

**Maryland Invasive Species Council
 USDA National Agricultural Library
 Main Reading Room
 Beltsville, MD 20705
 Thursday March 21, 2013
 With Edits**

Call to order

Facilitator Dick Bean called the meeting to order at 9:30 am

Introductions

Dick Bean - MDA, PPWM	Marc Imlay - MNCPPC
Conor Bell - USFWS, CBFO	Wesley Knapp—MDNR, NHP
Carole Bergmann— M-NCPPC, Mont. Parks	Kerrie Kyde—MDNR, NHP
Joyce Bolton, USDA NAL	Jonathan McKnight - MDNR, NHP
Tim Culbreth - MDNR, Forest Service	Deborah Landau - TNC
Nevin Dawson - UMD Extension	Mary Kay Malinoski - UMD Extension
Anne Goodman—Rockville NSN	Bud Reaves - Anne Arundel County
Anne Hairston-Strang, MDNR, MFS	Sara Tangren - UMD Arboretum
Ruth Hanessian - MAPI	John Peter Thompson—MNLA
Jacob Holtz - MDNR, Fisheries	Mark Thurmond - USDA APHIS
Paul Ijams - USDA APHIS PPQ	Marek Topolski - MDNR, Fisheries
Alice Imlay - Sierra Club	Jim Young—USDA APHIS

Additions to the Agenda

None.

Approval of minutes from January 16, 2013 meeting

January minutes approved as amended. Kerrie requested that members take the time to review minutes sent out after meetings or with draft meeting agendas, as we will no longer provide printed copies at the meetings.

Memberships

Conor Bell -- requested membership. This is his first meeting attendance.
 Mark Thurmond -- membership approved.

Mary Kay Malinoski -- distributed list of email addresses currently on MISC website.
 Requested verification and changes from membership. Also working on cleaning up listserv email addresses

Officer Elections

Acting Facilitator Bean and Acting Recording Secretary Kyde both voted in.

Guest Presentation: Dr. Sara Tangren, UMD Arboretum

*Quantitative Assessment of Threats Endangering an S2 Wildflower in MD --
 Sundial Lupine*

Sundial lupine, *Lupinus perennis*, is a member of the Fabaceae, which are N-fixers; host plant of the endangered frosted elfin butterfly -- one population left in the state

Project was to relocate and inventory all documented populations of lupine, and identify and assess the threats to the plant/site, and take action to abate them. Stemmed from UMD's decision in 2008 to make the College Park campus an arboretum and to take on saving a rare plant.

- Inventory – difficult due to clumping habit; cannot separate plants without excavation. Populations vary in size from single clump to thousands of individuals; largest state population covers about one ac.
- Distribution linear, along rivers, ridges. Adapted to openings in forest canopy; so geographic boundaries or places where disturbance has removed canopy provide habitat; genetic interchange can occur between populations over 1000s of years, pollinated by bees
- Adaptations to eastern deciduous forest may not work any more due to development of Maryland forested land
- Habitat: talus, rock slides, steep slopes; in eastern MD, geologic feature of linear population tends to be a river or sand deposits; used to occur along the fall line but the last fall line pop was found on the BARC property years ago – succumbed to succession, turf, development
- Started with 23 records from DNR's Natural Heritage Program; Coordinated with landowners – every single landowner contacted about conservation on their properties signed up – amazing
- Categorized threats -- What constitutes a threat? Only tallied when so damaging that 1) it had already caused the loss of the pop, or 2) would cause the loss imminently (before 2020)
- In descending order from highest percentage of sites affected to lowest, threats were:
 - Forest succession
 - Seed sink (roadway or RR, or natural feature where seeds cannot survive
 - Minimum viable population – if pop <50 individuals
 - Mowing -- 40% of pops mowed, powerline, parks, along roads or in yards
 - Invasives – 33% of populations crowded by invasive plants, percent cover
 - Stem borers -- unknown moth species and a native beetle which was ID'd
 - Herbicide – landowners spraying to control EIP and in most cases didn't know
 - Slope – seeds disperse downhill; lupines need to be at the top of the slope
 - Grazing – primarily from deer, affecting 15% of populations
 - Development
- Almost every site had invasives but only some were directly interfering with the lupines. Japanese honeysuckle, cheat grass and sweet vernal grass most frequent
Coumarin in sweet vernal grass (*Anthoxanthum odoratum*) is allelopath – inhibits germination of many xeric meadow community, lupines may or may not be affected
Sheep sorrel, sericea lespedeza: these two may crowd or steal water from lupines especially a problem on powerlines
Vicia villosa or V cracca – hairy vetch and cow vetch; change the soil N and make the soil richer; provides more competition. N-fixing normally s a competitive advantage for lupines
Wisteria on one site where lupine suddenly ceased to be present in 2007. wisteria blooms at same time as lupines. Possible that pollinators were distracted

Soy bean rust—present in summer, through spores blown in on storms, cannot overwinter, but affects kudzu and other legumes like lupines during growing season

- Worked at three sites, spraying or pulling invasives, to save lupines
- Conclusions
 - 11 metapopulation in MD
 - 25% loss in 20 years
 - 33% (12) of lupine pops are severely impacted by invasives
 - New counts: 28 pops of adult lupines – of these, 6 were secure (22%) or in viable condition
 - 78%, (22) were in dramatic decline
 - 17 of these were secured by working with property owners to change management practices
 - 10 populations of dormant (seed) lupines
- 60% of our lupine pops were saved with an investment of ~\$85,000; need more “boots on the ground” to continue encouragement of landowners
- Sara Tangren -- working on an economic model based on USDA specialty crop model to estimate what it would take to save native plants in MD and to develop a sustainable industry. Draft model attached to minutes for comment. Need a local seed bank because we have no current seed bank to deposit; currently have access to MARSB Mid-Atlantic Residual Seed Bank (refrigerator space, but need freezer space)

Questions for Dr. Tangren

Carole Bergmann -- population in Montgomery County? ST – historically, not now; some were in Rock Creek Park; MNCPPA Montgomery is trying to maintain 10% of our park property in open land, and is completing natural resource management plans for each park with management techniques and proper timing in order to support RTE populations.

Anne H-S: Impacts of deer? ST: deer eat flowering stems; DNR Insect ecologist Jennifer Frye studied largest remaining pop, with frosted elfins; found that late April, when the caterpillars are eating the flowers and buds, is the same time that the deer target the flowers, so eggs and larvae are damaged as well as the plant

Wes Knapp: so why is deer browse such a low threat? ST: because the damage count was done on a population basis, not a plant basis. Four pop'ns were affected by deer, but not others.

John Peter Thompson: deer do the same thing with soybeans

Carole Bergmann: eat white turtlehead at time when Baltimore checkerspot larvae are feeding

City of Cambridge bamboo ordinance; issues related to internet sales of invasive species

Kerrie Kyde: briefed MISC on Cambridge, MD's proposed ordinance banning several running bamboo species from within 10' of property lines. The effort arose due to neighbor to neighbor conflict. John Peter Thompson had offered feedback on the ordinance based on his work with CT citizens. Wes Knapp ID'd the species from photographs (and more recently, fresh material) and confirmed that it was *Phyllostachys* and not the native *Arundinaria* as had been suggested by a landowner. A hearing on the ordinance will be held March 25.

Kerrie requested that MISC give some consideration to methods of preventing or reducing internet sales of invasive species into Maryland. We can control, through regulation or

legislation what is purchased in Maryland, but not what is sold outside state borders. The MD IPAC has discussed this in its assessment process.

Ruth Hanessian: Re internet sales, would tax required to be collected by the vendor and passed on to the state on goods that we didn't want coming in be prohibitive; bought rocks from Canada and there was inspection

Deborah Landau: internet sales are so hard to regulate

Marc Imlay: regulation of internet sales of EIP from other states; tax would be a disincentive and might reduce sales even if it didn't completely eliminate them

Dick Bean: IPAC will look at this

John Peter: The NISC IPAC is producing a white paper on this topic; production interrupted by sequestration cancellation of meetings. NISC's IPAC is working on a white paper on internet sales of all taxa of invasive spp, but it is not yet drafted. Craig's list is picking up business, trend is toward more individual sites rather than huge internet marketers. Ex: video on how to get the maximum # of bamboo rhizomes into a USPS box for the least shipping. Video was up and then disappeared; maybe APHIS customs and border patrol got to him

Wed Knapp: *Pleioblastus* – new bamboo genus in Maryland came through internet trade

JPT: Reported his experience working with CT:

- Instantaneous internet sale sites pop up and then are gone.
- CT Invasive Plants Council overwhelmed by bamboo concerns – CT definition of invasive plants includes only spread by seed, so rhizomatous species aren't by definition invasive; defined as a "managed area problem"
- Citizens mobilized to map naturally occurring patches using EDDMapS, CIPC held those patches must have spread from plantings.
- Homeowners wanted an all-species ban; nurserymen and farm bureau objected on taxonomic grounds; property owners began to appeal their property assessments for over half of value due to destruction by bamboos, to document economic impact.
- Several dozen municipalities in NJ, NY, CT, RI, PA are responding to lower property tax assessments by drafting ordinances requiring someone to control bamboo; looking to states for back-up.
- CT citizens looking for state-wide bill that creates liability: "If you can figure out how to contain it, fine, but if it comes on my property, you are responsible for paying to fix the problem."
- Case in CT Court of Appeals in which a neighbor sued her neighbor over bamboo damage to her property; insurance companies have tried to settle but are not offering what she wants – bamboo removal and her garden returned. Insurance company involvement significant because it could affect ability to insure a home and obtain a mortgage on infested properties.
- Bamboo growers are looking at alternative uses: biofuels, fiber, textiles, paper, following this very closely.
- Bugwood will be working on an ID key to tell the difference between running bamboos *P. aurea*, *P. aureasulcata* and *Pseudosasa japonica*.
- These local laws have major implications for noxious weed law and existing tools for controls. May set a precedent for ornamentals, assigning the liability to the invader-provider or planter. But none of these sorts of laws would be retroactive, so there will be grandfathered pops of EIP, and might require a registry. Baseline assessments and measurements necessary.

Invader of the Month

Tim Culbreth: snails are up right now, thanks to Dick; emerald ash borer update waiting in the wings;

Dick Bean: Kim Rice suggested updating the IOTM SOP to remove Bob Tichenor from the "send to" and specify that the pix must be attachments, not embedded. List is full for 2013.

Month	IOTM 2013	Author
January		
February		
March	<i>Cernuella cissalpina</i>	Dick Bean
April	Emerald ash borer update	Kim Rice
May	Zebra mussel update	Ron Klauda
June	Fire ants update	Kim Rice
July	Blue catfish	MD DNR
August	Ravenna grass	Jill Swearingen & John Peter Thompson
September	Verticillium wilt	Aaron Cook
October	Biological Controls	Marc Imlay
November	Oriental bittersweet update	Sylvan Kaufman
December	<i>Drosophila suzukii</i>	Stanton Gill

Agency Updates

FWS: Conor Bell: working on programs within WRP – Wetland Restoration Program -- for wisteria, WLBG, bamboo, autumn olive. Snakehead public participation is on the increase.. Wants to use weevils on MaM. On bamboo, uses foliar spray knockdown and then cuts and paints the new shoots In St. Mary’s County has situation in which a property owner adjacent to a WRP site has bamboo that he wants to keep.

USDA APHIS: Mark Thurmond: participated in the USBG Kids Day for NISAW, a dozen agencies represented, 1000 people came through in 2 hours; MDA there in brown marmorated stink bug costumes

Jim Young: reported on the Mid-Atlantic interceptions. Presented at ESA eastern branch meeting on pests changed to non-reportable status because they are well distributed in US. When they are reported in international cargo, nothing is done because they are established somewhere in the US.

Dick: APHIS is purging its list of reportable spp; soliciting input from the states, so Gaye Williams and the MDA plant disease specialist will have inputs.

Ruth: What does “hitchhiker” signify on the interceptions list? Jim: means it was found on non-consumable commodity like tile or wood.

Paul Ijams: Acting for Matt Travis; U.S. House just passed the Continuing Resolution

DNR: Jacob Holtz, Fisheries: bill in MD legislature to expand the fee for introducing EIS into MD to EACH OFFENSE, \$2500/offense; would allow distribution of reward to the reporter. Passed by House of Delegates today. Waiting for Senate action.

Atlantic Marine Fisheries Commission has asked MD to prohibit Asian horseshoe crabs (brought in as bait) due to the possibility of transporting pathogens unknown that may affect native horseshoe crabs.

Anne H-S, Forestry: Working with Natural Heritage to control EIP in biodiversity hotspots, using USFS funding; will be hiring two crews to do some ID and inventory and some treatment

In the process of hiring an EAB forester to finish and implement the state EAB plan. Needs new link to quarantine maps for federal and state EAB quarantines to include in state plan. Website link is not current.

Tim Culbreth, Forestry: MDA gearing up again for hemlock woolly adelgid treatment over 150 acres in Western Maryland; we are continuing Cunningham SP hemlocks plantings and monitoring the Coretex planted seedlings for resistance.

Jonathan McKnight, Natural Heritage Program: three years after introduction of *Geomyces destructans* into Maryland, three species of native bats will be listed as threatened – tricolored, little brown bat and northern long-eared bat

After review of harvest licenses and work with MDA, found that current take of ginseng is unsustainable, and will be forbidden on state lands.

University of Maryland: Mary Kay Malinoski, University of Maryland Extension: UMD is changing Extension website design and structure. All links and addresses will change. More to come; will keep MISC posted.

ID card set for forest pests that we produced two years ago -- got a three year grant to work with MAEDN to develop a phone app to ID and locate invasive pests, diseases for all platforms for Android and iPhones. Bugwood taking over the apps world for this sort of ID and reporting. UMD will develop a new card set with four additional pests and pathogens that will be national. National interest coming from companies who distribute them to their employees. Bugwood will have an intro page so that no matter where you are, you can get the right app for that area.

Nevin Dawson, UMD Extension: Planning an EAB meeting for municipal and county planners on May 7 in Howard County, with in-field demonstrations on control techniques.

Roundtable and New Business

Bud Reaves, Anne Arundel County: We have a new county executive

Sara Tangren, UMD Arboretum: working with NatureServe and Audubon Naturalist Society on legislation -- HB936 would create an expert group of plant conservationists and nurserymen and extractive industries, highway interests, systems theorists, sociologists, educators, etc. Task: look at native plant industry and current state of native plant conservation and chart a path forward, including financing such efforts. Bill is looking good to pass; will need a range of experts. Panel will be advising the governor on recommendations for enhancing law and actions, and methods of raising funds to implement the recommendations. Will also look at other states' efforts, and request their input.

Marc Imlay: really good use of POS funds

Sara: We want to make sure that DNR is not the only agency providing expertise, because there aren't very many of them.

Dick: Commend JPT on getting Steny Hoyer to read the NISAW and EIS statement into the Congressional Record.

JPT: Suggested to WSSA to organize an EIP information session on Capitol Hill. Is working with CABI on a global EIS list; Pitch for NAL – this is where you need to come when you need information on food, fiber, farming, pharmaceuticals, etc.

Marc Imlay, Sierra Club: focusing on restoring federal funding for host-specific biological controls, funding for USDA Ft. Detrick research and detection. Has a new invasive species listserv, to encourage them to get letters to their congressional reps. Some frustration in organizations to get volunteers out to do removals, so new committee will have a phone bank. Meghan Fellows hired by Carole Bergmann to run the Weed Warrior program.

Ruth Hanessian, MAPI: Continuing to hold Science Café—one coming up April 28; Concerned that there is such emphasis on STEM, but not enough biological focus. Please consider offering to do a Science Café. Anne H-S: take a look at the Science Olympiad for biological content, and the state Envirothon.

Anne Goodman, Rockville: Celebrated NISAW with a 19-person event weed removal at school property, collaboration between Rockville Weed Warriors and MNCPPC Weed Warriors. Rockville gave permission for volunteers to pull invasive plants at Croydon Creek Nature Center and to plant natives.

Dick Bean: Submitted President's Environmental Youth Award application for Jake Robinson; still under evaluation

Next Meeting: Seneca Creek State Park on May 16, 2013, 9:30 – noon. Ruth and Ann will do refreshments.

Adjourned: 12:20 pm

Respectfully submitted,
Recording Secretary Kerrie Kyde