

June 25-26, 2014

U.S. Fish and Wildlife Service, Chesapeake Bay Field Office 177 Admiral Cochrane Drive, Annapolis, Maryland 21401 410-573-4500

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DRAFT

Wednesday, June 25, 2014, Conference Room- 2nd Floor

9:00 am 9:30 am	Coffee Call to Order • Welcome/Housekeeping • Introductions Sarah Whitney, Panel Chair		
9:40 am	Review & Approve Agenda/Minutes	Sarah Whitney, Panel Chair	
9:50 am	Winter 2013 Meeting Action Items	Sarah Whitney, Panel Chair	
10:00 am	 Funded Projects Update Update on 2013 funded RFPs Update on existing/completed projects 	Mike Allen, MD Sea Grant Sarah Whitney, Panel Chair, Hannah Martin, EPA Chesapeake Bay	
10:15 am	ANSTF Update	Laura Norcutt, UFWS	
10:30 am	Break		
10:45 am	Update on Teacher Training Course on Hudson River Invasives Kali Bird, Cary Institute of Ecos Studies		
11:05 am	Member/Interested Parties Updates	Panel Members and Interested Parties	
12:15 pm	Lunch		
1:15 pm	 2014 MAP Grants Competition Overview of proposals Discussion Award Selection 	Jonathan McKnight, Maryland DNR Hannah Martin, EPA Chesapeake Bay	
4:30 pm	Adjourn	Panel Members and Interested Parties	

Thursday, June 26, 2014 Conference Room- 2nd Floor

8:30 am	Coffee	
8:45 am	Call to Order	Sarah Whitney, Panel Chair
9:00 am	National Invasive Species Council's Stas Burgiel, NISC Pathway Management Plan Guidance (climate change and pathways)	
9:30 am	Bait Vector Project Update	Fredrika Moser, Maryland Sea Grant
9:45 am	Member/Interested Parties Updates	Panel Members and Interested Parties
10:15 am	2014 MAP Grants Competition (cont.)	
11:45 am	Next meeting Panel Members and Interested Partie	
12:00 pm	Adjourn	

DRAFT

Spring 2014 Meeting-Mid Atlantic Panel on Aquatic Invasive Species Day #1, June 25, 2014 Annapolis, MD

Participants:

Sarah Whitney, Chair, PA Sea Grant Steve Minkkinen, Vice Chair, FWS Hannah Martin, Staff Laura Norcutt, FWS Jonathan McKnight, MDNR Marian Norris, NPS Jay Killian, MDNR Mike Allen, MD Sea Grant

Fredrika Moser, MD Sea Grant

Gloria Putnam, NC Sea Grant

Edna Stetzar, DENRC

Susan Pasko, NOAA

Kali Bird, Cary Institute of Ecosystem Studies

Clarence Fullard, NOAA Fisheries

Erin Weels, NPS Intern

Ashley Palmer, NPS intern

Ray Fernald, VDGIF

Camille Scott, NIFA, Michigan State University

Bob Morgan, PA FBC

Parker Damm, NPS Intern

Stas Burgiel, ISAC

Amy Stauffer, Western PA Conservancy

Action Items:

- Norcutt will find out which appropriations committee is responsible for ANSTF and panel funding in order to encourage constituents to send letters of support in order to increase/maintain panel budgets
- Elect new chair of MAP.
- Inform Norcutt about which federal partners you need filled to complete Federal representation on MAP membership
- Work with McKnight and Fernald for recommendation support continued nutria eradication for ANSTF
- Send Norris' NPS document to MAP membership
- Whitney write letter to awardees for grant funding with money allocation and submit revised scope of work and suggestions
- Identify options for web update
- Pathway link report send out
- Whitney follow up with Fernald about dates to host next meeting in VA.

- Martin will send out doodle for dates for next meeting
- Martin will send out pathways guidance and link to interactive version to group.
- Comments due by June 30th for pathways report, Sept 5 for climate change
- Reminder to states that aren't here assigning info to field guide

Decisions:

- Fall Meeting Minutes, Approved
- McKnight will run new election process of new Chair for MAP.

Minutes:

Whitney called the meeting at 9:30 AM.

Whitney reviewed the Fall 2013 MAP Meeting Minutes. The panel approved the minutes.

<u>Discussion:</u> None.

Whitney reviewed the Fall 2013 Meeting Action Items

Discussion:

- A MAP listserv was created by Mike Allen. Anyone can post to the listserv and if you want to be added, contact Allen.
- MD invasive species council, Kerrie Kyde stepping down as representative, new representative is Jay Killian.
- January/Feb letter sent to ANSTF about how MAP uses budget funds. This was part of Taskforce request in response to internal budget cuts and sequestration. ANSTF reduced panel funds from \$50K to \$40K and wants to prevent any further reductions.
 - ANSTF meeting—FWS representatives talked about finances. Heard about the value of the panels but cannot raise back up to \$50K and working hard to keep budget at \$40K due to a tight budget.
 - What committee oversees budget for DOI? Natural Resources and Environment?
 Taskforce and panels could encourage constituents to send letter to appropriations committee. Action: Norcutt will find out what the appropriations committee
- New MAPAIS RFP sent out, received 13 proposals
- Still can't update panel website, looking at different options to be able to update/edit website.
- Whitney stepping down as chair, looking for new chair of the panel
 - Need to look through SOP for the process of electing new chair
 - Gather nominations and run election process, McKnight volunteered to run the election (Decision)

1. Funded Projects Update (Allen)

- a. Currently, there are 7 projects in some state of funding provided by MAPAIS small grants competition—2 completed projects (Didymo conference, VPI nutria project).
- b. The WV strategic plan in final form and waiting for final approval and then will be released for public comment and submitted to ANSTF for review.
- c. The Education project results submitted by Britt Slattery, MD have been presented at different forums and they also held a professional development workshop. They have lesson plans being reviewed by MD State Department of Education before they will be delivered in final form.

- d. Jason Smith, Hanover Engineering PA, has been working on mapping on small scale in community and creating a Mobile App to track invasives. Recently, they hired a technician to run the beta tests.
- e. Steve Keller is working on eDNA to track invasive Didymo. He worked with the Maryland Biological Stream Survey to sample 78 sites in MD and PA. To date, they have done DNA optimization for extraction and determined the assay works well. They also tested 46 samples for eDNA and found 3 positive sites and 43 negative.
- f. No moneys forfeited as of yet.
- g. 2 projects should end this summer.
- h. <u>Discussion:</u>
 - i. Moser: Do we know more about the beta testing with the mobile app?
 - 1. Working on that this summer with local township and have hired one person to do the beta testing.
 - ii. Whitney: Will most of these grants end next summer?
 - 1. Two will end summer 2014, one Dec 2014 and two will end summer 2015.
 - iii. McKnight: There was a publication about 5 months ago with article claimed that Didymo was native and that the ecological system changed which caused a change in the nature of the species. This small grant that MAPAIS funded using eDNA to track Didymo was extremely useful to cast doubt on that study because didymo is not found throughout the landscape.
 - Morgan: we have information from PA that does not support that study as well. We can only find Didymo historically in upper DE watershed. No natural occurrences in PA and it's spreading throughout the state. The study may be correct for Northwest US and Canada, but that does not support the Northeastern United States. A survey in 2009 in Pine Creek Pa. did not find any didymo, but now it is found there.
 - 2. Norris: We have an intern at NPS working on this, other research from 2009-2010 that find silica cells for Didymo, so you wouldn't find the eDNA in some locations. Historically, based on markers in soil samples, Didymo was there at some point. We suggest to not change message of hygiene to anglers and others using the resources because other invasives can be carried. Don't change message for hygiene, but broaden the rationale for hygiene while we find out more about Didymo. Our intern's work is hoping to create management plans for National Parks.
 - 3. Morgan: This is an excellent way to look at it because we can't reduce efforts on biosecurity protocols. There are other invaders to be concerned about. In regards to the article, it is irresponsible to do blanket statement toward whole North American continent. I would support a letter from this organization to clarify stance on this region.

2. Aquatic Nuisance Species Task Force Update (Norcutt)

- a. ANSTF Meeting: Nov 5 and 6th with an All Panel meeting held before the two day task force meeting (on November 4).
- b. Susan Mangin has retired, and Laura Norcutt will be the acting secretary for a little longer. Don MacLean will fill in after her.
- c. Proposed agenda for this meeting: lionfish plan will be up for approval, state management plans, EPA is proposing eDNA clearinghouse to have info where people can learn about a standard protocol; they are proposing that clearinghouse be hosted on ANSTF website
- d. Updates at the meeting: Zebra mussel action plan project and funding, Western Regional Panel will provide update on attorney general law enforcement AIS plan, boat design issues and consideration of AIS, summit Sept 9-10, 2014 at Lake Minnetonka Minnesota - American boating and yachting council summit with engineers and biologists to talk about problems and issues with possible solutions through boat designs
- e. Summary of May meeting: draft minutes out for review
 - Panels had issues finding federal members, Action: let Norcutt know what federal parts you need filled to complete Federal representation on MAP membership
- f. Outreach Committee of the ANSTF—now that recreational guidelines and water garden and classroom guidelines are posted online, we asked the committee to start working on outreach on these guidelines. Also working on Habittatitude and Stop Aquatic Hitchhikers. Elizabeth Brown (CO) and Doug Jensen (MNSG) will co-chair the committee.
- g. National Invasive Awareness Week, Feb-March 2015.
- h. Task Force Report to Congress. Working on getting report pulled together and Susan Pasko is heading that effort.
 - Completed data calls for information. We haven't put together a report to Congress since 2004. Represent federal level, task force level, and state plan level.
 - ii. All panels have responded to data calls. Federal agencies are still working on that.
 - iii. Once we get draft together we will send around for comments. Suggestions, comments, open to suggestions.
 - iv. May 19th email from Norcutt for the data call and review.

i. <u>Discussion:</u>

- i. Moser: how long are you going to wait for the feds to respond?
 - Prepared to take what we have and use as key examples and have greater focus on the panels of the task force. Want to highlight good things but want to point out what is not going on due to funding and budget cuts. What we need from congress is to build on a national level.

3. Update on Teacher Training Course on Hudson River Invasives (Bird)

a. MAPAIS funded this project in 2013 (\$13,500). Kali Bird, from the Cary Institute, provided the project update.

- b. Update summary: The Hudson River watershed drains 5 states, and is one of the most invaded places in the nation which creates a challenging area to work. The Cary Institute created and implemented a graduate course for teachers in order to train teachers so that they will train their students and continue the spread of knowledge. This was a blended course with 2.5 days in the field and weekly online coursework. Teachers that participated had the option to receive professional development (PD) hours or credit. NY has an incentive program for teachers to earn more money when they get PD hours and credit.
- **c.** Only 1/3 participated in online portion.
- d. The lessons were based on basic local ecology. The teachers were able to practice seining, catching fish, and identifying native and invasive plant and animal species. The students excelled in these hands on evaluations. After following up with the teachers, many have implemented management practices on school properties or have plans to do so within next year. NY is implementing a new species list that will impact nurseries and teachers. This new list impacts what is sold, restrictions, transport, and disposal of these species. For example, teachers cannot bring rusty crayfish from their backyard stream to school without a permit.
- **e.** Future plans: Will provide some of this information during a 2014 week-long summer institute. Materials developed, thankful for the fall course to help plan. Offering a public IS walk in July as part of New York's invasive species awareness week.
- **f.** It is a challenge to incentivize the teachers to participate. We are hoping to develop a new incentive program rather than monetary compensation.

g. <u>Discussion:</u>

- i. McKnight: nice to see you got a report and you have feedback built in as well as next steps. Credit and PD credits, how hard was it to establish that component and make it official?
 - 1. Done this in the past with another university, so we had everything in place. However, some people were difficult because it was hard to get them to respond. Frustrating for teachers as well as program people. Some courses, teachers want that college credit. They like having the option. Having the option for PD hours because of NY incentive program is nice. Younger teachers have more to gain by doing PD hours. State by state, incentive programs would matter. NY State is nice to have the option for college credit or PD hours.
- **ii.** Fernald: Starting next year, VA Tech will be the first university in country to offer BA in water resources and management. It will be a public policy degree in water resources. The materials developed through this project might be an appropriate pathway to get invasive species into an undergrad degree program.
- iii. Norcutt: trying to put together ANSTF outreach committee. I think this whole idea and participation would be good to train teachers. Good for outreach committee.
 - **1.** Improved guidelines for our teachers for species to use in classrooms. Interested in the classroom guidance.

- **iv.** The Cary Institute is working to come up with a lot of ideas to incentivize teachers and older teachers. Aiming to have less of a "pay for" model, smaller incentives within the programs and to have cohort idea. Way to label a group rewards program. Collegial collaboration to continue education.
- **v.** Moser: have you evaluated how they are using in schools, applied to curriculum standard requirements, etc? What are the invasive species the teachers identify and how do they make connection between aquatic environment and then to terrestrial environment?
 - 1. This was designed as a pilot course of blended course (fieldwork and online), and we structured it in order to see how it goes. Pre and post surveys, did they learn what we hoped they would learn? We aren't completely sure because we have not defined metrics for evaluation.
 - **2.** Covered purple loostrife, phragmites, emergent vegetation and native species. Fish-rudd, weatherfish. Watershed approach-terrestrial actions have impacts on aquatic environment and ecosystem.

4. Member/Interested Parties Update

- a. Edna Stetzar, DE—no new invasives documented, however DE is not proactive about going out and looking for them. We have a snakehead population in Millpond because it was stocked before regulation was instituted (man bragged about stocking). Also found some snakeheads in stormwater ponds and ponds in general area. In DE if you're caught, its only \$25 fine. We have Blue catfish documented but no Didymo. We have DE Invasive Species Council that has an annual meeting, and website. Funded signage for Stop Aquatic Hitchhikers in one watershed but we don't have a lot of the signs in boat ramp areas.
- b. Ray Fernald, VA—focusing on nutria with interagency-adopted strategy to deal with nutria by containing in southeast VA and keep it from spreading. The major issue is getting North Carolina onboard to help. NC reps are coming to meetings and supportive but not providing staffing or money. Feral hogs are also playing a huge role in VA for invasives. We are still working with snakeheads and others but there is nothing new. New governor as of last year and new secretary of natural resources. Invasive species not supported over the years but have yet to see what new secretary will do.
- c. Bob Morgan, PA—PFBC is getting more reports on aquatic plants than animals through their online reporting form. New Zealand mud snail—PA is only place on Atlantic that has it so far. Just finished first sample of the spring with one intern who counted one sample, 1 sq ft of benthic sampling at epicenter. Last year we saw about 1,000 per sq meter this count was 20-22,000 per sq meter. Need to make sure the count is verified. This is a heavy trout fishing area and people come everywhere over the world. We have the stream heavily covered in signs and local Trout Unlimited organization is spreading the word. Stream miles affected about 4-7 stream miles but not done in depth survey of spring creek this year yet. Developed generic AIS poster with help from PA Sea Grant, and they are going out. 4,000 printed. Distributed to law enforcement regions that are responsible for posting waterways and we are developing priority waterways list.

- **d.** <u>Camille Scott, NIFA, Michigan State University</u>—Studying sea lamprey genomics at Michigan State University. Working to compile data into useful database for researchers.
- e. <u>Jonathan McKnight, MD</u>—MD has been working to control nutria with a very successful elimination from Blackwater NWR. Nutria are now in a very restricted section of lower eastern shore. Now would like to see the APHIS team move to VA to work on the nutria issue there with the technology they developed. As close as we are to eradication, we are starting to see FWS refuge throttle contributions to the program and in result threatening the program. Would like word to go back to task force to spread the message that continual pull away funds from that effort will threaten this program and is of great concern to the team dedicated to eradicate nutria.
 - i. Norcutt: Would a recommendation to the Task Force be helpful? Yes. Fall meeting recommendation to the taskforce. Draft letter.
 - ii. Highlight to taskforce that it is potential successful huge win. Ask federal partners to push forward and make sure we carry it through rather than pulling out support and risking complete relapse. Delmarva is main piece but adding VA program to this, it is under development and North Carolina. This group funded initiatives, interagency team set up in southeast VA to deal with this.
 - iii. Action: McKnight work with Whitney to develop recommendation for ANSTF meeting
- Marian Norris, NPS: USGS Leetown Science Center is looking at Didymo at national parks In the Potomac River and Delaware River watershed. They are doing genetics research but not eDNA and have collected samples but don't have preliminary results yet. Their community study is looking at Didymo and the other diatom algal species that is occurring. Catoctin NP is a big location for Didymo and there is concern in the National Capital Region. It appears Didymo historically occurred upper Delaware River, but not in Big Hunting Creek. Ashley Palmer (NPS intern) is working on summarizing existing literature on Didymo to make recommendations to managers in National Parks. Our focus has been on notifying public that it is an issue, restricting access to places where it occurs, making sure people practicing proper hygiene. NPS does water monitoring and is incorporated hygiene in monitoring protocols. Trying to make sure we aren't moving these around and informing public, and where applicable, encouraging state regulations. NPS is not a regulatory agency and enforcement of state regulations is limited. NPS is supposed to be doing a detailed inventory of fish in Rock Creek (related to snakehead management) but have had contracting issues. We know we have other AIS in other waters within VA to NY but we don't have active control. The Pierce Mill Dam Fishway, paid by SHA as habitat mitigation, has the potential of passing snakeheads so will be closing it seasonally. National Capitol Region Exotic Plant Management Team is expanding into aquatic plant control/eradication.

g. Intern Update

- i. Erin Wells, UMD Baltimore Co., working on invasive aquatic plants, Brazilian waterweed
- **ii.** Ashley Palmer, George Mason University, AIS, Didymo and Snakehead. Find out when the breeding seasons of snakehead to determine when to use fish ladders.

iii. Parker Damm, UMD Baltimore Co., baseline water quality compilation in Northern DE, New Castle County. Park was formed in 2013 and want to put together guidelines of what we want to know about the park and what we already know.

5. 2014 MAP Grants Competition

- a. Received 13 grant proposals for a total requested funds: \$242,884
- b. \$34,000 to fund this year's grant competition
- c. Thanks to Jonathan McKnight and Hannah Martin for coordinating the review process. Each proposal was reviewed by 3 volunteer reviewers from the MAP membership. After the review process ended, the proposals were ranked based on overall score. The meeting participants reviewed the reviews and decided to fund the following grants (and give PIs feedback/comments when revising budgets).

PI	Requested	Map Awarded	Comments
Otts	\$10,000	\$7,000	Possible to look for leveraging from sea grants in the
			region. Action: Moser will contact Otts about this.
			Whitney keep Moser in the loop with emails.
			Is there an association that could represent
			landowners and be involved in the process? Action:
			Moser to put that concern into conversation when
			talking about funding.
			\$2K from sea grant, minus \$1K for traveling to our
			panel
Stahlman	\$30,614	Award Phase I	A lot of interest in the project, especially if it is a MAP
		Funding of	branded project. Fund time to put together in
		\$15,000	printable pdf form with MAPAIS logo. Then coming
			back for funds for production and printing once
			development phase is complete.
			2 year commitment to develop the pdf.
			Action: states from this panel will agree to get in
			contact with PA Sea Grant for state support.
Levri	\$15,543	\$12,000	Strong suggestion to coordinate with PAFBC or
			whoever is doing sampling work. Coordinate with Bob
			Morgan.

Action: Whitney will write letter to awardees asking if they will accept revised budgets, answer questions/address suggestions, and submit revised scopes of work.

Remaining MAP funding will be used as follows: \$2000 to MDSG as an administration fee for managing the grants. \$2000 for travel by Chair/staff to ANSTF meetings \$1000 for Panel meeting materials.

1. National Invasive Species Council's Pathway MGMT Plan Guidance (Stas Burgiel)

- a. Last meeting provided update on pathways and climate work documents out for review
- b. Action: Comments and input due by June 30. Looking for in terms of comments, broader framework and within the diagrams itself.
- c. Interested in priority pathways of concern of the regional panels (ex: MAP bait vector or fracking)
- d. Bioinvasions in a changing world: a mgmt. resource on invasive species-climate change interactions
- e. An ad hoc working group was formed 2 years ago with about 40 participants and was made up of representatives from federal, state, academia and industry.
 - i. EPA was involved and built upon the EOA invasive and climate change report developed years ago
 - ii. Would be interested from MAP about priority pathways.

2. Bait Vector Project Update (Fredrika Moser)

- a. Science and social science research done and will be taking next steps discussions with state agencies. The summer 2013 was spent talking to dealers (sources) and they said the issue is the alga packing material. They discovered if you did shock of salt water or freshwater and then packaged, the bloodworms survive and huge reduction (over 90%) of species on alga. The dealers said that's too big of an expense. Europeans that get the worms (distributors), don't like alga so they use vermiculite. Dealers feel as though the distributors drive how the material is packed. The distributors aren't regulated. Dealers will not change unless distributors ask for a change OR if they are regulated. To get distributors to ask for the change, you need the large group of bait shops or anglers to come together and send the message to the distributors.
- b. Summer and Fall 2014—small pilot with few bait shops in some of the states. Put together brochure and stickers, summary of study, website that gives more detail about the project. Go to three bait shops this summer and start dialogue with bait shop owners about how they can be effective as "opinion leaders" about what anglers want out of their bait product. Ask the bait shops to distribute the materials to their anglers and spread the concern about the packing materials. After the season is over, go back to bait shop owners and ask how many materials were given away and then there will be a survey for the bait shop owner. "rate your favorite packing material". Semi quantitative but mostly qualitative.
 - i. Whitney: One question to ask, "who is your distributor?"
 - 1. "Where do you get your bloodworms". Fill in blank who the specifics are
 - ii. Killian: considering asking the bait shops to sell some of the blood worms in vermiculite. Everyone always gets in alga, they don't know anything else. What would be the consumer attitude to see bloodworms packaged in different materials?
 - iii. So what do we do management wise now? The research is complete, however the vector management economics still have to be done.

- 1. Pasko—have you documented any successful introductions?
 - a. West Coast, one of the invertebrates was a Maine algae vector
- 2. Pasko—risk assessments made on any of the species identified in the algae?
 - a. No, except for invasion on west coast. SERC guys looked at that closely, we haven't identified any species in main algae that necessarily are currently are a species of concern.
- 3. McKnight—do you think there's a chance by using bait shops that are friendly to this concept, you will find an atypical result?
 - a. Extension agents will have a challenge, but yes I agree. Question is it's not a regulation thing, the framing is protecting your fishing waters. Surveys show that they care about health of waterways for their fish.
 - b. Mcknight will send Moser info about his bait shop

3. Member updates

- a. <u>Steve Minkkinen, FWS</u>: Mainly working with snakehead in MD and VA. Tagging in several Potomac tributaries to come up with population estimate with the plan to monitor afterwards. Also, looking to find out how quickly they recolonize.
- b. Susan Pasko, NOAA: NOAA is working on a variety of projects, however not all have Mid-Atlantic focus. 1. Lionfish, highest priority species. Maintain robust research and outreach programs. Developed lionfish management plan and sent out for comments and will be brought to ANSTF at the meeting this fall. 2. Sanctuaries, California, prohibit species intro on state waters like federal rules. Aquaculture industry. 3. Tunicate workshop, bring together main players and experts on tunicates. Seattle, Aug 6 and 7th 2014. Come up with coordinated response and management options. 4. Catfish, Blue and Flathead in Chesapeake Bay. Working with invasive catfish task force to put forward options. 5. Headquarters is working on habitat blueprint to identify focused areas in order to concentrate efforts and resources. Choptank is the focus area on the East coast. 6. National invasive species, focusing on updating the management plan that expired in 2013. New revisions will focus on next 5 years. Focus area on the plan that focuses on regional efforts. 7. HACCP program, streamline materials, manual, lesson plans and develop a train the trainer course. 8. FWS to develop review incentive programs, broad review of the issues. Considerations of each of these programs. Recommendations as well before you develop or implement programs. Publication coming out soon. 9. Unofficially July is Invasive Species awareness month. Plan to highlight within agency to spread awareness of IS issues. Snakehead, catfish. Asian tiger shrimp. Talks, webinars, web links
- c. <u>Gloria Putnam, North Carolina Sea Grant</u>: NC needs to increase awareness on invasive species. In the works of developing a North Carolina invasive species management plan. Working on hydrilla management. There will be a survey in fall and get citizen involved to find out where hydrilla is. Working on video as well.
- d. <u>Jay Killian, MDNR</u>: process of updating crayfish regulations—aiming to ban possession of live crayfish in the state. Just started the scoping process and introduce the concept.

- Next step would be to draft regulation and have in place by Jan 2015. Working out legal side beyond bait scale.
- e. <u>Sarah Whitney, PA Sea Grant</u>: Have Habitattitude magnet and bookmark (part of project with Great Lakes Sea Grant Network), targeted to water gardeners, pet owners, and aquarium owners, to send the message not to release your pets/animals. Working with Wisconsin Sea Grant to educate tournament participants and organizers about how to do boat washing and cleaning your gear. Boat wash at end of the tournament for fundraiser.

4. Next meeting

- a. Fernald agreed to host in VA
- b. End of Nov, send out doodle.
- c. Fernald-VA species issues, nutria and feral hog in southeast VA or south central. Northern would be snakeheads. Most significant unless you want to talk crayfish (western VA). Some sort of field even that would cover feral hogs and nutria. Figure out what field staff would be able to do this.