



Mid-Atlantic Regional Panel on Aquatic Nuisances Species

Mid-Atlantic Regional Panel Meeting Minutes – 9/7/05 to 9/8/05
Cacapon State Park, Berkeley Springs, West Virginia

In attendance:

Name	Affiliation	Phone/ E-mail
Julie Thompson	US Fish and Wildlife	410-573-4517/Julie_thompson@fws.gov
Jim Cummins	ICPRB	301-984-1908x106/jcummins@icprb.org
Jim Hedrick	WV DNR	304-637-0245x2010/jimhedrick@wvdnr.gov
Brent McCloskey	CRC / CBPO	410-267-9830/mccloskey.brent@epa.gov
Fred Kern	NOAA/NOS	410-226-5193/fred.kern@noaa.gov
David Heicher	Susquehanna River Basin Co.	dheicher@srbc.net
Tom Smith	VA DCR	804-786-4554/tom.smith@dr.virginia.gov
Melanie Wertz	PA DEP	717-772-5647/mwertz@state.pa.us
Fredrika Moser	MD Sea Grant	301-403-4220x16/moser@mdsg.umd.edu
Cathy Martin	DE Fish and Wildlife	302-653-2887/Catherine.martin@state.de.us
Paul Fofonoff	Smithsonian En. Research Ctr.	fofonoffp@si.edu
Jim Grazio	PA DEP	814-332-6845/jagrazio@state.pa.us
Tim Sinnot	NY DEC	518-402-8970/txsinnot@gw.dec.state.ny.us
Sarah Whitney	PA Sea Grant	215-806-0894/swhitney@psu.edu
John Wright	Army Corp of Engineers	718-765-7062/john.s.wright@usace.army.mil
Roger Mann	VIMS	804-684-7360/rmann@vims.edu
Bob Tichenor	MD Invasive Species Council	410-841-5835/tichenrh@mda.state.md.us
Jim Bean	BASF	901-496-2443/beanj@basf.com
Jonathon McKnight	MD DNR	410-260-8539/jmcknight@dnr.state.md.us
Ann Faulds	PA Sea Grant	215-806-0894/afaulds@psu.edu
Greg Ruiz	Smithsonian En. Research Ctr.	443-482-2227/ruizg@si.edu
Steve Minkinen	US FWS	410-573-4506/steve_minkinen@fws.gov
Chuck O'Neill	NY Sea Grant	585-395-2638/cro4@cornell.edu
Barnaby Watten	USGS	304-724-4400/Bwatten@usgs.gov

I. Welcome and Introductions – September 7, 2005 (DAY 1)

Julie Thompson, Panel Coordinator welcomed all the Panel participants to the second Mid-Atlantic Regional Panel meeting. She stated that she thought this would be an informative and productive Panel meeting. She cited three things that she wanted to see accomplished during the meeting:

1. Nominate chair and vice-chair
2. Develop an annual workplan for each working group
3. Propose and vote on Panel projects for funding.

Next, introductions of Panel members and participants occurred.

II. Review and Approval of Agenda

The Panel Coordinator mentioned that the only change to the agenda was that the ANSTF was unable to send a representative to provide an update during the 3:45 time slot on the first day of the meeting. She noted that she would be giving a short update for the Task Force and that the Panel could use the remaining time to talk about NOAA Rapid

Response funding. The Coordinator gave everyone a few minutes to review and comment on the agenda. There were no comments from the Panel participants.

Secondary Comments: Comments were brought up regarding the name issue between “nuisance species” and “invasive species.” To be consistent with NANPCA, ANSTF uses the term “nuisance” instead of “invasive.” The regional panel preferred the term “invasive” because native species can be considered “nuisance” species. Julie Thompson will ask the Task Force if the Panel is allowed to use the term “invasive” instead of “nuisance”.

III. Panel Business

The Panel used the entire time slot to review and make changes to the Panel’s Standard Operating Procedures (SOP).

Review and Discussion of SOPs: Julie Thompson drafted a SOP document for MARP which was sent out to the Executive Committee and to the Panel as a whole for comments. Comments were received and incorporated into an updated document from the initial review period. Julie expressed that she wanted further comments at this meeting so that the SOP document could be finalized before the meeting formally adjourned on September 8. Each section of the SOP was broken out and discussed.

The Panel Coordinator announced that the next two talks would focus on ballast water, which is an important pathway for introduction of aquatic nuisance species in the Mid-Atlantic region. Thompson stated that she thought this was a vector that the Panel needs to think about more with respect to Panel priorities and also in developing state management plans.

IV. International and National Ballast Water Standards

Dr. Roger Mann, from the Virginia Institute of Marine Science, gave a talk entitled, “International and National Ballast Water Standards”. The presentation can be viewed on the MARP website under “Current Projects and Information” (<http://www.chesapeakebay.net/marp.htm>)

Mann spoke about standards being developed by the IMO and ballast water treatment requirements described in Senate Bill 363 “Ballast Water Management Act of 2005”. The proposed US standards are more stringent than IMO, by 2 orders of magnitude (1 [this bill]; 100 [IMO]). IMO and SB 363 both target the same organisms but standards need to have better agreement with numbers. This is a first US bill attempt at setting standards. You need standards so that treatment technologies can be developed. Mann explained where ballast water standards stand currently, problems associated with ballast water, and options to reduce the impacts when receiving ballast water. There are several techniques such as dilution as a solution, ballast water exchange, and treatment and reduction or elimination. The IMO’s intention is to phase into technology based water cleansing instead of just doing ordinary ballast water exchange. Dr. Mann encourages members of the MARP to make states aware of this bill and trying to achieve continuity between states and a national standard. Need a compromise across the US so as not to disrupt trade and agreed to shipping standards consistent across the US. West coast has set a precedent in setting higher standards that ships have to meet.

V. Transfer of Organisms by Ships Ballast Water: Past, Present, and Future

Dr. Greg Ruiz, from Smithsonian Environmental Research Center, gave a talk entitled, “Transfer of Organisms by Ships’ Ballast Water: Past, Present, and Future.” The presentation can be viewed on the MARP website.

Over time there has been a substantial increase in detected invasions on the coast. Shipping is a major vector for invasions of AIS. Trade is a driver with more shipments; things are moved faster with more source regions and recipient regions. There are 100,000 ship arrivals each year in the U.S. (100 million metric tons/year ballast water discharge, hull surface area: 335 million meters squared/year). Most ship arrivals are in the east coast (but that might not mean the most ballast water). SERC samples ballast water to see what organisms it contains. Of these samples, viruses and bacteria

seem to be most common per liter in concentration. Emptying and refilling a ballast water tank is very efficient at changing all the water; flow-through takes 3 exchanges to achieve the same water exchange. However, the exchange of water doesn't compare much with removal of zooplankton. Ballast water exchange will remove some organisms (about 1 order of magnitude better than no exchange or treatment), but still contains about 2 orders of magnitude larger than the IMO standard. Ruiz stated that only about 17% of ships that do water exchanges meet IMO standards. The problem we are faced with today is that we have no idea about propagule concentration and invasion success – so it is hard to set a standard when you don't really know what concentration of organisms you want to actually reduce the chance of invasions.

VI. Four Centuries of Biological Invasions in the Chesapeake Bay

Dr. Paul Fofonoff, from Smithsonian Environmental Research Center, gave a talk entitled, “Four Centuries of Biological Invasions in the Chesapeake Bay.” The presentation can be viewed on the MARP website.

Dr. Fofonoff discussed the who, when, where, and why of invasions of AIS in the Chesapeake Bay. He discussed the big SERC invasive database NEMESIS. With fouling plate surveys, they have found 16 Chesapeake Bay invaders however; new species are not necessarily established populations. 170 species have been introduced to the Chesapeake Bay region (121 regular residents, 49 “boundary residents”). There are 44 marine species (algae and inverts), 126 continental inverts, plants, fishes, other vertebrates. The number of invasions/year has increased in the last 50 years, primarily among invertebrates and algae (better analyses, probably also driven by shipping). Shipping vectors include hull fouling and ballast water discharge. Recent invaders in the Chesapeake Bay with potential impacts include: American eel parasite (*Anguilla crassus*), the rapa whelk (*Rapana venosa*), Spiny waterflea (*Daphnia lumholtzi*), tunicates (hull foulers), and phragmites insect herbivores. Invader impacts were not discussed much, but it was clear that they vary greatly in type and magnitude of their impact – hence a mixture of perceived costs and benefits. SERC thinks that focusing on vectors is a good first order approach rather than going after individual species. The vectors can capture multiple species.

VII. State Updates on ANS prevention, control, and outreach activities AND Federal Agency updates

Tom Smith of the Virginia Department of Conservation and Recreation was moved up in the agenda to give the Virginia state update because he had to leave the meeting early.

Two years ago the Virginia General Assembly established the Virginia Invasive Species Council made up of cabinet level folks. The Virginia Invasive Species Advisory Committee (a stakeholder group) functions below the Council. The first charge was to develop a Virginia State Management Plan. The plan is in draft form and will go to Council before Christmas. It is hoped that this plan can also go forward to the ANSTF because it covers both terrestrial and aquatic. The ANSTF will consider more comprehensive plans, IF the portion on aquatic invasives follows the ANSTF template for their State Management Plans.

Also, VA has a quarry (Millbrook Quarry) with zebra mussels. The zebra mussels have been there for two years. Virginia now has enough money to pay for eradication. Eradication will occur soon. Virginia now has legislation that allows the state to go forward on private land to implement control measures. Smith did not know the details about how the quarry is being treated and how it is being tracked for success. The contractor may have the responsibility to go back in and check to see if eradication was successful.

Action Item:

Suggest having Ray Fernald come to next Panel meeting to talk about the history of this program to eradicate the zebra mussel.

Virginia also has seaside mapping of Phragmites and is holding landowner workshops. They are also doing some spraying on the seaside as well as doing limited control on bay side.

VIII. Development and Implementation of an ANSTF State Management Plan

Tim Sinnot from the New York State Dept of Environmental Conservation (NYDEC) gave a talk entitled, “Development and Implementation of an ANSTF State Management Plan.” The presentation can be viewed on the MARP website.

The development of a New York state management plan was driven strongly by the zebra mussel invasion. In 1989, zebra mussels entered New York waters. In 1991, New York legislature passed a bill requiring NYDEC to write a state management plan. In 1993, they completed a draft ANS plan. In 1994, NY had the first plan to receive Federal Approval and received ANS Grant money. Then in 1998, ANSTF came up with plan guidelines so NY had to re-write their plan. Some of the most difficult obstacles with development and implementation of a state ANS plan are internal – conflicts among user groups, such as recreational fishers.

- **Who gets the money?** ANSTF says it goes to the “state”. So it is pretty flexible where the monies go. Usually the money goes to NYDEC.
- **How was the money spent?:** some went to education and outreach material; research (gave money to Cornell and they did research we wanted them to do); herbivorous insects; ANS Museum display; monitoring equipment; zebra mussel biocontrol; ANS Coordinator Activities; and Finger Lakes Monitoring Network.
- **What did the plan say?** The NY plan was tied to section 1204 of ANSTF legislation and had extensive review by stakeholder groups. The plan had four goals: Prevention, control, mitigation, and education. The plan had a very detailed implementation plan. Problems associated with plan development included: no staff to do the work; no support at Policy-maker level; lack of coordinated public support and interest; and Executive staff does not perceive ANS as a problem. In 1998, ANSTF told NY they had to re-write their plan to comply with the ANSTF guidance document (needed a species list and implementation table).

NY’s revised goal included: effective ANS program management, prevention, control, involve/engage public, promote/encourage research. The plan has been stalled until the legislatively mandated NY State Invasive Species Task Force (created in 2003) comes out with a report to the Governor in 2005. The draft report is out for public comment. Hopefully the Invasive Species Task Force report will engage policy makers and will be the key to a successful statewide ANS program. NY state legislature has now put \$1 million on the table for invasive eradication. With regard to getting an ANSTF state management plan approved you must closely follow the ANSTF guidelines. Tim suggested that all the effort should be in raising awareness of the policy level people. You must have the policy in place to have the money and support to flow. Chuck O’Neill is on the NY Task Force, it is not as sunny a scenario as Tim suggests. Chuck says that the process is being politicized and the NY Task Force has some influence but it may not move forward with a lame duck governor. However, the NY Task Force has established a system to be coordinated at the policy level. Also, NY Task Force specifies that there has to be designated staff. The question is whether anyone will act on the NY Task Force recommendations. The NY Task Force report is written simply, with case studies and instructions for the legislature. Their approach is great, but whether the report’s recommendations will be acted on is difficult to know. Minnesota has an excellent campaign on invasives and has legislative support. Minnesota’s invasives program is a combination of State DNR and Sea Grant. It is important to have policy buy-in by getting the constituents to pressure the legislature successfully.

Recommendation: MARP should evaluate what is being spent on aquatic nuisance species management (need an economic analysis, coupled with ecological – but focus on the \$). The Policy Working Group is trying to survey what is being spent by the state agencies on eradication efforts.

IX. Update from states on the status of their state management plans

- **West Virginia-Jim Hedrick**
West Virginia has no plan at this time, but has Fisheries support to develop a plan
- **Delaware-Catherine Martin**
Delaware has comprehensive invasives plan that was just signed off from the governor; does not have detailed species list or implementation table; will have the plan posted on the Delaware Invasive Species Council website;

pushing for state invasive species coordinator; the State has funds to implement the plan; Delaware had a workshop to develop the plan and different agencies paid for the workshop.

- **Pennsylvania-Sarah Whitney**
Pennsylvania will have a workshop at the end of October to discuss the framework for a state invasives plan. The plan will include terrestrial and aquatic. PA also is developing a plan for invasive species management on state lands.
- **Maryland-Jonathon McKnight**
Maryland has a series of ad hoc plans and is not planning on developing a state management plan. If Maryland was to pursue a plan it would be a comprehensive terrestrial and aquatic state plan. Bob Tichenor's committee (MISC) meets on an ad hoc and voluntary basis. The Council would be a good review committee, but can't designate the staff time.
- **North Carolina-Julie Thompson for Rob Emens**
North Carolina does not have a plan at this time but Rob will be convening a team to work on the plan.
- **NJ-Julie Thompson**
On February 27, 2004 Governor James E. Greevey signed Executive Order #97 mandating the formation of the New Jersey Invasive Species Council and requiring, among others, the development of a comprehensive management plan.

General discussion about the above plans:

MARP should reach out to the invasive species councils in each of the states to see how they are moving forward and what lessons were learned from their efforts to get policy "buy-in" on a state plan. Economics are tough but that needs to be addressed on some level to help motivate action at the policy level.

Comments/Suggestions:

- It was asked if the above plans help to deal with species specific invasions and what is the value of having the plan approved by ANSTF?
- Another comment was made that we should promote the states to develop a plan with or without ANSTF approval. The plans would provide a mechanism for the Panel to determine where there is common ground between the states. There may be a model that is better for the Panel than the ANSTF.
- The Panel should gather information about state approved management plans to see if there is a connection between the states in the Panel. The Panel should also invite a member of the Invasive Species Council from each state so there is communication between us and the Councils. We should provide some time at Regional Panel meetings for Invasive Species Council updates.

X. State and Federal Update on Aquatic Nuisance Species Prevention, Control, and Outreach Activities in the Mid-Atlantic Region

- **West Virginia-Jim Hedrick**
-West Virginia has concerns with the zebra mussel; concerned that the zebra mussel could be transferred to reservoirs through boating and fishing.
-Concerned about the snakehead
-As of last year, WV passed a bill on release and movement of aquatic organisms; there are exceptions such as trout but they still require a permit for stocking
-A lake used for cooling has been a concern for introduction of tropical fish; an oscar was caught by a fisherman
- **Maryland-Jonathon McKnight**
-Maryland has worked hard on nutria eradication (\$1 million/year); purple loosestrife- training volunteers and releasing predatory beetles; zebra mussel-prevention mode, focusing on outreach and trying to encourage PA to control; mute swans-control program; and Phragmites-state cost share program (50%), WHIP through USDA (75% cost share); Land owner incentive program-75% Fed cost share, includes invasive species control if affecting desirable native wildlife and plants.

-MD is working on regulating crayfish inputs to the bay as well as regulating Snakeheads. MD says that Snakehead's can't have a bounty, but have a hat giveaway for catching snakeheads and turning them in.

- **Delaware-Cathy Martin**

-Delaware has land owner incentive program, WHIP, and Phragmites cost share program available to control invasives.

-Delaware currently has an interactive invasive species tracking system on a USGS web site. They will also be putting it on the Delaware Invasive Species Council web page (<http://delawareinvasives.org>) to identify species.

-Delaware Sea Grant received a grant to conduct a workshop to educate teachers about invasive species. The DE Division Fish and Wildlife has a new program to document all aquatic vegetation in and around ponds. Results will be in a published report.

- **New Jersey-Julie Thompson**

-As part of Executive Order #97, the New Jersey Department of Environmental Protection established a policy regarding nonindigenous plants in NJ. The policy includes a list of non-native species that can't be put on state lands.

- **Pennsylvania-Melanie Wertz**

-There are zebra mussels in the Alleghany River that were introduced from NY. Great Lakes states are not interested in supporting the SB 363 because of "state's rights", lacking "no ballast on board", and a long timeline for compliance. The PA Invasive Species Council is moving forward. Their first meeting will be in October 2005.

There is state interest in doing surveys in the lakes to look at aquatic species, invasive and other wise, present in those systems – looking to use the TMDL legislation to get money to pay for surveys in the lakes.

Sarah Whitney stated:

-There will be an Invasive Species Management Plan workshop on October 26 and 27. She is looking for speakers. Also, Pennsylvania Sea Grant has a small grant to purchase watch cards for zebra mussels, quagga mussels and Northern snakeheads.

- **North Carolina-Julie Thompson for Barbara Doll**

-North Carolina has created a poster about invasives and a watch list.

-Beach kudzu is becoming a problem. It was planted for erosion control and is now spreading. It interferes with loggerheads nesting and crowds out native grasses. Barbara Doll will bring more information about it at the next MARP meeting.

- **USGS – Barnaby Watten**

-The Invasive species program is currently funded at \$10 million. The program deals with aquatic invertebrates and fish. Sharon Gross is the program manager and just put together a 5 year plan.

-There are various USGS offices in the region that are working on invasive species issues. Patuxent is doing research on nutria to look at the impacts of their grazing on marsh loss. Leetown Science Center is also doing work on nutria. They are developing microsatellite genetic markers to determine sources and sinks of nutria populations. They are also looking at control of fouling organisms using carbon dioxide at high pressure to acidify the water to drop pH or to strip oxygen to kill organisms. They received a patent on this process and will test it on ballast water. The USGS NC State Co-op Unit is optimizing electroshocking techniques to target snakehead and flathead catfish. Invasive species database.

- **Army Corps of Engineers-John Wright**

-The Corps is interested in coordinating with states to address invasive species on federal lands.

-The Corps of Engineers Norfolk and Baltimore Districts are working with the states of VA and MD to develop an Environmental Impact Statement for the introduction of *C. ariakensis* to the Chesapeake Bay.

-The Baltimore District is also involved with the nutria eradication project. The Waterways Experiment Station spends time working on invasive species and limited projects – in the thousands of dollars.

- **NOAA-Fred Kern**

-Research funds available from NMFS, NSGO, and Coastal Zone and are used to address invasive species.

-Lionfish issue looked at, also genotyping of invasive species.

-Oyster disease monies were funneled to *C. ariakensis* research. \$2 million spent so far. Some monies are with the NERRS program.

XI. Spotlight on Species: Northern Snakehead-Steve Minkinen

The presentation can be viewed on the MARP website.

Steve gave a quick overview of the known biology and ecology of the snakehead. He then talked about the first introduction in the Crofton Pond in Maryland and then went on to talk about their introduction in the Potomac River. Every time the Fish and Wildlife Service has sampled in the last several months they have been able to catch northern snakehead in the Potomac. Minkinen spoke of the need for experiments to learn about their movement and behavior to help assist with control efforts.

ADJOURNED – DAY 1 (Julie Thompson and Fredrika Moser adjourned the meeting for the day.)

Thursday September 8, 2005 (DAY 2)

I. Panel Business

Julie Thompson will send out an email with the meeting minutes within one month of a Panel meeting. She will request comments and incorporate those comments. After incorporating changes, the minutes will become final and posted on the web.

The Panel completed review of the Panel Standard Operating Procedures-Julie Thompson will incorporate changes, send out the revised SOPs for comments, revise and then send out for Panel approval via E-mail vote (see also Day 1 Panel Business).

II. Reports from Working Groups (yearly work plan and projects proposed for funding)

- **Policy Working group (Leader: Sarah Whitney)**
 - The group would like to do a survey of the states and interstate commissions to identify the regulatory and legal tools that states already utilize. This survey would outline the current status of policies, tools and how the jobs are being done within the states.
 - The survey would be emailed to each state
 - The goal is to work towards the development of action plans so that we can gain top level commitment to address invasive species issues
 - Possible development of a brochure or flyer explaining to state agencies what MARP is all about.
- **Education and Outreach Working Group (Leader: Ann Faulds)**
 - \$5K Penn State web site development
 - \$3-4K Brochure about panel /featuring ANS in region. (widget idea was shelved) (in-kind graphics support may be available from BASF)
 - Discussion of “Habitatititude” and “Stop Aquatic Hitchhikers” outreach campaigns. There are constraints with “branding” or “trademark” infringement. The Education and Outreach group is interested in endorsing them (need to see how we do this by speaking with Joe Starnichak and Marshall Myers). Jim Bean agreed to research this further.
 - Education and Outreach recommendations assembled from the Chesapeake Bay Program’s 6 invasive species management plans; will look to select 2 – 3 top priorities for this and compare with what other panels have done. This list will be assembled for the annual report for November 1, 2005.

- Logo contest – prize is a book basket. First put it out to the MARP crowd, if we get nothing, then we put it out to the other Regional Panels. The Education and Outreach Group will make the final decision on the logo. Also, discussed using the logo for letterhead and on other Taskgroup documents.
- Put together a directory for the web.
- Discussion of running a symposium on a relevant topic for the region. Also, consider running training for agencies and/or NGOs concerning invasive species. For example, HACCP training. We should have a presentation of this at the next meeting and consider as training.

- **Science and Management Working Group (*Leader: Jim Grazio*)**

Short term plans:

1. Survey to determine priority AIS in Panel states; what are their priorities? Where do they need funding? This will “piggyback” on the policy working group survey. Also, ask states what value MARP could bring to them.
2. Conduct a database review (e.g., USGS NISbase) of AIS occurrences and ranges within MARP boundaries.
3. Develop a “Who’s who” directory of state, federal, academic AIS contacts.
4. Review FWS National Snakehead Plan

Long term plans:

1. Assess capacity and coordinate Zebra mussel monitoring and rapid response among member states.
2. Identify and serve as a clearinghouse for research funding sources and control strategies.
3. Recommend research priorities and/or identify potential control approaches
4. Consider hosting a ballast water management workshop

Discussion (all working groups):

Ann Faulds suggested that we figure out a simple survey that covers key components of each working group and mail it to the membership. Sarah will mail out her draft of a survey and the other two working groups can add to it.

The Panel also discussed supporting USGS taxonomic expert’s database. The Panel will make a recommendation to the ANSTF in the annual report that they should support the USGS taxonomic expert’s database. The Panel would like to have a link from our web site to the USGS web site.

III. Discussion on Panel funding for proposed projects (Suggestions)

- The Panel should strive for consensus when choosing to fund a project
- If we put a RFP out this year to fund some projects, we need to make sure that the language is consistent with the goals of MARP; include a statement about NOAA wanting input on regional research priorities
- The Policy Working Group has nothing that is requiring panel funds; the workgroup does support the idea of a rapid response workshop.
- Discussion of money to support a zebra mussel prevention program.
- Discussion of starting a training program (HACCP or risk assessment)
- Suggest nurturing a relationship with NE Association of Fish and Wildlife Administrators and their SE division. They have passed a resolution wanting to work with the Panels. Their next meeting is in April. Have someone put together a talk about what the Panel is about, who belongs, short list of what our short and long-term goals. Put a poster or display together for the 14th International Aquatic Invasive Species Meeting.
- Look into research needs for individual species
- work with Invasive Species Councils to see if they have potential projects we would like to fund
- Had another discussion about trying to support something “on the ground” that has an impact.
- Discussion of using money to fund a small snakehead project (behavior/movement)

Proposals for project funding need to be put forward within the next 4 weeks.

- Agree to put \$5K forward to the Penn state web development for MARP.
- Agree to put \$4K forward to developing a brochure on MARP.
- Encourage finding small projects that we can make a big difference with. These need to possibly look at “orphan” species. Find something that needs support and would benefit. Find out from local watershed groups.

Nominations for Chair and Vice Chair

Chair: Fredrika Moser, Maryland Sea Grant

Vice-Chair: Jim Bean, BASF

Action: Julie Thompson will send out an e-mail announcement about the election.

Next Meeting: The next Panel meeting will be in North Carolina. The following locations within North Carolina were suggested: Fayetteville, Beaufort, and Raleigh-Durham. March 28, 29, 30 or April 4, 5 and 6 were mentioned as possibilities for meeting dates. Julie Thompson will call Barbara Doll and Rob Emens for suggestions. There was also a suggestion that we focus on an important invasive species issue in NC and take a field trip. We could schedule a mid-day trip and evening work session.