Meeting Minutes: October 13th and 14th, 2021

October 13, 2021 • 9:00 am to 12:00 pm
October 14, 2021 • 9:00 am to 12:00 pm
Remote Only

October 13, 2021, 9:00 am to 12:00 pm

Present via Zoom
Most but not all participants were present for the entire meeting.

1. Jennifer Burington
2. Chelsey Blanke
3. Danielle DeVito
4. Kerry Wixted
5. Krishna Woerheide
6. Christina Basch
7. Shawn Murphy
8. Michelle Grabowski
9. Liz Anderson
10. Jeffrey Kalin
11. Jeffrey Flory
12. Emily Dunlap
13. Paul Erdmann
14. Amanda Preston
15. Jim Calkins
16. Emilie Justen
17. Sascha Lodge
18. Laura Van Riper
19. Val Cervenka
20. Drew Dickhart
21. Rob Venette
22. Angelique Dahlberg
23. Marian Shaffer
24. Roger Becker
25. Doug Jensen
26. Joe Enfield (MN Association of County Ag Inspectors)
27. Megan Weber
28. Ariana Richardson
29. Angie Gupta
30. Shane Blair
31. Kelsey Taylor

Council Business
- Approval of Agenda (vote)
  o Poll: 21/22 yes, 1/22 abstain, Approved

Engagement Discussions
Palmer amaranth pathways into Minnesota – Shane Blair (MDA)
- MDA Palmer resources can be found on this website
  o Has a map that is updated daily, showing where Palmer amaranth is in the state
    ▪ Includes information about the site, when it was last treated, etc.
    ▪ It does not have the exact location because some of that information is private
  o They are also doing a Weed of the Month series that talks about what people are seeing in the field
  o Paper: Timeline of Palmer amaranth invasion and eradication in Minnesota
- Impacts
  o Outcompetes row crops
  o Becomes herbicide resistant very quickly (already resistant to 6 classes of herbicides)
- Can germinate at any time during the season

**Timeline**
- First found in 2016 in Lyon County. Roughly 14 landowners had a pollinator seed mixture contaminated with Palmer amaranth. Eradicated from Lyon and Yellow Medicine Counties.
- 2017: 4 new counties
- 2018: 8 counties; First find for Minnesota in a row crop setting.
- 2019: Gained 2 more counties (Lincoln and Houston)
- 2020: 1 county
- 2021: 1 positive find in 1 county, contaminated Pearl Millet was identified and all 5 sites (affecting 3 counties) in MN where it was planted is being monitored, No palmer found growing.
- To date, detected in 10 counties total. Able to determine pathways to slow spread.
- Can dominate 72-90% of row crops

- In Iowa they went from two counties to twenty counties in a short timeframe
- Looking into and monitoring/regulating the pathways really helped Minnesota slow the spread
  - Only four counties currently have populations (Clay, Houston, Polk and Goodhue), all from different pathways. Screenings has been identified in Polk county & Chicken feed identified as the pathway in Clay county. Houston and Goodhue the pathway is unknown currently.
- They are considering a population to be eradicated if it has not been detected for three consecutive years (MDA no longer conducts management at that point – it’s up to the farmer or property owner)

**Pathways**
- Original was a grass seed, conservation pollination seed mixture
- In 2018, two fields, one field in Jackson County and one in Redwood County were the first row crop fields where Palmer amaranth was found in Minnesota. MDA and University of Minnesota Extension screened manure, feedlots and looked at what the farmer was feeding their livestock, which turned out to be sunflower screenings. Sunflower screenings coming from a ND company. The two farmers were connected with the University of Minnesota Extension to look at and review their chemistry plans as well as what specific crop they were going to plant for the upcoming growing season.
- 2019, found it in a millet seed, the company self-reported the issue, and they were able to recall all the seed except one in Lincoln County. They burned down that field and compensated the farmer. MDA continued to survey field to ensure no Palmer amaranth goes to seed.
  - Houston County has the worst infestation in the state, and they don’t know the source. They have conducted propane weed torching with the Conservation Corps of Minnesota and Iowa along with hand pulling. Hand pulling seemed to be the most effective. Monitored the site once a week.
- 2020, Winona County, 1 dairy farmer, 3 soybean fields, source unknown (uses a lot of different screenings but screenings were not available to test, all consumed). Crop consultant found Palmer amaranth and reported it to MDA.
- 2021
  - Polk due to sunflower screenings and Goodhue County, source infesting corn fields is unknown. Looking into the source, testing cover crop seed from many different
vendors, as well as, collecting samples of screenings from local feed lot where farmer receives manure from.

- Clay County, source was chicken feed from a well-known company
- Pearl Millet found to be contaminated at a low level. All sites across 3 counties are being monitored but no Palmer growing yet.

  o There are many pathways, and we are always dealing with new pathways
  o Shane felt that eventually, if nothing changes, we will be overwhelmed and responsibility for control will fall on the landowner/farmer; it’s starting to feel like it is getting out of control as more and more pathways are being identified.
  o Communication by neighboring states is poor. Difficult to address pathways when neighboring states are not willing to address prevention (e.g., initially North Dakota not responding when a company there was found to have contaminated product) Some pathways identified late and notified the state that may have received these screenings or seeds late.
  o Need to find a way to work together at a regional level
  o Want to shift focus to empowering farmers: Train them to identify, know how to respond and be committed to control

• Q&A
  o Q: There has been a lot of discontent in the farmer community. What have the conversations been like? A: It depends on where you are in the state. In one case, it was all going well until neighbors started turning on each other (i.e., reporting activities of the farmer with the infested field and threatening to sue). Prefer to encourage the farmer/landowner to talk to their neighbor.
  o Q: How often do you get a call that turns out not to be Palmer? In how many fields do you do random checks for Palmer? A: Didn’t get a lot of false reports at first but now that folks have become more knowledgeable, Shane gets multiple calls per week. When soybeans drop their leaves, pigweeds retain them, so the fall is a time where they get a lot of false identifications. For spot inspections, MDA staff will walk the edges, drive around and if they see something taller than the crop, will go look at it. They always look at manure by feedlots. Shane does this even when not working.
  o Q: Are the neighbors using extra herbicide preventatively? A: Yes, some of them are. MDA does notify neighboring property owners when populations are confirmed.
  o Q: How are the screenings regulated, coming into Minnesota? A: If you want to sell seed in Minnesota, need to be certified. You are allowed so many weeds per pound, but Shane thinks mostly they do not get tested. Screenings are material that falls through the cracks when seeds are being screened – it’s a byproduct that’s sold to feedlots (so there is typically a lot of weed seed). Six million pounds sold by ND company to MN farmers sold as roughage or bedding, full of weed seeds. Companies are not willing to screen the product because they will lose money. Composting is labor intensive and too costly if done correctly. One company offered to incinerate the screenings which also costs money (not sure if they are doing that but assume they are). Ideally, MDA would like to collect samples and test them. MDA seed inspectors collect samples of any seed sold in Minnesota to test them against the labels because that is how they have found Palmer amaranth in the past. MDA is actively working on this. IA has a community level effort; SD was originally doing nothing. ND and SD placed Palmer amaranth seed on their Noxious Weed Seed list. Palmer Summit – MN, ND,
SD, IA, IL and WI proposed. Talked about identified pathways, effective ways to eradicate Palmer amaranth and what is not working. Also talked about regulation and funding.

- Q: Based on your experience and the role of MISAC, is there some advisory action MISAC should take to reach out to the state or neighboring states? A: Yes, we need to work at this on a regional level. In Iowa, they are addressing it at a community level (communities go out to the farms and work to control it in a farmer’s field).

- Q: Thought the state issued a cease-and-desist order to a company that was selling Minnesota farmers sunflower screenings? A: Yes, that happened and would have allowed MDA to take it to a legal level.

- Doug: Options for MISAC:
  - Send a letter to MDA commending their Palmer amaranth efforts and asking if they need assistance from other states. – Roger offered to write this, and Doug offered to help.
  - MISAC could reach out to other MISAC-like entities in other states. – Support by Roger, Paul, Chelsey, Jeffrey, and Jim.
    - Jeffrey: We could also send this to our congressional committee that works with agriculture. We’re all interconnected with other states through commerce.
    - For the south, it’s past tense (beyond control).
    - Could also reach out to the National Invasive Species Council and other national groups.

- Q: Where it is now, do you think it can be contained? A: Shane and crew members from the Conservation Corps of Minnesota and Iowa walked every row at all the sites in Goodhue County, collected all the plants every month, and incinerated them. Right now, it’s all under control. Not finding plants outside those sites. They are making sure these plants do not go to seed and keeping a close eye on them. However, they just found about 6 million lbs. of contaminated seed screenings delivered to Minnesotans. MDA was able to get into contact with each truck driver that delivered these screenings into MN and samples were obtained to test for Palmer amaranth. If positive, surveys will be conducted, and management practices will be put into place at all sites where screenings may have ended up.

- Motion by Angie: MISAC write a letter supporting a regional approach to Palmer amaranth education and management. Second by Jim.
  - Letter will also commend MDA’s efforts
  - Send it to MDA commissioner
  - This would open the door for a similar letter to go out to other states
  - Poll: 21/23 yes, 2/23 abstain. Motion passes.

Firewood Month and Minnesota Firewood Regulations – Danielle DeVito (MDA Pest Mitigation and Regulatory Coordinator)

- See slides for more detail
  - Regarding the definition of firewood: Could move something longer than four feet long
- Regulations
  - MDA has the right to instate quarantine
  - Major pests of concern include emerald ash borer (EAB) and gypsy moth
    - They know that the gypsy moth common name has been dropped by ESA so will continue to use it and acknowledge this until there is a new name in January 2022
- Interior and exterior quarantines: See slides for map of quarantined counties throughout the state
- Exterior quarantine: no firewood can come in from outside Minnesota without a permit or special written permission; coordination by three states to help control
  - Worked with U.S. Customs and Border Protection (CBP) to prevent firewood from coming in from Canada
- They rely on the public to report detections of EAB
- See slides for map showing how you can and cannot move firewood between the EAB quarantines
  - Can bring firewood into a quarantine county from a non-quarantine county
  - Can move firewood between quarantine counties under normal traffic conditions
- Gypsy moth quarantine: Firewood cannot leave Lake and Cook counties
- 27/87 Minnesota counties are under EAB quarantine
- MDA likes the simplicity of the resources from DontMoveFirewood.org

- Certified firewood
  - The only firewood that can move all around the state
  - Is heat treated by firewood producers; 16 kilns statewide
  - Certification process takes about two months to complete
    - Includes a legal agreement saying the producer will always meet criteria
  - They test for cold spots within the kilns to ensure that all the wood is reaching the appropriate temperature

- Labeling
  - MDA certified with printed logo
  - USDA certified (they still see these even though this program is no longer operating so Danielle works with other states to learn how they are addressing this)
  - Simple, no certification
  - X DNR approved vendor ticket: Other states also have programs that have not been operating for some time, but they still see these (so Danielle tries to reach out to folks to educate them)

- Recreation
  - Most common questions are about what firewood people can use on state lands
  - Also get questions about federal lands (in some cases, only MDA-certified firewood is allowed), county parks, private campgrounds/resorts, private cabins
  - There is a checklist of items you should check for EAB when moving your home from an infested to uninfested county.

- Questions and Answers
  - Q: Are there other commercial sources for spread of EAB besides firewood? A: Yes. Anyone making mulch, cabinets, working with lumber, etc. enters into compliance agreements with Danielle/MDA.

Recovering America’s Wildlife Act (RAWA) – Kerry Wixted
- Alliance for America’s Fish and Wildlife was an outcome of the 2014 Blue Ribbon Panel (group of various experts and stakeholders) that identified the need for more funding for fish and wildlife conservation and management
- RAWA was first introduced in 2017 and would provide 21st century funding for species conservation
• Species of greatest conservation need (SGCN) have been identified by states: Minnesota has identified >340 SGCN (Minnesota’s State Wildlife Action Plan)
• There is a history of success with species like bald eagles, peregrine falcons, etc., when funding is adequate
• USFWS requires updates of state wildlife action plans every 10 years. These plans identify SGCN.
• RAWA would provide $1.3 billion in annual funding; $25 million on average per state
• Minnesota currently receives around $3 million/year for implementation but could be getting up to $23 million if RAWA were passed
• Need 25% non-federal match (monetary or in-kind)
• 27 state resolutions have been passed
• Seeing a lot of movement/support in the House and Senate now, even though the bill was last reintroduced in July
  o Funds come from the general fund
  o HR 2773 – 125 cosponsors
    o S 2372 – 28 bipartisan cosponsors
• Actions folks can partake in
  o Senator Klobuchar has cosponsored the bill – could send out some thanks
  o Increase awareness
  o Strategize projects and sources for match
  o Collect success stories and examples of challenges due to limited funding
    ▪ The DNR shared some examples with AFWA already
  o Join the Alliance!
    ▪ This would involve signing on saying we support the Alliance and related work. We would also get resources and a toolkit that can be used for outreach related to RAWA.
• The bill language specifically calls out invasive species: Funds may be used to “manage, control, and prevent invasive species, disease, and other risks to species of greatest conservation need”
  o Includes management, prevention, education and outreach, and law enforcement
  o For example, Henslow’s Sparrow is an SGCN that relies on grasslands and there may be a tie in with Palmer amaranth
• Can use the funds to work across states
• The North American Invasive Species Management Association (NAISMA) just signed on as a partner
• Connect with your state wildlife agency and work together if you already have connections in place and sources of match you can bring to the table (this could be important even outside RAWA for federal projects which usually require some non-federal match)
• Members expressed support for learning more about and potentially joining the Alliance.

Engagement Discussions
Upper Midwest Invasive Species Conference (UMISC) 2022 MOU Discussion – Jennifer Burington
• If the conference doesn’t make enough revenue to pay for the event center, who is responsible for those costs?
  o The contract includes a guarantee of $23,000 in food and beverage revenue. Based on current menu prices and our typical menu selections, we only need about 180 people to hit that number (~30% of pre-pandemic UMISC attendance)
• We can cancel if government issued travel restrictions or 45% or more of our prospective attendees are being impacted by budget cuts such that they cannot attend.

- Motion from Megan, second from Jim: Approve the admin MOU. Poll: 19/19 yes. **Approved.**
- Motion from Angie, second from Jim: Approve the partnership MOU. Poll: 19/19 yes. **Approved.**

**UMISC 2022 Update – Doug Jensen**

- Executive committee has not yet started meeting but Clair (Midwest Invasive Plant Network (MIPN), admin for UMISC) has already developed a timeline
- Need support from MISAC to help plan aspects of the conference. Three committees need help from MISAC members. Terrestrial and aquatic committees would involve reviewing the call for abstracts and reviewing abstracts to ensure the best presentations are selected. The field trip committee would work with the planning committee to develop the field trips (which could involving going to nature areas, parks where control efforts are being done, etc.) and plan logistics.
  - **Program committees**
    - Terrestrial: Laura, Sascha, Roger, someone from MDA
    - Aquatic: Megan, Ariana
    - Either aquatic or terrestrial: Kelsey Taylor
    - Field trip: Doug, Ariana
  - **Media committee** – Helps issue a news release that will go out to the media, identify and invite media to the conference and field components, and develop a strategic plan to aid execution of these efforts.
    - Doug, Jennifer
  - **Moderators will also be needed**
  - **Contact Doug (djensen1@umn.edu)** if you have any interest in getting involved with any of the above

- UMISC planners will consider the following and are looking for input from MISAC:
  - In-person and online experiences and what they should look like
  - If plenary speakers should be in-person
  - Policy on having remote speakers
  - Ability to watch live or asynchronous pre-recorded presentation online
  - Whether or not abstract books should be printed
  - Developing a survey to gather sponsor and attendees thoughts on the above
  - MISAC member thoughts on these and other items
    - In the past we have done Carol Mortensen Awards in conjunction with UMISC; would we still do these together?
      - **Will put the formation of a 2022 Carol Mortenson Awards Committee on the agenda for the January 2022 MISAC meeting**
    - Does the contract with the Green Bay event center have a cancellation clause by a certain date if there is a lack of interest for in-person attendance?
      - Hopefully Wisconsin attendees will fill in with in-person attendance
      - Clair or Mark can answer that question. Doug was not involved in negotiating the WI contract and was informed after the fact.
    - Could we reach out to other hybrid conferences to see what the attendance was, both in-person and online? We are not aware of other hybrid conferences. NAISMA was a long way into planning before they canceled the in-person aspects of their conference.
UMISC planners will also work to brainstorm conference theme, special topics, sessions, invite plenary speakers, call for sponsors, etc.

Planning timeline
- Jan-Feb: Call for abstracts, website updated, planning social events and venues
- March: Abstracts will be finalized
- April-May: Preliminary agenda will be released, speakers notified
- June: Logistics for venues will be finalized
- August-September: Intensive conference administration

Conference dates are October 24-27, 2022
Discussion continued on October 14th

October 14, 2021, 9:00 am to 12:00 pm

Present via Zoom
Most but not all participants were present for the entire meeting.

2. Chelsey Blanke 12. Dave Hanson 22. Tyler Kaspar
5. Shawn Murphy 15. Laura Van Riper 25. Jeffrey Flory
8. Katie Sickmann 18. Jim Calkins
10. Christina Basch 20. Dane Huinker

Council Business
- Approval of Meeting Minutes from 7/13/2021 and 7/15/2021 (vote)
  - Poll: 22/22 yes, Approved.
- Treasurer’s Report submitted by Wildlife Forever, fiscal agent for MISAC (vote)
  - Typically propose to renew Wildlife Forever contract with MISAC at the October meeting. Appreciate the partnership and look forward to continuing that. Co-chairs should discuss and move forward on this.
  - Laura asked about costs for website work and whether those funds were spent.
    - Likely want to update the MISAC website with UMISC 2022 information.
    - Also add website meeting dates.
    - The web team will send requested website updates to Dane to use up the few remaining hours on the current contract.
  - Motion to approve the financial report from Megan, second by Laura. Poll: 19/19 yes. Approved.
- 2021 Leadership - Jennifer Burington, Chelsey Blanke, Megan Weber
- Elect 2022 co-chair (vote)
  - Sascha offered to serve but asked if there was any concern about two DNR staff serving as co-chairs. If so, Sascha could be co-chair in 2023.
  - Members expressed no concerns but Ariana also offered to serve.
• Motion for Ariana to be the 2022 co-chair, second from Sascha. Poll: 22/23 yes, 1/23 abstain. **Approved.**

• **Upcoming meeting dates and format**
  - Discussed the following proposed dates and format
    - January 12, 13
    - April 13, 14
    - July 13, 14
    - October 12, 13 or October 5, 6
  - Laura leads a standing meeting on the second Wednesday afternoon of the month. But two mornings would work.
  - Angie: Less tolerance for an in-person meeting with a hybrid format that isn’t very good and less tolerance for in-person meetings that could be done virtually than there was pre-pandemic. Hybrid meetings can be done well but if they are not, people on both sides can be upset.
    - Need to own the things that we can do in-person (networking, field tour, etc.). If it’s just talking, should we just be doing that on Zoom? It definitely does not seem rational to drive up for two half days.
  - Megan agreed. Not entirely intolerant of saying this is her Zoom day. Would not be opposed to an all day Zoom meeting. We gain a lot by people being able to join virtually. We have had better participation and would hate to lose that. Could we have one meeting a year that’s in-person?
  - Christina: Like the idea of one annual in-person meeting. A full day of Zoom sounds like a bit much. Could have separate educational timeslots for folks interested in those talks.
  - Angie: Likes the 2-day approach for Zoom meetings. Advocates for a break!
  - Drew: Has experience with doing a virtual/hybrid set up. They have a room that could be used for hybrid meetings.
  - Krishna (in-chat): I agree with 1) two mornings in a row over zoom, 2) one annual in person meeting, and 3) designated breaks. (Liz agreed in-chat.)
  - Megan (in-chat): We have a couple rooms at the U that have an "OWL" (which is an awesome hybrid meeting tool that focuses in on a speaker automatically) -- I would have to check on the sizes of the rooms there
  - Drew: Maybe we could do some more hands on activities on the day of the in-person meeting.
  - Ariana (in-chat): Agreed on the one in-person meeting.
  - Doug: Would prefer to have the in-person meeting in the summer rather than winter for driving purposes. (Ariana agreed in chat.)
  - Jennifer: The 2022 spring field trip will also be another opportunity for networking.
  - Doug: This would be just for 2022 and we could always revise for future meetings.
  - Sascha: Guessing the January meeting would still be all virtual due to COVID.
  - Angie: If we have a spring field trip, do we need an in-person meeting?
  - Laura: There’s often not a lot of cross over between the people who attend the field trip and MISAC meetings. There hasn’t been timed scheduled for MISAC business during previous field trips. Could push the field trip as networking.
  - Angie: Would much change if we skipped a business meeting?
  - Doug: Budget UMISC discussion will be needed.
  - Laura: Won’t get much business accomplished at a field trip.
o Chelsey: The state plan implementation evaluation process is another thing we should work on next year.
o The group discussed having the July meeting be our in-person meeting and having the entire meeting on July 14th.
o MISAC leadership could discuss and decide on approach for the October meeting. Could be just a business meeting, saving the educational presentations for UMISC.
o We do not typically vote on dates so leadership can send out meeting invites.
o Ariana: Could we just do a one-day meeting in October?
o Sascha: Earlier seems better to avoid last-minute UMISC planning. Drew agreed.
o Megan is happy to let us keep using her Zoom account. Megan and Doug have a preference for Zoom.
o Recap: 2 mornings Zoom - January and April, in person on July 14, October 6 virtual business meeting.
o Can members attend just one day of a two-day meeting, twice a year to remain a MISAC member? Yes.
o Christina: For the in-person meeting, could we plan to meet outside and have a backup indoor location?
o Jennifer: Will have to wait and see.

Updates and Discussion Topics

2022 Calendar Update – Sascha Lodge
- The MISAC 2022 Calendar has been printed and looks great. Contact Laura if you are interested in ordering but have not already done so.

State Plan Update – Chelsey Blanke
- We have decided that we needed to shift our timeline for the plan update and submit it to the Aquatic Nuisance Species Task Force (ANSTF) in the spring, rather than this fall.
- Reasoning: Chelsey was informed on September 8th by Don Maclean from the federal ANSTF that reviews and approves state invasive species plans had scheduled their fall meeting for November 16-18, giving us an October 14th deadline to submit our revised state invasive species management plan (to allow them time to review prior to the meeting).
- Rather than rushing to finalize our revision and achieve necessary support and approvals by MISAC and other partners in 5 weeks, we will submit the plan in advance of the spring 2022 ANSTF meeting
  o Beyond the rush for approvals, we would still like to host a meeting with representatives of the tribes to share how we’ve incorporated their input and receive final feedback but we are still waiting for approval from DNR leadership on some language related to tribal consultation
- Hope to have meeting with tribal representatives and initiate final MISAC review next month
- Final updates and approvals by the end of the year
- Design work early next year (we also would not have had time for this if we had submitted the plan this fall)
- Aiming to submit to ANSTF in March or early April 2022 (as they usually have their spring meetings in May)
- Advantage is that we will end up with a better product and all supplementary materials (short-form take-home messages for partners on how they can help implement, accomplishments and shortfalls since 2009, etc.)
Goal Review and Membership – Jennifer Burington

- Reviewed suggested MISAC Goals for 2021 from the agenda
  - Jumping worms are still being worked through the rulemaking process
- Potential speakers
  - Mike Dockery was interested in coming next year
  - Ingrid Schneider on emotional impacts of invasive species
- New ideas
  - Angie: Heard an eDNA presentation from U of M Fish and Wildlife Conservation Biology recently. Might not have much use for terrestrial invasive species but could be really useful for aquatic invasive species. The speaker made a comment about papers he could not get published because it studies were not successful so there are some things we will not hear about elsewhere. They worked on a terrestrial crayfish and some species you might not normally think of.
  - Jeffrey Flory: Everything on land washes into the water, couldn’t that potentially be detectable by eDNA (say, if buckthorn was located upstream)?
  - Megan: Presentation on pesticide use, specifically glyphosate and/or USGS climate adapting climate modeling for aquatic invasive species to look at water temp vs. air temp (Sascha has pesticide contacts).
  - Monika (in-chat): It would be interesting to invite leaders from other state invasive species councils to learn about how they operate and what they prioritize (supported by Angie and Megan; Doug has connections he could help make through the National Invasive Species Council).

2022 Field Trip Planning – Chelsey Blanke

- Ideas from member survey
  - Canoe tour of the St. Louis River Area of Concern, wild rice restoration and AIS management
  - Decontamination process for spearing and netting with the Fond du Lac Band of Lake Superior Chippewa (would need supervisor approval and there is no set date – staff are on call)
  - U.S. CBP Port of International Falls
  - U.S. CBP inspections and facility tour at MSP airport
  - Wastewater treatment facility using or transitioning from using invasive Phragmites
  - Sites, terrestrial and aquatic, undergoing restoration or adaptive management
    - Demonstrations of physical (e.g., DASH), biocontrol (e.g., purple loosestrife), and chemical control (e.g., herbicide treatment plants, Cu zebra mussels)
    - Site with jumping worms
    - Site with invasive Phragmites
    - Common carp control
    - Include a service aspect (e.g., garlic mustard pull, biocontrol weevil harvesting)
  - Joint "meet and greet" meeting of MISAC, the DNR AIS advisory committee, and the DNR Commissioner
    - Likely would want to include the Noxious Weed Advisory Committee (NWAC) and MDA Commissioner too
    - Should come with specific asks or messages (would need collaborative prep work by all groups involved)
• Not exactly a field trip but could potentially be combined in with some of these other options

• Group discussion on ideas
  o Additional ideas
    ▪ Monika (in-chat): One fieldtrip possibility is to reach out to Urban Roots about their conservation efforts that includes invasive plant management and restoration. These youth are trained by NPS to be tour leaders. They are doing some very cool work in St. Paul.
    ▪ Katie Sickmann: The conservancy is doing a lot of work with purple loosestrife biocontrols and rearing in mass rearing cages. (Support from Megan.)
      o History of MISAC field trip locations
      o Hybrid or regional events would make the trip easier to attend
      o Locations that are not too remote or rugged will help prevent exclusion of invitees with mobility concerns
      o Jumping worms in the spring would be difficult because they’re immature and hard to find.
      o Ariana (in-chat): I would just keep in mind with the ID changes not everyone may be updated (real id) or have updated passports for entry onto federal bases that require those just a thought in case anyone still had standard issues ones
      o Jennifer: Always up for a canoe trip down a river. (Katie and others agreed.)
      o Kelsey: Will be coordinating searching for emerald ash borer and different ash stands, which could go along with the canoe trip idea. Will have to double-check with colleague on the feasibility of doing this.
      o Jeffrey: Could also tie in willow identification. Suspect some patches are nonnative willows and there is a small window of time for identification with budding out leaves.
      o Katie: Conservancy has a big fleet of canoes.
      o Several others offered to bring canoes in chat.
      o Kelsey: Timing would have to be sometime after the fishing opener and sometime before June.
      o Doug: And after River Quest.
      o Kelsey will check with her colleague to make sure this is a viable option. If it’s not, Chelsey will create a follow-up poll to help rank ideas.
      o Megan (in-chat): would be good if dates come out soonish as I still have time to plan around them, but my May is still pretty flexible.
    o Field trip committee: Kelsey, Chelsey, Doug, Tyler, Monika, Katie

Regional Invasive Species & Climate Change (RISCC) Discussion – Angie Gupta

• RISCC group website
• Focused on invasive species and climate change
• They have a listserv that sends out research summaries with take-home points and what they mean for managers. Helps to stay updated without having to slog through all the research.
• They don’t cover the Great Lakes states - could we reach out to see if they’d be interested in covering the lakes states?
• Doug: They are the only regional group Doug’s aware of working on climate change and invasive species, so it would be a great group to hook up with
• We could see if they would be willing to be a featured speaker in 2022
• Angie also thought they might do other things we do not know about
• About nine MISAC members in attendance knew of the group
• They are connected with USGS so might be connected with folks in our region who might be interested in doing some of the same things for Great Lakes region (Doug also has connections with USGS that could be helpful here)
• Laura: They have been talking about expanding westward so they would be able to give us a sense of this and others who might be involved
• Angie will reach out to Carrie Brown-Lima and invite them to present.

UMISC 2022 Discussion (continued from October 13)
• Sascha: There is no need to print abstract books if there will be a virtual attendance option. Can use a good app or website. (Megan, Angelique agreed.)
• Laura (in-chat): I would be disappointed if I traveled to a conference and spent my time watching people give talks on screens. (Angie agreed.)
  o If there is some use of virtual presentations at an in-person or hybrid conference, use it very sparingly and carefully (might help to get bigger speakers)
• Megan: Could focus on doing a few presentations hybrid and doing it really well.
• Angie: Would rather have all in-person or all virtual. Does not like virtual networking. Like the ability to record and share virtual presentations later. If in-person, again, really emphasize networking and other in-person elements of the conference (e.g., field trips).
• Monika (in-chat): Sustainable Forests Educational Cooperative has done hybrid presentations well before covid. The speakers were in person but live streamed.
• Paul: Paul has been working on planning some conferences and has been considering these things also. Could be a lot of work to plan a hybrid meeting and cons could outweigh the pros.
• Monika (in-chat): Could require vaccination for in person participation. I think ESRI did this for a recent conference. I acknowledge that this has the potential to be controversial.
  o Ariana: Agreed. Felt it would be irresponsible not to require vaccination (especially because people could be traveling for this and coming from areas where vaccination rates are low).
  o Angie: Agreed. Should do a survey of potential attendees so UMISC planners are not making these decisions alone. (Jeffrey, Emily, Monika agreed.)
  o Jennifer: The facility may have requirements as well for masking and vaccination
  o Jeffrey: You also have people going out at night at conferences, so that risk is present as well, making testing requirements for the unvaccinated mute.
  o Kelsey: Would not feel comfortable attending a conference if we are only going to take attendees’ word for it that they are vaccinated. Leans toward a hybrid option.
  o Ariana: Can appreciate logistics being challenging, there will always be some degree of risk, there a stark difference between asking someone to attest and providing proof. This likely needs to be a bigger conversation.
  o Doug: Yes, Doug will take this input to the conference executive committee.
  o Kelsey: Question 4 seems like a great place to start. “Should online attendees be able to watch in-person presentations live or asynchronous pre-recorded?”
  o Rob: Will state employees be able to travel to Green Bay? This is a concern for researchers at the Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC).
  o Doug: Does not think they will go back to an only in-person option.
Updates from Members
Shawn Murphy – Metropolitan Mosquito Control District – Finishing up work for the season and planning for 2022. Mosquitoes were down due to drought. Higher number of mosquitoes with West Nile virus were detected this year.

Jeffrey Kalin – USDA National Resources Conservation Service – Working on updating and rolling out prescribed burn policy. Will be able to write prescribed burn plans and carry out prescribed fires. Also working to improve conservation planning.

Christina – Minnesota Department of Transportation (MnDOT) – Transitioned from MDA to MnDOT last month. Will be lead contact for MISAC for any MnDOT information. Also working on specialized management plans for sites with Japanese knotweed and cutleaf teasel and some specialized management plans for high quality areas in the southeast.

Liz Anderson – Lake County Soil and Water Conservation District (SWCD) – Finishing up field season. This year was somewhat more normal except for the Greenwood fire that affected boat traffic.

Rob Venette – MITPPC – Working with MDA on elongate hemlock scale, which showed up on Christmas trees coming in from North Carolina last year. Trying to figure out if it could survive Minnesota winters and hope to have results soon. MITPPC is also working on tribal engagement. They will be meeting with 1854 Treaty Authority to have initial conversations about how the Center can support management activities that might be happening and will be having ongoing conversations with other groups too. Working on MITPPC research prioritization and will have a draft updated list of species eligible for funding soon. Public comment on the species list will come out between now and the end of the year.

Sascha Lodge – Minnesota DNR Forestry – From a state forest perspective, working on getting contractors working on about 30 different invasive plant management projects focusing on several species. Have been facing a lack of contractors who do woody invasive plant management in the northern part of the state (esp. north of Bemidji).

Doug Jensen – Minnesota Sea Grant Program – Working on a Boundary Waters Canoe Area Wilderness AIS signage project funded by Lake County; multiagency initiative to develop new signage with a watershed protection message for water accesses and trailheads. Hoping to install them this fall. Also continuing to work on the Don’t Pack a Pest program for academic travelers funded by USDA-Animal and Plant Health Inspection Service; met with and educated students and academic advisors at study abroad fair at UMD. Coordinating partners around yellow iris in the Duluth area. Helping with the MISAC/state invasive species plan revision. Developing a model outreach materials graphics portal for the national Stop Aquatic Hitchhikers! website. Planning UMISC. Invited to be first plenary speaker on AIS and social science at 22nd International Conference on Aquatic Invasive Species in Belgium!

Jeffrey Flory – Transitioning away from foliar treatments. Will be working on garden valerian along Hwy 4 and state forests. Having to spend more than 75% of his time on it. Previously logged areas have much larger and denser patches. After that, will be switching to buckthorn management on high priority properties.

Angelique Dahlberg – Minnesota Aquatic Invasive Species Research Center (MAISRC) – Continuing to learn more about the impacts of copper on zebra mussels and nontarget organisms. Veligers are more susceptible. Working to figure out lowest effective dose. Had a mobile lab at Pelican Lake in Crow Wing County. Used lake water to do treatments within the mobile lab. Copper toxicity is determined by bioavailability so developed concentrations based on lake-specific water composition. Copper was
effective on zebra mussels but had difficulty getting live veligers so they are working to get more information on their susceptibility.

Emily Dunlap – Three Rivers Park District – Found jumping worms at Lake Rebecca Park Reserve in late August. Quite a bit of woodland area is infested (10-12 acres). Also found them in two more gardens within park reserves. Working on containment BMPs for within the parks district.

Kelsey Taylor – Fond du Lac Band of Lake Superior Chippewa – Found curly-leaf pondweed on the periphery of the reservation, which is the first time they have had an aquatic invasive plant come into the reservation. Manually cleared it out as much as possible and hoping to prevent if from getting into wild rice lakes. Starry stonewort was found in the Stoneybrook River last year so working on monitoring. Conducted rusty crayfish and zebra mussels monitoring. Successful with having goats control a buckthorn patch (after an unsuccessful attempt last year). It was their biggest buckthorn patch (shoulder to head height).

Krishna Woerheide – Grand Portage Band of Lake Superior Chippewa – Looked for rusty crayfish and spiny water flea in some water bodies and they were not detected. Did some surveillance this summer for spotted wing drosophila and thinks it was found in some blueberry units but has to double check the sample. For some species, working to determine a threshold level of spread at which its presence will be accepted.

Laura Van Riper – MN DNR Invasive Species Program – NWAC will vote on regulation in December (see Jim Calkins’ update). Working on getting printed calendars out to people. EDDMapS verifiers are working on verifying what they can from the field season. Getting about one report per day of people finding jumping worms. Look for them when you are raking leaves.

Monika Chandler – MDA – Drought was a big concern this summer, esp. in the northern part of the state. Livestock producers will import hay and there could be a lot of contaminants in that hay coming in from other areas. Extension and other agencies have been working on messaging related to this, emphasizing early detection, etc. Also concerned about what drought will mean for invasive plant populations (some may not do well but some may thrive). NAISMA will be hosting a classical biological control summit this fall; Monika recently joined the committee and there is no representation for other types of biocontrol, for example insects, so that is much needed. Lots of new findings of priority species in many different areas (cutleaf teasel, poison hemlock in many areas, knotweeds in the northwest, etc.). Jeffrey has found a mountain ash that has not yet been identified (extensive stand). iNaturalist has been a crowdsourcing force (reports automatically get imported into EDDMapS if research-grade). Presents both a challenge and an opportunity at the same time (difficult to deal with incorrect reports but that is how they learned of cutleaf teasel).

Paul Erdmann – Minnesota Board of Soil and Water Resources – Working on American highbush cranberry and European rose (new webpage describes the differences) and works closely with SWCDs to educate how to spot the difference. Cautions that if they do not know the difference, it should not be sold at plant sales. Working on a better factsheet on this issue.

Jim Calkins (in-chat) - My update is that jumping worms remain a concern as there have been additional finds at garden centers/nurseries in MN. Also, the following recommendations have been presented to the MDA NWAC membership for consideration and a vote in December -- Callery Pear/Restricted Noxious Weed; Garden Valerian/No Regulation; Castor Bean/No Regulation; Amur Corktree/Specially Regulated Plant (female cultivars may not be sold and fruit production on existing trees must be controlled); Kudzu/No Regulation; Johnsongrass/Prohibited-Eradicate; Hardy Kiwi/Specially Regulated Plant
(tentative to be finalized in November; may not be planted in landscape settings but may be grown for fruit production with a management plan); and Japanese Tree Lilac/No Regulation. I don’t think we have formally shared recommendations with the MISAC before but thought I would do so this time. Please share any comments with me or Laura Van Riper.

Marian Shaffer – National Park Service (NPS): St. Croix National Scenic Riverway – Collected samples throughout the watershed for zebra mussel veligers, getting those processed now for presence of zebra mussels and spiny waterflea veligers. Next week will be picking up zebra mussel blocks in the riverway, part of a long-term monitoring program. Saw an explosion in zebra mussel numbers this past summer. Collaborating on purple loosestrife biocontrol work. Working with partners doing buckthorn control. Will be doing a second round of rusty crayfish monitoring next week on the Snake River, 6 traps in upper and lower. They have not been documented there but pretty sure they exist since they are known to be everywhere else in the watershed. Lots of area to survey so always looking for partners to work with.

Angie Gupta – U of M Extension Forestry – Continuing to work on citizen science projects and thinking about projects for next year. Trying to look for butternut (threatened species because of butternut canker).

Katie Sickmann – Wild River Conservancy – Changed name from the St. Croix River Association and they will also cover Namekagon River, moved office locations. Collaborating with Marian on raising purple loosestrife biocontrol beetles; released >5,000 beetles over the summer, hoping to have mass rearing cage next year. Also partnered with NPS, USGS and others to propagate winged maple leaf mussels in the St. Croix River. Working to monitor 100% of roadways for invasive Phragmites to support control. Collaborating on zebra mussel and rusty crayfish work that Marian mentioned previously.

Ariana Richardson – Meeker County – Updating plan currently and in open grant application period for 2022. Wrapping up programming for waterfowl hunters. May have zebra mussels in Lake Frances but it has not been officially confirmed. Talking about transitioning the program from the county to SWCD.

Megan Weber – University of Minnesota Extension – Completed this year’s starry trek event since the July meeting; no one found new starry stonewort populations (though other detections have happened outside starry trek) but did find new populations of Eurasian watermilfoil and Corbicula. Just finished Briggs Lake Corbicula project. Working on another citizen science project to get lake associations involved in early monitoring (e.g., after a new zebra mussel infestation is detected, tracking recruitment, etc.). Doing some pilots to evaluate how to have volunteers conduct assessments.

Jennifer Burington – Inundated with reports of all kinds of things. Started using a new online reporting form that only requires an email, address, phone, and county but prompts them for all the other info (people often do include the address which reduces the number of emails to confirm things). Finished up invasive pest surveys in community gardens and forests and will be starting to go through those samples. Gypsy moth trapping will be wrapping up soon. Seed inspections will start happening again (hopefully there won’t be more mystery seeds).

Chelsey Blanke – MN DNR Invasive Species Program – Conducted a survey of pond and aquarium hobbyists and should have results to share from that soon; had almost 500 respondents. Will also soon have results from the retail invasive species assessment (study investigating stocks of Minnesota aquarium retailers and seafood markets). In the next 3-6 months, will be reviewing all of the DNR’s recent trade pathways work and developing summary reports, completing communications about those efforts, and thinking about what comes next. Also assisting the Great Lakes Commission in development of their Blue Accounting website, which aims to track Great Lakes data, including invasive species data, for
consideration by policymakers. Assisting with the statewide invasive *Phragmites* control effort. Continuing to work on the MISAC/state invasive species management plan revision.

**Closing**

- Watch your email
  - Roger has drafted the Palmer amaranth letter
  - Chelsey will also share a follow-up email and requests from Kerry Wixted

**Adjourned.**