

2107 Conference Session Descriptions

FRIDAY, MAY 19, 2017

Pre-Conference Full-Day Workshops (10:00 a.m.-5:00 p.m.)

Volunteer Stewardship on Scientific and Natural Areas (SNAs): a hands on and how to - Kelly Randall, Scientific and Natural Areas Program, Department of Natural Resources; Jim Smetana, Site Steward, Lost Valley Prairie Scientific and Natural Area; Steve Poole, Site Steward, Lost Valley Prairie Scientific and Natural Area Scientific and Natural Areas (SNAs) preserve some of Minnesota's best examples of native plant communities and rare species. Often work is needed to keep them that way. That's where volunteers can help! This field trip will be a three part, full-day extravaganza. Part one: a how-to with tips and tricks for conducting volunteer stewardship projects such as invasive species removals, seed collections or other tasks. Part two: a tour of Lost Valley Prairie to see work done by volunteers. Part three: Hands-on invasive species removal to see for yourself how it is done. Very active. Box lunch included.

Wildlife Tracking - Jonathan Poppelle, Minnesota Wildlife Tracking Project; Donnie Phyillaier Volunteer Naturalist Minnesota Valley National Wildlife Refuge

Spend the day exploring the art and science of wildlife tracking. Tracking allows environmental educators to "show" illusive animals to students and visitors. It provides researchers and citizen scientists a low-cost, non-invasive way to survey wildlife. And it offers nature enthusiasts a lifetime of learning and deepening nature connection. On this field trip we will explore the fundamentals of tracking; survey river otter sign for the National Park Service; and help you get set up with resources to continue your own study of tracking, join (or start) a wildlife tracking club, or participating in wildlife tracking surveys. Moderately active. Box lunch included.

Birds, Biomes and Biodiversity: 75 years at Cedar Creek - Caitlin Potter, Cedar Creek Ecosystem Science Reserve, University of Minnesota Crow-Hassan Park Reserve

The University of Minnesota's Cedar Creek Ecosystem Science Reserve is a 5600 acre ecological field station that is celebrating 75 years of ground-breaking and field-defining research this summer. Join naturalists, scientists and fellow nature lovers for a tour of the reserve, which will include a hike through natural examples of Minnesota's biomes and microhabitats, a visit to several of our long-term research experiments on biodiversity and global change, and an opportunity to bird-watch in our restored oak savannas and prairies. Come explore the U's historical and current ecological research while enjoying a day outside! Moderately active. Box lunch included.

Crow-Hassan Park Reserve - from forests to prairies - John Moriarty, Three Rivers Park District The field trip will start at the district nursery where we grow over 60 species of native woody plants for restoration projects. The bus will then go to the trailhead and the rest of the tour will be in the prairie, which is a 1200 acres complex of grassland, wetlands, and fire managed woodlands. Walking will be on sand and turf trails with gentle terrain changes. The hike will be 3 to 4 miles. There are no facilities beyond the trail head. The hike will highlight prairie management, prairie restoration, seed collection, We will have demonstrations on radio telemetry on turtles and snakes, seed collection, bee surveys, coverboard surveys and small mammal trapping. Very active. Box lunch included.



Restoring Native Woodlands: Can you "set it, and forget it"? - Eli Sagor, University of Minnesota Cloquet Forestry Center; Mike Reinikainen, Program Forester, Cooperative Forest Management, MN DNR; Jeff Wilder, Program Forester, Cooperative Forest Management, MN DNR

We will tour several unique wooded parcels in northern Washington County to hear stories of how private woodland owners are restoring functional native forest systems. Tour-goers will see the importance of following up with monitoring of installed conservation practices. The tour will focus on deer and rodent browse control, invasive species eradication (including buckthorn), tree planting (including site preparation), and related topics. This full-day tour will include presentations and stories from MN DNR foresters, a UMN Extension specialist, and of course the woodland owners whose stories will be shared as we walk their woods. Moderately active. Box lunch included.

Forest Pest First Detector Workshop - Gary Wyatt, University of Minnesota Extension The Minnesota Forest Pest First Detectors training program is designed to help identify the occurrence of emerald ash borer and other early detection invasive forest pests in Minnesota. First Detectors are the front line of defense against likely infestations of many different forest pests including gypsy moth, Asian longhorned beetle and Oriental bittersweet.



Meeting, working with and educating the public about invasive forest pests are key activities of Forest Pest First Detectors.

Everyone is welcome to attend First Detector workshops - even if you do not wish to become a Forest Pest First Detector! Box lunch included.

Workshop participants should complete the online training modules below before attending the face-to-face workshop.

Pre-Conference Full-Day Workshops (10:00 a.m.-2:30 p.m.)

Tour of District Energy Saint Paul & Wood from the Hood (you may choose a partial day workshop at no additional cost) - Nina Axelson, District Energy Saint Paul/Ever-Green Energy Tour District Energy St. Paul, the district energy plant that provides heating and cooling services to over 200 buildings in downtown St. Paul. Learn about the basics of district energy and CHP, the history of this plant and the renewable energy technologies and resources District Energy St. Paul uses to run the plant such as solar thermal, solar PV and biomass. Then tour Wood from the Hood a sawmill and finishing shop with the mission to "Reclaim discarded trees from urban neighborhoods to create beautiful, high-quality wood products." Moderately active. Box lunch included. NOTE: This tour returns at 2:30. Included in this opportunity/price is participation in one of the 2:30-5:00 pm walking tours. You must pre-register for both this tour AND a Friday afternoon walking tour.

Pre-Conference Partial-Day Workshops (2:30-5:00 p.m.)

The New Bell Museum + Planetarium - Denise Young, Bell Museum + Planetarium; Robin Thomson, Curator, University of Minnesota Insect Collection

Opening summer 2018, the new Bell Museum + Planetarium will showcase University of Minnesota research, scholarship and education in natural science. Beautiful exhibits with cutting edge technology, nature



NEW MUSEUM + PLANETARIUM

dioramas, landscape views, a 120 seat digital dome theater and outdoor learning environments will foster scientific literacy for all ages and will serve as a vital interface between the University and the larger community. We'll also tour the University of Minnesota Insect Collection, including background and history of the collection, discussion of on-going collection projects and research, and viewing of collection specimens and assorted live arthropods. Participants will walk uphill 1 mile and back.



Research in the Monarch Lab: more than just butterflies - Kyle Kasten, University of Minnesota Monarch Lab; Laura Lukens, Research Technician, Monarch Lab; Karen Oberhauser, Professor, University of Minnesota; Patrick Pennarola, Graduate student, Monarch lab; Julia Leone, Graduate student, Monarch lab

The U of MN Monarch Lab is more than just butterflies. We'll tour insect conservation research sites on and near the St. Paul campus, including lab and field sites. You'll have a

chance to catch dragonflies, both nymphs and adults; look for monarch eggs, caterpillars, and adults; evaluate the amount of monarch habitat in a randomly chosen city block, and check out the diversity of butterflies and bees collected as part of a study on native prairie management. At each site, you'll learn about the practical implications of the science behind the fun. Participants will walk half a mile uphill and back.

SATURDAY, MAY 20, 2017

8:00-9:15 a.m.

Supporting the Connection of Children to Nature: National and Local Efforts - Cathy Jordan, Children & Nature Network, University of Minnesota

The Children & Nature Network (C&NN) provides national leadership to support the movement to connect all children, families and communities to nature. C&NN supports cities' efforts to connect children to nature, library-based community engagement in nearby parks, the transformation of schoolyards to create access to green space, young people engaging the next generation of outdoor enthusiasts and environmental stewards, family nature clubs, and grassroots organizations' campaigns to connect children and



Nature Connection, has aligned its strategic initiatives with several of C&NN's priorities. Explore these efforts, and how you can become involved.

What Trees Should I Plant? - Eli Sagor, University of Minnesota

We'll discuss sources of information and sensible approaches to decide what trees to put in the ground now so your seedlings will not only survive next winter, but will likely still be vigorous and healthy six (or more) decades from now. Bring your questions and tree planting stories, this will be an interactive session.

Minnesota's Superior Hiking Trail - Phil Hartley, Minnesota Master Naturalist

The Superior Hiking trail starts at the Wisconsin boarder just east of Jay Cooke State Park and extends over 300 miles to overlook the Canadian border. Along the trail are many hills, valleys, rivers, bridges, waterfalls, overlooks, and campsites plus interesting geological features and significant historical locations. This presentation is a virtual photo hike along the trail intended to encourage you to lace up your hiking boots and head "Up North".

Electric Car - Right for You? - Sarah Keefer, Sky Glory Sanctuary; Jeff Krebsbach, Electric Car Enthusiast, Sand Jay Inc

In your commitment to leading an ecologically sustainable lifestyle, you recycle, compost, plant native... and you've even considered switching to a 100% electric vehicle. Join us for an overview of how your family can be part of the community of zero-emission car owners. We'll discuss range, maintenance, charging, trip planning, costs and rebate programs- then step outside for a hands-on look at the eco-friendly features of a fully electric vehicle. Discover how simple it can be to finally own a car that will never burn oil, leak anti-freeze, or spew clouds of exhaust fumes!



Play the Watershed Game - Karen Terry, University of Minnesota Extension Learn how to play The Watershed Game! The Watershed Game is an interactive, educational tool that helps individuals understand the connection between land use and water quality. You will learn how land uses impact water and natural resources, increase your knowledge of best management practices, and learn how good decisions can prevent adverse impacts. You will apply the tools of plans, practices, and policies that help you and your team achieve clean water goals for protection and restoration while providing for community growth. You will also learn how The Watershed Game can be used in your own community to help local leaders make better natural resources decisions.

Minnesota Aquatic Invasive Species Research Center Lab Tour & Getting Involved in AIS - Megan M.

Weber, University of Minnesota Extension/MAISRC We will provide a tour of the new Minnesota Aquatic Invasive Species Research Center laboratory facilities while giving descriptions of some of the exciting research happening at the facility. You are likely to see some live fish and plants housed at the facility. At the end of the tour we'll talk to you about the new citizen science opportunities being developed by University of Minnesota Extension and the Minnesota Aquatic Invasive Species Research Center and provide more information on how you can get involved! Short walk, some standing.

Urban Dairy Tour - Justin Siewert, University of Minnesota Department of Animal Science Did you know that there is a working Dairy farm on the St. Paul Campus? You will visit the Dairy Cattle Teaching and Research Center where you would see the milking parlor, the barn where the cows are housed, and some of the equipment used on modern dairy farms. This is also an opportunity to learn what the cattle are fed, how they are cared for, and about some of the research conducted here. Short walk, some standing.

Bee Lab Tour - Rebecca Masterman, University of Minnesota

Come find out what the buzz is all about! Get a behind the scenes look at the University's brand new Bee and Pollinator Research Lab which conducts research on wild bee distribution and abundance, honey bee health and behavior, and best practices for bee keeping and management. Hear about the Bee Squad's work fostering healthy bee populations and pollinator landscapes and find out how you can contribute to a brighter future for bees in Minnesota! Participants will walk to the Bee Lab, about 3/4 mile up a gentle slope and back.



Climate Change and Water Resilience - What Can You Do? - Leslie Yetka, Director, Master Water Stewards Volunteer Program, Freshwater Society

Our climate is changing, with significant impacts to our water resources. So, what can you do about it? First, you can learn more. This presentation will provide an overview of climate change in Minnesota, the impacts we are experiencing now, as well as what we can expect in the future. Second, you can help increase local resilience by adopting best practices related to water management, both in your community as well as your own backyard. Third, you could consider becoming a Master Water Steward, and volunteer your time educating others on water resilience. There are many ways that you can take action on this important topic!

Master Woodland Owner: Introduction - Matt Russell, Department of Forest Resources, University of Minnesota Master Woodland Owner (MW0) Cohort members ONLY. MWO graduates encouraged to attend; beginning MWOs required to attend.

9:30 a.m.-12:00 p.m.

Our Changing Season: Getting On-board for Citizen Science Projects for Minnesota - Rebecca Montgomery, University of Minnesota Department of Forest Resources; Stephan Carlson, Professor, Extension Educator, AFNR, Fish, Wildlife and Conservation Education

The MN Phenology Network's Citizens Science project is looking for 200 State-wide observers who will follow a minimum number of plants or animals over the next 5 years and report on the National Phenological Network's (NPN's), Natures Notebook website. Join this team of observers and learn about how to collect basic data that is useful to researchers and natural resources managers, the latest historical data that has been digitized, and how you can contribute to the project with just smart phones or tablets.

Make a Mobile Tour or Scavenger Hunt Today! - Lisa Larson, Minnesota Master Naturalist In this hands on session, you'll learn to use a free, online game authoring tool called Aris Editor to make your own map-based tour or indoor scavenger hunt. There's no cost to develop or host an Aris game. You'll be guided step by step to create your own basic game or tour during the session. No experience is required. You'll need to bring your own laptop. Aris Editor does not run on Android or iOS devices. To play your game, an Apple iPod, iPad, or iPhone is needed. Some will be provided, but bring yours if you have one.

Successful Nature Photography - Mark Bergman, Minnesota Master Naturalist

Did you ever wonder how those beautiful nature photographs were taken? The silky flow of water over a waterfall. The fine detail in a small wildflower. The golden color in a landscape. Capturing the detail in wildlife. This session will unlock the secrets of successful nature photography and teach the techniques to improve your photographs. Attendees should bring their camera and camera manual.

Water Winding through our Watersheds - Karen Terry University of Minnesota Extension Come to this hands-on, interactive session to learn more about how water moves through our lakes, rivers, streams, wetlands, aquifers, plants, animals, and atmosphere! We will explore our Minnesota watersheds through maps and web-based tools and talk about what threatens our water resources and what we can do about it. We will use a large stream model to explore how the energy of moving water shapes our stream channels.

Mapping Change with the Minnesota Diversity Atlas - George Weiblen, Bell Museum + Planetarium; F. Keith Barker, Associate Professor, Department of Ecology, Evolution & Behavior

Help us use over a century's worth of specimens to map the distribution of animals, plants, and fungi. Your data will let us know where species have been and predict where they may end up in the future! This hand-on session will introduce participants to the Minnesota Biodiversity Atlas and to Zooniverse's Mapping Change, home-grown online tools for naturalists to explore and contribute to scientific collections of the Bell Museum. Includes a behind-the-scenes tour of the collections. Participants will walk to the Bell Museum's new location, about a mile up a gentle slope and back.

Tree Identification and Campus Walk - Angela Gupta, University of Minnesota Extension; Charlie Blinn, Professor and Extension Specialist, Matt Russell, Assistant Professor/ Extension Specialist

Ever wonder how foresters identify trees? This session will take a leisurely walk around portions of the St. Paul Campus of the University of Minnesota to learn the basics of tree identification. We'll learn the importance of MAD Caps (a useful mnemonic device to help make tree ID easy) and touch on tree identification beyond leaves.



Basics of GPS for Natural Resources - Andrew C. Jenks, University of Minnesota

This class will begin with the basics of how GPS satellite signals are used to determine a location on earth and how that location is displayed on a digital map. We will use various types of instruments such as tablets and other handheld devices. We will learn how to accurately collect location data, transfer that data to a computer and display a map. We will also load locations into our instruments and practice accurate land navigation. Finally, we will practice integrating field data collection procedures (data & images). The class will highlight the lowest cost approach to using these technologies; Open Source Software or tools that can be easily used with existing equipment (phones/tablets). This session involves a 5 minute/half mile walk uphill to the computer lab in Skok Hall.



Eyes in the Sky - Mike Billington, The Raptor Center

Walk across the street to enjoy a live raptor (eagles, hawks, owls, falcons, and vultures) program, followed by a short behind the scenes tour of The Raptor Center. The program will cover raptor natural ecology, human environmental impact, and volunteer opportunities at The Raptor Center. On the tour you will see the majority of The Raptor Center's 28 permanently injured raptors, most of which are on display representing nearly 11 different species. Then hear a presentation on the fascinating world of vision science through the lens of animals with the strongest vision on the planet, diurnal raptors. We will address some misinformation about the actual strength of raptor vision. Short walk, some standing.

NOTE: Arrive at this session no later than 9:20! We'll leave for the Raptor Center at that time so we can have enough time there. If you arrive at 9:30 you'll miss it!

The surprising lives of our native mussels - Dr. Mark Hove, University of Minnesota Department of Fisheries, Wildlife and Conservation Biology

Photographs, videos, and stories reveal how these interesting animals live in little-visited reaches of our rivers. Following the presentation there will be a tour of a mussel life history research laboratory, and if time allows, a short lesson on mussel identification. Bring shells you'd like identified! Participants will walk half a mile up hill and back.

Master Woodland Owner: Panel - Matt Russell, Department of Forest Resources, University of Minnesota Master Woodland Owner Cohort members ONLY. MWO graduates invited to attend; beginning MWOs required to attend.

1:15-2:30 p.m.

Native Bees of Minnesota: An Introduction to their Identification, Behavior, Lifestyles, and Natural History - Heather Holm, Pollinator Consultant, Author, and Environmental Educator

The presentation will cover the life cycles, habitats, diet, foraging behaviors, nesting lifestyles, seasonality, and preferred native forage plants including specialist relationships of fifteen genera that occur in Minnesota. Participants will learn what characteristics to look in the field, by photo, or with a microscope to assist them with bee identification and come away with an understanding of where to look for native bees in their native habitat.

Discover Dragonflies - Marti Starr, Minnesota Dragonfly Society; Tina Morey, MN Master Naturalist/MN Dragonfly Society; Curt Oien, MN Master Naturalist/MN Dragonfly Society

Dragonflies spend a majority of their life as aquatic larva living in lakes, rivers, ponds, streams and other wetlands. Different species have unique needs when it comes to water conditions, aquatic environment, and purity. This makes dragonflies a great indicator species when it comes to water quality. Join members of the Minnesota Dragonfly Society to learn about these fascinating creatures and the environment in which they live.

Growing and Harvesting Decorative Florals and Edibles from Woody Plants - Gary Wyatt, University of Minnesota Extension; Mike Reichenbach, Extension Educator, University of Minnesota Extension; Diomy Zamora, Extension Educator, University of Minnesota Extension

Decorative woody florals and edibles from woody plants can be found in our native woodlands and forests in Minnesota. These woody plants can also be planted and grown in your backyard or landscape for personal or business purposes. This session will focus more on plants that can be planted and grown, such as curly willow, yellow dogwood, pussy willow, hazelnuts, juneberry, black chokeberry, honey berry and many others. Cuttings, edibles and plants will be displayed. Harvesting, value-added products and marketing will be discussed. Participants are also encouraged to share their experiences with florals and edibles from the woods.

Mythbusters: Minnesota Ag Edition - Amy Rager, University of Minnesota Extension Minnesota is the number 1 turkey producing state in the US, We are home to more than 2 million cattle, and grow many crops for both human consumption and other uses. Have you ever wondered what is that growing in that field? You will get a short field guide to agricultural crops of Minnesota. Come and learn about the agriculture industry and it's important place in the economics of Minnesota.

1:15-4:00 p.m.

Communication 101: Getting your message across - Stephan Carlson, University of Minnesota Extension The art of oral communication also has a science behind it. This session will explore the components and principles of effective communication as it relates to the interpretive profession. It will emphasize fundamentals of oral presentations, Tilden's Principles, theme development and hands-on use of tangible objects, intangible meanings and the application of universal meanings. Plan to be active and apply these concepts in a safe learning environment.

Eye Spy - John G. White; Minnesota Master Naturalist Learn to recognize natural elements of photography composition that you can use to make your pictures more engaging. We'll review a short powerpoint using my personal images to demonstrate the basics of shooting nature in the field, followed by a walk outdoors where we can use digital technology to both demonstrate and critique our collective work.



What's in my Woods? And how much is there? - Matt Russell, University of Minnesota-Department of Forest Resources and Extension; Brian Clough, Research Associate, University of Minnesota-Department of Forest Resources Understanding the diversity of tree species and their sizes can give insight into what kind of wildlife may be present, can inform forest stewardship planning, and leads to a deeper appreciation of forests. Participants will learn how to set up and carry out a typical woodland inventory. You will learn about the important things to look for and measure in a forest, be introduced to basic forest inventory equipment, and learn about the importance of woodland inventories.

Turf, Trees, Invaders, and Biomes of the World: A walk on the wild side - Cindy Buschena, Forest Resources; Eric Watkins; Horticulture, Gary Johnson; Forest Resources, CBS greenhouse staff; College of Biological Sciences

This tour will: (1) look at research on the development of low-input turf grasses for cold climates; (2) explore research of the Urban Forestry Outreach, Research & Extension Nursery (reforestation options for community budgets, correcting dysfunctional root systems, elm resistance to Dutch elm disease); (3) examine 'What's the big deal about earthworms in Minnesota?' - A description of Minnesota's exotic earthworm invasion, with an earthworm collecting demonstration; (4) visit the plant biomes collection in the College of Biological Sciences Conservatory (Cloud Forest + Maritime, Desert, Semi-Arid, Sub-Tropics, Tropics) - the most biodiverse conservatory in the upper Midwest, with over 1,200 plant species. Participants will walk a 2 mile loop across campus.

What and Where: Mapping Skills and Spatial Tools - Andrew C. Jenks, University of Minnesota The class with begin with how to download/install/use basic Open Source mapping software. Students will learn to create basic maps and define/measure boundaries. Exercises will include digitizing (and editing) points, lines & polygons. We will also learn how to use geographic/projected coordinate systems and appropriate underlying datum. We will learn how to acquire/use satellite imagery, topographical and other background maps. We also will try and include several simple elevation analysis exercises. This session involves a 5 minute/half mile walk uphill to the computer lab in Skok Hall.

Master Woodland Owner: Tree Identification and Campus Walk - Angela Gupta, University of Minnesota Extension; Charlie Blinn, Professor and Extension Specialist, Matt Russell, Assistant Professor/Extension Specialist Master Woodland Owner Cohort members ONLY. MWO graduates invited to attend; beginning MWOs required to attend. Ever wonder how foresters identify trees? This session will take a leisurely walk around portions of the St. Paul Campus of the University of Minnesota to learn the basics of tree identification. We'll learn the importance of MAD Caps (a useful mnemonic device to help make tree ID easy) and touch on tree identification beyond leaves.

2:45-4:00 p.m.

Getting to the People Part of the Problem: Using Social Science in Natural Resource Management - Vanessa Perry, University of Minnesota; Jenn Shepard, Research Assistant, University of Minnesota; Holly Meier, Research Assistant, University of Minnesota Social science offers a path to understanding the human element of natural resource management, in particular the 'how' and 'why' of decisions and behavior. This presentation and interactive discussion will provide an introduction to social science, an overview of social science methods, and opportunities for session participants to explore how they might apply social sciences in their work. Presenters will include local examples of research, with a focus on application for working with communities on natural resource issues in the field and on the ground.

Keeping Woodlands Healthy and Resilient - Eli Sagor, University of Minnesota

Woodlands give us beauty, peace, wildlife habitat, and products from a renewable source. But when it comes to woodlands, the only constant is change. This is even more true in the era of emerald ash borer, buckthorn, and other invaders. We'll discuss practical actions you can take to make the best of your woods better and protect against threats to their health and resilience.

Project GO: A Model for Nature-based After School Programming - Sara Holger, Project Get Outdoors, Inc. The Project GO program model focuses on involving under-served youth in outdoor, after school programs.

Participants will learn how the Project GO model can be used as a template within their own communities. They will be introduced to a variety of resources available for connecting kids to nature and will get hands-on practice planning a nature activity for children. Participants will also learn about an 8-hour Project GO Leader Certification course being offered around the state.



Noodles, Noggins and Beans: Skulls for Beginners - Jan Welsh, Minnesota Department of Natural Resources Sharpen your observation skills and learn about wildlife anatomy in this up close and personal study of wildlife skulls. You'll learn about key characteristics of animal skulls to look for and practice using a key to identify a variety of "bone heads." Learn to read clues to an animal's lifestyle by studying their dentition, eye placement, musculature and more.

SUNDAY, MAY, 2017

9:30-10:45 a.m.

Signage and Brochures: Getting your "Big" idea across - Stephan Carlson, U of MN Extension, Fish Wildlife and Conservation Education

Interpretive signage and brochure development involves a variety of communication principles. These principles of "non-personal communication" are well studied in the Interpretation profession and will be discussed and shared. The intent is to better develop effective brochures and signage that capture the "big" ideas intended for natural resource communication.

Create a Monarch Waystation - Sarah Keefer, Sky Glory Sanctuary

Love monarchs and want to take an active role in their conservation? Step in for a quick overview of monarch & milkweed ecology, wild rearing caterpillars, and tips for landscaping your waystation. After this session, you will flutter away with the knowledge and milkweed seeds to create your own Monarch Butterfly waystation!

Minnesota Noxious Weeds and Terrestrial Invasive Species Plants – What you should know - Gary

Wyatt, University of Minnesota Extension; Mike Reichenbach, Extension Educator, University of Minnesota Extension; Diomy Zamora, Extension Educator, University of Minnesota Extension

There are 29 terrestrial plants on the Minnesota (MN) Noxious Weed list and 51 terrestrial plants on the MN Invasive Species list. Learn all about the MN noxious weed law, plants on the list and the different categories of management practices mandated by law. Understand how these plants are added or removed from this list. Know which MN state agencies are responsible for noxious weeds and invasive species. Several plants will be discussed from life cycle to management. Early detection contacts and smart phone apps used to report noxious weeds and invasive species will be discussed.





Deer Across Minnesota's Landscape - Matt Russell, Department of Forest Resources, University of Minnesota

White-tailed deer are an attractive wildlife species across Minnesota's landscape, providing hunting opportunities and enjoyment to woodland owners and naturalists. Participants will learn about the history of deer in Minnesota, their biology, and habitat requirements. As deer can also pose problems to their habitat by browsing vegetation and woody tree species, we'll also discuss approaches to protect plants for deer herbivory that you can take home with you.

9:30 a.m.-12:15 p.m.

Bumble Bee Identification - Elaine Evans, University of Minnesota

In addition to being fuzzy and cute, bumble bees are important pollinators in Minnesota. Their large size and relative ease of identification makes them an excellent entry point for those wanting to know more about native bees in Minnesota. In this workshop, participants will learn how to identify bumble bees to the species level and how to use their identification skills to participate in the Minnesota Bee Atlas. The Bee Atlas will use observations from citizen scientists to better understand the distribution of native bees in Minnesota.

Tree Identification and Campus Walk - Angela Gupta, University of Minnesota Extension; Charlie Blinn, Professor and Extension Specialist, Matt Russell, Assistant Professor/Extension Specialist Ever wonder how foresters identify trees? This session will take a leisurely walk around portions of the St. Paul Campus of the University of Minnesota to learn the basics of tree identification. We'll learn the importance of MAD Caps (a useful mnemonic device to help make tree ID easy) and touch on tree identification beyond leaves.

11:00 a.m.-12:15 p.m.

Wildflowers of Minnesota's North Shore - Phil Hartley, Minnesota Master Naturalist Spring ephemerals to fall goldenrods, the wildflowers along the North Shore of Lake Superior are always a delight to encounter. Whether growing in a mossy forest or on a rocky outcrop, they are remarkable examples of beauty and perseverance. This PowerPoint photo presentation will highlight a cross-section of wildflowers. Each wildflower will be shown, we'll have a quick "wait, wait, don't tell me" moment, and then some of its unique characteristics will be highlighted.

Pollinator-Friendly Trees and Shrubs - Gary Wyatt, University of Minnesota Extension; Mike Reichenbach, Extension Educator, University of Minnesota Extension; Diomy Zamora, Extension Educator, University of Minnesota Extension

Pollinator-friendly plants are being cultivated to increase habitat for pollinating insects. Much of the literature has promoted vegetative flowering plants for these plantings with little recommendations for trees and shrubs that can provide pollinator habitat. This session will discuss many pollinator-friendly trees and shrubs that can be planted in Minnesota landscapes. Participants are also encouraged to share their experiences with pollinator friendly plants.

Agroforestry for Landowners - Diomy Zamora, University of Minnesota Extension; Gary Wyatt, University of Minnesota Extension; Mike Reichenbach, Extension Educator, University of Minnesota Extension Agroforestry intentionally combines agriculture and forestry to create integrated and sustainable land-use systems. Agroforestry takes advantage of the interactive benefits from combining trees and shrubs with crops and/or livestock. Agroforestry practices include: Alley Cropping, Windbreaks, Riparian Forest Buffers, Silvopasture and Forest Farming. Learn more about Agroforestry practices and which practices would benefit your property.

Coming to a Prairie Near You! - Dawn Littleton, University of Minnesota Extension Be on the lookout for 2017's premiering invasive species of prairies and other ecosystems. This session will begin with a brief discussion of the devastation caused by current invasions of these species and then turn attention to preventing this damage by reporting and/or quickly eliminating target species. While the presentation will focus on prairies, target species (e.g., Grecian foxglove, knapweeds, Japanese barberry, Oriental bittersweet, Palmer amaranth, etc.) are opportunists and will also invade woods, fields, savannas and other ecosystems. Identification techniques for the field will be described and demonstrated.

