

Central Minnesota Audubon  
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# Green-Backed Gazette

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## NEWSLETTER OF THE CENTRAL MINNESOTA AUDUBON SOCIETY

### Volume 46

Jan 2024



#### President's Note, by Dan Kneip

I recently watched a preview of Hamline University's CGEE online seminar "The End of Night" in which I learned that most children today have never observed the Milky Way in the night sky. I remember when we were young, we only had to walk out of the one small yard-light illuminated circle between the barn and house to observe the Milky Way and all the constellations we could identify. We could even get a better view by walking into the pasture away from the trees to see the constellations and stars.

The difficulty in seeing stars for big city dwellers is not hard to imagine but even at my home on the outskirts of Cold Spring it is not easy to see much of the night sky due to artificial light. When driving home from Minneapolis at night we have often been surprised at how much skyglow there is in this short trip, not to mention the extremely bright signs and billboards along I-94.

Well-lit streets and intersections are certainly welcome at night when walking or driving, but we light up our streets and highways all night long and in all directions, even when there is no one there that needs it. No wonder migrating birds and other wildlife can become confused and disoriented by all the lights.

There is another aspect of light pollution presented in the article "What We Lose When We Can't Stargaze," written by Robert Trotta, a physicist from the University of Trieste, Italy. He explores the benefits of stargazing throughout the ages and the detrimental aspects of not being able to see the stars. He notes, "*The night sky is humankind's only truly global common, shared by all of us across civilizations and millennia.*"

Excessive lighting is also a waste of energy. It has been estimated that cities spend up to forty percent of their electric bills on street lighting. There are actions that can be taken to reduce light pollution and save energy, such as directing light to the ground and dimming lights when streets are not in heavy traffic flow.

Once again, our human activity is resulting in unwanted situations that are complex and will require lots of effort and discussion to be resolved. We can all start by doing our small part and turning off the outdoor house and garage lights when not needed or having the lights directed at the ground and only bright enough for good visibility.

CMAS will be offering the option for chapter members to attend the January, February, and March monthly meetings in person at the UUF - Universal Unitarian Fellowship Hall, or via Zoom. If you wish to attend via Zoom, please send your request to receive a link by e-mail to [centralmnaudubon@gmail.com](mailto:centralmnaudubon@gmail.com) by 10 a.m. the day of the meeting.

#### Calendar

Wednesday, January 17, 2024

7 p.m. CMAS Meeting

Location: Unitarian Universalist Church

Subject: Current land stewardship projects at the Abbey Arboretum and Outdoor University programming

Speakers: John Geissler, Director - Saint John's Outdoor U

St. John's Outdoor U Events:

Celebrating the Avon Hills - Saturday, January 27, 2024

Registration Fee: \$40 or \$30 for members and \$10 for children

Luminary Walks Feb 8 and 10th/ 6:30 pm - no registration or fees

Wednesday, February 21, 2024

7 p.m. CMAS Meeting

Location: Unitarian Universalist Church

Speaker: Ellen and Mike Heneghan

Wednesday, March 20, 2024

7 p.m. CMAS Meeting

Location: Unitarian Universalist Church & ZOOM

Subject: Possibly Carnegie Nature Center

Speaker: TBD

Wednesday, April 17, 2024

7 p.m. CMAS Meeting

Location: St. Cloud Library

Speaker: Stan Tekeila

Note that our Audubon Minnesota office is part of the regional organization, responsible for Minnesota, Iowa, and Missouri referred to as "Audubon Upper Mississippi River Region." The regional Facebook page has been updated. Check it out and follow at: <https://www.facebook.com/Audubon UMR>

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Peregrine Falcon Recovery

Jacqueline Fallon, Vice President of Field Operations for the Midwest Peregrine Society came to St. John’s University to discuss the peregrine falcon (peregrine) recovery project in Minnesota. She began by discussing that peregrines have been long been revered. The Egyptian god, Horace is depicted as a peregrine falcon. In the Middle Ages, peregrine falcons were used in falconry as a symbol of status.

Peregrine means “sickle-shaped wanderer”. Peregrines have long, pointed wings, and baffles in their nares that allows them to dive at speeds of up to 242 miles per hour (we’d need a mask)! The malar stripe below their eyes acts as built in sunglasses. Peregrine falcons are the only species that has a tomial tooth (which acts like a guillotine) that Jaquie calls “spinal cord scissors”. They also have long, narrow toes which helps them with “reach over strength” when hunting.

Peregrine falcons are found on all continents except Antarctica. Pre-DDT, some peregrines were tree-dwellers and some preferred cliffs near water. Post-DDT, peregrines have been found nesting on cliffs, towers, bridges and buildings. DDT caused egg shells to thin by approximately 18%. Thankfully, it was banned in 1972.

Jacquie noted that peregrine falcons were never meant to be a high population species. Approximately 40 pairs were in the midwest, while up to 10,000 pairs were in North America. In the late 1940’s, peregrines were in a worldwide decline. By 1964 there were none east of the Rockies. Captive breeding began at that time. In 1965, at a Wisconsin conference, it was reported that peregrines had already experienced an 80-90% decline in 30 years. They were listed on the endangered species list in 1973 when there were less than 100 pairs left. Between 1976 - 1977, releases began in Wisconsin but they were stopped because of owl predation. Great-horned owls are known as the tiger of the night... the most efficient hunters. Between 1982-1984 releases began at Weaver Dunes, but they were discontinued due to adult falcons. In 1985, releases began in urban areas and along the North Shore.

In 1987, the first successful hatching in the wild occurred with one fledgling. In 1988, the first successful cliff nesting in the wild with no assistance from humans occurred. In 1991, the first reproduction by the first wild fledged chick happened. In 1999, peregrine falcons were de-listed! There were 107 pairs and 217 young had fledged. 1,300 falcons have been released in the Midwest at the cost of \$3.2 million (a fighter plane costs \$28 million).

Jacquie noted that field season starts with lining up volunteers and acquiring permits and permissions. Field season begins in February by LaCrosse. The plan is to capture unbanded birds, identify all the birds on their territories, and determine nesting status. The young peregrines’ legs are long enough at 13-14 days to be banded. Volunteers visit 55 sites in a six week period (there is a pair of peregrines in St. Cloud) and schedule banding of any young (80-90 in a season). Fledglings are returned to their territories. Annual reports are finished. She also works to raise awareness of the project within the community. Jacquie proudly reported that 80% of peregrines are banded annually. She conducts approximately 200 programs per year through the Mayo Clinic. Groups can be as small as four people or as many as 100. They have a camera on the nest. Unfortunately the server crashed this year. She noted that 50,000 - 100,000 people see the camera feed each year.

Documentation that has been gathered includes 0.2cc blood samples, how many eggs were unhatched, and feather clipping samples. This was discontinued in 2015. Banding continues. Each bird receives a bi-colored band with a letter and number. These bands are able to be identified at a distance of 700 feet. An average of 70 pairs nest, 60 - 70% produce young (about 3 per nest) and fledge 120 - 150 young per year (over 50% from cliffs).

The first eggs are laid in mid - late March. The latest are fledged in late August. One-third of all North American peregrines are in Minnesota (mostly along the North Shore and Mississippi river corridor).

Originally, the goal was to release as many peregrines as possible within reason. About 1,300 birds were released between 1983-1996. Kentucky, Iowa, and Missouri have continued to track through 2005-2006. The current population far exceeds the recovery goals. At this point, they are working to minimize artificial nest boxes and the focus is on “no assistance”.

Jacquie noted that weather can have an impact on peregrines. Drought affected them. The easy spring this year (with no ice storms or large rain events to kill chicks from hypothermia) was good. Things they’ve learned about peregrines includes that they don’t mate for life, there can be love triangles, and incest exists although infrequently (they will breed with whoever is available). Territorial tolerance has changed. Originally, a mated pair would have a 7-10 mile territory. Now, they can be across the street in Minneapolis. Injuries don’t mean a mandatory captive life.

The male does all the hunting for all (his mate, three young, and himself). He may collect 500 pounds of prey per nest season. One male fed two families in Minneapolis. A male who lost a leg took over incubation and the female took over hunting. “Sota” lived almost 19 years even with frost-bitten feet (he only had two toes). We know more about their population, reproduction levels, and behavior because of studies. The peregrine falcon wildlife study is the most extensive in the world!

The average life span is 10-12 years if they live to the age of one. There was one that lived to nest at 21, and a male sired four chicks at the age of 19! The pair in St. Cloud lives on the Mississippi Bridge. Jacquie noted that the young better be good at flying or they’ll end up in the river. They’ll prey upon anything from a hummingbird to a sandhill crane.

(continued above right)

Jacquie finished her presentation by showing Rhye, her 3 1/2 year old female from Duluth who sustained a broken wing on her first day of flight when 40-50 mile per hour winds pushed her into a building. Peregrines are 42 - 43 days old when they fly. Rhye is an adaptable animal ambassador. She wore a hood for the first year, but doesn’t now. She can fly, but not well enough to feed herself. Jacquie noted that Rhye could live into her upper 20’s in captivity! Jacquie even posed for photos with Rhye and event participants.



**Bird vernacular: Malar (May-ler) -** The region of the side of the throat or lower cheek from the base of the bill to the corner of the jaw. A malar stripe is sometimes referred to as a mustache, mustachial stripe, or whisker. Maylar stripes can be black or red (for example, in a flicker) and may (as in the case of a peregrine falcon) deflect glare. Many species of sparrows also have a malar stripe!

No Melt Suet

- 1 pound lard
- 2 cups chunky (or smooth) peanut butter
- 1 container corn meal (white or yellow)
- 2 Tablespoons Cayenne Pepper
- 4-8 cups Flour (or ground oatmeal)



Melt lard in a dutch oven (or other large pot) on low - medium heat. Once melted, add cayenne pepper and peanut butter. Stir until melted. Remove from heat. Add corn meal and stir to coat. Next add 4 cups of flour and stir to mix. Keep adding flour and mixing until no “liquid” remains and it resembles cookie dough. Now the suet can be formed into shapes, used to fill log feeders, or crammed into tree bark for foraging birds. All the woodpeckers like this suet, as well as chickadees, nuthatches, blue jays, even starlings and the occasional desperate squirrel (unfortunately). Sunflower seeds, millet, or other nuts and fruit could be added as well, but this simple recipe is an immediate winner and costs far less to make than buying an equal amount of suet “plugs”.

Did you know... that most young corvids have blue eyes? Magpie young have blue eyes and they are members of the corvid family. Other corvid family members include crows, ravens, jays, and nutcrackers! Fifteen species can be found nesting in North America.

“The peregrine falcon is a symbol of freedom and speed, inspiration and beauty. It is also a symbol of the dangers of environmental pollution and the importance of protecting our natural world.”~ The Nature Conservancy



Door Prizes

Lyle Bradley was a former science teacher at Anoka High School and an avid birder from an early age. He loved learning and collected many books for his personal library. Several of his books were offered as door prizes at the November meeting. Congratulations to Joe Chovan for receiving The Father of Waters: A Mississippi River Chronicle text by Norah Deakin Davis. Congratulations to Doris Minnerath-Kneip for receiving Bluebirds of the Upper Midwest by Dorene Scriven.

Door prizes at the meetings may be books, puzzles, feeders, food items, or “other”. Participation is voluntary, but winners must be present to win!

Audubon Aventures Update

In 2023 CMAS has provided a total of 28 classroom kits and eight Homeschool kits to area schools, homeschoolers and Boys & Girls Clubs! Thank you to the sponsors, including the St. Cloud Morning Optimist Club for donations to help bring the Audubon Adventures to area kids!



***Looking for ways to make a difference?***

***Donations are welcome for our fund to assist with continuing to print the newsletter and quality speakers to the meetings. If you choose to help out, please make out a check to Central MN Audubon Society (CMAS) and send it to our President, Dan Kneip. THANK YOU SO MUCH!!***

**Local Membership:** Some CMAS members may wish to only belong and support our local Chapter, without belonging to National Audubon and receiving the Audubon magazine. Local members do receive our Green-Backed Gazette. Membership cost is \$20 annual or \$15 annual if you choose to receive the newsletter electronically only (paperless). Please contact a board member if interested in this option.