



July 13, 2021 • 9:00 am to 12:00 pm

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Remote Only

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Present via Zoom

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

- | | | |
|-----------------------|-------------------|---------------------|
| 1. Jennifer Burington | 8. Dave Hanson | 15. Sascha Lodge |
| 2. Chelsey Blanke | 9. James Calkins | 16. Tyler Kaspar |
| 3. Megan Weber | 10. Kelsey Taylor | 17. Michael Rhoades |
| 4. Doug Jensen | 11. Mary McMahon | 18. Forest Eidbo |
| 5. Amanda Preston | 12. Paul Erdmann | 19. Cori Mattke |
| 6. Christina Basch | 13. Rob Venette | 20. Angie Gupta |
| 7. Dane Huinker | 14. Roger Becker | |

Council Business

- Approval of Agenda
 - Poll: 100% of attendees approved the agenda, **Approved**
- Approval of Meeting Minutes from 4/14 – 4/15/2021 (vote)
 - Poll: 100% of those who voted (14 participants) approved, **Approved**
- Treasurer’s Report submitted by Wildlife Forever, fiscal agent for MISAC (vote)
 - No expenses since the April meeting
 - Reimbursement funds for UMISC 2020 expenses came in as income
 - MISAC’s current balance is \$28,395.35
 - Poll: 93% (14 participants) of participants that voted approved, 1 abstained, **Approved**
- 2021 Leadership - Jennifer Burington, Chelsey Blanke, Megan Weber
- Upcoming meeting dates: October 13-14

Updates and Discussion Topics

In-person or virtual future meetings

- Doug: We should consider a hybrid option. Not sure what will happen with the COVID-19 delta variant.
- Jennifer: Do we want to continue with the half-days?
- Chelsey: Probably want to do a full day if it’s going to be in-person.

- Group agreed that a hybrid, full day would be best though re-scheduling might be difficult. Could have one day be in-person/hybrid and the other day be fully virtual.
- Will stick with October 13-14 and **Jennifer will look into rooms.**

State Plan Update – Chelsey Blanke

- Partner review period closed on June 1st.
- The Federal Aquatic Nuisance Species Task force that approves aquatic invasive species plans to make states eligible for funding for implementation of the aquatic portions of the plan also did their “pre-review”. They provided comments that we can address to make the plan more likely to be approved when we submit it prior to their fall meeting.
- Number of reviewers: ~25 (counting the Department of Natural Resources (DNR) Aquatic Invasive Species (AIS) Advisory Committee and the ANS Task Force as just one, though multiple people from those groups reviewed and submitted comments)
- DNR leadership is reviewing the new tribal consultation section and the MISAC plan subteam will share it with tribes when it is available.
- Aiming to have the plan available for final MISAC review in August and to submit it to the ANS Task Force shortly thereafter.
- New content being added in response to partner input:
 - Characterization of current/ongoing activities
 - Essential operations (watercraft inspection, education and outreach campaigns, invasive plant management, etc.)
 - Species-specific information (short summaries of prevention, management and research on some of the most threatening species)
 - Aquatic
 - Invasive carp
 - Zebra mussels
 - Starry stonewort
 - Nonnative Phragmites
 - Spiny waterflea
 - Terrestrial
 - Jumping worms
 - Emerald ash borer
 - Palmer amaranth
 - Oak wilt
 - TBD: Common and/or glossy buckthorn, common tansy or wild parsnip; discussion:
 - Doug: Want to strike a balance among taxa
 - Megan: Are these species high on the threat list? People might be worried about what we cover/don’t cover.
 - Chelsey: They are highly rated and there’s a lot of work being done.
 - Sascha: We’re going for species that we have ongoing work on research, management or prevention.
 - Rob: Common and/or glossy buckthorn, common tansy or wild parsnip are actively researched within Minnesota Invasive Terrestrial Plants and Pest Center (MITPPC) and in

- the Minnesota Department of Agriculture’s (MDA) tactical plan.
 - If we choose wild parsnip, could include some of MNDOT’s efforts.
 - Decided on common buckthorn because it is both a woody species and a high threat.
 - Develop accompanying documentation
 - Fact sheet highlighting the main points of the plan
 - A short document to provide guidance based on the plan's objectives and support plan implementation by partners
 - Short summary of changes, accomplishments and shortfalls from 2009-2021
- Evaluating plan implementation
 - The plan’s “Program Monitoring and Evaluation” section:
 - Encourages partners to:
 - Reference the plan in their annual reporting and share annual reports with MISAC
 - Adopt principles and practices that allow for an objective assessment of the performance of the plan
 - States that MISAC will facilitate an evaluation process every 2 years through:
 - A partner survey identifying strategies and actions being implemented
 - Discussing plan implementation and the need for plan updates or amendments
 - States that MISAC will thoroughly review the plan and consider updating again after 10 years, if it has not been updated sooner
 - The plan revision subteam has talked extensively about the importance of metrics and SMART goals
 - Since the plan is a strategic, rather than operational document, we have landed on emphasizing the importance of partner organizations developing SMART goals and tracking associated metrics
 - We can help support this in implementation by checking in on the plan more, reporting out on progress, really turning to it and using the plan and telling the story of progress being made
 - Can we develop a survey to help track some of the major metrics to help evaluate plan implementation? **This is something we will experiment with and see if it seems reasonable.**
 - Additions to the plan that we and others will be able to look back on
 - Gaps in authorities
 - Priorities for action
 - Implementation tables
 - Rob: What happens if we feel that certain efforts are falling short, given that this is a voluntary plan?
 - Megan: Like the idea of reporting out on implementation.
 - Doug: Who’s going to do it – do we have the capacity?
 - Chelsey: **We will need to come up with a process that will work within our capacity.**
 - Jim: If the plan is implemented this year, reporting/evaluating every 2 years would allow us to do evaluation in off years when we’re not planning UMISC – could dedicate our October meeting to this and have agencies report out on their efforts.

- **There was no disagreement with the proposed evaluation process as written. The details need to be worked out.**

2022 Calendar Update – Sascha Lodge

- **Reply to Laura’s email from June/July 21 if you want to order MISAC calendars.** Final numbers are needed by mid-August to get the calendars for next year.

Goal Review and membership

- Progress is being made on all 2021 goals.
- Added ideas for potential speakers:
 - a. Chelsey Blanke – DNR invasive species retail assessment
 - b. Tina Fitzgerald/Phil Hunsicker (DNR) – Local aquatic invasive species (AIS) prevention aid summaries (in relation to evaluation of state plan implementation)
 - c. Mike Dockery – tribal perspectives on invasive species
 - d. Ted Johnson – UMN tribal liaison
 - e. Doug Jensen – Don’t Pack A Pest for Academic Travelers (for 2023)
 - f. Doug Jensen – Great Lakes AIS Landing Blitz

2021 Field Trip Planning

- Need a champion.
- Not sure of peoples’ comfort levels related to COVID-19
 - Usually try to invite folks outside of MISAC
- Would we be able to recoup the costs? (usually about \$1000)
- MDA folks are all doing 4 different jobs – won’t be able to attend a whole-day field trip this year
- People would understand if we don’t do a field trip this year due to the pandemic
- Ideas so far
 - Mystery snails collection sites managed by Fond du Lac (though we have not asked Kelsey about the potential for this)
 - U.S. Customs and Border Protection Station in International Falls
 - Wastewater treatment facility with invasive *Phragmites*, plus other invasive *Phragmites* sites
- Vote results
 - 2 voted to wait until 2023
 - 13 voted to wait until spring 2022 and start planning now
- **Chelsey will create a link or survey for folks to add their ideas for a field trip in Spring 2022.**

Legislative updates and other changes

- Species names
 - Entomological Society of America will stop using the name gypsy in insect names
 - Angie Gupta: They have not established a new common name yet
 - Angie: The North American Invasive Species Management Association is interested in taking some additional leadership around the issue of species names. They also work on multiple taxa (but not aquatics).
- Doug: Doug is the co-chair for the Federal Aquatic Nuisance Species Task Force outreach committee; suggested a national invasive species community of practice (ISCoP) be established and that has been approved
 - Entirely voluntary
 - Will include members of the six regional panels

- First task for the ISCoP will be to decide what sort of space they want to occupy
- Rob: MITPPC funding
 - MISAC's and other organizations' high-profile letters were very helpful in working with the legislature
 - In the special session, environment-related items were lumped into omnibus bills. These bills, including Minnesota Aquatic Invasive Species Research Center (MAISRC) and MITPPC funding, were passed at the last minute.
 - MITPPC received a \$5 million appropriation
 - State continues to be a leader in investing on invasive species research
- Cori: MAISRC funding
 - MAISRC also really appreciated MISAC's letter
 - \$3.75 million from ENRTF (a little less than usual but it extends the life of MAISRC until 2025)
 - Also got a general fund appropriation that will provide more stable/reliable funding: \$1 million/2 years to support core activities
- Jennifer and Christina (MDA)
 - Received funding to fix hemp licensing system
 - Invasive species program also got increased funds for the biennium
 - Seed-related funding didn't go through
- Chelsey (DNR)
 - Chelsey couldn't find anything that confirmed passage of the bill that proposed revising the DNR's invasive species plan every 5 years ([HF 228](#))
- Cori
 - There was a bill on the table that included boater fee increase – part to DNR and part to MAISRC and part to AIS prevention aid. That didn't end up coming through.
 - There is additional funding for AIS prevention grants but that did not go to MAISRC – we're not sure how that is being routed but Cori will try to share the bill information with the group.
 - Email from Cori, post-meeting on 7/13: The final environment funding bill provided \$850,000 from the general fund in the first year of the budget for grants to lake associations to manage aquatic invasive plant species.
 - From Jake Walsh, post-meeting on 7/27: The \$850,000 from the environmental funding bill will be administered through the MN DNR AIS Control Grant Program as they have been designated for “grants to lake associations to manage aquatic invasive plant species”. The DNR is planning to offer this program again in 2022. Interested individuals can sign up for the program's [email delivery list](#) (see the “Subscribe” box at the very end of the page) and contact Jake Walsh with questions (jake.walsh@state.mn.us).

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| 1. Jennifer Burington | 3. Megan Weber | 5. Amanda Preston |
| 2. Chelsey Blanke | 4. Greg Suskovic | 6. Bob Dunning |

7. Emily Dunlap
8. James Calkins
9. Jeffrey Kalin
10. Mary McMahon
11. Roger Becker

12. Doug Jensen
13. Cori Mattke
14. Dane Huinker
15. Dave Hanson
16. Angela Gupta

17. Paul Erdmann
18. Ariana Richardson

Engagement Discussions

Influenza: Birds, Pigs & People - Gregory R. Suskovic DVM, Minnesota Board of Animal Health (BAH)

About BAH

- Greg is responsible for emergency responses to animal diseases in Minnesota
- They have the authority to quarantine and restrict importation of livestock
 - BAH authorities are in Minnesota Statute Chapter 35, especially Section 35.03 and Section 35.05
- Work with diseases that affect economies as well as zoonotic diseases
- They participate in National Surveillance Eradication Programs: Influenza and Chronic Wasting Disease surveillance and scrapie eradication
- Board programs
 - Traceability
 - Emergency Planning
 - FAD Response
 - Sales, markets and exhibitions
- Report animal diseases on [the BAH website!](#)

Emergency Response

- Focus on diseases that have not been seen in the U.S. or have been previously eradicated
- See slides for list of foreign animal diseases
- They have veterinarians with special training in diagnosing animal diseases not found in this country
- FAD investigation procedure
 - Report
 - FADD assigned
 - FADD investigates and takes samples
 - Priority Level assigned
 - At level 1, they will hand-deliver the samples
 - Only had one level 1 in Greg's 30-year career
 - Response actions take place if confirmed

Influenza Virus Biology

- Has to go through several steps to reproduce because it's an enveloped single stranded RNA virus
- Can mix with other viruses and mutate in a process called "antigenic drift"
- Host and lineage origins for the gene segments of Novel influenza A (H1N1) virus: Circulations between birds, humans and pigs
 - Does not have much of an effect on pigs any longer
- Anatomy of an influenza virus: RNA polymerase, M1 protein (covers the genetic material), neuraminidase (N), nucleoprotein, hemagglutinin (H), envelope (lipid/fat layer)

- Viruses are classified by their N and H numbers (e.g., H1N1)
- Just because two viruses are classified as H1N1, doesn't mean it's the same virus – it could have different antigens
- Who has what?
 - Virus: human influenza, SIV, avian influenza (AI); respective reservoir: people, pigs, wild waterfowl and shorebirds
 - AI attacks the digestive system and spreads in fecal material
 - They circulate and genetics change, which is why new vaccines are needed each year
- Transmission between species
 - Not to commonly, but sometimes, flu viruses can cross species lines (otherwise, they are generally adapted toward their target species)
 - It's especially concerning when a virus crosses species lines and there is already a host-adapted virus present

Avian Influenza

- Wild waterfowl are the natural reservoir and poultry is raised in the same geographic region (historic wetlands) in Minnesota
- Low pathogenic (LPAI) – we are just getting over an outbreak of this in Minnesota
 - Primarily respiratory signs
 - Decreased egg production
 - Depression, reduced feed/water intake
- Highly pathogenic (HPAI)
 - Symptoms
 - Systemic infection (as opposed to respiratory)
 - High mortality within 24-48 hours
 - No clinical signs
 - HPAI has always been an H5/7
 - LPAI H5/7 can mutate into HPAI if allowed to circulate
 - This is one of the main reasons we have a national AI surveillance program
- LPAI H7N9 in China was affecting people because of the wet market situation there

H5N2 HPAI 2015: Minnesota's Story

- December 2014-2015
- U.S. numbers
 - 21 states with HPAI detections (commercial premises, BY, captive and/or wild birds)
 - 232 premises
 - 49.6 million commercial birds depopulated
 - 9 million birds affected
 - 85 wild bird detections
- Worst animal disease event in U.S. history!
- Hadn't had this disease yet in the U.S.
- Made USDA reconsider how we respond to all animal diseases
- Minnesota numbers (nation's #1 turkey producer)
 - Over 9 million birds affected
 - 23 counties affected
 - 110 premises

- 104 turkey
 - 4 chicken layers
 - 1 chicken pullets
 - 1 backyard
- Timeline (2015)
 - March 5 - USDA confirms H5N2 HPAI in Pope County, MN
 - Set up state incident management team
 - Thought they had gotten it under control
 - March 27 – Confirmation in Lac Qui Parle and Stearns County
 - No connection to Pope County issue
 - April 2 – Called in Type 3 USDA incident management team (IMT)
 - Peak in April 2015 and a smaller peak in late spring-early summer
- Issue and response strategies
 - Turkeys started showing symptoms within hours
 - Had to go through and humanely euthanize as quickly as they could within an infected premises
 - Hired trained contractors
 - They use a foam that causes anoxia for euthanasia
 - They have multiple zones out from the infested zone: euthanasia, control and surveillance
 - Tested 2391 backyard lab submissions
- They are highly prepared for the next time (see slide on future response)

Other HPAI events

- There have been a few HPAI events in the U.S. since 2015 (in Indiana, Tennessee, South Carolina)
- Involved a combination of multiple viruses

Wild bird surveillance in the U.S.

- Most recent testing was in the Atlantic flyway in the winter of 2021 (2700 samples) – found low rates of LPAI
- Planning to survey 16,000 birds from 2021-2022 because the global HPAI situation is troubling right now (seeing outbreaks in China, Indonesia, Egypt, Germany, Poland, Hungary, India, South Africa, and elsewhere; even seeing clinical signs in waterfowl)

What can we do?

- Continue surveillance (esp. during waterfowl migration)
- Preach biosecurity
 - Inclusive: Keep things in their place
 - Exclusive: Keep things out of our place
- Continue to review AI response plans
- Be ready to move when called

Questions and Answers

- Angela: Are these normal levels of outbreaks (referring to global map)? A: In China and Europe, those levels are higher.
- Doug: Mentioned some turkeys were moved indoors because of risk from waterfowl transmission? A: Yes, partly. They're also easier to raise indoors.

- Chelsey: What did the incident command structure and station look like? A: Don't know how you could run an incident without the incident command system. Incident commander – everyone does what they say. Operations chief – makes the decisions. Sometimes can do a lot just with that. Planning chief – will run meetings and get things started that way. Have people for logistics and for finance. Have a public information officer. They also have a memorandum of understanding with MDA – they will help with operations and may have an incident co-commander.
 - Would have a unified command with USDA if they called them in. They have a national veterinary stockpile and Emergency Management Resource Center system.
 - The 2015 AI situation only really affected the Midwest. If this was national, they would be looking at more of a vaccination strategy and relying on the national veterinary stockpile.
- Doug: Who pays for all of the response? A: Taxpayers.
- James: Do you think this type of thing is applicable to invasive species like zebra mussels? A: If you give me enough money, you could probably get rid of anything. Depends on the perceived threat and how much you are willing to spend.

Briggs Lake *Corbicula fluminea* surveillance project – Megan Weber

- See slides for more information
- AKA Freshwater golden clam
- Project began in October of last year
- Fairly widespread distribution in North America and worldwide
- Problematic biofouler
- In Minnesota, distribution has been mostly limited to areas with some type of thermal input; research has predicted that most Minnesota lakes have temperatures below golden clam's tolerance levels
- Ridges on their shells are a distinguishing feature; you can feel the ridges and the shells are strong (don't crumble easily)
- Discovery in Central Minnesota
 - Found by an AIS Detector – mixed in with plants pulled up with a plant rake
 - Got an AIS response grant from MAISRC to evaluate their presence in the winter
 - Winter fieldwork
 - Drilling holes in the ice monthly
 - Shoveling sediment with a dip net
 - Temperature readings
 - Live vs. dead status
 - Findings so far:
 - 370 clams
 - Coldest temp 0.32 C
 - See slides
 - Next, will start looking at a couple of other locations in Sherburne, Ramsey, and Anoka counties
 - Wonder if they are in other locations as well – encourage people to submit reports!

Questions and Answers

- Doug: Has there been any discussion about potential eradication? Industry has been dealing with this species for years with the biofouling. A: Not at this time.

- Doug: Lots of the zebra mussel control work built on work related to freshwater golden clam.
- Chelsey: Does it seem like they are surviving beyond their cold temperature threshold? A: Every winter month during this project, they have seen freshwater golden clam at temps below that 2°C threshold. It might make sense to re-assess at that threshold. They are currently an unlisted nonnative species but are undergoing rulemaking to potentially become a proposed prohibited invasive species.

Updates from Members

Megan Weber – University of Minnesota Extension – Starry trek is happening again this year at 27 sites across the state on August 21st; contact Megan if you want to get involved. Wrapped up AIS Detectors workshops for the year. They were all virtual and it went well so they will keep virtual as an option.

James Calkins – Minnesota Nursery and Landscape Association (MNLA) – MNLA has been working on jumping worm best management practices. Those have been completed and there will be an article in The Scoop in August and MNLA will be distributing educational materials. A few facilities have reported confirmed jumping worms in the past week and it is a concern because there is not a lot of certainty in what can be done. MDA has been working with them and made specific requirements of conditions they have to follow but has not required them to stop sales; another entity is asking the facilities to get rid of all of their stock.

Bob Dunning – Stearns County Agriculture Inspector – State association of agricultural inspectors is having an in-person conference next week; will be hearing from the MDA commissioner, Julia Bohnen from the U of M, and others and taking a bus tour to see the U of M Arboretum, an industrial hemp processing facility, and a gravel pit site. Extremely disappointed with new finds of wild parsnip in Stearns County – trying to control them as soon as possible. Rough potato is not doing well with lack of precipitation.

Cori Mattke – MAISRC – See update on funding in notes from 7/14. There are three projects going through peer-review and if those projects are funded, they will be announced at the September 22nd showcase. MAISRC will be doing a hybrid event for that conference (not all of the presentations will be streamed for online).

Doug Jensen – Minnesota Sea Grant Program – See update on national invasive species community of practice in notes from 7/14. Great Lakes regional symposium focused on trade pathways for invasive species and law enforcement in those pathways. There is some good work going on and there is some need for improved coordination between invasive species managers and law enforcement. Helped coordinate the Great Lakes AIS Landing Blitz. Hired two interns – working with the Boundary Waters Area Coalition to add signage near BWAC area waters.

Yellow iris along the St. Louis River Estuary. Verified ~20 locations working with 1854 Treaty Authority and the DNR to map those that are in the estuary. Also a few populations in Tischer Creek that flows into Lake Superior. There is also one population on the UMD campus and a couple others around Duluth. Hoping that there will be some resources dedicated toward control.

Angie Gupta – U of M Extension Forestry – Held Forest Pest Detector Coffee and Chats: it was interesting doing virtual education; several people attended from out-of-state and far away. In the midst of various side [projects related to invasive species](#) – please help spread the word! Focused on jumping worms, mulberries, Japanese tree lilac (only when escaped), porcelain berry, Siberian peashrub and European alder. Also wrote a blog post on the [emotional effects of jumping worms](#) (people keep using

the word “devastated” to describe their feelings). Going to NAISMA this year – will be on a panel about invasive species common names. Part of a small group that’s trying to sort out/establish some “good” common names for jumping worms - actually likely about 10 different species of worms are currently lumped together and called jumping worms.

Paul Erdmann – Minnesota Board of Soil and Water Resources – Met with Dan Shaw and Laura Van Riper to start drafting a letter to contractors to get the word out about soil and soil movement. It’s a good step toward getting a better understanding of how invasive species could be moved around by construction projects, etc. Will be reaching out to MNDOT to get a better sense of their practices and those involved with restoration projects. BWSR Academy in Brainerd. Unrelated to work at BWSR, working with Megan Weber and Izaak Walton League on an invasive species workshop that will be put on at the end of the month by Fortin Consulting, Inc.

Ariana Richardson – Meeker County – Have a decon station running on their busiest lake seven days per week. Also have an herbicide upgrade initiative kicking off to have the cost difference paid for to allow use of more effective herbicides in aquatic plant treatments (example: Lake Minnebelle switching to Procellacor). Have a revised their end-of-year report for the grant process to make it easier for people. Hosting a starry trek event. Surrender event was being planned but may be tabled. Helping with education on Clean, Drain, Dry.

Jeffrey Kalin – USDA National Resources Conservation Service (NRCS) – Have been busy at NRCS trying to get updates to Conservation Reserve Program (with 40 acre max, etc.). Begun looking at issues related to drought. Managing conservation priority areas. State is revising prescribed burning policies so hope to get more prescribed burning done on the ground. Bobwhite and savannah prairie initiative will provided additional habitat on the ground.

Jennifer Burington – MDA – Providing funding specifically for hemp and weeds - just sent out the notice to award recipients. Still receiving mystery seed reports (a few here and there) – USDA has taken on response. Lots of reports of Japanese beetles. Just had gypsy moth mating disruption treatments in Duluth; public reception was more relaxed this year. Fielding “Arrest the Pest” reports and will be changing the name to “Report a Pest”.

Chelsey Blanke – DNR – State plan (see notes from 7/14). Also working with a contractor to assess the availability of invasive species at pet stores and seafood markets in Minnesota. Media interviews in response to recent publicity around goldfish in Keller Lake, Burnsville. Great Lakes regional symposium focused on trade pathways for invasive species and law enforcement in those pathways (same as what Doug mentioned) was great and attended by Chelsey, Heidi Wolf, and DNR Enforcement. Helping out with some grant writing for invasive *Phragmites* surveillance and control in the Lake Superior basin area.

Closing

Adjourned.