St. Cloud, MN 56301

Central Minnesota Audubon 806 S. 6th Avenue Green-Backed Gazette

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Newsletter of the Central Minnesota Audubon Society

* All Meetings held at the St. Cloud Unitarian Fellowship Hall

Volume 42

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January, 2020



President's Letter by Brian Jungels

Bird Lovers

One observation I have made over the last number of years is the fact that people like birds. Whenever I meet someone new and reveal I am an Audubon member, I usually hear inquiries about a bird that they saw at a feeder or even photos with requests for identification. The only birds I recollect that have bad press are pigeons and cormorants. Even starlings with their bullying nesting behavior get good press with their spectacular communal flocking displays.

Now the down side. Why do we as a group continue to live and support government policies and cultural practices that are not bird friendly? As an example, every Sunday edition of the St. Cloud Times profiles a "mansion" for sale. I find the fact that the ownership of these resource dependent and destructive monstrosities is being glorified as something to strive for an offense. I have done a lot of reading about the Civil War and one of the major lessons I take from the War is this: people can live with enormous contradictions for a long time but the longer they resist from dealing with these contradictions, the more painful the resolution will be. People like birds. Let's try to live a life that reflects this.

Did you know... the Minnesota Pollution Control Agency (MPCA) wants YOU to provide input regarding important lakes and streams, water quality, and to help guide the priorities of future implementation and strategy within the Mississippi River-Sartell Watershed? It's TRUE! Two public meetings in February (see the Calendar on this page) will provide information regarding the Watershed Restoration and Protection Strategy (WRAPS) for this watershed, including water quality and watershed conditions. The watershed covers areas of Stearns, Benton, Morrison, Crow Wing and a small portion of Todd Counties. In Stearns County, the watershed reaches south of Avon and Albany (including the Watab River, South Two Rivers River, and Spunk Creek). In Benton County, it includes the entire watershed of Little Rock and Bunker Hill Creeks, and inlcudes the Platte and Skunk Rivers in Morrison and Crow Wing Counties. Please consider attending one of the meetings! Your input and participation is very important.

Calendar

7 p.m. Wednesday, January 15, 2019 Audubon Meeting, Unitarian Fellowship Hall*

Speaker: Don Leaon

Topic: Bees of Minnesota

Mn Master Naturalist, Don Leaon will discuss the six families of bees found in MN and the role they play in maintaining healthy ecosystems. He will cover challenges bees are facing due to habitat loss, pesticide use, and other factors. He will also discuss what each of us can do to promote healthy bee populations.

Friday - Sunday, January 24 - 26, 2020 Winter BOW (Becoming an Outdoor Woman) Workshop Northwoods Audubon Center (now known as the Osprey Wilds

ELC), Sandstone, MN



7 p.m. Wednesday, Febuary 19, 2020 Audubon Meeting, Unitarian Fellowship Hall*

> Speaker: TBD Topic: **TBD**



4-7 p.m. Tuesday, February 25, 2020 Mississippi River-Sartell Watershed Restoration and Protection Strategy (WRAPS) Meeting **Royalton American Legion**

103 N. Maple Street, Royalton, MN 56373 For more information, contact Phil Votruba, MPCA at (218) 316-3901

4-7 p.m. Thursday, February 27, 2020 Mississippi River-Sartell Watershed Restoration and Protection Strategy (WRAPS) Meeting

Sartell Community Center 850 19th Street South, Sartell, MN 56377 For more information, contact Phil Votruba, MPCA at (218) 316-3901

> 7 p.m. Wednesday, March18, 2020 Audubon Meeting, Unitarian Fellowship Hall*

Speaker: Steve Saupe Topic: Nuts of Central MN



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Nov/Dec. Speakers: Ilyse Putz, Michelle Beadle, Elise Miller, and Sophia Buysse **Cool Botanical Studies from 2019**

Michelle Beadle was the first of the four young women from the College of St. Benedict who presented their research conducted during the summer of 2019. Michelle's work involved reinvasion of Eastern Red Cedar in restored grasslands (of Nebraska). Eastern Red Cedar is native to Nebraska, but it is invading grasslands. It is an increasing issue due to fewer fires in grasslands. In some places, fire has not occured for 20 - 30 years or longer. Eastern Red Cedar decreases productivity of ranchland by up to 75%! When the trees are over 6' in height, they are harder to kill in a moderate intensity fire. Michelle noted that they used a "cut 'n stuff" method of treatment by cutting the outskirts and stuffing the slash under the canopy of standing trees to create a ladder fire when using prescribed fires for control.

Michelle noted that in determining the rate of re-invasion, she needed to consider hysteresis, which is the dependence of the state of a system on its history. If the cedar invade faster, the system is hysteretic. She sampled 15 year classes (2005-2019) at the woodland/grassland interface in 5 x 5 meter plots. Findings follow. A collapsed woodland was 6 - 15 years ahead of invasion in adjacent grasslands. If using prescribed fire, more frequent burns are necessary. Red cedar roots do not resprout, but the seeds persist. Michelle noted that at less than one year of age, red cedar are less than 10 cm viable. Michelle noted that she recommends treatment at less than 8 years because a moderate fire would control the red cedar.

Sophia Buysse shared her research through the University of Utah on Genetic Influence on Drought Tolerance in Quaking Aspen. She first noted that there can be three types of drought, agricultural drought (reduced precipitation with high temperatures during the three months of summer), meteorological (over an extended period of time), or hydrological (lowering of the aquifers and surface water levels). Phenotypic plasticity allows species to live in unfavorable conditions and may allow for acclimation. Genetic traits can be changed. Quaking Aspen create clonal trees... 10 trees can be the same tree. Genetic influence can indicate if certain clones are better able to tolerate drought than others. Sophia used genotypes (leaf out time and fall leaf colors) in her studies. She conducted 10 days of sampling in the San Juan National Forest (7.5 hours from the University). She collected leaves and tested for the genotype in 15 plots (5 trees each at three elevation bands). Sophia found 14 clones from 48 trees. Only 2 clones were in the same sample. She measured water potential before the sun would rise (3:30 - 5:30 a.m.) and then would repeat at 1 p.m. (during the most sun stress). With regard to trait plasticity, she didn't see much trend. She noted that she expected different results.

Elise Miller went next with her research on Micro-Density Anomalies in White Pine Distribution and Drivers (through Harvard). She noted that one can tell how well a tree has/had by the density of the wood rings. Early wood and late wood rings make up one year's growth. Early wood is less dense and has thinner cell walls, while late wood is darker and more dense. In a good year, the rings will be wider. A question that she asked was how do the environmental drivers of temperature and precipitation affect density? She cored 41 young white pine trees at breast height to check for microdensities. Elise had 7 of the trees cut down to check if microdensities went through vertically. She found that microdensity anomalies occurred in 1999, 2002, 2012, and 2016. She also studied soil moisture and vapor pressure deficits. She noted that wood growth models can help with climate projections and reconstructions.

Our final presenter was Ilyse Putz, who studied Soil Fauna Feeding Activity in Fens in Northeast Germany. Fens are wetlands that have a specific pH and water chemistry (bogs that are fed by groundwater). Wetscapes (wetland landscapes) sequester carbon. When wetlands are drained, less carbon is stored. When soil fauna decompose carbon dioxide is released. Ilyse was in NE Germany (where there are many wetlands) from mid-June to the end of August in 2018. She studied three types of fens there...perc mire, coastal mire, and alder carr. She used PVC strips to create baited lamina sticks with celluloseand bran flakes and placed them at two depths, at the surface and at 30 cm. She also used one control (covered mesh), which excluded some mesofauna and all macrofauna. Ilyse noted that it was very difficult to get the PVC lamina sticks in the ground due to a heatwave during the time that she was there. In the coastal fens, she recorded no feeding in the mesh (this fen was the hardest to get in the ground). The perc fen had the most action. She determined the amount of food that was consumed as well as the fauna. Ilyse noted that there were other scientists from around the world there (for example, Poland, China and South American countries were represented). Wetlands are becoming more important globally.

A HUGE thank you goes out for the donation to CMAS in memory of Dr. William (Bill) Dahl (1939-2019)! The donation is SO appreciated!!

Looking for Ways to Make a Difference?

Donations are welcome for our fund to assist with continuing to bring quality speakers to the meetings. Any donation amount would be most welcome and appreciated! If you choose to help out, please make out a check to Central MN Audubon Society (CMAS), and either deliver to our Treasurer, Kathy Doyle or bring to a meeting. THANK YOU SO MUCH!!

MEETING DOOR PRIZE!

Congratulations to Mike Heneghan, the recipient of our November door prize, a 2.5 lb block of beef suet for feeding the birds in winter. Door prizes may vary from books to bird related items, sustainable alternatives to reduce waste and conserve resources, or even sustainably harvested food items. As usual, interested individuals may put their name into the drawing at the meeting. Membership is not required, but you must be present to win!

Annual Calendar Sale is ON!

Our Treasurer, Kathy has three styles of calendars available for purchase for 2020 for just \$13 each (much less than in the store and there's no tax). They make in height; from 2-8 years they're contained in the herbaceous layer; from 8 - 12 great gifts! All feature birds, of course. A new offering has years cover rapidly increases. At 12 and over, the trees become reproductively birds of the garden, and the ever popular desk calendar and Bird-A-Day return again. Get 'em while they're "hot"! All the profits from the sale of the calendars will stay with us in CMAS. Thank you for your support!

2019 Christmas Bird Count

The St. Cloud Christmas Bird Count was a success! Sixteen stalwart individuals braved a cold North Wind to count 37 species of birds for a total of 1986 individu-

als. They also added two new species (Hermit Thrush and Carolina Wren) to our count's composite total. Here is the tally of our count:

Canada Goose 165 Common Goldeneye-112 Ring-necked Pheasant-3 Bald Eagle-18 Red-tailed Hawk -11 Rough-legged Hawk-1 Great-horned Owl-3 Downy Woodpecker -65 Northern Flicker-1 Northern Shrike-2 Amercan Crow-148 White-breasted Nuthatch-91 Hermit Thrush-1 White-throated Sparrow-2 Trumpeter Swan -14 Cardinal-22 Purple Finch-3 House Sparrow-121 Barred Owl-1

Mallard 195 Common Merganser-12 Wild Turkey-126 Sharp-shinned Hawk-2 Peregrine Falcon-1 Rock Pigeon-195 Red-bellied Woodpecker-37 Hairy woodpecker-25 Pileated Woodpecker-9 Blue Jay-153 Black-capped Chickadee-248 American Robin-3 European Starling-55 Am.Tree Sparrow-13 Dark-eyed Junco-82 House Finch-49 Am. Goldfinch-33 Mourning Dove-1

Study nature, love nature, stay close to nature. It will never fail you. ~Frank Lloyd Wright





Raptor Food is Needed Again!!

Linda Peck has been a licensed wildlife rehabber for many years and has rehabilitated injured creatures or raised young animals and birds to the point of being able to be released as "adults". Linda tried to retire from rehabbing animals. It didn't take. She's back in business and needing your trapped (not poisoned) mice and road kill rabbits and squirrels or window killed birds. She has three raptors that are very hungry! A huge THANK YOU goes out to Linda for all her work and dedication to those who cannot verbally express their thanks!

Technology savvy people take note... a new Facebook group has been created called "MN Heartland Birding+" which you can join and note sightings in the area as well as possibly post a picture or two!

Local Membership Available: Some CMAS members may wish to only belong to and support our local Audubon Society, without belonging to National Audubon and receiving Audubon magazine. This option is available at only \$20 per year and local members do receive our Green-Backed Gazette.