneys General, and the	Sept. 2015			
to Private Land for	Center (PI:	Environmental Law Institute (Project Team) propose to	_			
Eradication and	Stephanie	work with the MidAtlantic Panel on Aquatic Nuisance				
Control of Aquatic	Showalter Otts)	Species to improve regional understanding of the				
Nuisance Species		strategies available to access private land for eradication				
		and control of aquatic nuisance species and lay the				
		foundation for the collaborative development of				
		guidance for implementation.				
The Good, the	Maryland	Invasive species of plants, animals and pathogens affect	Funded			
Bad and the Ugly:	Department of	our everyday life, but often in ways that are not readily	through Dec.			
An invasive species	Natural	apparent to the public. This project will develop	2015			
toolkit for	Resources (PI:	comprehensive toolkits which teachers and other				
educators	Kerry Wixted)	educators can use to deliver classroom lessons and				
		exercises that fit their needs, meet educational				
		requirements, and reach target age groups in order to				
		teach about the basic tenets of the problem and about				
		specific aquatic invasive species and other invaders, and				
		to motivate students to take action in their communities.				

Characterizing the Invasive New	Pennsylvania State University	The presence of the NZMS in central Pennsylvania is a cause for concern because of the substantial ecological	Funded through Sept.
Zealand Mud Snail	(PI: Edward P.	changes that can occur due to its presence. This proposal	2016
Population in	Levri)	outlines work to 1) determine the extent of the invasion	
Central	,	in Pennsylvania, 2) determine the diversity and identity of	
Pennsylvania		the clones in central PA (US1, US2, US3, or new clones),	
		and 3) conduct experiments to determine if the clones	
		found in central PA possesses characteristics different	
		from other clones of the species that may influence its	
		spread and invasiveness	
Mid-Atlantic Field	PA Sea Grant	This project proposes to expand the Pennsylvania field	Funded
Guide to Aquatic	(PI: Sara	guide to become a regional Mid-Atlantic AIS field guide	through Sept.
Invasive Species	Stahlman)	that will include 20-30 new species of concern from New	2016
		York, New Jersey, Delaware, Maryland, West Virginia,	
		Virginia, and North Carolina, as well as Pennsylvania.	
Training and	Virginia	This project will be a pilot program for training dogs to	Funded
Evaluation of	Department of	detect nutria on the edges of their range in Virginia.	through Sept.
Dogs for Early	Game and		2016
Detection of	Inland Fisheries		
Nutria (Myocastor	(PI: Todd		
coypus)	Engelmeyer)		