

Indiana Invasive Species Council Public Meeting Minutes - Draft

Friday, May 05, 2017 from 10:00 AM to 3:00 PM (Eastern)

Efroymsen Conservation Center

620 East Ohio Street, Indianapolis, IN 46202

1. Welcome, roll call and introductions: – IISC chairman Kris Krouse

Council members present:

- Kristopher Krouse, Executive Director, Shirley Heinze Land Trust kkrouse@heinzetrust.org
- Philip Gramelspacher, representing Indiana Forestry and Woodland Owners Association pgramelspacher@insightbb.com
- Megan Abraham, State Plant Regulatory Official, State Entomologist, and Division Director, IDNR Division of Entomology and Plant Pathology, Department of Natural Resources MAbraham@dnr.IN.gov
- Mike Warner, Certified Forester, ArborTerra mwarner@arboterra.com
- Heather Reynolds, Associate Professor, Indiana University hlreynol@indiana.edu
- Rick Haggard, Executive Director, Indiana Nursery and Landscape Association haggard.rick@att.net
- Matthew Kraushar, Indiana Department of Transportation, mkraushar@indot.in.gov
- Jeff Cummings, Indiana State Department of Agriculture jecummins@isda.in.gov

Council members not present:

- Sandra Norman, representing Indiana State Board of Animal Health snorman@boah.in.gov
- Steve Yaninek, Dept. of Entomology, Purdue University, representing the Dean, College of Agriculture, Purdue University yaninek@purdue.edu
- Eric Fischer, Aquatic Invasive Species Coordinator, IDNR, Division of Fish and Wildlife efischer@dnr.in.gov

Other attendees:

- Dawn Slack, Southern Indiana Land Steward, The Nature Conservancy, dawn.slack@tnc.org
- Phil Marshall, Forest Health Specialist, Indiana Department of Natural Resources, Division of Forestry and Division of Entomology and Plant Pathology, pmarshall@dnr.in.gov
- Travis Buckel, USDA APHIS Wildlife Services, Travis.L.Buckel@aphis.usda.gov
- Lynn Dennis, Director of Government Relations, Indiana Chapter of The Nature Conservancy ldennis@tnc.org
- Ray Chattin, Indiana Soil Conservation Board and Southern Indiana Cooperative Invasives Management, chattinryz@aol.com
- Katie Nelson, Indiana State Department of Agriculture, kanelson@isda.in.gov
- Nick Harby, INPAWS RIP squad, nickharby@yahoo.com
- Larry Bledsoe, State Coordinator, Indiana Cooperative Agricultural Pest Survey, Dept. of Entomology, Purdue University lbledsoe@purdue.edu

2. Adopt 5 May 2017 agenda & approve 1 February 2017 minutes.

Motion to approve 5 May 2017 agenda by M. Abraham, 2nd by R. Haggard. Motion approved.

Motion to approve 1 February 2017 minutes by M. Abraham, 2nd by H. Reynolds. Motion approved.

3. Old business: Council appointments update.

- Council appointments: No progress in acquiring member representing Indy Parks. Terms for P. Gramelspacher, Kris Krouse, and M. Warner current through 2017. **Action item.** Discussion with Governor's representative needed for guidance. Matthew Kraushar (INDOT) replaces Bill Fielding (INDOT). Jeff Cummings (ISDA) replaces David Bausman (ISDA).

4. New business:

- IISC Legislative update, Funding – L. Dennis: No progress in funding Exec. Dir. position. John Baugh, L. Dennis, and Mary McConnell will plan further discussions on Exec. Dir. funding and Purdue logistics. Recent meeting with Chris Smith, DNR Deputy Director of Regulatory Management Team, regarding removing highly invasive terrestrial plants from trade resulted in the understanding that the state moratorium on all non-emergency rules is still in force. Rebecca Holwerda, Regional Dir. for Northwest Indiana (Sen. Coats Office). Now Director of Operations and Policy (?) IDEM, DNR. She will attend meetings with Chris Smith in which the Terrestrial Plant Rule (TPR) will be discussed.
 - Question by H. Reynolds: What steps should IISC take to keep the TPR in front of legislators? Ans. L. Dennis. A letter could be drafted to the rule moratorium committee stating that IISC is still enthusiastic in supporting the rule and to provide IISC contact information should the reviewing committee need additional details or have questions.
 - Question by M. Warner to M. Abraham: Regarding the TPR, are all the economic analyses complete? Ans. Yes. Is nursery industry ready for the TPR. Ans. R. Haggard, yes.
 - M. Abraham: the rules committee have/will review any proposed rule in process under the previous state administration to determine which will be considered under the new administration. However, any non-emergency proposed rule is still under moratorium. DNR stance will be that time is critical. Rapid adoption of the TPR will result in lower economic impact.
 - Question by H. Reynolds. Will IISC request for a rule-process status report assist DNR in moving the rule forward, or would a letter from IISC encouraging rapid adoption be helpful? Ans: M. Abraham/P. Marshall. A letter supporting the rule from IISC to Chris Smith (DNR), the moratorium rule committee, and then to Governor's office (c/o Rebecca Holwerda) is preferable.
 - **Action item.** Letters supporting TPR drafted by Jeff Cummings, H. Reynolds. Review and proof by L. Dennis.
 - Question by H. Reynolds: How should letters be addressed?
 1. Chris Smith; Cover letter thanking him for his support of the TPR and asking him to carry our letter to Gov. Holcomb forward. Enclose copy of the letter to be sent to Gov. Holcomb.
 2. Gov. Eric Holcomb; Briefly overview the need for the rule and request that the Moratorium Rule Committee move the TPR to active status in the rules process.
 - Question by P. Gramelspacher to L. Dennis. Is there any progress in funding the IISC Exec Dir. Ans. No.

- Invasive Plants Advisory Committee (IPAC) update, D. Slack:

The committee is reorganizing and setting priorities. The listserv of contacts is preserved and an active committee of 16 members was created and had a first meeting on 21 April 2017. Goals are:

1. Getting the committee functioning as a working group.
2. Reviewing past programs.
3. Supporting IISC
4. Commitment to reducing the planting of invasive species.
5. Developing public outreach
6. Developing specific tasks for committee members.

IPAC will meet quarterly 7-14 days before the IISC meetings.

Priority tasks include:

1. Updating the IISC official plant list. Last update was 2013.
2. Assisting Dr. Cliff Sadof in IISC web development.

- Question by K. Krouse. What is the composition of IPAC? Ans.

1. DNR representative
2. IN American Soc. Landscape Architects
3. University research and Extension
4. Soil and Water Conservation Districts
5. Department of Public Works Indy
6. Private advisor (Ellen Jacquart)
7. Southern Indiana Cooperative Invasive Management
8. Indiana Museum of Art
9. Tippecanoe County Parks volunteer group for removal of invasive plant species
10. IN Coastal Cooperative Weed Management Area
11. Nursery industry
12. Natural Resources Conservation Service

Discussion: Suggested partners might include:

1. Nature Preserves (Tom Swinford)
2. The DNR nursery inspector replacing Scott Kinzie. Name ?

- Question from K. Krouse: Status of ReportIN? Ans. The app is receiving many reports. (21000+) Ellen Jacquart is still reviewing submissions.

- Terrestrial Invasive Plant Rule (TPR) update, M. Abraham

- No new economic impact information is needed. No recent changes to the IISC official plant list. Rule moratorium is still in place.
- Question by H. Reynolds: Is the statement of economic importance found on the IISC website the same as the economic analysis contained in the TPR? Ans: No. IISC statement refers to total economic impacts, TPR economic analysis refers to impacts to small businesses and to state (for rule implementation).
- Question by L. Dennis: If a forest landowner is impacted by an invasive species and hires a

consulting forester, is this situation considered a small business that could be impacted by the TPR. Ans. Yes. This could be an example of a potential cost savings to a landowner if highly invasive plants are reduced in the landscape, and Megan can refer to such savings in the analysis.

- Aquatic Invasive Advisory Committee
 - No report.
 - R Chattin asks if the Council is aware of IDNR Division of Fish and Wildlife, Lake and River Enhancement (LARE) Grants. Large portion of funds supported invasive plant management. Website indicates these grants are intended to reduce non-point sediment and nutrient pollution of surface waters to a level that meets or surpasses state water quality standards. Ans: Yes. These funds assisted removal of *Hydrilla* from Lake Manitou.
- Presentation: Wild Pig Elimination Project in Indiana – Travis Buckel, Wildlife Biologist, USDA, APHIS, Travis.L.Bucket@aphis.usda.gov
Educational materials are available. Email Travis.

Overview of presentation:

- Reporting service through USDA, APHIS, Wildlife Services (WS): 1 855 386 0370
- Presented national program goals and objectives re: control feral swine and associated damage and disease risks
- National program is working in 39 states (annual funding), 3 of these states function as elimination states (more manpower and funding, elimination goal of 5 years or less) - want IN to become an elimination state
- Immediate IN goals: reduce and eliminate populations ID numbers/locations, damage assessment, BMPs, management plan
- IN Wild Pig Task Force members: DNR, DNR F&W, NRCS, IN Pork, Purdue, APHIS, IN Farm Bureau, BOAH, IN Dept of Health, Veterinary Services
- IN Wild pigs: reports on pot-bellied pigs, domestics (neither of which are wild pigs), Eurasian wild pig (brought for sport hunting - was OK at the time), Eurasian-domestic hybrid (in south, we don't have). Lawrence, Washington, Jackson (anywhere along the White River drainage or feeder creeks is good)
- History: since 1990s (DNR immediately aware), new introductions can happen at any time - but it is illegal to introduce an invasive species now (and Eurasian pig is considered invasive), across state lines is a Federal violation, but fines are too low to be effective (\$500 per day)
- Possible/known sources: human-aided releases for sport hunting, escaped or abandoned domestics, abandoned pets (pot-bellied)
- Economic loss: 1.5 billion annual USDA estimate - hard to determine - includes damage to agriculture, the environment, other losses and control
- Wild pig threats in IN:
 - agricultural damage (corn fields - root up/eat corn seed, milk-stage corn cobs, wheat - eat, hayfields, soybean - root up), disease threat to domestic swine
 - corn damage very apparent from aerial surveys (August) - Phil mentioned that DNR does aerial surveys (for invasives?) that may be useful
 - hay and soy field damage can disrupt ability to run equipment
 - native resources: plants, soils, water quality, wildlife, wetlands
 - ground nesting birds and mammals (quell, turkey, grouse, waterfowl,

- rabbits)
 - reptiles, amphibians, invertebrates (snakes, salamanders, frogs, turtles, toads)
 - competition for food (mast crops, forbs, agriculture) - love acorns - negatively affect deer and turkey
 - threatened and endangered species: eat and/or destroy habitat
 - water quality - turbidity, bacterial disease load (salmonella, E. coli, cryptosporidium) -pigs require water resources
 - first-order streams in summer favored by pigs - mucks them up, deposit pathogens
 - habitat disturbance - soil erosion, spread of invasive plant species, tree death (rub off bark)
 - spread of disease: livestock, humans, wildlife
 - carry at least 30 viral and bacterial diseases and nearly 40 parasites that may affect humans, domestic livestock, pets, wildlife
 - water contamination - IN has a lot of reservoirs, not as many wells
 - hunters may catch disease by not wearing gloves when slaughtering
 - domestic pigs vulnerable
- Wild Pig disease sampling: testing includes classical swine fever, leptospirosis*, toxoplasmosis*, tularemia, senecavirus. Genetic samples w/ development of DNA profiles, stomach samples and diet studies *diseases detected so far
- Agreements
 - written permission from landowner needed, each agreement tailored to landowner, agreements can be cancelled immediately, will assist landowners to do the removals
- Wild Pig monitoring: game cameras, bait stations (bait holes, game feeders), some helicopter surveillance - use wireless technologies
- Wild Pig removal
 - remove whole group (pigs very intelligent, get educated), may require a variety of removal techniques, WS recommends trapping and snaring followed up with shooting, sustained monitoring and removal
- Wild Pig Removal Techniques (trapping and night shooting are the top two means, team of 4 employees now)
 - Live traps, snares - e.g. drop trap - lifted off ground until pigs go in, corral trap - circle of panels with multiple entrances that shut once pigs are in, cage trap - small, easy to set up, neck and foot snares - works for trap or bait shy pigs
 - Night shooting - infrared, night vision - concentrate on whole sounder removal, avoid shooting over bait - except for small groups
 - Aerial shooting - helicopters - hasn't been super successful.
 - Judas pig - use GPS tracking collars to know exactly where the pigs are and this helps target control projects - collar one female pig and b/c pigs are social she is the nucleus - helps with landowner sign up since there is hard evidence of pig presence. One tagged animal can associate with up to 60 other pigs. Pigs average a couple of mile range and move around a lot so this makes it difficult for landowner to know. Cedar thickets, swamps are good cover nuclei.
- Road Blocks
 - Limited cooperation from private landowners - sport hunting (is a culture - family, friends, hunting leases), anti-government and privacy

- Loss of cooperations - as damage decreases.

Travis' Answers to Questions from IISC:

- Estimated population is about 500. Annual recruitment is ...females average 4 young/litter 2x per year
 - Goal to eradicate? Bounties? Don't work well.
 - Without program, would the pig population increase and spread beyond the 3 counties? It would get very bad in the 3 counties first.
 - Good feral pig habitat beyond those counties? Yes, Mascatatuck National Wildlife Refuge for e.g. Control plan attempts to control within existing range to keep from spreading.
 - Male:female ratio is 50:50
 - Disposal? Given to landowner. Cannot donate due to disease risk.
 - Limiting factor for success? Manpower. Having 4 employees has made a big difference. New Mexico had 14 employees for a large area. Indiana pigs are concentrated right now.
 - Forecast for eradication? If 14 employees could deal with it in 2 years. With the team of 4, will see a big decrease - within 5 years expects to pretty much control the population. Hobby trappers help out.
 - Can pigs survive very cold winter? Yes, they love the cold.
 - Hunting license needed? No, and there is no open season. Can't hunt with dogs. Must have landowner permission.
- Emerging Invasive Species Issues and Update, M. Abraham and P. Marshall
 - Gypsy moth spray program (with *Bacillus thuringiensis*) beginning at Purdue University, then on to northern locations.
 - Thousand cankers disease/walnut twig beetle survey has begun. The fungus, *Geosmithia morbida*, and the beetle, *Pityophthorus juglandus*, have been found in Indiana, however, they have not been found together on a live walnut tree. Impact of the disease in Indiana may not be as important as once thought. Epidemiology of the disease seems highly dependent on environmental factors and tree stress. Recovery of symptomatic trees in other states east of the Mississippi River has occurred.
 - National Apiary Survey will be conducted this summer as in the past several years. Survey targets include many potential stressors that contribute to colony collapse disorder.
 - Kudzu management program will continue in southern Indiana.
 - Emerald Ash borer parasitoid release and evaluation program has begun.
 - Boxwood blight nursery survey will continue.
 - Sudden oak death nursery survey will continue.
 - Hemlock woolly adelgid survey has begun in north and south Indiana.
 - Reviewing trace-forward and history of reports of wooden furniture imported from China and Asia to distributor in Indiana that contained live brown fir longhorned beetle, *Callidiellum villosulum*, and the velvet longhorned beetle, *Trichoferus campestris*. Some of the furniture was shipped to Minnesota and Wisconsin.
 - Reviewing trace-forward reports of hemlock woolly adelgid received from a nursery in Tennessee. No subsequent evidence of HWA found.
 - Reviewing trace-forward reports in late summer of an Asian thrips found on Hosta imported to a distributor in Michigan that had shipped plants to many locations including Indiana. Survey and education program for nursery owners will begin in 2017 for this potential pest thrips (spp.?).

- Discussion on wood boring beetles found in furniture in IN, MN, and WI. Also, the process used by Customs and Border Protection uses to screen international travelers was outlined.
 - Brown marmorated stinkbug reports and questions continue to be received by IDNR.
 - Thousand cankers disease research and management meeting at Lafayette, June 13-15.
 - Southern pine beetle, *Dendroctonus frontalis*, is a growing concern to managers in the Hoosier National Forest.
 - Asian longhorned beetle has not been found in Indiana.
 - Big ash project. Preservation of large ash trees to provide seed sources. Some regeneration is occurring.
 - Chestnut oak mortality is being investigated.
 - Brief discussion on brown marmorated stink bug. Biology and management. This pest cannot be managed with regulation.
 - Brief discussion regarding resurgence of emerald ash after the outbreak phase passes.
- Contribution agreement proposal by NRCS and SICIM, Mike Warner
 - NRCS will provide 50% matching funds to promote CWMA programs. D. Slack and R. Chatten report that SICIM is communicating with Jane Hardesty, State Conservationist with NRCS to prepare a grant proposal to manage invasive weed control. Available funds may be as much as \$600,000 over a 5-year period. Goals include hiring regional CWMA executive directors statewide and creating as many CWMA as possible. There is a desire to have a functional CWMA in every county. Target date for information on fund availability is 1 June 2017. First exec dir hire will be within SICIM organization, and whose primary responsibility will be to initiate new CWMA across southern Indiana. The next priority is to hire 3 to 4 additional regional exec dir to initiate other CWMA across the state. NRCS is actively collaborating with SICIM to make the program a reality. Will Drews (Knox County SWCD) will be the first exec dir hire under this CWMA creation initiative. A goal is that these new exec dir positions and CWMA organizations develop sustaining funding after the NRCS funds expire. IISC promotion can include the IISC conference in 2018 and updated information presence or link on the IISC website.

Action item: Motion by M. Warner to have IISC provide a council member to the SICIM steering committee, M. Warner volunteers. Motion 2nd by H. Reynolds is contingent on SICIM approval. Motion passed.
 - Framework for Purdue Extension to Statewide Invasive Species Surveillance.
 - Proposed in absentia by S. Yaninek; see attachment 1. The proposal objective is “to augment surveillance and amplify public outreach by engaging Extension educators and connecting through their reach in every county in the state.”
 - Discussion: This program would be contingent on approval of the Purdue Extension Director, Jason Henderson. This program falls under the purview of the IISC tactical plan for making recommendations to agencies and organizations. Future Farm Bill funding might be possible for salary savings.

Action item: Chair will ask S. Yaninek for bullet points helpful in drafting a Council letter of endorsement to the Purdue Extension Director, Jason Henderson, for the proposed Extension-based Statewide Invasive Species Surveillance proposal to be included with his requests to Purdue administration to revise his Extension appointment, and for the involvement of Extension field staff in invasive species issues/education/awareness. Chair will draft and send on the letter.

- Updates from Working Groups

1. Tactical Plan – Heather Reynolds

- Strategic Plan and Calendar: Review of plan priorities and needed updates. Three strategies were identified by the Council as highest priority. Please note the updated plan strategies and the corresponding Council and participant responsibilities. Please notify Tactical Plan working group of any needed corrections.
- Request for input on inventory for invasive species projects and findings of lead state agencies. The Council will send a simple on-line survey to at these least agencies. A distribution list will be created targeting INDOT, DNR, INBOAH, USFW, USFS, DOD (Crane Navel Weapons Center and Camp Atterbury Army base), Army Corp of Engineers, Jefferson Proving Grounds (Big Oaks National Wildlife Management Area, Dunes National Lakeshore, county weed management areas, land trusts (e.g. TNC, ACRES), University biology departments in Indiana, Purdue Extension ANR staff, Indiana Parks and Recreation Association. Please contact IISC with any additions.
- P. Marshall: Please supply specific people within agencies to receive survey.
- **Action item:** Chair requests Council members to supply agency email addresses to H. Reynolds or L. Bledsoe to create distribution list for online survey.

- Tactical Plan addendum discussion:

[Sec.4. (6)] Assist governmental agencies in reviewing current invasive species policies and procedures, and addressing any deficiencies or inconsistencies in such policies and procedures.

[Sec.4. (7)] Assist state agencies in reviewing the agencies' performance measures for accountability concerning the agencies' invasive species actions.

Two working groups need to be established: (1) Invasive Species Policies & Procedures Committee (2) Performance Measures Review Committee, (2

- This may not be possible at this time. How should the Council proceed?
- Topic tabled by Chair until 4 August 2017 meeting.

2. Communications and Website – Larry Bledsoe

- Website Retooling: Discussion regarding email sent to Council by Dr. Cliff Sadof. See attachment 2.
 - An adhoc committee is not needed to determine the vision, purpose, or mission of the website. The Council defined this at the previous meeting. Purdue was given the freedom/discretion to make the website a more useful resource. All of the website purposes included in section "1" of the email message are appropriate.
 - The mission of the IISC is stated on the current home page; "The Indiana Invasive Species Council (IISC) was established by the state legislature to enhance the ability of government agencies to detect, prevent, monitor, and manage new and long established invasions, as well as increase public awareness about these growing threats." Two points of discussion occurred without resolution: (1) The mission should be made more prominent instead of "buried" in text. (2) Simplify the main page, place the mission on a secondary page, and only include the choices (clicks) that take the user directly to the most pertinent information ("portal for two activities," BMPs and reporting.

- Tag line concept is good idea
- Suggestion: Make menu clear, simplified, and more prominent.
- **Action item:** Obtain website analytics to determine what is being searched and use that to direct content. Sadof and/or Bledsoe
- The 2 primary topics already on the home page are directed to a small user group. Suggestion to provide educational content to wider audience. Possible content to include: Why should you care about invasive species (aesthetics / economics / environomics? This would make content more usable to Purdue CES audience.
- Suggestion: Three website columns, middle column with brief “mission” and “why care” text (e. g.) Invasive Species 101. Left and right columns with 3 to 5 big buttons directing user to appropriate content. “Too many places to click on the current homepage.”
- See the PlayCleanGo website for good simple model, <<http://playcleango.org>>. Try to navigate to any action items with 3 clicks.
- See GrowNative Indiana website for model, <http://grownativeindiana.org> for simple model of 3-4 choices to begin.
- See Texas Invasives website for good model, <http://www.texasinvasives.org> Good catch phrase; “Hello zebra mussels, goodbye Texas lakes.” Hello invasive species, goodbye Indiana nature, wildflowers, trees, etc.
- See New Hampshire invasive species website, <<https://nhbugs.org>>
- Question: Who takes responsibility for updates after current FB funding is exhausted? Invasive news content is important and content should be developed? Texas site catch phrase changes monthly. Site is dynamic. Likely multiple staff members are involved in content and maintenance. May be expensive to maintain.
- Multiple devices platforms should be supported.
- Initial page “big picture” buttons need to be “fat finger friendly” with minimal text due to wide use of mobile devices. Page scrolling and enlarging will occur after desired content area is located. Purdue resources are being converted to be mobile friendly.
- Site mission could be developed into a catch phrase supported with link to more detailed information.
- Answer to Section 3 Sadof inquiry, “Can the Citizen Scientist reporting needs be met by referring visitors to the GLEDN’s App (ReportIN) and the 1-866-NOEXOTIC phone line:” Ans. Yes, website should direct users to ReportIN and phone number(s). For example, to “Report a Potential Invasive Species,” do a “click here” to take users straight to the appropriate app (GLEDN, EDDMaps) without the user having to find and manually download. Two choices needed?-Android vs Apple. The browser used may dictate how a direct link is set up to load the appropriate app.
- Section 4. Content under the species group buttons should be more than BMPs. More resources should be identified for each of the groups. Until more content is identified no need to create a link that takes one to a link (omit secondary page). Main page button should send user straight to existing suggested content. (e. g. “Plant Pests & Diseases” button would link to the DNR site, until more resources are identified. IISC does not need to create content for these groups, just identify resources. Question: why is there so little information on Indiana invasive diseases, mammals, and aquatics compared to plants and insects? Ans. Low level of funding, relative few examples of invasive species in some of the groups, e.g. mammals.
- Question: N. Harby: what happens when a user clicks “contact us?” Ans. IISC inquiries are routed to L. Bledsoe who then responds when appropriate, or directs the inquiry to the

Council Chair or a specific member of the Council. About 3 requests for information per month are received. This amount of email traffic is no problem, however, if traffic increases with the website revision, then a new model would be needed. Most inquiries are from people with invasive plants on their property and are seeking management resources.

3. Education and Outreach – Mike Warner

- No formal report
- Liz Jackson has sent a prior announcement to the Council regarding the Thousand Cankers Disease Conference and Workshop at Lafayette, 13-15 June 2017. Meeting is hosted by Central Plant Board/USFS and others. Registration is free.
- Question: Is a link for this meeting on the IISC website? Ans. No.
- Question, H. Reynolds: Is invasive species awareness represented at Indiana State Fair? Ans. Yes, IDNR. Divisions of Fish & Wildlife, Forestry, Nature Preserves, Entomology & Plant Pathology collaborate with a display. DNR is will consider other organizations that want to participate. IDNR promotes IISC at the Indiana State Fair.
- Question, H. Reynolds: Does the IISC brochure need to be updated? Ans. No funds are available. Should this task be removed from the Tactical plan? Ans. Yes. IPAC has been active in invasive species brochure production. There is a URL to IISC on the latest IPAC brochure.
- M. Abraham. Delay any action until website is updated using Farm Bill, Forest Pest Outreach funds. IISC postcard announcing new website may be possible using these funds.

4. 2018 Spring Conference – Dawn Slack

- Conference goals are to provide “a forum for networking and promote Indiana resources (BMPs, ReportIN, new IPAC brochures, etc) to manage invasive species.”
- Proposed date is February 2018. Date TBD.
- Proposed meeting structure is a one-day event, 9 am to 3 pm with catered lunch.
- Proposed location is Hendricks County Fairgrounds
- Target audience includes CWMAAs, University researchers and Extension, Master Gardeners, turf associations, flower and rose garden clubs, etc.
- Attendance is estimated at 50 to 60.
- Maximum attendance is approximately 200.
- Venue rental is \$125
- Registration fee will be \$25. Purdue Conferences will likely manage registration.
- Catering (box lunch) quotes range from \$900 to \$975.
- IISC will be sole meeting developer/promoter.
- Meeting structure will be 5 to 6 speakers: Four morning topics, followed by a “networking” lunch. An afternoon presentation of a “tool” e.g. EDDMaps, and then end the meeting with a “speed round” to give CWMAAs an opportunity to present their goals, ideas, programs, activities, etc.
- Static displays (EEMaps, ReportIN, Purdue CES, etc are encouraged.
- Suggested topics include an overview of invasive species and why they are important for each group of terrestrial and aquatic vertebrates and plants, terrestrial vertebrates, insects and other invertebrates, and pathogens; and resources like “GrowNative.”
- Sponsorship is probably not needed, however, Eco Logic LLC has indicated that they may be willing to sponsor portions of the meeting. Some of the nurseries participating in the GrowNative program may be interested in sponsoring a portion of the meeting with

- appropriate promotion. P. Marshall: Another possible sponsor may be Red River Specialties, 1324 N Hearne Ave #120, Shreveport, LA 71107. IDNR is a regular client.
- Purdue conferences will handle registration for a fee of 10% of gross receipts or minimum \$250.
 - Two questions to resolve: (1) if there is a fund short fall, who pays the negative balance? (2) If there is a surplus, who holds the positive balance.
 - o Suggestion/question: M. Warner, could SICM create an account for IISC funds?
 - o Suggestion: M. Warner, SICM should be on the meeting agenda to promote the contribution agreement described in New Business section above.
 - Purchasing commercial booth space on the registration online site may be possible. Conferencing fees may change.
 - **Action item:** P. Marshall stated that IISC is administrated in Purdue College of Agriculture and therefore conference fees should be ‘in house.’ L. Bledsoe will get a ruling on how IISC is regarded by Purdue Conferences.
 - **Action item:** No motion is needed to approve meeting preparations, therefore, D. Slack has approval from the Council to proceed with conference planning.

5. New Chair Nominations and Election

- J. Cummings: Report that IISC Chair term is one year.
- M. Warner motions to nominate H. Reynolds. Nomination accepted.
- P. Gramelspacher: 2nd and Motion to close nominations. Motion approved.
- Chair calls vote, H. Reynolds abstaining. 7 yea, 0 nay. H. Reynolds elected to Chair.

6. Updates or announcements from the Council and public

1. J. Cummings for John Baugh.

- Update of attempt to insert language in a bill for emergency rule making authority for the Office of the Indiana State Chemist (OISC) under the Seed Law. This language provides authority regarding regulating prohibited noxious seeds. Several species were going to be added to the law by statute to circumvent the normal rule process and give the State Chemist immediate authority. Procedural problems prevented the addition of the species as new language cannot be added to a bill at the end of session without opportunity of review by at least one House. This topic will be revisited at the 2018 session for new legislation. A bill will be introduced to give emergency rule making authority to the OISC for pesticides, seed, fertilizer, and feed. OISC currently does not have this authority.
- P. Marshal: DNR Div of Entomology and Plant Pathology (DEPP) also does not have emergency rule-making authority. A combined bill for OICS and DEPP may be attempted.
- M. Abraham: DEPP has special procedures that generate the equivalent of an emergency rule.
- **Action item.** J. Cummings will communicate with M. Abraham to determine if a combined bill for OISC and DNR DEPP emergency rule-making authority is possible.
- DNR is interested in adding poison hemlock as an addition to the Noxious Weed Law. Stakeholder input is needed. CWMA’s and county weed boards may have an increased opportunity to interact with state government in managing noxious weeds.

2. R. Haggard: Consider IISC involvement in Green Expo in Indianapolis, 15-18 Jan 2018.

3. Unanimous appreciation expressed for the leadership provided by Past Chair, Kris Krouse.

7. Next meeting dates: Dates adjusted due to Indiana State Fair. 25 July 2017 (location is Normandy Barn) and November 3, 2017 (location TBD)
 - **Action item.** Send agenda items to current Chair, H. Reynolds.

8. Next steps/action items
 3. Old business: Council appointments update.
 - Governer's representative needed for guidance on filling Indy Parks Council position. K. Krouse will contact Chair regarding protocol for seeking replacement appointments to the Council.

 4. New Business/ IISC Legislative update.
 1. Letters supporting TPR drafted by Jeff Cummings, H. Reynolds. Review and proof by L. Dennis.

 4. New Business/Contribution agreement proposal by NRCS and SICIM, Mike Warner
 1. Motion by M. Warner to have IISC provide a council member to the SICIM steering committee, M. Warner volunteers. Motion second by H. Reynolds is contingent on SICIM approval.

 4. New Business/Framework for Purdue Extension to Statewide Invasive Species Surveillance.
 1. Chair will ask S. Yaninek to draft bullet points helpful in drafting a Council letter of endorsement to the Purdue Extension Director, Jason Henderson, for the proposed Extension-based Statewide Invasive Species Surveillance proposal to be included with his requests to Purdue administration to revise his Extension appointment, and for the involvement of Extension field staff in invasive species issues/education/awareness. Chair will draft and send letter.

 4. New Business/Updates from Working Groups/1. Tactical Plan
 1. Chair requests Council members to supply specific email addresses to L. Bledsoe for agency listserv for online Tactical Plan survey.

 4. New Business/Updates from Working Groups/ 2. Communications and Website
 1. Obtain website analytics to determine what is being searched and use that to direct content. Sadof and/or Bledsoe

 4. New Business/Updates from Working Groups/ 4. 2018 Spring Conference.
 1. P. Marshall stated that IISC is administrated in Purdue College of Agriculture and therefore conference fees should be 'in house.'" L. Bledsoe will get a ruling on how IISC is regarded by Purdue Conferences.
 2. No motion is needed to approve meeting preparations, therefore, D. Slack has approval from the Council to proceed with conference planning.

 6. Updates or announcements from the Council and public
 1. J. Cummings will communicate with M. Abraham to determine if a combined bill for OISC and DNR DEPP emergency rule-making authority is possible.

7. Next meeting;

1. Send agenda items to current Chair, H. Reynolds.

Motion to adjourn by R. Haggard, 2nd by J. Cummings

3:07 PM – Adjourn

Attachment 1.

Purdue Extension Invasive Species Program Proposal

Invasive species are defined as alien or non-native species whose introduction does or is likely to cause economic or environmental harm or harm to human health. Invasive species disrupt the balance of nature when they escape their natural checks and balances and proliferate unrestrained - basically enjoying a free lunch! They include exotic insects, plants, fish, birds, mammals and many other organisms that pose a serious threat to our homes, environment and economy, and constitute a growing problem estimated to cost 5% of global economies worldwide. In the US, where a new invader reaches the country every 6 weeks and threaten the long-term health of natural resources in rural and urban areas, the annual cost has been estimated to be more than \$137B.

Non-native species can be both a consequence of and an impact on our economy. They disrupt production, price and markets, trade, food security and nutrition, human health and the environment, not to mention their costs as a nuisance species, which can be staggering and recurring. In addition to the billions of dollars spent each year to manage invasive terrestrial plants, including \$27B for introduced weeds alone, more than \$100M is spent annually to control just two species of nonnative aquatic plants, hydrilla and water hyacinth, in U.S. waterways. Zebra mussels incur more than a billion dollars in control costs and damage each year to U.S. infrastructure, while exotic fish cost an estimated \$5.4B annually. The U.S. livestock industry losses from exotic microbes and parasites is conservatively estimated at \$9B per year, whereas the total damage of nonnative birds to native birds is approximately \$17B per year.

In Indiana, homeowners grapple with invasive species such as garlic mustard and multiflora rose in their back yards, and Asian ladybugs and brown marmorated stinkbugs in their homes. Woodlots owners are well aware of exotic Asian bush honeysuckle, gypsy moth, emerald ash borers and sudden oak death. Indiana DNR leverages resources each year from a modest \$20 million a year federal program to successfully “Slow the Spread” of gypsy moth. Meanwhile, Hoosier landowners and managers reportedly spent \$6M in 2012 to control invasive plants. In field crops, we find introduced European corn borers and soybean aphids now being managed each season with costly proprietary pesticides and seed genetics. Fruit and vegetable growers are similarly managing non-native brown marmorated stinkbugs, and the recently discovered spotted wing drosophila found on small fruits. The nursery industry is periodically victimized by devastating invasive fungal pathogens of solanaceous plants, ornamental plants and oaks. Our waterways are not exempt from alien invaders. Asian carp are overwhelming native fish in Hoosier rivers, and Eurasian watermilfoil, an aquatic plant introduced through the aquarium trade, is now found in a third of the lakes and reservoirs in northern Indiana and cost Hoosiers \$800,000 a year in removal efforts.

Invasive species in Indiana are a persistent and growing concern in production agriculture, natural resources and urban communities in Indiana where the Departments of Natural Resources, Agriculture, Transportation, and the Board of Animal Health have the lead responsibilities for invasive species. Purdue Extension plays an important auxiliary role with invasive species in the state by addressing new pests and diseases associated with specific 2 commodities once they are well established. However, like the federal government, communication and interactions between state agencies and their partners are constrained by

inadequate shared planning, legal authorities and state appropriations. So in 2008, a task force created by the Natural Resources Study Committee of the Indiana legislature with a broad assortment of stakeholders with expertise and interests in invasive species issues provided their findings and recommendations. This became the basis for House Act No. 1203 signed into law in 2009 that created the Indiana Invasive Species Council. The Council is charged with helping state agencies and their partners with invasive species responsibilities and interests to effectively and efficiently address these challenges.

Where Purdue Extension is concerned, what is missing, and what is still needed, is a way to bring Extension educators together with state agencies as a competent and compelling ally in managing invasive species. The objective would be to augment surveillance and amplify public outreach by engaging Extension educators and connecting through their reach in every county in the state. And since all invasions are local, any help that Purdue Extension can provide in the counties would be a win for the state. This could be done by creating a new Extension program that engages Extension educators as frontline assets in each county to help with invasive species surveillance, education and outreach. The program would fit logically in the Agriculture and Natural Resource (ANR) section of Purdue's Cooperative Extension Service. ANR already addressed invasive species, but almost exclusively with Extension specialists, experts on particular commodities or taxonomic species, who provide information for managing specific well established invaders. There is no dedicated program that provides training about invasive species as a general topic to Extension educators, and the role they can play as frontline first responders and local awareness campaigners.

This critical gap in Purdue Extension could be filled with a new program on invasive species that would be independent of specific commodities or taxonomic species, and complement existing Extension specialist programs. The new program would provide general information and training about invasive species to help Extension educators engage as partners with early detection and public outreach. Extension educators would become part of the statewide surveillance network and local advocates about the importance of invasive species. This way, when a new invader threatens, Extension educators will be better prepared to help specialists, and link strategically with relevant state agencies. The Indiana Invasive Species Council can help link and coordinate these interactions with state agencies. The expected outcome would be a greatly enhance statewide invasive species capacity with better connections between partners. Dr. Steve Yaninek is willing to take on this responsibility, but his current appointment at Purdue would need to be changed. If the Council thinks this proposal is a good idea, he would like their endorsement so he can include it in his request to Purdue administration for a new Extension appointment focused on invasive species.

Attachment 2.

From: Sadof, Clifford S [<mailto:csadof@purdue.edu>] Sent: Thursday, March 09, 2017 9:30 AM To: dawn.slack@TNC.ORG; Kris <kkrouse@heinztrust.org>; Ellen Jacquart <ellenjacquart@gmail.com>; Megan Abraham (MAbraham@dnr.IN.gov) <MAbraham@dnr.IN.gov> Cc: Sara Stack <stack4@purdue.edu>; Crow, Joan E. <crow@purdue.edu> Subject: Website Retooling for Indiana Invasive Species

Hi All,

My discussion with Purdue Ag Communication yesterday was quite informative.. We basically agreed that any media campaign, social or otherwise would have to drive the public to our invasive species website. I would like some input from the Council on the following points in order to proceed. I told the group we wanted to have everything functioning in time for a campaign to promote the Spring 2018 IISC meeting.

1. What do we want the website to do?

Why this is important: As we learned, from the Dontmovefirewood.org campaign, simple messaging is key to changing public behavior. Bringing them to a complicated website will dilute our messages and ranking in google search engines. The top 10 BMPs for invasives plants that the council already developed is also another good example of simple messaging.

- [Need a clear vision and mission statement - not sure what this should be; perhaps we need an ad hoc committee to lead us in the effort](#)
- [Become a reliable, informative and current source Council info for Council stakeholders](#)
- [Be a repository of IISC business and activities](#)
- [Provide links to relevant IS websites](#)

2. What are the critical activities that we should put on the front landing page?

Based on discussions I have had with members of the Council we want website to be a portal to two activities. Actually the existing website <https://www.entm.purdue.edu/iisc/plants.php> already devotes the left side of the page to BMP's and the right side to Reporting. Any public ad campaign would build on these activities. For example, the two activities I have listed could be promoted with a variant on a tag line that could spin off of existing campaigns. For example " See Something, Say Something, Do Something", or "Find it, Report it, Fix it".. :

- [Reporting invasive species](#)
- [Best Management Practices \(BMPs\)](#)
- [Source of invasive species news - local, state, regional, national, international](#)

3. Can the Citizen Scientist reporting needs be met by referring visitors to the Gledn's App (Report IN) and the 1-866- NOEXOTIC phone line?

The Council put considerable effort in this partnership with Charles Barger of Bugwood to develop this reporting tool. New invasive pests can easily be added by contacting Joe LaForest or others in the Bugwood group.

- [Use website to reinforce GLEDN app \(need to find a better name for this](#)

app), and perhaps include a link to the GLEDN portal for reporting new observations

4. What are the critical elements of the best management practices for each group of organism that should be accessible?

This is really the most difficult point. On the existing webpage, Invasive Plants are handled quite well. The problems arise with the other 3 categories, Plant Pests and Diseases, Animal Diseases, Aquatics. The page takes users to other sites, mostly existing in the DNR, which eventually links to Purdue resources. Since this is a complicated problem we agreed that best place to start is to inventory a list of existing Purdue web resources so we can then create a prioritized list of what might be included and how the IISC website would need to be structured.

- Perhaps best handled with an ad hoc committee that would include both IISC and non-IISC members

Looking forward to hearing from you so we can proceed with the scoping of this project.

All the best,

Clifford S Sadof