Indiana Invasive Species Council Public Meeting Minutes

Thursday, November 10, 2016, 10:00 AM to 3:00 PM EDT Efroymson Conservation Center 620 East Ohio Street Indianapolis, IN 46202

1. Welcome to IISC participants, introductions and announcements - Kris Krouse

Council members present:

- Kristopher Krouse, Executive Director, Shirley Heinze Land Trust kkrouse@heinzetrust.org
- o Sandra Norman, representing Indiana State Board of Animal Health <u>snorman@boah.in.gov</u>
- Megan Abraham, State Plant Regulatory Official, State Entomologist, and Division Director, IDNR Division of Entomology and Plant Pathology, Department of Natural Resources <u>MAbraham@dnr.IN.gov</u>
- Philip Gramelspacher, representing Indiana Forestry and Woodland Owners Association pgramelspacher@insightbb.com
- o Mike Warner, Certified Forester, ArborTerra <u>mwarner@arboterra.com</u>
- Jeff Cummings, jecummins@isda.in.gov_representing David Bausman, Indiana State Department of Agriculture <u>dbausman@isda.in.gov</u>
- Rick Haggard, Executive Director, Indiana Nursery and Landscape Association <u>haggard.rick@att.net</u>
- Eric Fischer, Aquatic Invasive Species Coordinator, IDNR, Division of Fish and Wildlife <u>efischer@dnr.in.gov</u>

Council members not present:

- o Heather Reynolds, Associate Professor, Indiana University <u>hlreynol@indiana.edu</u>
- o Bill Fielding, representing Indiana Department of Transportation <u>wfielding@indot.in.gov</u>
- John W. Williams, City of Indianapolis, Department of Parks and Recreation; (vacated) john.williams@indy.gov
- Steve Yaninek, Dept. of Entomology, Purdue University, representing the Dean, College of Agriculture, Purdue University <u>yaninek@purdue.edu</u>

Other attendees:

- Liz Jackson, Engagement Specialist for the Hardwood Tree Improvement & Regeneration Center, Executive Director of the Indiana Forestry & Woodland Owners Association, and the Executive Director of the National Walnut Council. Jackson@purdue.edu
- o Dawn Slack, Steward of Southern Lands, The Nature Conservancy dawn.slack@tnc.org
- Don Robertson, Seed Administrator, Office of Indiana State Chemist and Seed Commissioner <u>drobiso@purdue.edu</u>
- Phil Marshall, Forest Health Specialist, Indiana Department of Natural Resources, Division of Forestry and Division of Entomology and Plant Pathology <u>pmarshall@dnr.in.gov</u>
- Lynn Dennis, Director of Government Relations, Indiana Chapter of The Nature Conservancy <u>ldennis@tnc.org</u>
- Ellen Jacquart, Director of Northern Indiana Stewardship, The Nature Conservancy, IN Chapter <u>ejacquart@tnc.org</u>

- o John Baugh, Director of Ag Services and Regulations Resources <u>baughj@purdue.edu</u>
- Larry Bledsoe, State Coordinator, Indiana Cooperative Agricultural Pest Survey, Dept. of Entomology, Purdue University <u>lbledsoe@purdue.edu</u>
- 2. Presentation of meeting agenda and previous meeting minutes.
 - November 10, 2016 meeting agenda approved with amendments; motion to approve by P. Gramelspacher, 2nd by S. Norman. Motion approved.
 - March 11, 2016 meeting minutes presented for approval with minor edits; motion to approve by M. Warner, 2nd by M. Abraham. Motion approved.

3. Old business:

- Council appointments update:
 - H. Reynolds reappointed to serve 3-year term; serving to September 2019.
 - M. Warner reappointed to serve 3-year term; serving to May 2019
 - Term expirations in 2017 include P. Gramelspacher and J. Williams (ex. Indy Parks and Rec.).
 - E. Jacquart suggested that the J. Williams replacement be associated with land trust, conservation and/or parks and recreation organization.
 - Action Item: Chair will make second attempt to contact Indy Parks Director, Linda Broadfoot, to provide guidance on potential council replacement.
 - L. Dennis stated that state government is currently in transition which provides additional time for selection of a new council member.
 - P. Marshall suggested seeking input from regional weed management associations. Potential appointees for J. Williams seat include Bob Eddleman CWMA Steve Kotter Bloomington Parks and Rec., and Tom Tramain (ex. SICIM). No resolution.
- 4. New business:
 - Legislative update L. Dennis/J. Baugh.
 - Request for IISC Exec Dir position has been included in three Indiana budget cycles.
 Request resides in the Purdue Research line items. This position is a priority issue for advocacy by the Indiana Conservation Alliance. To facilitate this position proposal (and fulfill the mandate to the Council), the IISC report (2015-2016) should be submitted to Rep. Don Lehe, of the Ag and Natural Resource Study Committee or whoever is in leadership of the Committee in the transition government. The statute that directs IISC reporting to the NR study committee no longer exists, therefore, new language should be inserted into the DNR Omnibus Bill to redirect IISC report to the new interim committee. No resolution.
 - IISC Ag and Nat Res Study Committee report review and discussion.
 - Chair thanked E. Jacquart for editing efforts.
 - Report draft highlights include:
 - Included 2015 conference and partnerships with Midwest Invasive Plant Network 2016 conference
 - Updated current member list
 - Emerging invasive species issues will need updating by M. Abraham and P. Marshall
 - Aquatic invasive species issues will be updatied by E. Fischer
 - Exec Dir job description will be attached. Please edit as needed. Financial details are: 1. Salary \$75,000

- 2. Benefits \$33,000
- 3. Admin support/travel \$10,000

4. Exec Dir will be a Purdue University staff member. Purdue Department of residence is undecided. Appointee background will help determine placement. Dr. Cliff Sadof (Entomology) is identified as a potential liaison for position.

- Narrative of report provides historical context, justification, benefits, and needs of the Council.
- Action item. Please provide final edits to Chair by 23 November 2016.
- Action item. Chair to send final report to L. Dennis by 30 November 2016.
- Action item. L. Dennis to present report to appropriate legislative interim committee by 31 December 2016.
- Invasive Plants Advisory Committee Reports
 - Terrestrial Invasive Plant Rule Update– M. Abraham
 - Natural Resource Committee cancelled November meeting due to lack of quorum. TIPR proposal will be submitted at the 17 January 2017 meeting (The Garrison, Fort Harrison State Park).
 - Economic impact data still being gathered and will be included in final proposal.
 - Callery pear and Norway maple are not included in current proposal.
 - Industry and public outreach/notification will begin immediately after TIPR proposal is accepted. (3600 dealers, 350 growers, many retail outlets)
 - TIPR has not yet passed through the Rules Moratorium Committee which could be an obstacle.
 - Anyone can provide testimony at the Natural Resouces Committee meeting, but greatest potential for impact will be during the public online comment period.
 - Rule process will require approximately one year to implement after it is enacted.
 - Action item. M. Abraham will send updates to IISC distribution list if/when the proposal passes the Rules Moratorium Committee so that all will know if it will be presented to the Natural Resource Committee on 17 January 2017.
 - IPAC Transition E. Jacquart
 - Dawn Slack (TNC) will assume some of the responsibilities of E. Jacquart.
 - Invasive Plant Advisory Committee meeting report 28 June 2016: see also attachment 1.
 - IPAC accomplishments:
 - 1. Invasive plant list. More work to be accomplished.
 - 2. Best Management Practices. Adoption varies by agency. BMP beginning have increased importance to private growers. TNC staff, Dan Shaver or Chris Neggers, can provide outreach BMP programs/information
 - 3. EddMappS Indiana page/ReportIN. Very successful program.
 - 4. Invasive Plants in Indiana brochure. Very popular publication.
 - Potential future projects
 - 1. Landscaping alternatives
 - 2. Invasive educational materials for K-12
 - 3. Promotion of city ordinances
 - 4. Greater web presence
 - 5. Creation of educational props
 - 6. Assistance in grant planning applications

7. Reorganize/refine IPAC priorities.

- Grow Native. E. Jacquart
- Successful program in Monroe County that encourages production and sale of native plants and less nonnative plants. INPAWS is transitioning the program statewide in winter 2016-2017. Applying for grant funds. Any retail outlet can join the program by adding any native plants to their inventory. The program provides marketing materials and creates/promotes a list of participating "Grow Native" outlets. Grow Native Indiana has web site <<u>http://grownativeindiana.org</u>>
- Committee recognition of contributions of E. Jaquart to IISC.
- Invasive Species Response Plan update. K. Krouse.
- Response Plan concept presented by Jeff Knick, Dept of Homeland Security at the 11 March 2016 IISC meeting will not be pursued by DHS, therefore, there will be no opportunity for IISC collaboration.
- Cooperative Weed Management Areas. Open discussion.
 - Question: How does IISC increase collaborations with CWMAs?
 - 1. K. Krouse; Invite CWMA to IISC meetings to provide reports/input.
 - 2. E. Jacquart: CWMA personnel have demonstrated desire to interact with IISC
 - 3. Five management areas.
 - a. Indiana Coastal Cooperative Weed Management Area (ICCWMA)
 - b. Northern Indiana Cluster, Stewardship Network (Steuben and LaGrange Co.)
 - c. Northwest Indiana CWMA
 - d. West Central CWMA
 - e. Southern Indiana Cooperative Invasive Management (SICIM)
 - E. Jacquart: Also, many independent county-level weed management groups. IISC may represent the mechanism needed for consistent communication among groups.
 - P. Marshall: Suggestion that the leadership of the five management areas be placed on IISC mail list and invited to Council meeting and provide an opportunity to report CWMA activities. Conference call option should be available. Purdue Entomology manages IISC mail list.
 - M. Abraham: Kudzu management is a problem that county weed boards/CWMAs could provide valuable assistance to IDNR.
 - P. Marshall: Additional problems amenable to collaboration are tree of heaven, bush honeysuckle, and stilt grass.
 - L. Dennis: These types of interactions and connections demonstrate the need and usefulness of an Executive Director position for IISC to the Natural Resources Study Committee. L. Dennis requests a written summary of these proposed collaborations. No resolution.
 - Action item: K. Krouse: Invite the leadership of the five CWMAs to the next IISC meeting. K. Krouse will coordinate exchange of information with E. Jacquart, L. Bledsoe to identify contacts. CWMA information (outdated) is listed on IISC web page. Action item: M. Abraham will invite Ken Cote to next IISC meeting to discuss collaboration on Kudzu management issues.
 - P. Marshall suggests that CWMA informal reports be placed on the agenda.
 - S. Norman stated that USDA is handling the feral pig issue and that IBOAH is not directly

dealing with any invasive animals at this time.

- Action item: M. Abraham to send Chair a description of potential project collaborations with IDNR and CWMAs as job description material for Exec Dir position. Nursery Inspector in charge of Kudzu management, Ken Cote, will assist.
- Aquatic Invasive Advisory Committee: Eric Fischer
 - Completion of Asian Carp hydrologic barrier at Eagle Marsh (Ft. Wayne) in May 2016. Little River Wetland Project is a 1.7-mile berm dividing two watersheds. \$4.4 million.
 - EddMapS report of large expanse of water lettuce (plant in trade) near Hobart, IN (Lake George). EDDMapS Record ID: 4776566 water lettuce (*Pistia stratiotes*). Overwintering capability of seeds is unknown.
 - Lake Manitou treated for Hydrilla for the last time in 2016, eradication appears successful. Survey only in 2017.
 - Aquatic Species Management with Rapid Response Plan will be updated in 2017.
- Presentation to Council by Don Robinson, Seed Administrator, Office of Indiana State Chemist and Seed Commissioner. *Indiana Noxious Weeds*.
 - Description of the difficult process of updating the Indiana noxious weed list.
 - Current list was created in 1955, rule enacted 1957, slight modification of verbiage in 1983, Re-adopted without change in 2001, 2008, and 2014.
 - law only represents agricultural seed
 - seed mixes used in restoration of wild lands have no oversight and are problematic.
 - Indiana Crop Improvement Association certifies agricultural crop seed only.
 - There is a need for a clearinghouse to certify native and wild seed.
- Updates from Working Groups
 - Tactical Plan Update K. Krouse
 - Survey instrument created by H. Reynolds distributed and discussed. See attachment 2.
 - Three strategies had highest priority.
 - 1. Recommend priorities for projects, funding, rules, and, laws concerning invasive species to the appropriate governmental agencies and legislative committees.
 - 5. Convene or support an invasive species meeting at least once per biennium to provide information on best practices and pertinent research findings.
 - 6. Assist governmental agencies in reviewing current invasive species policies and procedures, and addressing any deficiencies or inconsistencies.
 - Top state agency projects and funding needs were identified: see attachment 2.
 - Next steps would be to develop some methodologies to accomplish portions of these strategies.
 - E. Fischer: For Asian carp initiative, other regional and federal organizations are already involved and coordination is needed.
 - M. Abraham: IISC, CWMA, and IDNR interaction with Kudzu management is a potential project for accomplishing fieldwork and outreach.
 - M. Warner: advocacy for government funding is important.
 - Communication and Web site.
 - L. Bledsoe: Dr. Cliff Sadof is requesting federal Farm Bill funding to update the IISC web

site that would comprehensively consolidate statewide invasive species information. It is envisioned that the IISC site becomes the primary portal for invasive species information. If funding is approved, appropriation would begin in 2018.

- P. Marshall: This initiative and Farm Bill funding has potential to support the justification salary for an Exec Dir. position.
- Education and Outreach Mike Warner
 - National Invasive Species Awareness Week (NISAW), 27 February-3 March 2017. This recognition was initiated by Play-Clean-Go organization and has promotional materials.
 - Action Item. M. Warner and P. Marshall: Will request NISAW proclamation by Indiana Governor.
 - Suggestion that IISC promote publicity for NISAW.
 - E. Jacquart: NISAW-Policy activities in late winter. There may be NISAW-In the field held in the growing season. No dates set.
 - L. Dennis: This is an opportunity for IISC to meet at the State House or State Office Building.
 - Facebook activities: no progress.
 - K. Krouse: There are outreach opportunities for individual council members.
 - St. Bartholomew School, Columbus, IN. Need assistance in setting project. M. Abraham requests information.
 - Action item: Inquiry from Toronto, Canada. Have resource that might have value to IISC outreach. M. Warner will evaluate the offer.
- Emerging Invasive Species and Update: P. Marshall and M. Abraham.
 - Communicated with Department of Homeland Security regarding rapid response to Asian long horned beetle infestation.
 - Chestnut oak mortality at Patoka Reservoir-possible oak wilt.
 - Sudden oak death not found.
 - Hemlock wooly adelgid not found.
 - Beech bark disease –not found
 - Laurel wilt not found. Problem on sasafrass and spicebush.
 - Asian longhorned beetle not found.
 - Gypsy moth continues to be found at Purdue University. Statewide the capture numbers are up but, the Slow-the-Spread program is working well.
 - Emerald ash beetle State quarantine has been discontinued. Parasitoid release program initiated in southeast Indiana.
 - Thousand cankers disease. Fungus and beetles have been located in Indiana. No symptomatic trees have been located. Walnut Council TCD Purdue meeting 11-13 June 2017.
 - Tree of heaven aerial surveys conducted in July 2016. Also, looking for instances of verticillium wilt.
 - Kudzu treated in 76 sites over 26 counties in 2016. Good example of where county weed boards could assist in the management effort.
 - Imported fire ant. USDA is considering removing IFA quarantine all states. Doesn't overwinter in Indiana. Easily transported on shipping containers.
 - Corn tar spot reported in 13 counties
 - Xanthomonas –found in the Midwest. not found in 36 Indiana counties.

- Other sources of pest information
 - Indiana Exotic Forest Pest Advisory Committee.
 - Northeastern Area Association of State Forester State Health Committee.
 - USFS Regional Invasive Species Issues Teams- Recent.
- 2017 Conference considerations
 - 2013 IPAC + IISC
 - 2015 MIPN + IISC
 - 2017 discussion
 - Action item: P. Marshall will send information to the Chair regarding sponsoring (name only) TCD research at the 2017 Walnut Council meeting. This item is resolved.

The Walnut Council will have their annual meeting at Purdue University June 11-13, 2017. This meeting's theme is to look at 50 years of walnut tree improvement. The Walnut Council agreed to utilize and extend their meeting arrangements to add a TCD Research & Management Operational Meeting from June 13 to 15. The purpose of this meeting is to gather and present all research information, survey and status of TCD in all states to be used to further direct research, survey, forest management and to meet regulatory management needs. The 'Research' meeting attendees and presenters will primarily be USFS, APHIS, ARS, University, state & federal resource managers, state & federal regulatory officials, industry representatives and forest landowners. Sponsorship includes USDA Forest Service Forest Health Protection, USDA Forest Service R&D, Hardwood Tree Improvement and Regeneration Center at Purdue University, Central and Southern Plant Boards. Additionally, P Marshal will request sponsorship from IDNR – Forestry & Entomology/Plant Pathology.

- Green Expo (3-5 January 2017) planning is complete and not a venue for IISC. IDNR may have space at 2017 meeting for IISC promotion. No resolution.
- Action item: R. Haggard will assist Council in possible appearance/session at Green Expo 15-17 January 2018.
- Purdue conference office has space and is available. One year advance planning may be needed. The annual Purdue Pesticide Conference is not the correct venue for an IISC fucnction.
- Central Plant Board annual meeting (Indianapolis 17-20 April 2017) planning is complete and not the correct venue for IISC.
- Great Lakes Conference (Indiana 25-27 September 2017) may be a venue for IISC promotion.
- 5. New Chair open discussion
 - -Action item: K. Krouse requests appointment of new Chair in 2017. Please consider candidates to nominate at the next meeting of the IISC.
 - State agency council members may need approval by their executive director or ethics panel.
- 6. Updates or announcements from the Council and public.
 - E. Jacquart reported on the invasive species symposium conducted by students at Clay

Middle School, Carmel, IN under the direction of Steve Sturgis.

- D. Robertson asked if IISC would consider collaborating with FFA/4-H proficiency tests or community projects to promote invasive species programs.
- E. Jacquart reported that National Science Olympiad has added invasive species component to their competions.
- L. Jackson reported that Dr. Robert Wagner, new Department Head for Purdue Forestry and Natural Resources will be informed about IISC and the potential for an Exec Dir that would be located at Purdue.
- L. Bledsoe reported that Council member, Dr. Steve Yaninek (absent) has stepped down as Department Head of Purdue Entomology but is still a faculty member and still an IISC member. Dr. Steven Cameron, is the new Department Head. He will be informed of IISC activities and meetings.
- 7. Proposed next meeting date and frequency.
 - Quarterly meetings beginning in February proposed.
 - First Fridays in February, May, August and November proposed.
 - 2017 IISC meetings (with slight date modification) are 1 Feb, 5 May, 4 Aug, and 3 Nov.
 - February meeting is Wednesday 1 February 2017 at Government Center: Parking in Museum or Circle Center. Enter at public assess through security point. Food available in Gov Center cafeteria.
 - Action item: M. Abraham and P. Marshall will arrange meeting room at Gov Center.
 - To use TNC facilities, contact D. Slack.
 - Action item: M. Abraham will send logistical information to Council and other potential participants prior to the meeting.
- 8. Next steps/action items.
 - Section 3: Old Business; Chair will make second attempt to contact Linda Broadfoot, Indy Parks Director to provide guidance on potential replacement for J. Williams.
 - Section 4; Ag and Nat Res Study Committee report review and discussion.
 - Provide Chair with final edits for IISC report by 23 November 2016.
 - Chair to send final IISC report to L. Dennis by 30 November 2016.
 - .L. Dennis to present IISC report to appropriate legislative interim committee by 31 December 2016.
 - Section 4: Invasive Plants Advisory Committee Reports; M. Abraham will send updates to IISC distribution list if/when the proposal passes the Rules Moratorium Committee so that all will know if it will be presented to the Natural Resource Commission on 17 January 2017.

- Section 4: Cooperative Weed Management Areas. Open discussion:

- K. Krouse will invite the leadership of the five CWMAs to the 5 May 2017 IISC meeting. K. Krouse will coordinate collection of contact information with E. Jacquart and L. Bledsoe. CWMA information (outdated) is listed on IISC web page.
- M.Abraham will invite Ken Cote to next IISC meeting to discuss collaboration on

Kudzu management issues.

- M. Abraham to send Chair a description of potential project collaborations with IDNR and CWMAs as job description material for Exec Dir position. Nursery Inspector in charge of Kudzu management, Ken Cote, will assist.
- Section 4: Education and outreach;
 - M. Warner and P. Marshall will request NISAW proclamation by Indiana Governor.
 - Inquiry from Toronto, Canada. Have book resource that might have value to IISC outreach. M. Warner will evaluate the offer.

- Section 4: 2017 Conference considerations;

- P. Marshall will send information to the Chair regarding sponsoring (name only) TCD research at the 2017 Walnut Council meeting.
- R. Haggard will assist Council in possible appearance/session at Green Expo 15-17 January 2018.
- Section 5: K. Krouse requested appointment of new Chair in 2017. Please consider candidates to nominate at the next meeting of the IISC.
- Section 7: Proposed next meeting date and frequency;
 - M. Abraham and P. Marshall will arrange meeting room at Government Center 1 February 2017.
 - M. Abraham will send logistical information to Council and other potential participants prior to next meeting.

Attachment I

Invasive Plant Advisory Committee meeting 6/28/2016

Attending Ellen Jacquart (TNC), Susan Mihalo (Coastal IN CWMA, TNC), Will Drews (Knox Co SWCD), Megan Abraham (DNR – DEPP), Jane Savage (INPAWS, BCNWP), Joanna Woodruff (CILTI stewardship), Eric Fischer (DNR – DFW aquatic invasive specialist), Stephanie Schuck (Nina Mason Pulliam EcoLab at Marion College), Dave Gorden (Mark Holeman Inc., landscape architect), Vicky Meretsky (IU), Heather Reynolds (IU), Larry Bledsoe (CAPS, Purdue University).

After introductions, Ellen reviewed the history of the Invasive Plant Advisory Committee. The Indiana Invasive Species Council (IISC) was created in 2009 through legislation. In 2010, the IISC created working groups to help them address invasive species issues. The Invasive Plant Advisory Committee (IPAC) is one of those working groups. IPAC is a somewhat informal committee at this point; it consists of those members who were part of the Invasive Plant Species Assessment Working Group (which worked together from 2000-2006) and others who have expressed interest in the issue of invasive plants in Indiana. The mailing list for IPAC is now approximately 400 people.

Ellen then announced that she is retiring at the end of 2016, so plans need to be made for how the good work of IPAC carries on without her. It's suggested that if no leader steps forward to coordinate the whole committee, subcommittees interested in particular projects – brochure update, BMP promotion, etc. – come together to work on particular tasks. Files and email list will be left with IISC when Ellen leaves her position at the end of December.

Ellen reviewed our four main past accomplishments, and what remains to be done with each of four projects:

1. Invasive Plant List

- Through assessing invasive plants, we created an official invasive plant list for Indiana that was adopted by IISC and is now on their <u>website</u>.
- The IISC also requested that the DNR Division of Entomology and Plant Pathology (which has authority over invasive plants) explore creating a rule to ban highly invasive species. The rule has been drafted.
- *What remains to be done*: Megan Abraham, State Entomologist, updated us on the progress of this rule:
 - Due to economic impact to horticultural industry, they have removed Callery pear and Norway maple from proposed list. There was concern the rule would not move forward with these species on it.
 - Next must get fiscal analysis package finished in DNR, then send to DNR OMB
 - So far, the fiscal information is about the impact to horticultural industry.
 - We need specific fiscal impact on ecosystem services, timber harvest, control costs, etc.
 - Anyone with this kind of information what are invasive plants costing us?
 please send to <u>mabraham@dnr.in.gov</u> by July 15
 - Heather to use Google Scholar or its like to pull together some literature on economic impacts of invasive plants
 - Vicky noted impacts on pollinators the money being invested in improving pollinator habitat is very high; however, invasive plant species can then swamp planted areas and cause that investment to be wasted.

- After it gets through DNR OMB, it must get through Rule Moratorium committee made up of governor appointees – not clear if it will get through this step. We may need to write letters to them at this point (Megan to advise on who to send comments to)
- If it gets through the Rule Moratorium committee, it then goes to the Natural Resource Commission (NRC) for preliminary adoption this could be at the Sept. 20 meeting of the NRC.
- After preliminary adoption, there will be a public comment period, and we will need comments to the DNR in favor of the rule. Will send details on that to the IPAC list at appropriate time.
- Nine months later, it goes back to Natural Resource Commission for final adoption (June 2017)
- Also remaining to be done -
 - This list will need to be updated periodically with new species to assess, and the rule will then need to be updated as well.
 - When the rule passes, the on-line list will need to be updated for all species to reflect the new legal status of each species.

2. Best Management Practices -

- Created a 'top ten list' of BMPS which can be found here.
- Had agencies voluntarily adopt the BMPs and try to implement them over a two year period, then report on their progress. INDOT, DNR-DFW, DNR-DNP, DNR-DSP, DNR-DoF, and TNC all did this and provided reports.
- What remains to be done -
 - How do we market these BMPs to facilitate implementation widely?
 - Can there be certification program, perhaps as part of Grow Native, to certify contractors/businesses which follow BMPs?

3. <u>Report IN</u>-

- Developed a reporting system for invasive plants through partnership with EDDMaps.
- There is both an on-line platform for computers and an app for smartphones (the Great Lakes Early Detection Network app) that sends all the reports to a queue to be verified by volunteers.
- Thousands of reports have come in, many of species in counties we did not know about.
- What remains to be done -
 - Need help from botanists to verify reports
 - Need someone to coordinate verification; can we have CWMAs take responsibility for verifying reports in their areas?

4. Invasive Plants in Indiana brochure -

- Jeff Belth designed and did layout of this brochure, with lots of help from a committee that drafted the content.
- 45,000 already printed very popular
- What remains to be done -
 - When the rule taking highly invasive plants out of trade is finalized, the brochure should be edited to reflect the changed legal status of the species in the brochure.
 - Will need to reprint when brochures run low www.hardingpoorman.com prints the brochure, and printing has been paid for by INPAWS.
 - Currently, brochures are kept in the basement of the Conservancy office, and we
 mail them out free of charge to whoever asks for them. Postage costs are
 reimbursed by INPAWS. Will need to determine where brochures will be kept and
 who will mail them after Ellen is gone.

Possible future projects for IPAC:

- Educational materials
 - Landscaping alternatives:
 - For those wanting to buy native or non-invasive plants, we currently have the existing MIPN landscaping alternatives brochure (cost of 50 cents each) and the INPAWS Landscaping with Plants Native to IN
 - These two brochures complement each other well, and we think that between these two brochures we meet the need for materials.
 - Invasive species materials for K-12:
 - There are a few existing curricula; we should get links for those up on the IISC-IPAC website. Project Learning Tree, Project Wild have sections on invasive species; the Hoosier NF developed a curriculum that we should figure out how to disseminate. Will to send existing invasive curricula to Ellen, who will get onto IISC website (note which meet standards)
 - We should work with HASTI, with EEAI, with universities (service learning) to organize and promote invasive curricula.
 - Better integrate invasive education into Master Gardeners/Extension programs (Purdue Extension) and Master Naturalists where possible.
- City ordinances should we promote better ordinances with landscaping lists to reduce the number of invasive species planted? There is an INPAWS page for ordinances we will link to that on IISC page
- Website Can IPAC website be more all encompassing? Right now it is more a list of resources and links than an integrated hub of information. It's suggested we get a Purdue student intern to work on the website and better integrate the information and link together all the efforts going on.
- Props plastic specimens, laminated specimens that could be kept in central/regional locations and loaned out for events. Suggestion that someone mount and laminate the invasive plant specimens in Ellen's office (there are hundreds) and make those available to others. The Hoosier NF curricula has a box of props can that be loaned out? Ellen to ask Teena Ligman if she knows.
- Grants for control
 - Could IISC get a grant and then sub-grant to landowners for control work?
 - Could IPAC find someone to administer (receive and evaluate requests) grant funds gratis? If we wait for executive director (who could handle such tasks) to be funded and on board, will take a long time to get this started.
- Grant for planning
 - Could there be a grant to do a state-wide plan on strategically where control efforts should focus to make the biggest difference?
- Grant to work on Invasive plants in horticulture
 - Develop materials/signage for nurseries and plant sellers to help switch from invasive to native. Use grad students/service learning/capstone to develop materials.
- IPAC structure
 - It was suggested that IPAC should become a more formal organization with subcommittees, regular annual or biannual meetings, and so on. This would help with communication, transparency, and moving forward with projects if key people leave.

Ellen Jacquart Director of Northern Indiana Stewardship ejacquart@tnc.org (317) 829-3814 (Direct Phone) (317) 951-8818 (Main Phone) (317) 917-2478 (Fax) nature.org The Nature Conservancy Indiana Field Office Efroym son Conservation Center 620 East Ohio Street Indianapolis, IN 46202-3811



Attachment 2.

1) Your Name:

2) The entity you represent on the IISC:

3) For each of the 10 strategies in the table below, indicate your priority ranking of the strategy, whether an executive director is critical for accomplishing the strategy, and any comments.

4) Of the 10 strategies below, which are your top 3? (Simply list the #'s)

STRATEGIES	PRIORITY RANKING			EXEC. DIRECTOR CRITICAL?		COMMENTS
1 Recommend priorities for projects, funding, rules and laws concerning invasive species to the appropriate governmental agencies and legislative committees.	High	Med	Low	Yes	No	
2 Recommend a lead state agency to develop an invasive species inventory for each invasive species taxon (plants, insects and plant diseases, aquatics, animal diseases), and develop and maintain a data management system for invasive species in Indiana.	High	Med	Low	Yes	No	
3 Communicate with other states, federal agencies, and state and regional organizations to enhance consistency and effectiveness in preventing the spread of, early detection of, response to, and management of invasive species.	High	Med	Low	Yes	No	
4 Coordinate education and outreach activities.	High	Med	Low	Yes	No	
5 Convene or support an invasive species meeting at least once per biennium to provide information on best practices and pertinent research findings.	High	Med	Low	Yes	No	
6 Assist governmental agencies in reviewing current invasive species policies and procedures, and addressing any deficiencies or inconsistencies in such policies and procedures.	High	Med	Low	Yes	No	
7 Assist state agencies in reviewing the agencies' performance measures for accountability concerning the agencies' invasive species actions.	High	Med	Low	Yes	No	
8 Receive reports from any governmental agency regarding actions taken on recommendations of the council.	High	Med	Low	Yes	No	
9 Apply for grants.	High	Med	Low	Yes	No	
10 Provide grants for education concerning or management of invasive species.	High	Med	Low	Yes	No	

(more next page)

As part of updating and meeting our Invasive Species Council Tactical Plan goals, we need your quick response to the following questions. Please hit 'reply' and embed your answers in the email.

- 1. Your name:
- 2. The state agency uou represent on the IISC.
- 3. Your agency's top 5 invasive species projects.
- 4. Your agency's top 3 invasive species funding needs for the coming year.

Top Projects

- Asian carp

- emerging zoonotic diseases (e. g. Zika)
- aquatic invasive plants: hydrilla, starry stonewort
- invasive plants in forest systems
- roadway invasives (esp. Canada thistle, Johnson grass, Phragmites, Autumn Olive, and Asian Bush Honeysuckle

Top Funding Needs

- biosecurity
- disease awareness
- training, diagnosis
- invasion biology research and control, monitoring of critical pathways, habitats
- education