Wisconsin Invasive Species Council Meeting

Wednesday, December 14, 2016
10:00 a.m. – 1:00 p.m.
DNR Science Operations Center
Madison, Wisconsin

Meeting Notes

Council Members Present: Tom Bressner (Wisconsin Agro-Business Association), Tom Buechel (McKay Nursery), Drew Feldkirchner (DNR), Julie Fox (Tourism, via telephone), James Hughes (DOT), Jim Kerkman (Council on Forestry), Brian Kuhn (DATCP), Greg Long (Needles & Leaves Nursery), Travis Olson (DOA), Ken Raffa (University of Wisconsin), Paul Schumacher (Wisconsin Lakes, via telephone).

Others Present: Mary Bartkowiak (DNR, staff), Tara Bergeson (DNR, staff), Tim Campbell (UW-Extension), Michelle Nault (DNR), Christa Schaefer (DOT), Dreux Watermolen (DNR, staff), and Bernie Williams (DNR).

Call to Order and Introductions

Chairman Schumacher called the meeting to order at 10:07 a.m. Council members introduced themselves and welcomed Julie Fox as the Department of Tourism Secretary's designee to the Council.

Approval of September 14, 2016 Council Meeting Minutes

Motion by Mr. Kerkman to approve the minutes of the September 14, 2016 Council meeting. Second by Mr. Bressner. Motion passed.

State Agency Invasive Species Staffing

Mr. Watermolen provided updates on recent staffing changes within the DNR. Mr. Feldkirchner provided information on DNR's Statewide Invasive Species Coordinator position. As part of the DNR's recently rolled out strategic alignment, the Bureau of Natural Heritage Conservation (NHC) was identified as the new "homeroom" for statewide invasive species work. Tara Bergeson has temporarily been assigned the coordinator role. NHC intends to pursue a permanent position to fulfill these duties. The timeline is not known at present, but will be evaluated after July 1, 2017.

Anne Pearce is the new coordinator for the Wisconsin First Detectors Network at UW-Extension. She replaces Tony Summers.

Mary Bartkowiak is the new invasive species outreach coordinator for DNR's invasive "Organisms in Trade" project. She replaces Amy Kretlow.

Mr. Kuhn announced that The DATCP has hired two plant pest and disease specialists. Shanon Hankin will work out of the Madison Prairie Oak State Office Building where she will assist the phytosanitary certificate program and cover inspection fieldwork in Green Lake, Waushara, Marquette, Juneau, Adams,

Richland, Vernon, and Crawford Counties. Tim Boyle will work out of his home headquarters and cover inspection fieldwork in Clark, Jackson, Monroe, La Crosse, Trempealeau, Buffalo, and Pepin Counties.

Chairman Schumacher welcomed the new staff members.

Chairman Schumacher inquired about staffing within the DNR's Fisheries Management program. Mr. Watermolen reported that fisheries staff member, Willy Fetzer (replaced Bill Horns), has been assigned to work with the Department Invasive Species Team and deal with NR 40 permitting for fish. The position vacated by Kate Strom Hiorns has not been filled and work related to bait fish regulations has not been reassigned at this time. The bureau has requested permission to fill several critical vacancies, including that of Ms. Strom Hiorns. Chairman Schumacher stated that he believes fisheries/bait fish regulation should be a high priority work area in the near future.

Council Research Committee Report

Dr. Reinartz's term on the Council ended earlier this year. Chairman Schumacher asked Dr. Raffa if he would be willing to assume the position of Research Committee chair. Dr. Raffa agreed. Chairman Schumacher reminded the Council that the primary task for this committee to undertake in the near future is the review of the most recent NR 40 update process and consider what worked well and what might need improvement for next time.

Council Education Committee Report

Ms. Schafer provided the Council with a report on behalf of the Education Committee.

The committee has developed a timeline and major milestones for the 2017 Invader Crusader awards. The nomination period will run from January 17 to March 17, 2017. Awards will be presented on June 8, 2017 at the DNR's Mac Kenzie Environmental Center. Council members who are interested in serving as judges should contact Christa. Mr. Long will be a judge, and members may also contact him.

The committee has also identified a timeline and major milestones for the 2017 Invasive Species Awareness Month video competition. The video submission period will run from February 6 through April 28. The judging period runs from May 1 through May 31. Judging will be based on the number of Facebook "Likes" that each video receives. The contest winner will be announced on June 1 and acknowledged during the Invader Crusader awards ceremony.

Chairman Schumacher asked if a poster contest had been considered. Ms. Schafer replied that a poster contest is not in the works due to lack of staff capacity to support such an effort.

The committee has developed an "Ordinances Resources" page on the Council website which will be presented later in the meeting. The Committee is now working on developing an "Educators Resources" page for the website. The page will feature curriculum materials for both formal and informal educators from pre-K through college levels. It will also include links to service learning opportunities. The committee hopes to present a draft of the page at a future Council meeting.

Ms. Schafer reported that the committee is not planning to hold an Education Summit in 2017, but they are considering other options that could take the place of the Summit.

The Education Committee will continue meeting bimonthly, with meetings scheduled through the end of 2017.

Chairman Schumacher commented that background material for new Council members should include some of the historical context for the Council, including the development of the strategic plan. As staff time is available, he suggested the committee consider populating the webpage with more of this information/minutes from past meetings. Chairman Schumacher expressed appreciation for getting recent minutes posted in a timely manner.

Local Noxious Weed Ordinances Web Resource

Mr. Watermolen described and demonstrated the Council's new web resource focused on local noxious weed ordinances, which was developed as a follow up to recent Council meeting presentations. The Education Committee has not yet promoted the site because it first wanted feedback from the Council.

Mr. Long asked if focusing at a local- rather than state-level is "taking a step backwards." Mr. Watermolen explained that municipalities already have statutory authority to enact such ordinances and that having a local ordinance does not change the need to comply with NR 40. Rather having a local ordinance shifts implementation of NR 40 to the local level, which may be a good approach when dealing with individual landowners. Mr. Kuhn commented that the approach brings the control and enforcement to the local level, which could be a real benefit as limited state resources can be better focused on commercial aspects of invasive species. Mr. Watermolen noted a recent example where local authority would have been helpful. An NR 40-regulated species, Princess tree, was reported growing in front of a residence in Fitchburg. The process of identifying the (absentee) property owner, contacting them, and informing them that the tree needed to be removed took considerable staff time. With a local ordinance, DNR staff could have referred the complaint to the city for follow up under its ordinance.

Mr. Schumacher suggested that the web resource be brought to the attention of local government associations. Mr. Watermolen responded that the Education Committee can work with the associations to include articles in their newsletters. This information can also be integrated into DNR's exhibits at the Wisconsin Counties Association and Wisconsin Towns Association meetings and the Education Committee can reach out to the League of Wisconsin Municipalities to request a link to this webpage on that organization's site. Mr. Olson commented that the Wisconsin Wetlands Association (WWA) is working to increase wetland ordinances at the local level (counties and municipalities) and suggested that WWA might be interested in including wetland invasive species in their work on this issue.

> **Task:** Ms. Bergeson will reach out to the WWA Policy Coordinator to discuss opportunities to promote integration of wetland and nuisance weed ordinances.

Dr. Raffa asked for clarification on the intended audience for this web resource. Mr. Watermolen responded that the intended audience is local municipalities and elected officials, though individuals could also use it to engage and inform their elected officials.

Mr. Schumacher expressed a desire to be sure that local ordinances are consistent with NR40. Mr. Long added that it is important to not undermine NR40, which gives species a fair hearing backed by science and data. He expressed concern that municipalities could add any species they determine to be a weed to a local ordinance. For example, when prairies started becoming popular in the Milwaukee area, many native species were added to municipalities' lists of weeds. Mr. Watermolen acknowledged this concern and shared an example of some municipalities regulating milkweed, which is a native Wisconsin plant that is important to pollinators, as a noxious weed. He noted that these types of "abuses" of the local weed

ordinance are the exception and not the rule. Mr. Watermolen reminded the Council that local ordinances must be consistent with NR40, but that the law does allow for regulation of non-NR 40 species that are determined locally to be noxious weeds. The Council and DNR cannot make these determinations for local governments.

Mr. Buechel commented that municipalities will use a local ordinance if/when they feel the need to and will not if they don't. He wondered if developing the web resource is a good use of the Council's time. Mr. Watermolen responded with an example from the Town of Jacksonport (which was presented at a recent Council meeting). The approach was not to add a lot of plants into their ordinance, but rather to strategically consider threats and those species for which the town could reasonably make a difference. One of their biggest concerns in their area is managing *Phragmites*. The town recognized that if they could not manage this species across the entire town they would lose the battle. Therefore, they added *Phragmites* to their ordinance because it allowed them to manage it locally across the entire town. In addition, they chose to not ask residents to pay for this, but instead are using grant funding from the Great Lakes Restoration Initiative (GLRI) to do the necessary management. This is an example of a pragmatic approach and prudent use of local resources. Having the "Local Ordinances" page provides a resource for communities looking to use a similar approach. Mr. Watermolen also noted that the page has been created already and is not anticipated to pose an ongoing workload issue.

Motion by Mr. Kuhn to add language to the Council's Local Ordinance webpage to indicate the Wisconsin Invasive Species Council recommends that local noxious weed ordinances be used to expedite implementation of NR 40 and that emphasis be placed on exotic invasive plants as listed in NR 40. Second by Mr. Long. Motion passed.

Mr. Bechner asked if we can track the implementation/use of these ordinances. Mr. Watermolen replied that that may be possible and the committee could look into doing so.

Consideration of Petition Related to Biological Control of Garlic Mustard

Garlic mustard is an introduced European biennial plant that has spread to 37 states and six Canadian provinces and is one of the few introduced herbaceous species that invades and dominates forest understory communities. Sites dominated by garlic mustard frequently have low native herbaceous species richness and cover. In addition to mechanical, physical, and herbicidal control, biocontrol is an option for land managers dealing with garlic mustard. In a June 21, 2016 petition, researchers from the Minnesota Department of Natural Resources, CABI Switzerland, and the Department of Agronomy and Plant Genetics at the University of Minnesota proposed release of the root-mining weevil, *Ceutorhynchus scrobicollis*, as a garlic mustard biocontrol agent.

Ms. Williams provided information about the DNR Forestry program's research on forest plots in Wisconsin, which quantify garlic mustard. This research is not comparable to that done by other researchers described in the petition because the DNR selected plots randomly, while other research plots discussed in the petition were not selected randomly.

Dr. Raffa asked what mechanisms would lead to the eventual decline of garlic mustard as mentioned in the petition? Ms. Williams explained that garlic mustard secrets a chemical called Sinigrin into the soil that deters the growth of other plants and decreases competition. Over time, garlic mustard produces less Sinigrin. One researcher has hypothesized that once that happens, garlic mustard will decline and other species will return to the forest environment. Importantly, though, it will likely take decades before an initial garlic mustard invasion declines enough for native species to regain a foothold. In the meantime, the health of the forest will have been compromised. Ms. Williams noted that DNR staff who have

reviewed the referenced study believe that there are important gaps in the research. She also noted that even if garlic mustard does eventually decline on its own, it is still causing extensive problems in temperate forests right now. As a practical example, landowners who have land enrolled in the Managed Forest Law (MFL) program are required to do a harvest. If they harvest an area that is heavily infested with garlic mustard, they may not get adequate tree regeneration. As a result, they may eventually lose their enrollment in the MFL Program.

Chairman Schumacher asked Dr. Raffa what he thought about the proposed biocontrol agent. Dr. Raffa indicated that there are some non-host plant species upon which this particular weevil feeds. Biocontrol of plants has been a bit of a roller coaster and he is somewhat concerned about potential long-term consequences. Ms. Williams commented that there are a couple of agricultural species that are within the host range for this weevil. If released within a forest community and not near agricultural areas, the risk appears to be minimal. Dr. Raffa questioned the dispersal ability of the weevil indicating he was not sure if this weevil can fly or not.

Mr. Kuhn mentioned that the National Plant Board has expressed concern that the APHIS biocontrol program is not approving new biocontrol methods. Dr. Raffa added that the process seems to be more diffuse for plant biocontrol than for animal biocontrol. Dr. Raffa reiterated that his primary concern is the impact to non-host plant species, but overall, it looks to be quite low. Mr. Buechel noted that the public will express concern over any potential agricultural impacts.

Mr. Kuhn reported that DATCP staff reviewed the petition and submitted a letter of support. They didn't believe there was evidence of risk from the proposed biocontrol agent to threatened or endangered species in Wisconsin; whereas garlic mustard does have a negative impact on some rare species.

Chairman Schumacher asked for clarification on what Council action is requested on this issue. Mr. Watermolen clarified that the Wisconsin DNR was not asking for any particular action. The Minnesota DNR seeks support broadly for their petition. The question for the Council was whether or not to take any action regarding the petition. Mr. Watermolen suggested the following as possible options:

1) do nothing;
2) write a letter in support of the petition;
3) write a letter expressing opposition to the petition; or
4) write a letter raising questions about details within the petition.

Mr. Feldkirchner asked if we know whether Michigan has weighed in on the petition. Ms. Williams was not aware of any action taken by Michigan. Mr. Kuhn, however, added that Michigan did receive the petition for review. Mr. Long asked if there will be additional opportunities for review and updates in the future. Ms. Williams was unsure of future steps in the federal process. Mr. Watermolen asked whether the Council would like updates in the future. Council replied that they would.

Task: Ms. Bergeson and Ms. Williams will track the issue and provide updates as appropriate.

Motion by Dr. Raffa that the Council not take any action regarding the petition at this time. Second by Mr. Kuhn. Motion approved.

Starry Stonewort Response Plan

Ms. Nault provided an update on the DNR's starry stonewort response plan. Starry stonewort is a macroalgae native to Europe and Asia that was first documented in North America in the St. Lawrence River in 1978, likely the result of transport via ballast water. Starry stonewort has since been documented

in Michigan (Lower Peninsula) inland lakes in the mid-2000s, and is currently known from sites in Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Vermont, and Ontario, Canada.

Biologists first discovered starry stonewort in Wisconsin in Little Muskego Lake, Waukesha Co., in fall 2014. Throughout 2015 and 2016, the DNR conducted a rapid assessment of public access locations throughout southeast Wisconsin. Monitoring consisted of random rake tosses at boat launches, shoreline meanders, snorkeling, etc. Starry stonewort has now been found in six Wisconsin inland lakes. In August 2016, a lake management consultant discovered an additional population in the Sturgeon Bay channel, Door Co. In September 2016, DNR staff conducted a rapid assessment of public access locations surrounding the initial report, and along the Green Bay and Lake Michigan coastlines. Starry stonewort was detected at a small number of sites along the east shore of Green Bay and in Rowleys Bay on the Lake Michigan coast.

Ms. Nault reviewed identifying characteristics of starry stonewort and species that it could be confused with and discussed what is known about the species' biology/ecology. Ecological impacts of starry stonewort remain largely unknown. Management of starry stonewort has been largely unsuccessful in other states. Chemical herbicide treatments may provide temporary nuisance relief (< 1 year), but do not kill the entire plant. These chemicals are generally non-selective and may impact native species. Physical control (e.g., hand-removal, DASH, dredging, mechanical harvesting) have also been largely ineffective. There are no known biocontrol methods for this species. As a result, eradication is not likely a realistic goal for this invasive species.

To date, the DNR has awarded six early detection/rapid response grants and four Clean Boats Clean Waters grants to deal with starry stonewort. The goal has been to prevent further spread of starry stonewort within Lake Michigan and potentially to additional inland lakes. Future management attempts may include water level drawdowns, dredging, use of barrier curtains to contain herbicide treatments, sequencing of techniques, etc. Ms. Nault noted that it will be important to engage local stakeholders in management planning and education/outreach activities (i.e. CBCW). If further management/control efforts occur, it also will be important to collect quantitative data to assess the efficacy and longevity of that control work. The DNR team is working with other states and partners to learn and adaptively manage starry stonewort.

Mr. Kerkman asked what Michigan has been doing on this issue. Ms. Nault indicated Michigan has not been quantitatively tracking and measuring their control efforts. She indicated that New York may be better situated to share experiences and lessons. Minnesota is also taking a more science-based approach. She noted that often lake associations/lake groups just want to "do something." When one thing appears not to work, they quickly move on to something else with little documentation of previous effort. As a result, it can be complicated to assess what is working. Ms. Nault noted that industry (e.g., herbicide developers/applicators) seems to be in tune with this issue; although there are not yet many answers, they seem to be putting resources into it.

Mr. Kuhn asked if states that have had starry stonewort longer are seeing negative impacts? Ms. Nault responded that most information is anecdotal at this point and there is very little published literature. It is reasonable to make some general guesses about potential impacts based on knowledge of how this type of invasive usually works; eradication is not realistic.

AIS Strategic Management Plan

Mr. Campbell provided a brief update on the Aquatic Invasive Species Management Plan, He summarized included input received from the Council following its previous meeting and described how the plan was modified based on that feedback. He also discussed next steps and timeline.

Mr. Campbell reminded the Council that there are multiple audiences for the plan, including agency staff and partners involved in work planning/grant proposal development who may wonder what the needs/ priorities are. He also described some of the federal requirements that the plan has to meet and described why certain elements were included and the corresponding level of detail needed.

Mr. Schumacher inquired about the timeline for completing the plan. Mr. Campbell indicated that he hopes to have a close-to-final document in January. The document will be subject to review by various DNR policy teams, the Mississippi River Basin and Great Lakes Panels, Aquatic Nuisance Species Task Force, and U.S. Fish and Wildlife Service. Those reviews could take as much as six months.

Exotic Pet Rehoming Efforts

Mr. Campbell provided a brief update on recent exotic pet rehoming efforts. U.W. Sea Grant hosted a re-homing event on October 1, 2016 in Green Bay with the Green Bay Aquarium Society and the Fox Valley Humane Society. The event, which was held at a nature center, was successful with more than 50 contacts made; 17 fish were rehomed. Sea Grant's Habitattitude project conducted a pet rehoming survey of retailers, nonprofits, and nature centers in the Fox Valley area. They learned that rehoming or surrender services need to be available at all times since owners may not have the luxury of waiting for an event. All of these venues also indicated that they get asked about rehoming on a regular and frequent basis. Reasons and timing for per rehoming vary. Fortunately, survey respondents were knowledgeable about invasive species.

Mr. Feldkirchner asked if the rehoming program also includes native species. Mr. Campbell responded that, although the program does not directly address native species, the issue does come up regularly and the program can be helpful for placing native species, too.

Mr. Campbell concluded by noting the "Habitattitude for Teachers" online course he is working on, as well as a second Great Lakes BIOTIC Symposium that will be held in 2017.

Waterfowl Hunter Outreach

Mr. Campbell provided a brief update on recent waterfowl hunter outreach efforts as well as lessons learned to date. Waterfowl hunters use watercraft but probably are not getting the typical AIS outreach messages that other boaters get. As a result, awareness about invasive species among waterfowl hunters is somewhat lower than what has been observed among boaters in general. The AIS team is attempting to address this concern through various outreach efforts. Program goals in 2016 included testing outreach tools and tactics to: 1) increase awareness among waterfowl hunters about their role in AIS prevention, and 2) increase AIS prevention behaviors among those hunters. Jenny Seifert is serving as the campaign coordinator, DNR's water guards and county AIS coordinators are in-field co-leads, and conservation wardens are assisting as needed with enforcement.

In 2016, the outreach effort reached approximately 11,500 hunters. Interactions were mostly positive overall. We learned that hunters seem most willing to interact when they come off the water in late

morning and are less interested when heading out onto the water. There is room for outreach improvement. There is also a need to look at decoys and not just boats when inspecting for invasive species. Barriers to AIS prevention among hunters can be summed up as including awareness, time, and mud (a complicated vector for dispersal). One unexpected outcome was the discovery of starry stonewort on boats and equipment at Big Lake Muskego, with the threat of being spread to other areas.

In 2017, the program will look at campaign improvements including 1) better waterfowl-specific "bling," 2) recruiting more volunteers, 3) using a longer planning timeframe, 4) administering a hunter-specific CBCW survey, 5) allotting more water guard hours for the waterfowl season, and 6) ensuring better communication with conservation wardens. Staff also plan to attend waterfowl hunter events and are developing a piece that could be included in Ducks Unlimited's member magazine.

Mr. Buechel asked whether any outreach has been directed at equipment manufacturers. He also noted that many duck hunters follow the seasons and go from state to state for their hunting. Mr. Campbell responded that there have been efforts aimed at engaging the entire outdoor industry. For example, bait shops owners are recognized opinion leaders, so efforts are being directed to working with them on the baitfish education and outreach. There have been efforts to work with boat manufacturers on designs that would be less likely to harbor invasive species and move them around. He acknowledged that more could be done along these lines.

Mr. Buechel stated that an important message to industry is that if habitat is lost, the industry will be lost. Smart messaging and repetition on products could do a lot to help spread the word about the risk of invasive species.

Organisms in Trade Outreach and Education Related to NR 40

Mr. Kuhn suggested tabling this update to a future meeting because the meeting is running a little bit behind. Chairman Schumacher agreed.

Round Goby Response at Lake Winnebago

Ms. Nault provided an update on the rapid response actions following the discovery of round gobies in Little Lake Butte des Morts. The round goby is an aggressive territorial fish with a voracious appetite. It feeds on the eggs and young of native fish, negatively influences spawning of other fish, alters the food web in invaded habitats, and can be a 'bait-stealing' nuisance. It is a prolific, reproducing up to six times in a season. Round gobies were first observed in the St. Clair River and Lake Huron in 1990, and by 1995 were found in all of the Great Lakes. Until recently, scientists believed that round gobies had spread to inland rivers only up to their first impassable barriers. In the Fox River, gobies occurred only downstream of the Rapid Croche dam, but in August 2015, an angler reported catching a goby immediately below the Neenah Dam in Little Lake Butte des Morts. In September 2015, DNR crews sampled numerous locations near the original report and caught two gobies, confirming its occurrence in the area.

The DNR worked with the Fox River Navigation System Authority (FRNSA) in September 2015 to close the Menasha Lock in order to prevent upstream movement of gobies into the Lake Winnebago system. This sudden closure of the locks stranded eight large recreational vessels, preventing them from navigating to their overwintering dry-dock locations. A decontamination plan allowed a one-time passage through the Menasha lock, in conjunction with a Rotenone treatment to kill any gobies that may have been present in the lock chamber. Mr. Watermolen noted that this was a reasonable and practical approach to ensuring an ongoing partnership with the FRNSA and boaters.

Round goby 'watch' signs in multiple languages have been posted at public access sites and various bait shops in the area. Outreach to hundreds of individual anglers has occurred through a high level of traditional and social media coverage. DNR staff have followed up on all angler submitted calls and reports. UW-Oshkosh's Clean Boats Clean Waters interns provided all boaters a goby 'wallet card' with information on goby identification and what to do if they catch one. Interns angled for gobies in between interactions with boaters, but no gobies were caught. Thus far, effort shave been successful in preventing the gobies from spreading into Lake Winnebago.

Activities planned for the remainder of 2016 and 2017 include: an education and outreach push during sturgeon season and other area fishing tournaments, sturgeon stomach analyses for the presence of gobies, and continued planning for 2017 monitoring for round gobies on Lake Winnebago and Upper Pool Lakes, response actions, and outreach activities. The DNR will continue to working with the FRNSA to explore long-term strategies related to operation of the Menasha lock. The USGS is studying the effectiveness of a carbon dioxide (CO2) barrier to prevent goby movement upstream; preliminary results are undergoing internal review. A future effort may use a visible dye that could illustrate hidden historic corridors to examine potential 'cross-connections' between channels that may allow for potential goby movement.

Council Questions and Feedback on Written Updates

Schumacher asked if the Council had any questions on the written updates that were shared. Council members had no specific questions. Mr. Schumacher expressed appreciation for staff efforts to pull together the updates.

Public comment

There were no additional comments from the public.

Chairman Schumacher asked members to review the biennial goals for the Council and, in particular, the NR 40 species assessment process.

Task: Ms. Bergeson will remind the Council to do this.

Mr. Watermolen asked if the Council preferred to schedule the March/April meeting via Doodle poll before the holidays or after. Most preferred waiting until after holidays.

Task: Ms. Bergeson will poll the Council in early January to schedule the spring meeting.

Adjourn

Mr. Long moved to adjourn the Council meeting. Seconded by Dr. Raffa. Motion passed. Chairman Schumacher adjourned the Council meeting at 1:00 p.m.

Note: PowerPoint presentation slides and handout materials from several of the meeting presentations/ discussions were distributed to Council members via email following the meeting.