



May 17-18, 2016

Chesapeake Bay Program Office, Joe Macknis Memorial Conference Room (Green Building near the water)
410 Severn Ave, Annapolis, MD 21403

Conference Line: 866-299-3188 **Code:** 410-267-5731

Adobe

Connect: <http://epawebconferencing.acms.com/midatlanticpanelaquaticinvasivespecies/> (Note: Enter as Guest with your name and affiliation)

AGENDA

Tuesday, May 17, 2016

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| 9:00 am | Coffee | |
| 9:30 am | Call to Order <ul style="list-style-type: none">• Welcome/Housekeeping• Introductions | <i>Ray Fernald, Panel Chair</i> |
| 9:40 am | Review & Approve Agenda/Minutes | <i>Ray Fernald</i> |
| 9:50 am | Fall 2015 Meeting Action Items | <i>Ray Fernald</i> |
| 10:00 am | 2016 Budget Update | <i>Mike Allen, Panel Vice-Chair</i> |
| 10:15 am | Funded Projects Update <ul style="list-style-type: none">• Update on 2015 funded grants• Update on ongoing/completed projects | <i>Mike Allen</i> |
| 10:30 am | Break | |
| 10:45 am | Presentation and update on rebuild of MAPAIS website / logo design | <i>Mike Allen, Jenna Clark</i> |
| 11:15 am | Small Grant update on "Mid-Atlantic Field Guide to Aquatic Invasive Species" | <i>Sara Stahlman, PA Sea Grant</i> |
| 11:45 pm | Small Grant update on "Virginia Nutria Detection Dogs" | <i>Todd Engelmeyer / Ray Fernald</i> |

- 12:00 pm Lunch
- 1:00 pm ANSTF Update *Susan Pasko / Ray Fernald*
- 1:30 pm Discussion: VIDA (Vessel Incidental Discharge Act) *Ray Fernald*
- 2:00 pm 2016 MAP Grants Competition *Kyle Runion / Ray Fernald*
- Overview of proposals
 - Discussion
 - Award Selection
- 5:00 pm Adjourn for day

Wednesday, May 18, 2016

- 9:00 am Coffee
- 09:15 am Small Grant Final Report on “The Good, the Bad, and the Ugly: an Invasive Species Toolkit for Educators” *Cindy Etgen, MD DNR*
- 09:45 am Decision Items and New Business: *Ray Fernald / Mike Allen*
- Addition of Waterwheel to list of Mid-Atlantic Aquatic Invasive Species of Concern
 - Conference/Workshop ideas
- 10:30 am Discussion: Boat/Trailer Inspection and Decontamination Programs in the Mid-Atlantic States *Ray Fernald / Panel Members and Interested Parties*
- 11:00 am Member/Interested Parties Updates *Panel Members and Interested Parties*
- 11:50 am Next meeting *Panel Members and Interested Parties*
- 12:00 N Adjourn MAPAIS
- 12:30 pm **Workshop: Discussion of Mid-Atlantic Guide to AIS format and species profiles** *(only if sufficient interest and availability of Panel Members and other participants)*

Minutes of the Mid-Atlantic Panel on Aquatic Invasive Species Meeting in Annapolis, Maryland May 17-18, 2016

Participants:

Ray Fernald, VDGIF (Chair)	Jenna Clark, MDSG
Mike Allen, MDSG (Vice Chair)	Frederika Moser, MDSG
Kyle Runion, CRC (Coordinator)	Sara Stahlman, PASG
Steve Minkinen, USFWS	Sarah Whitney, PASG
Don MacLean, USFWS / ANSTF	Jonathan McKnight, MDNR
Susan Pasko, NOAA	Jay Killian, MDNR
Alexis Rudd, NOAA	Cindy Etgen, MDNR
Steve Minkinen, USFWS	Steve Young, NY DEC
Marian Norris, NPS	Edna Stetzar, DEFW
Jil Swearingen, NPS	Rob Emens, NC DENR
Ian Pfingsten, USGS NAS	Bob Morgan, PA FBC
Matt Neilson, USGS NAS	Brianna Hutchinson, SRBC
Trevor Michaels, USDA APHIS	

Action and Decision Items

Decision: The Fall 2015 minutes were approved.

Action: Fernald will continue the conversation with NOAA about Sentinel Site consideration of AIS.

Decision: The panel voted to add waterwheel (*Aldrovanda vesiculosa*) to the list of species of concern.

Action: Fernald will update the by-laws of the panel; any comments and suggestions should be sent to Fernald.

Action: Fernald will reach out to state representatives and other panel chairs to start a discussion about reaching out to congressional contacts and the congressional invasive species caucus regarding funding for AIS.

Action: Panel members should [review the MAPAIS website](#) (username: MAPAIS_panel, password: wagonwheel). Clark requests that any suggested edits (content, panel member lists, etc.) and panel member headshots be [emailed to her](mailto:clark@mdsg.umd.edu) (clark@mdsg.umd.edu) by June 1, 2016.

Action: Panel members and colleagues will review [Mid-Atlantic Field Guide species profiles](#) and send edits to Stahlman (sng121@psu.edu) (cc Fernald, Allen, and Runion) by 5/27 if possible. Review assignments are available in the minutes.

Action: Panelists should contact Fernald if they would like to raise attention to inter-basin issues (vector transfer) in the mid-Atlantic.

Action: Fernald will continue to work with Pasko regarding the [ANSTF Experts Directory](#).

Action: Fernald will forward VIDA information such as a history of the bill, the bill itself, and a series of talking points to the panel.

Decision: A motion was raised and approved to fund project numbers 1 (Hall) and 5 (Julian) at full cost.

Decision: A motion was raised and approved for a subcommittee within the panel consisting of Fernald, Allen, Killian, Stetzar, and Rudd to further discuss proposals 3 (Gray) and 7 (Wieland). The subcommittee may discuss panel concerns about proposals with principal investigators and request clarification or adjustment of proposals and their budgets. The panel entrusts the remaining funding decisions of this grant cycle to the subcommittee.

Action: A committee consisting of Morgan, Emens, and Whitney led by McKnight will discuss the scope of the pet trade vector management issue and determine the level of involvement necessary to fully address this issue. The findings will be shared with the group at the fall 2016 meeting.

Decision: The next meeting will be near the end of terms for our Chair and Co-Chair. Fernald and Allen have offered to extend their terms, and the panel approved their continued leadership.

Action: The panel will be polled regarding travel needs to New York for the possible spring 2017 meeting.

Minutes

Review of the Fall 2015 Minutes & Action Items

- **Decision:** The Fall 2015 minutes were approved.
- The ad-hoc NISA review committee was not formed; if NISA is raised to Congress again, this committee will be formed to review and offer comments.
- Invasive species materials were developed for the Envirothon and Science Olympiad. Toolkits were developed and were presented by Etgen.
- **Action:** Fernald will continue the conversation with NOAA about Sentinel Site consideration of AIS.
- **Decision:** The panel voted to add waterwheel (*Aldrovanda vesiculosa*) to the list of species of concern.
- The “Access to private lands” project has interest in a re-boot from Maryland; the conversation will continue if other interest arises.
- **Action:** Fernald and Whitney will update the by-laws of the panel; any comments and suggestions should be sent to Fernald.

2015 Budget Update, Mike Allen

The panel’s budget is split into administration and sub-awards. With two more fiscal years in the federal grant, there is about \$5,000 remaining for internal administration. There are currently three active grants to sub awardees: invasive mud snail, mid-Atlantic field guide, and dog training for eradication of nutria; all are on track for completion at the end of this fiscal year.

Fernald: At our last meeting, there was an understanding that funding was possible to increase to \$47,000, but this was not approved in Congress and funding is back down to \$40,000. This additional money is not in the 2017 President’s budget, though the status of that is uncertain with the upcoming election. ANS state plan management plan is increasing, though this money cannot be directly applied to regional panels.

State AIS management plans: WV, NJ, DE, and NC do not have plans (WV is under development; NC is complete but not approved). MD is awaiting approval. NY updated plan was approved. PA and VA have approved plans.

Action: Fernald will reach out to state representatives and other panel chairs to start a discussion about reaching out to congressional contacts and the congressional invasive species caucus regarding funding for AIS.

- AIS contacts: Erica Jensen with the Great Lakes Panel, [Scott Cameron](#) from the Reduce Risks of Invasive Species Coalition

Website Redesign, Jenna Clark

Thank you to the website redesign committee (Allen, Fernald, Emens, Kilian, Runion, Whitney, led by Clark).

The website (www.midatlanticpanel.org) was analyzed for content and document storage. An audience of the new website was set as panel members, researchers seeking funding, and interested citizens. Based on this audience, the purpose of the site is to provide information about the panel’s accomplishments, funding opportunities, members, and past and upcoming meetings. The new website was created in WordPress and is responsive to mobile devices. It contains new content as well as whatever content was deemed important from the old website.

Action: Panel members should [review the website](#) (username: MAPAIS_panel, password: wagonwheel). Clark requests that any suggested edits (content, panel member lists, etc.) and panel member headshots be [emailed to her](mailto:clark@mdsg.umd.edu) (clark@mdsg.umd.edu) by June 1, 2016.

The panel approved the new logo. Next steps for the website include this review by panel members and a public launch once complete. Website administrators will be provided training for maintenance of the site and an instruction manual will be developed.

Small Grant Update on “Mid-Atlantic Field Guide to Aquatic Invasive Species,” Sara Stahlman

[First drafts of species profiles have been completed and separated by taxa on Google Drive](#). Stahlman requests that the content of each profile be reviewed by panelists or colleagues. Species not already published in the PA field guide are a priority (separated out in word document distributed to panel), but aspects such as species distribution of those that overlap with the PA guide still require review. Please make edits by downloading profiles and using track changes; send completed reviews to Stahlman (sng121@psu.edu) (cc Fernald, Allen, and Runion), preferably by May 27th. Edits after this date will still be accepted but are more difficult to incorporate, so please adhere to this tight deadline if possible. PSU is developing an app for the PA field guide and will be able to incorporate the mid-Atlantic guide as an interactive web version.

The hope is to have printing of the guides completed in September so the project will be completed as the life of the grant ends.

Section additions to field guide: Policy and management challenges, such as invasive but economically important species; MAPAIS background page; Terrestrial species that can impact wetlands (mute swan, nutria, Canada goose, and feral swine).

Review Assignments

Introductory Sections: Marian Norris

Policy and Management Challenges: McKnight

MAPAIS Background: Fernald, Allen, & Runion

Aquatic and Facultative Plants: Emens

Invertebrates: Kilian, McKnight colleague, Fernald colleague

Fish: Minkinen

Pathogens: McKnight colleague

Algae: Allen, Emens colleague

Reptiles and Amphibians: Fernald colleague, McKnight colleague

Terrestrial Species: McKnight, Fernald colleague

Action: Panel members and colleagues will review [Mid-Atlantic Field Guide species profiles](#) and send edits to Stahlman (sng121@psu.edu) (cc Fernald, Allen, and Runion) by 5/27 if possible. Review assignments are available in the minutes.

Small Grant Update on Virginia Nutria Detection Dogs, Ray Fernald

Todd Engelmeyer with VA DGIF is leading this project. They have been training dogs to find scat of nutria as a measurement of presence/absence. Maryland is using nutria detection dogs towards the eradication effort while Virginia is working to contain and prevent population expansion, particularly the western shore of the Chesapeake. Two dogs are being trained: Jake and Birdee. Detection dogs have been known to detect up to 20 species, so there is an interest in training these dogs to detect other regional AIS such as zebra mussel.

ANSTF Update, Susan Pasko

The [ANSTF met recently](#) in Traverse City, Michigan. The Great Lakes Panel led the first day of the meeting, presenting on great lakes restoration initiative projects and state management plans. The second day consisted of presentations on Asian carp in Lake Erie and prevention of inter-basin transfer. MIT presented on CRISPR, a genetic engineering tool with applications for AIS control. The basic idea is to adapt a gene technology to a state where a species eradicates itself. This will be an important issue to watch going forward as control of the

technology and application will be a concern. A GAO consultant presented on the ANSTF audit where they recommended that the task force needs to improve in tracking accomplishments. The National Marine Manufacturing Association & National Aquaculture Association were approved as new *ex officio* members to the task force.

The [ANSTF Experts Directory](#) requires an update. Currently, users can add experts. Experts are divided into tier 1 and tier 2 experts. Tier 1 may be contacted by the public, and tier 2 may not, intended to be contacted when tier 1 experts have questions. The panel tentatively decides to have a panel representative from each state be a user to maintain the expert lists. **Action:** Fernald will continue to work with Pasko regarding the [ANSTF Experts Directory](#).

Action: Panelists should contact Fernald if they would like to raise attention to inter-basin issues (vector transfer) in the mid-Atlantic.

The next ANSTF meeting will take place on November 8-10 at the USFWS headquarters in Falls Church, Virginia.

Discussion: Vessel Incidental Discharge Act (VIDA)

It appears that the act was voted down in Congress, but the panel will continue to stay informed about the issue in case the act is proposed in the future.

The VIDA proposes to move authority from states to the Coast Guard to regulate and monitor AIS boat discharge, taking away authority for specific state actions as well as the EPA and Clean Water Act while enforcing nationwide regulations. The panel cannot take a position on this issue, but individual states and agencies may. The proposed regulations are less stringent than already exist in some state laws, such as New York.

Action: Fernald will forward VIDA information such as a history of the bill, the bill itself, and a series of talking points to the panel.

2016 MAP Grants

- Eight proposals were submitted to MAPAIS for the 2016 Small Grants Competition. Panel members reviewed proposals and discussed funding decisions at the meeting. Available funding is approximately \$39,600. Proposals:
 - 1: Pymatuning Invasive Species Boat Inspection Stations, Stacie Hall (Pymatuning State Park)
 - 2: Community Outreach Initiatives to Reinforce Current Monitoring Efforts for Two Invasive Crabs in the Hudson-Raritan System, Megan Rothenburger (Lafayette College)
 - 3: Inland movement and early detection of the spiny water flea (*Bythotrephes longimanus*) in the mid-Atlantic region, Derek Gray (California University of Pennsylvania)
 - 4: AIS Management, Education, and Outreach Initiatives for the State of Maryland, Mark Lewandowski (MD DNR)
 - 5: The use of environmental DNA (eDNA) to detect emergent infectious pathogens in amphibian populations, James Julian (Pennsylvania State University)
 - 6: Genetic characterization of watermilfoil diversity in Deep Creek Lake, Maryland, Syndell Parks (GenPass LCC)
 - 7: Economic Analysis of AIS Risk and Risk Reduction in the Bloodworm Trade, Robert Wieland (Main Street Economics, LLC)
 - 8: Give Snakeheads the Paddle: Snakehead Outreach and Control with Ecotourism and Angler Incentives, Patricia Delgado (Jug Bay Wetlands Sanctuary)
- **Decision:** A motion was raised and approved to fund project numbers 1 (Hall) and 5 (Julian) at full cost.

- **Decision:** A motion was raised and approved for a subcommittee within the panel consisting of Fernald, Allen, Kilian, Stetzar, and Rudd to further discuss proposals 3 (Gray) and 7 (Wieland). The subcommittee may discuss panel concerns about proposals with principal investigators and request clarification or adjustment of proposals and their budgets. The panel entrusts the remaining funding decisions of this grant cycle to the subcommittee.

Small Grant Final Report on “The Good, the Bad, and the Ugly Invasive Species Toolkit”, Cindy Etgen

Sixteen invasive species toolkits were developed by Maryland DNR for regional schools and educators (8 kits in MD, 8 in other states). [Forty lesson plans in five modules](#) & 16 fact sheets on invasive species are included in the kits as well as available online. Animal pelts, seeds, plant matter, and other hands on materials are available for students. Toolkits are being used in classrooms and for trainings such as Envirothon. Over 360 educators have been reached through workshops and presentations, with additional presentations planned over the summer.

Decision Items and New Business

Workshop ideas or recommendations

- Morgan: Proposes pet trade vector investigation as a potential workshop.
 - Norris: NPS would have an interest in this concerning disease spread through pets.
 - **Action:** A committee consisting of Morgan, Emens, and Whitney led by McKnight will discuss the scope of the pet trade vector management issue and determine the level of involvement necessary to fully address this issue. The findings will be shared with the group at the fall 2016 meeting.
- Young: A New York Invasive Species conference takes place each year in November at Cornell. A presentation of MAPAIS may of interest to the conference (Nov. 1-3, 2016).

Decision: The next meeting will be near the end of terms for our Chair and Co-Chair. Fernald and Allen have offered to extend their terms, and the panel approved their continued leadership.

Future MAPAIS recommendations to ANSTF

Funding will be addressed. We will continue to request that all federal agencies support the nutria eradication project. The ANSTF’s next meeting is in November, so the panel will have further opportunities to discuss recommendations. Another recommendation should be made regarding increased participation and representation of large partnership organizations such as the Chesapeake Bay Program.

Discussion: Boat/Trailer Inspection and Decontamination Programs in the Mid-Atlantic States

McKnight: Will share a legislatively mandated report (developed by McKnight and Kilian) about feasibility and recommendations for regulatory required inspections for use of state waterways. Shared in this report that many inappropriately look to emulate work being done in much larger, more popular western lakes, which is probably not appropriate given the different societal values and funding associated with water resources in our region (specifically MD).

Young: NY is ramping up their work in on this topic and boat launch setups recently.

Norris: This panel should start to have a louder voice at other partnerships such as the Chesapeake Bay Program to have AIS issues represented in their work. As an example, NPS Chesapeake Bay has a main focus of public access rather than boat decontamination and education about the ecological implications.

Member Updates

Norris: This weekend is national bio-blitz for the National Park Service, some of which will include inventories of invasive species. We have two new parks in the northeast: Patterson Great Falls in NJ and Harriet Tubman. Partnership possibilities exist in both of these. We have not found snakehead in Rock Creek in DC, but have in the C&O Canal (contained). Tim King of USGS has completed additional didymo studies & looked at macroinvertebrate communities and algal communities associated with didymo. Nancy Rybicki of USGS has recently reported a new species of water chestnut in the Potomac River.

Pasko: The Stop Aquatic Hitchhikers website update is nearing completion. If anyone is interested in helping finalize content, contact Pasko.

Minkinen: [The Stop the Snakehead Fishing Derby](#) takes place this Saturday at the C&O Canal in Maryland.

Rudd: Started at NOAA in February working on the ANSTF and NISC issues and excited to get involved with MAPAIS.

Young: This year marks the highest AIS funding ever in NY at \$12 million. We now has an AIS coordinator and I (Young) run the Long Island invasive species PRISM. www.NYIS.info. A statewide invasive species awareness week takes place July 10th-16th.

Kilian: Maryland has an ANS regulation which contains a list of species that are not present and prohibited in MD and a list for species that are present with which transport is prohibited. These lists are currently being updated and modified to contain all species within a family where necessary.

Emens: After about two years of drafting, we now have an AIS management plan and are hoping this plan will organize work in the state. It is not moving beyond the agency level at this time and will not be put forward to the governor for a signature. Recently found didymo.

Stetzar: The Delaware Invasive Species Council is pushing for AIS being integrated existing topic areas in Envirothon (this year it was a special topic). Snakeheads continue to expand. A power plant recently contacted us about snakeheads at an intake canal and we are looking to reach out to them and other power plants to increase knowledge. Hydrilla is in about 1/3 of Delaware's ponds. Our aquatic vegetation control leads to high variability in the density of vegetation, causing variation in health of fish communities. We are working to maintain vegetation for the health of fish communities.

Fernald: Virginia's focuses have not changed recently. Our main effort is on eradication and control. USDA APHIS is our primary contractor in working with feral hogs. Waterwheel monitoring should be starting soon. Momentum in invasive plants. The Department of Agriculture has instituted an aquatic invasive weed committee. Want to implement AIS monitoring and inspection and boat decontamination programs.

Morgan: PA will soon start our first full season of crayfish regulation to limit possession and movement to cut down on 4-6 invasive species. The Department of Agriculture is starting a hydrilla eradication and control program at Pymatuning Lake. Round goby has moved inland and is now threatening natives in the diverse French Creek.

Swearingen: NPS National Capital Region invasive plant management plan environmental assessment is currently out for public comment. An upcoming workshop in Laurel MD may include AIS talks about early detection.

Pfingsten: USGS has the aquatic exotic plant database back up and we are looking for data. Pam Fuller wanted to offer to create a mid-Atlantic view in database if the panel is interested.

Next Meeting

We will tentatively plan on having a Maryland focused meeting in Annapolis on November 15th and 16th (dates subject to change). There is interest in pursuing a spring 2017 joint meeting with NE panel in New York.

Action: The panel will be polled regarding travel needs to New York for the possible spring 2017 meeting.

Meeting adjourned

DRAFT