

2019 LCCMR Southwest and Central Minnesota Site Visit

Wednesday, September 11 and Thursday, September 12, 2019

Day One – Wednesday, September 11, 2019

8:00 AM DEPART	<p>Depart from State Office Building to Charles Eastman Canoe Landing in Morton – bus departs from front of building G2W6+JV Morton, Minnesota*</p> <p><i>Directions:</i> (2 hours 10 minutes / 117 miles) Head south on Rev Dr Martin Luther King Jr Blvd (0.2 mi) Turn right onto Cedar St (0.2 mi) Turn right onto E 12th St (174 ft) Use the left lane to turn slightly left (0.1 mi) Keep left at the fork, follow signs for Interstate 35E S and merge onto I-35E S (0.2 mi) Merge onto I-35E S (7.1 mi) Take exit 99B to merge onto I-494 W (14.4 mi) Take exit 11C to merge onto MN-5 W/US-212 W (1.8 mi) Keep left to continue on US-212 W (49.0 mi) Turn left onto MN-15 S (12.6 mi) Turn right onto Hwy 19 Blvd W (30.8 mi) Turn left onto Centennial Dr (472 ft) Turn right onto 1st St (0.2 mi)</p>
10:10 AM	<p>Charles Eastman Canoe Landing, Morton G2W6+JV Morton, Minnesota (25 minutes on site)</p> <p><i>Presenters:</i> Ted Suss, Friends of the Minnesota Valley Executive Director Tony Sindt, DNR Minnesota River Specialist</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Minnesota River trailhead and canoe landing: to transform a municipal parcel from a compost site into a Minnesota River water trailhead and landing and to design and build interpretative trails around the landing complex · Minnesota River aquatic ecosystem research: to accelerate collection of baseline data to enhance understanding of the Minnesota River ecosystem, measure future impacts of changing climate and landscapes on the aquatic ecosystem, and guide future management efforts <p><i>Appropriations:</i> M.L. 2014, 07f, Minnesota River Water Trailhead and Landing in Morton – \$198,000 – City of Morton M.L. 2016, 03i, Enhancing Understanding of Minnesota River Aquatic Ecosystem – \$500,000 – DNR</p>
10:35 AM DEPART	<p>Depart to Cedar Rock Scientific and Natural Area JR8C+7W Redwood Falls, Minnesota</p> <p><i>Directions:</i> (22 minutes / 15 miles) Turn left at the 1st cross street onto Hwy 19 Blvd W (0.3 mi) Turn left onto US-71 S (5.4 mi) Turn right onto Redwood 101 (2.1 mi) Turn left onto River Rd W (0.2 mi) Continue onto County Rd 25 (2.1 mi) Turn right onto County Rd 17/Laser Ave (4.5 mi) Destination will be on the right</p>

11:00 AM	<p>Cedar Rock Scientific and Natural Area JR8C+7W Redwood Falls, Minnesota (10 minutes on site)</p> <p><i>Presenter:</i> Judy Schulte, DNR acting Scientific and Natural Areas Program Manager Brad Bolduan, DNR Regional Scientific and Natural Areas Specialist Molly Roske, DNR Scientific and Natural Areas Unit Supervisor</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Cedar Rock SNA and the SNA program: to conserve sites of biodiversity significance by restoring and enhancing lands established as scientific and natural areas, and acquiring lands with high-quality native plant communities and rare features to be established as scientific and natural areas <p><i>Appropriations:</i> M.L. 2019, 09a, DNR Scientific and Natural Areas – \$3,500,000 – DNR (multiple previous)</p>
11:10 AM DEPART	<p>Depart to Swedes Forest 20-2 Native Prairie Bank MMC7+MR Belview, Minnesota</p> <p><i>Directions:</i> (19 minutes / 14 miles) Head south on Kenwood Ave toward County Rd 9 (1.1 mi) Turn right onto County Rd 9 (7.5 mi) Turn right onto County Rd 7/S Main St (5.4 mi) Turn right onto 430th St (0.2 mi) Destination will be on the right</p>
11:30 AM	<p>Swedes Forest 20-2 Native Prairie Bank MMC7+MR Belview, Minnesota (30 minutes on site)</p> <p><i>Presenters:</i> Judy Schulte, DNR Native Prairie Bank Program Manager Rhett Johnson, DNR Regional Private Lands Specialist Bruce Carlson, DNR Minnesota Biological Survey Supervisor Dustin Graham, DNR Minnesota Biological Survey Plant Ecologist/Botanist</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Native Prairie Bank conservation easements: to acquire native prairie bank easements, prepare baseline property assessments, restore and enhance native prairie sites, and provide technical assistance to landowners · Minnesota Biological Survey: to complete the statewide field surveys begun in 1987 to provide a foundation for conserving biological diversity by systematically collecting, interpreting, and delivering data on native and rare species, pollinators, and native plant communities throughout Minnesota <p><i>Appropriations:</i> M.L. 2018, 09i, Easement Program for Native Prairie Bank – \$2,000,000 – DNR (multiple previous) M.L. 2019, 03a, Minnesota Biological Survey – \$1,500,000 – DNR (multiple previous)</p>
12:00 PM DEPART	<p>Depart to Grandview Valley Winery 42703 Grandview Ave, Belview, MN 56214</p> <p><i>Directions:</i> (4 minutes / 1.2 miles) Head east on 430th St toward Grandview Ave (0.8 mi) Turn right onto Grandview Ave (0.3 mi) Turn left</p>

12:05 PM	<p>Strategic Planning Lunchtime Group Discussion, Grandview Valley Winery, Belview 42703 Grandview Ave, Belview, MN 56214 (1 hour 15 minutes on site)</p> <p>Winery overlooks a Native Prairie Bank easement; pizza buffet lunch will be ordered for members and invited guests.</p>
1:20 PM DEPART	<p>Depart to Lac qui Parle State Park pullover 24PC+88 Churchill, Minnesota</p> <p><i>Directions:</i> (54 minutes / 45 miles) Head north toward Grandview Ave (0.2 mi) Turn right onto Grandview Ave (0.3 mi) Turn left onto 430th St (1.0 mi) Turn right at the 1st cross street onto County Rd 7 (2.2 mi) Continue onto Co Rd 9 (5.8 mi) Turn left onto US-212 W (23.7 mi) Continue onto US-59 N (0.2 mi) Turn left to stay on US-59 N (7.5 mi) Turn left onto 1st St W (2.6 mi) Turn right onto 140th Ave NW (1.1 mi) Destination will be on the left</p>
2:15 PM	<p>Lac qui Parle State Park pullover 24PC+88 Churchill, Minnesota (1 hour 10 minutes on site)</p> <p><i>Presenters:</i> Terri Dineson, Lac qui Parle State Park manager Hannah Texler, DNR Ecological Monitoring Network Project Manager Erika Rowe, DNR Ecological Monitoring Network Coordinator Nicole Gerjets, DNR Zoologist/Bee Specialist Jessica Petersen, DNR Invertebrate Ecologist Shelli-Kae Foster, Prairie Woods Environmental Learning Center YES! Grant Project Leader Taylor Templer, West Central YES! Coordinator Cindy Dorn, Pioneer Public Television, Prairie Sportsman Producer/Writer</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Lac qui Parle State Park overview · Ecological Monitoring Network: to develop a consolidated statewide network of permanent habitat monitoring sites in prairies, forests, and wetlands to help guide and prioritize habitat protection and management decisions in response to environmental change · Native Bee Survey: to assess the current status and distribution of native bee pollinators in Minnesota and facilitate interagency collaboration and public outreach on pollinators · Prairie Butterfly Conservation: to prevent the extinction of imperiled native Minnesota butterfly species through breeding, research, field surveys, and potential reintroduction · Youth-led sustainability initiatives: to improve local waterways by training and mobilizing youth-led teams in Minnesota communities to complete projects related to water quality including monitoring and reporting · Prairie Sportsman: to provide outreach on outdoor recreation, conservation, and natural resource issues, including water quality, wildlife habitat, and invasive species, through a series of interrelated educational and training videos and statewide broadcast television programs <p><i>Appropriations:</i> M.L. 2016, 03d, Statewide Monitoring Network for Changing Habitats in Minnesota – \$500,000 – DNR M.L. 2019, 03s, Native Bee Survey – \$600,000 – DNR (multiple previous) M.L. 2016, 03c2, Prairie Butterfly Conservation, Research, and Breeding - Phase II – \$329,000 – DNR (one previous) M.L. 2018, 05b, YES! Students Take on Minnesota Water-Quality Challenge – \$213,000 – Prairie Woods Environmental Learning Center (multiple previous)</p>

	M.L. 2018, 05a, Prairie Sportsman Statewide Environmental Broadcasts and Videos – \$300,000 – Pioneer Public Television (one previous)
3:25 PM DEPART	<p>Depart to West Central Research and Outreach Center, Administration Building 46352 MN-329, Morris, MN 56267</p> <p><i>Directions:</i> (49 minutes / 45 miles) Head north on 140th Ave NW toward 10th St NW (2.9 mi) Turn left onto US-59 N (11.9 mi) Turn right onto US-59 N/W Logan Ave Continue to follow US-59 N (30.0 mi) Turn right onto MN-329 E (0.6 mi) Destination will be on the left</p>
4:15 PM	<p>West Central Research and Outreach Center, University of Minnesota – Morris 46352 MN-329, Morris, MN 56267 (1 hour 30 minutes on site)</p> <p><i>Presenters:</i> Steve Poppe, Senior Horticulture Scientist Eric Buchanan, Renewable Energy Scientist William Northrop, UMN Associate Professor Joel Tallaksen, Renewable Energy Scientist Bradley Heins, UMN Associate Professor Lee Johnston, West Central Research and Outreach Center Director of Operations, Professor</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Prairie pollinator education: to restore 17 acres of native prairie for pollinators and to construct wayside shelters and kiosks along an existing trail to provide information to visitors on the importance of pollinators and native prairie ecosystems · Transitioning farms to local energy: to develop clean energy strategies for Minnesota farms in order to reduce fossil fuel energy use and increase local energy production · Hydrogen fuel from wind-produced ammonia: to develop a technical solution for converting wind-produced ammonia to hydrogen through catalytic decomposition, for use in reducing emissions from diesel engines and powering fuel cell vehicles · Life cycle of renewably produced nitrogen fertilizers: to calculate fossil fuel energy savings and greenhouse gas reductions resulting from the use of local renewable energy technologies, including biomass gasification, anaerobic digestion, and hydroelectricity to produce fertilizer · Dairy farm wastewater: to develop and evaluate an integrated system that recycles and uses nutrients in dairy wastewater from feedlots and milk processing, thereby reducing nutrients from agricultural runoff, and to provide outreach on adoption of new technologies · Solar energy for swine farms: to continue to develop and evaluate the utilization of solar photovoltaic systems at swine facilities to improve energy and economic performance, reduce fossil fuel usage and emissions, and optimize water usage <p><i>Appropriations:</i> M.L. 2018, 05g, Morris Prairie Pollinator Demonstration Area and Education – \$550,000 – UMN, West Central Research and Outreach Center M.L. 2014, 08d, Transitioning Minnesota Farms to Local Energy – \$500,000 – UMN, West Central Research and Outreach Center M.L. 2016, 07c, Hydrogen Fuel from Wind-Produced Renewable Ammonia – \$250,000 – UMN M.L. 2014, 08e, Life Cycle Energy of Renewable Produced Nitrogen Fertilizers – \$250,000 – UMN, West Central Research and Outreach Center M.L. 2016, 07d, Utilization of Dairy Farm Wastewater for Sustainable Production – \$475,000 – UMN, West Central Research and Outreach Center M.L. 2016, 07e, Solar Energy Utilization for Minnesota Swine Farms – Phase II – \$475,000 – UMN, West Central Research and Outreach Center</p>

5:45 PM	<p>Dinner in AgCountry Auditorium, Administration Building, West Central Research and Outreach Center, University of Minnesota – Morris (1 hour on site) 46352 MN-329, Morris, MN 56267</p> <p>Dinner catered by local restaurant for members</p>
6:45 PM DEPART	<p>Depart to North Parking Lot, University of Minnesota – Morris</p> <p><i>Directions:</i> (3 minutes / 1.1 miles) Head west on MN-329 W toward US-59 S (0.6 mi) Continue onto Prairie Ln (0.3 mi) Turn right onto Alumni Dr (0.2 mi) North Parking Lot is on your left</p> <p><i>Walking Directions from North Parking Lot to Student Center:</i> (4 minutes / 0.2 miles) Head south on Avenida De Cesar Chavez (0.1 mi) Turn right onto Cougar Cir (292 ft) Student Center is on your left Event is in Oyate Hall (room 140)</p>
7:00 PM	<p>Strategic Planning Listening Session, Oyate Hall, Student Center, University of Minnesota – Morris (1 hour 30 minutes on site)</p> <p>“LCCMR will be hosting “Food for Thought,” a listening session at the University of Minnesota – Morris. Tell state decision-makers what environmental issues need funding, eat milk and cookies, and enter to win sustainable goodies – including a Klean Kanteen.”</p>
8:30 PM DEPART	<p>Depart to GrandStay Hotel & Suites 5 MN-28, Morris, MN 56267</p> <p><i>Directions:</i> (4 minutes / 1.4 miles) Turn right onto Avenida De Cesar Chavez (0.1 mi) Turn right onto Martin Luther King Jr Dr (0.2 mi) Turn left onto E 7th St (387 ft) Turn right onto Iowa Ave (0.2 mi) Turn left onto Old U.S. Hwy 59 S (0.8 mi) Destination will be on frontage road to the right</p>
<p>Day Two – Thursday, September 12, 2019</p>	
6:45 AM DEPART	<p>Depart to Common Cup Coffeehouse 501 S Atlantic Ave, Morris, MN 56267</p> <p><i>Directions:</i> (2 minutes / 0.6 miles) Head southwest on Old U.S. Hwy 59 S toward State Hwy 9 N (0.1 mi) Turn left onto Atlantic Ave/Old U.S. Hwy 59 S (0.5 mi) Turn right onto W 5th St Destination will be on the right</p>
7:00 AM	<p>Strategic Planning Coffee and Conversation, Common Cup Coffeehouse, Morris 501 S Atlantic Ave, Morris, MN 56267 (1 hour on site)</p> <p>“Join LCCMR members for Coffee & Conversation at Common Cup Coffeehouse. Let them know what natural resources issues you think Minnesota should make a spending priority, while you get your morning caffeine fix.”</p>

8:00 AM DEPART	<p>Depart to St. John's University, New Science Center, Room 150 HJJ5+JV Collegeville, Minnesota</p> <p><i>Directions:</i> (1 hour 28 minutes / 83 miles) Turn left at the 1st cross street onto Atlantic Ave (0.5 mi) Turn right onto MN-28 E (50.1 mi) Turn left onto US-71 N/Main St S (0.2 mi) Turn right to merge onto I-94 E (29 mi) Take exit 156 (0.3 mi) Turn right onto St John's Rd (1.1 mi) Turn left onto Prep School Rd (.2 mi) Turn right onto Science Dr, follow signs to Science Lot 1 Park in Science Lot 1, visitor parking is free New Science Center is the building on your left as you entered the parking lot Enter the building and take a left at the large pendulum in the entryway</p>
9:30 AM	<p>St. John's University, New Science Center, Room 150 HJJ5+JV Collegeville, Minnesota (40 minutes on site)</p> <p><i>Presenters:</i> John Geissler, St. John's Abbey Arboretum Land Manager / Outdoor University Director Dennis Fuchs, Stearns County Soil & Water Conservation District Administrator Jenny Gieseke, BWSR Organizational Effectiveness Manager</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Avon Hills conservation easements: to restore and enhance protected lands, provide public outreach, and prepare management plans for and use a reverse-bid ranking system to secure permanent conservation easements on high-quality natural habitat in the Avon Hills area of Stearns County · Mississippi River conservation planning: to develop and adopt river protection strategies in cooperation with local jurisdictions in the communities of the 26 miles of the Mississippi River between Benton and Stearns Counties · Nitrate leaching: to reduce nitrate leaching on sandy soils of central Minnesota by developing water-efficient production methods, supply chains, and end-use markets for three perennial crops: Kernza, prairie species, and alfalfa · Conservation apprentice academy: to train and mentor future conservation professionals by providing apprenticeship service opportunities with soil and water conservation districts <p><i>Appropriations:</i> M.L. 2019, 09j, Preserving the Avon Hills with Reverse-Bidding Easements – \$1,600,000 – St. John's Arboretum and University (multiple previous) M.L. 2011, 03n, Mississippi River Central Minnesota Conservation Planning – \$175,000 – Stearns County Soil & Water Conservation District M.L. 2019, 04k, Accelerating perennial crop production to prevent nitrate leaching – \$440,000 – Stearns County Soil & Water Conservation District M.L. 2016, 05a, Minnesota Conservation Apprenticeship Academy – \$433,000 – BWSR (multiple previous)</p>
10:10 AM DEPART	<p>Depart to Pearl Lake Public Access CM4Q+HR Rockville, Minnesota</p> <p><i>Directions:</i> (24 minutes / 21 miles) Head north toward Science Dr (105 ft) Turn left onto Science Dr (0.1 mi) Turn right onto Abbey Rd (0.2 mi) Continue onto St John's Rd (1.1 mi) Turn right to merge onto I-94 E (0.3 mi) Merge onto I-94 E (1.2 mi) Keep right to stay on I-94 E (8.3 mi)</p>

	<p>Take exit 167A-167B to merge onto MN-15 S toward Kimball (4.3 mi) Turn right onto Co Rd 141 (5.0 mi) Turn left onto Co Rd 146 (0.2 mi) Destination will be on the left</p>
10:35 AM	<p>Pearl Lake Public Access, Stearns County: (45 minutes on site) CM4Q+HR Rockville, Minnesota</p> <p><i>Presenters:</i> Casey Shoenebeck, DNR Sentinel Lakes Coordinator Heiko Schoenfuss, St. Cloud State University Professor James Gerads, St. Cloud State University Graduate Research Assistant Adam Heathcote, St. Croix Watershed Research Station Associate Scientist</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Sentinel Lakes: a monitoring and multidisciplinary research effort on 25 sentinel lakes in Minnesota, which will integrate and synthesize previously collected data to enhance understanding of how lakes respond to large-scale environmental stressors and provide for improved ability to predict and respond to lake changes for water and fisheries management · Septic pollution: to assess the presence of possible sources of contaminants of emerging concern in Minnesota lakes in order to determine their effects on fish health, understand the potential contribution from septic systems, and inform options for remediation and prevention to protect Minnesota lakes from these contaminants in the future · Toxic algae: to determine the historical distribution, abundance, and toxicity of the invasive blue-green alga, <i>Cylindrospermopsis raciborskii</i>, in about 20 lakes across Minnesota and inform managers and the public about the alga's spread and health risks <p><i>Appropriations:</i> M.L. 2016, 03g, Sentinel Lakes Monitoring and Data Synthesis – Phase III – \$401,000 – DNR (multiple previous) M.L. 2015, 04c, Biological Consequences of Septic Pollution in Minnesota Lakes – \$364,000 – St. Cloud State University M.L. 2018, 04d, Protect Water Quality with Efficient Removal of Contaminants in Treatment Ponds for Storm Water – \$325,000 – St. Cloud State University M.L. 2018 06f, Determining Risk of Toxic Alga in Minnesota Lakes – \$200,000 – Science Museum of Minnesota (multiple previous)</p>
11:15 AM DEPART	<p>Depart to Lake Maria State Park, Trail Center Interpretive Building 8375+GH Silver Creek, Minnesota</p> <p><i>Directions:</i> (37 minutes / 25 miles) Turn right onto Co Rd 146 (1.4 mi) Turn right to stay on Co Rd 146 (7.7 mi) Turn left onto Co Hwy 45/Co Rd 45 (1.9 mi) Turn right onto Co Hwy 44/Co Rd 44 (0.4 mi) Turn left onto 200th St E (2.0 mi) Turn left onto Co Rd 145 (0.2 mi) Turn left onto MN-24 N (272 ft) Turn right to merge onto I-94 E (4.9 mi) Take exit 183 for County Road 8 toward Silver Creek/Hasty (0.2 mi) Turn right onto County Rd 8 NW (2.4 mi) Turn left onto 127th St NW (2.1 mi) Turn right onto Clementa Ave NW (1.1 mi) Turn right onto Park Rd (0.3 mi) Turn left (0.3 mi) Turn right Destination will be on the right Continue to follow the road for parking</p>

12:00 PM	<p>Strategic Planning Lunchtime Group Discussion at Lake Maria State Park, Trail Center Interpretive Building (1 hour 15 minutes on site) 8375+GH Silver Creek, Minnesota</p> <p>Boxed sandwich lunches from local restaurant will be ordered for members and invited guests. Lunch will be eaten on picnic tables in the surrounding area or tables inside Trail Center in case of foul weather.</p>
1:15 PM	<p>Lake Maria State Park, Trail Center Interpretive Building: (40 minutes on site) 8375+GH Silver Creek, Minnesota</p> <p><i>Presenters:</i> Steve Kloiber, DNR Wetlands Monitoring Coordinator Megan Fitzpatrick, DNR Wetlands Research Group Luis Ramirez, Audubon Minnesota Director of Conservation Tamara Simonich, Lake Maria State Park Manager</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · National Wetlands Inventory: to update and enhance wetland inventory maps for Minnesota · Wetlands invertebrates: to assess invertebrate amphipods in wetlands and explore stocking them as a valuable food source for ducks and other wildlife in the Prairie Pothole Region of the state · Wetland bird survey: to develop a statewide wetland bird monitoring program to enable long-term monitoring of the status of wetland birds and the health of their wetland habitats · Lake Maria State Park overview <p><i>Appropriations:</i> M.L. 2016, 03e, Completing the National Wetland Inventory Update for Minnesota – \$1,500,000 – DNR (multiple previous) M.L. 2018, 08g, Restoring Wetland Invertebrates to Revive Wildlife Habitat – \$400,000 – DNR M.L. 2015, 03f, Creating a Statewide Wetland Bird Survey – \$146,000 – Audubon Minnesota</p>
1:55 PM DEPART	<p>Depart to Cedar Creek Ecosystem Science Reserve, Lindeman Center 2660 Fawn Lake Dr NE, East Bethel, MN 55005</p> <p><i>Directions:</i> (1 hour, 3 minutes / 44 miles) Head north (0.3 mi) Turn right onto Park Rd (0.2 mi) Turn right onto Clementa Ave NW (0.8 mi) Turn left onto County Rd 39 NW (6.3 mi) Turn left onto Elm St (0.2 mi) Turn right onto W Broadway St (0.5 mi) Turn left onto MN-25 N/Pine St (0.4 mi) Turn right onto Park Blvd SE/Co Rd 14 (6.6 mi) Turn right to merge onto US-10 E (4.5 mi) Turn left onto Proctor Ave NW (0.6 mi) Turn right onto Proctor Rd NW (1.7 mi) Turn right onto 205th Ave NW (3.4 mi) Turn left onto Twin Lakes Rd NW (1.1 mi) Turn right onto Norris Lake Rd NW (1.9 mi) Turn left to stay on Norris Lake Rd NW (5.0 mi) Turn left onto St Francis Blvd NW (1.0 mi) Turn right onto 229th Ave NW (0.2 mi) Turn left onto Ambassador Blvd NW (0.2 mi) Turn right onto Bridge St NW (0.5 mi) At the traffic circle, continue straight to stay on Bridge St NW (0.3 mi) At the traffic circle, take the 2nd exit and stay on Bridge St NW (0.3 mi) Continue onto 229th Ave NW (3.8 mi) Continue onto University Ave Extended NE/University Avenue Extended NW (0.9 mi) Turn right onto 237th Ave NE (2.4 mi) Turn left onto Fawn Lake Dr NE (0.9 mi)</p>

	<p>Cedar Creek driveway will be on the right Turn left at the fork in the driveway, following signs for Visitors and the Lindeman Center</p>
<p>3:00 PM</p>	<p>Cedar Creek Ecosystem Science Reserve, Lindeman Center 2660 Fawn Lake Dr NE, East Bethel, MN 55005 (1 hour 45 minutes on site)</p> <p><i>Presenters:</i> Forest Isbell, Cedar Creek Associate Director Caitlin Barale Potter, Cedar Creek Education and Outreach Coordinator Elena West, UMN Postdoctoral Researcher John Fieberg, UMN Associate Professor David Wolfson, UMN Graduate Student Emilie Snell-Rood, UMN Associate Professor Daniel Stanton, UMN Postdoctoral Research Associate</p> <p><i>Topics:</i></p> <ul style="list-style-type: none"> · Bison: to research combined bison grazing and fire management strategies to restore Minnesota's oak savanna ecosystems · Wolves: to assess wolf recolonization impacts on wildlife, biodiversity, and natural resources and provide educational opportunities at Cedar Creek Ecosystem Science Reserve · Red-headed woodpeckers: to evaluate red-headed woodpecker survival and habitat needs and to use this data to develop and disseminate a long-term oak savanna management plan that supports red-headed woodpeckers and other oak savanna habitat-dependent species · Sandhill cranes: to delineate population boundaries, habitat use relative to crop depredation, and migration patterns and survival of Minnesota's two populations of sandhill cranes, Mid-continent and Eastern · Roadside plantings for pollinators: to produce site-specific recommendations for roadside plantings in Minnesota to maximize the nutritional health of native bees and monarch butterflies that rely on roadside habitat corridors · Lichens and mosses: to survey, map, and analyze mosses and lichens across the state, including their moisture-retention capacity, effects on hydrology, and ability to filter airborne pollutants <p><i>Appropriations:</i> M.L. 2017, 08c, Evaluating the Use of Bison to Restore and Preserve Savanna Habitat – \$388,000 – UMN, Cedar Creek Ecosystem Science Reserve M.L. 2017, 03k, Cedar Creek Natural Area Wolf Recolonization Assessment – \$398,000 – UMN, Cedar Creek Ecosystem Science Reserve M.L. 2019, 03j, Red-Headed Woodpeckers as Indicators of Oak Savanna Health – \$171,000 – UMN M.L. 2014, 05h, Sandhill Crane Populations and Management in Minnesota – \$250,000 – UMN M.L. 2017, 08a, Optimizing the Nutrition of Roadside Plants for Pollinators – \$815,000 – UMN M.L. 2017, 08a, Assessing Natural Resource Benefits Provided by Lichens and Mosses – \$213,000 – UMN</p>
<p>4:45 PM DEPART</p>	<p>Depart to State Office Building 100 Rev Dr Martin Luther King Jr Boulevard., St Paul, MN 55155</p> <p><i>Directions:</i> (47 minutes / 37 miles) Head southwest on Fawn Lake Dr NE toward 237th Ave NE (0.9 mi) Turn right onto 237th Ave NE (0.9 mi) Turn left onto MN-65 S/Hwy 65 (18.4 mi) Use the right lane to take the ramp onto US-10 E (2.5 mi) Use the right 2 lanes to merge onto I-35W S/US-10 E toward Minneapolis/St Paul (1.9 mi) Take exit 28B for US-10 toward St Paul (0.3 mi) Continue onto US-10 E (2.2 mi) Keep left to stay on US-10 E, follow signs for I-694 E (0.2 mi) Merge onto I-694 E/US-10 E (3.8 mi) Use the right 2 lanes to take exit 46 for Interstate 35E S/U.S. 10 S toward Saint Paul (0.5 mi) Merge onto I-35E S/US-10 E (4.8 mi) Take exit 107C for University Ave toward State Capitol Hospital (0.2 mi)</p>

	Turn right onto University Ave E (0.6 mi) Turn left onto Rev Dr Martin Luther King Jr Boulevard. Destination will be on the right (0.1 mi)
5:30 PM	State Office Building – bus returns 100 Rev Dr Martin Luther King Jr Boulevard., St Paul, MN 55155

*Plus codes, or Open Location Codes, (such as [G2W6+JV Morton, Minnesota](#)) are an easy way of identifying a location without a street address. Plus codes can be used like street addresses and are simpler to type into navigation than latitude and longitude. Additionally, all addresses in this agenda are hyperlinked to Google Maps for ease of use.