

Maryland Invasive Species Council
December, 2 2004
USDA ARS
Beltsville MD

Call to Order: ~9:45 Bob Tichenor

Additions to the agenda

Introductions

Dick Bean, MDA

Carole Bergmann M-NCPPC

Carol Bordelon, USDA National Arboretum

Don Cober, MD SHA

Eric Duce, MD SHA

Anne Hairston-Strang MD DNR

Ruth Hanessian, MAPI

Lane Heimer, MDA

Carol Holko, MDA

Larry Hurley, Behnke Nurseries

Hyesuk Kong, USDA ARS

Kerrie Kyde, MD DNR

John Lydon, USDA ARS

Jonathan McKnight, MD DNR

Mary Kay Malinoski, MCE

Pete Rupp, MDA

Jil Swearingen, NPS

Sara Tangren, Chesapeake Native Nursery

AI Tasker, USDA APHIS

Sarah Tasker

Bob Tichenor, MDA

Bob Trumbule, MDA

Approval of Minutes - see notes,

Add attendees Pete Rupp, Lane Heimer

RIFA - change "potted" to "bare-root"

Snakehead - Change "*Channa* family" to "Channidae family", "Mandarin" to "Mandarin Chinese"

Approved as corrected.

Presentation: *The Potential Impact of our Changing Climate on Invasive Plants*, Dr. Lewis Ziska, Plant Physiologist, Crop System and Global Change Laboratory, USDA ARS

Questions raised by dissenters from CO₂ theory:

- Isn't the rate in rise of CO₂ really slow?- change from organic farm in Western Maryland to inner Baltimore City, increases in CO₂ and temperature
- Does the CO₂ gradient really affect weed biology?
 - organic farm, lambsquarter 6-8 ft. v. downtown Baltimore 10-12 ft.; ragweed pollen production higher in urban area
 - do plants acclimate (i.e has it occurred already?) No.
 - actual loss to invasive weeds - \$13 billion/year, 2300 acres/day (Bureau of Land Management figure)
 - experiment to show increase showed 3x response to recent CO₂ in total biomass at 54 DAS (days after sowing); plants with large below-ground sink show strong response to CO₂
- Something must regulate response to CO₂? - nitrogen does not appear to limit response
- Does CO₂ alter herbicides? - field grown Canada thistle shows strong root response to CO₂; extra C in roots diluted herbicide at future CO₂ levels.

Discussion:

- Is plant utilizing more N? Concentration of N in plant, i.e. total N in plant, doesn't seem to change.
- What to do to reduce rates of increase in CO₂? Nothing. Start to identify plants sensitive to CO₂ and plan ahead - biocontrol, other?
- Current levels v. historic? - 200-300 in past ½-1 million years; weeds have broader genetic base than crops - i.e. can adapt more effectively.

- Demise of small farmer due to weed control costs? invasive = successful? Weeds as crops?
Red rice more responsive to CO₂ - breed characteristics into cultivars
- Oceans are a carbon sink - colder holds more carbon
- House in Takoma Park - 95% renewable energy - Open House this weekend, ccan.org; 7205 Willow Park, 11-4.
- Need partnerships to address whole issues.
- How to elevate issue to awareness? Conflicting messages muddy the waters.
- Other issues, nutritional value of food due to CO₂.
- Phrase as national security issue?

Report on EDRA Workshop, Carol Holko

2-day workshop to support Sea Studios Foundation project Strange Days on Planet Earth, to air on National Geographic April 21, 27. Four topics, climate change, loss of top level predators, toxins in the water, invasive species. TV Special hosted by Ed Norton. Invasive species to move from awareness to action. Consortium of 18 "nodes", e.g. science centers, aquaria, zoos, botanical gardens, to distribute materials on invasive species (Maryland Science Center features MISC Invader of the Month display). Invasive Species Impact Initiative to develop and distribute a toolkit to engage Citizen Scientists in early detection and rapid assessment. Targeting metropolitan areas, increase participation of resource users and citizens.

Key points:

- EDRA? ED Reporting and Assessment,
- Need for conformity and centralization of everything: reporting, resources, protocols.
- List of criteria to be part of network
- National ID for program (e.g. Master Gardeners)
- Need a champion (e.g. Rachel Carson)
- Perpetuation issues - funding, partners
- Techno-Outreach - videogames, MTV video,...

PTI Proposal for Purple Loosestrife (PLS) - Kerrie Kyde

- NWF Pulling Together Initiative - to locate, map and control PLS in wetlands in MD using IVM, train and mobilize a public-private sector early detection and rapid response team; MISC is presented as overseer, capturing current activities, with vision as a formal, independent, fully-funded invasive species management area organization; needs approval by MISC. How to formalize is TBD.

Motion to support the proposal. Motion seconded and passed.

Comment to Kerrie, kkyde@dnr.state.md.us

Updates:

DNR - Jonathan McKnight, Kerrie Kyde

- Recently-passed Omnibus spending bill includes MBTRA; mute swan and 70+ non-native species lose protection under Act when signed.
- Nutria report on financial losses to Chesapeake Bay area projected through 50 years
- Bob Tichenor has submitted grant proposal to look for invasive plants on state lands; cooperation between DNR/MDA.

MDA - Dick Bean

- ALB removal in NJ quarantine on 10 sq. miles; 4000 trees (conservative estimate) to be removed. NOTE: 1. Industrial warehouse zone with imports from China, 2. 1st citizen detection resulted from news report. 3. Triage form to weed out negatives (suggestion from clever attendee - "tree-age").
- Soybean rust is in N. America

APHIS - Al Tasker

- Transportation Research Board, January 6 symposium to discuss pathways

- NWSSA Invasive Species Symposium in meeting week of Jan 3, Wednesday p.m.
- Docket for *Caulerpa* still open - need input on how to regulate non-traditional pathways.
- *Senecia inaequalis* - seeking emergency restrictions pending risk assessment and regulation
- 2 new species of pampas grass from Patagonia, could be more cold-tolerant.
- Omnibus budget - passed with 2 million, ½ million earmarked, 1 ½ mill for witchweed
- MOU on giant hogweed with NPB, MD is signer; USFS wants to be involved - signatures not required; MOU's emphasize regional unity.

Carole Bergmann

- Montgomery County wants to know why callery pear is not on list; Add to list? Add to list - will vote at next meeting.

Motion to vote on adding Callery pear to MISC list at next meeting. Motion seconded and passed.

Ruth Hanessian

- poster on northern snakehead, warning in Korean, Mandarin Chinese, Vietnamese.
- Discovery Channel - January 20, *White House Pets*.

Anne Hairston Strang

- Stream Releaf Implementation Plan - maintenance plan in the works, comment to Anne, astrang@dnr.state.md.us.

Carol Bordelon

- Richard Mack, Washington State U. Keynote speaker. March 19, *Native Plants: Connecting Gardens, Nature, and People*. 19th Annual Lahr Symposium, Arboretum Website, <http://www.usna.usda.gov/Education/events.html>.

MISC - official representation on Aquatic Nuisance Species Task Force, mid-Atlantic regional panel. Comment to Bob Tichenor, tichenrh@mda.state.md.us.

Future meeting dates:

February - MDA, Candus Thomson, outdoor writer for Baltimore Sun to speak on successful outreach.

~Adjourn~

Respectfully submitted by:

Carol Holko, Recording Secretary