



# Friends of Thacher State Park

Emma T Thacher Nature Center • 87 Nature Center Way • Voorheesville, NY 12186  
March—April 2025 • Vol. 29 No. 2

## Seeing Through Bird's Eyes



The birders' checklist on the Thacher Park website lists 131 species that are likely to be seen at the Park. There is always a good reason for birdwatchers to hike in the Park. Now, before the excitement of spring migration

begins, is a good time to consider bird vision in order to better understand the birds when they do arrive.

For birds, as for humans, what you see is what you know. But bird vision, except for owls, is so dramatically different from human vision that it is difficult to imagine what their experienced world is like. As with humans, owl's eyes focus straight ahead, they have binocular vision. They turn their heads in order to see what's beside or behind them. Owls can turn their heads so far that the visual fields in back on each side almost overlap. Thus owls can see nearly everything behind them. By contrast, a Great Blue Heron's visual field is 180° vertical. Even when standing upright with his beak pointing straight ahead, it can see fish swimming at its feet.

Now think of the side-facing eyes of most other birds. Try it yourself. Close your eyes. Touch your temples. Imagine that the place where your fingers touch are your eyes. Imagine you have a beak where your nose is. Tap your left temple. Imagine seeing only on that side. Now tap your right temple and again imagine seeing on that side. Both eyes can still see forward and backward. Humans see the world in front and move into it. The avian visual world surrounds it. Birds move through it.

A mallard duck sitting on Thompson's Lake has a completely panoramic view with no blind spot either in front of or behind it. On the lake it can see the entire sky without moving. When flying, it sees the world simultaneously moving toward it and away from it.

Often eyes on opposite sides of the birds' heads are specialized for different purposes. In many birds the left eye is specialized for scanning for predators while the right eye

scans for food sources. It takes a fair amount of intelligence to integrate such disparate visual input. Scientists have found that the more biased this sightedness, the more proficient those individuals are.

Birds see more colors than humans. Birds see in four classes of color – blue, red, green, and ultraviolet (UV). They perceive parts of the UV spectrum that are invisible to our eyes. Along with this, they have better visual acuity and can filter wavelengths to establish subtle differences between similar shades of color, shades that humans cannot distinguish. While humans don't see in UV spectrum, colors in those wavelengths appear brighter or iridescent to us. Seeing UV helps birds to find food and partners. Many berries reflect UV light. The plumage of male hummingbirds, goldfinches and others reflects UV. It seems that they sparkle to appeal to potential mates.

It is known that songbirds, ducks, falcons, and gulls can sleep with one eye open. This is useful for protection against predators. Birds that sleep on the ground are vulnerable to foxes and coyotes. It pays to keep an eye open. Scientists have also found that swifts and other birds sleep while flying. Closing one eye rests the hemisphere on that side of the brain. Closing the other eye rests the hemisphere on the other side.

In February the groundhog saw his shadow. Even now we still may have days of cold and unpleasant wind. Take advantage of such days to sit with a hot cuppa to learn more about bird vision. Jennifer Ackerman's two books have a wealth of information.\* On the web, enter "bird vision" in your search box to discover many intriguing entries. The Audubon article\*\* is particularly well written. Then, your head filled with new knowledge, come to hike Thacher and become a birdwatcher extraordinaire.

- by Sigrin Newell

\* Ackerman, J. *The Genius of Birds*, (2016), *The Bird Way* (2020)

\*\* Tim Birkhead, *What makes Bird Vision So Cool*, Audubon Magazine May-June 2013



# Calling on Volunteers!

Spring is fast approaching! This means people will be back out in the park and we'll need your valued time as volunteers. JBT is launching a recurring Saturday volunteer program called **"Pitch in for Parks!"**. The program will run from March 15th to October 25th. These events will run from 11am -2pm, all PPE and tools will be provided by the park. We just ask that you bring appropriate work shoes and clothes you don't mind getting dirty. We will do trail work, remove invasive species, and make the park an even more beautiful place to be.

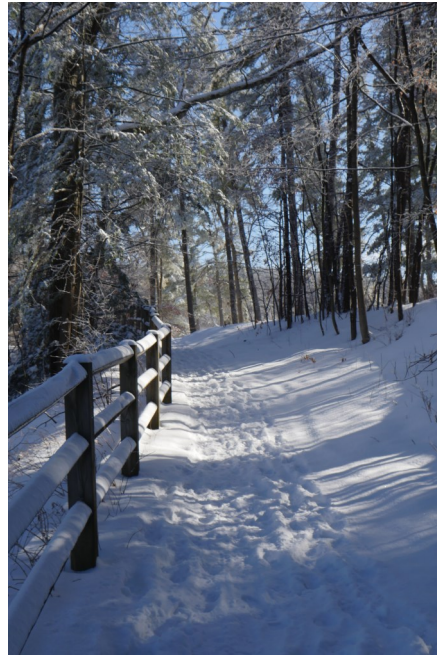
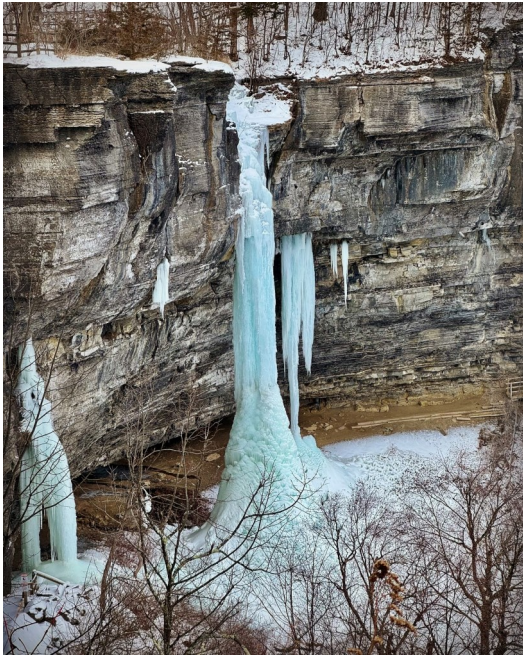
Please call (518) 872-0800 to register or follow the QR code to the volunteer survey that will connect you to the perfect volunteer role for you! For questions, please contact [lan.Evans@parks.ny.gov](mailto:lan.Evans@parks.ny.gov).



**Save the Date!**  
**I Love My Park Day**  
**Saturday, May 3<sup>rd</sup>**

Please join us at the Visitor Center to help out the park on this major volunteer day!

For registration details please check <https://www.ptny.org/> or stay tuned for park updates.



Winter has its own beauty! Photos of Thacher Park in winter courtesy of our wonderful Park Staff! Top left to right: Frozen Mine Lot Fall (Josh Horth), Snowy Escarpment Trail (Florence Conway), "Barry the Bear" snow sculpture (Michelle Johnston). Bottom: Sunrise at Thompson's Lake (Kellen Graham) and Wintry Hop Field (Florence Conway).

# Reimagining Thacher Nature Center

The Emma Treadwell Thacher Nature Center was established in 2001, made possible by the extraordinary generosity of Martha and Fred Schroeder. Since its opening, the center has welcomed visitors of all ages to explore and strengthen their bond with the natural world.

While the center continues to feature its original exhibits from 2001, exciting plans are in progress to celebrate the Nature Centers 25<sup>th</sup> anniversary! These improvements aim to create a more accessible and immersive experience for all visitors. In the previous newsletters we've explored the reimagined meadow and forest exhibits, and in this edition we'll dive into the lake habitat!

Walking through the front door into the Nature Center you'll step into the meadow habitat which highlights the importance of meadows and the pollinators that call Thacher home. The meadow exhibit transitions into the forest habitat, mirroring the natural shift from meadow to forest outdoors. The room that previously held the gift shop is transformed into the lake habitat, which will be an exciting feature for our 3,000+ school field trip attendees who explore aquatic life in Thompson's Lake and the surrounding area with Nature Center educators each year.

Walking into the lake exhibit room, murals on the walls bring a sunny lake habitat indoors to be enjoyed year-round!

This exhibit features a beaver lodge, much like the one just outside the Nature Center. The indoor lodge replica features an entrance visitors can crawl into to imagine life as a beaver. Inside, the layout of a beaver lodge is outlined on the wall. Sections of the wall are treated with magnetic paint, allowing for lifecycle and aquatic life magnet activities. Designed for low physical effort, they also accommodate tolerance for error, as there is no wrong way to place them!



By hopping on the lily pad, visitors are treated to a splash sound, further fueling the imagination and bringing the lake room to life. During the summer, families can borrow nets and guidebooks at the Nature Center front desk and head down to

Thompson's Lake to see what life they can discover in the shallows of Thompson's Lake. The winter is a great time to borrow a pair of binoculars and snowshoes and head out to observe our nesting pair of bald eagles.

*To support these exciting updates to the Nature Center exhibits, checks made out to Natural Heritage Trust can be mailed to:*

*Thacher Nature Center  
87 Nature Center Way  
Voorheesville, NY, 12186*



*Or scan the QR code to donate online (select Emma Treadwell Thacher Nature Center!)*

*- by Becky Schneider*



**Check for updates at [www.friendsofthacherpark.org](http://www.friendsofthacherpark.org)**

## Officers of the Friends Board of Trustees

Interim President:	Laure-Jeanne Davignon	(518) 578-4718
Vice President:		
Treasurer:	Betsey Miller	(518) 869-0739
Secretary:	Christine Gervasi	(518) 872-1501
	Immediate former President: John Kilroy	

## Other Trustees

Jim Schaller	(518) 861-7452	John Kilroy	(518) 872 -1501
Chuck Ver Straeten	(518) 872-2223	Jill Harbeck	
Bert Schou	(518) 221-8693	Margaret Naughton	(518) 391-0261

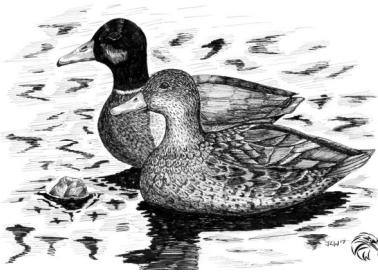
**As always, call (518) 872-0800 or (518) 872-1237 to verify activity times and dates.**

Please feel free to call board members with questions or suggestions.

Many thanks to Sigrin Newell, Becky Schneider, Victoria Gellatly, Florence Conway, Josh Horth, Kellen Graham and Michelle Johnston for their contributions to this newsletter.

— Christine Gervasi (Editor)

**Friends of Thacher Park**  
**c/o Emma Treadwell Thacher Nature Center**  
**87 Nature Center Way**  
**Voorheesville, New York 12186-2601**



<https://www.deviantart.com/jerwalpole/art/Mallard-Duck-Sketch-748866014>

**Wednesday, March 12, 2025**

**Next:**

**Board Meeting**

**7:00 pm at Thacher Visitor Center**

### *Needle Ice*



Frost pillars, spew ice, kammeis, pipkrake, ice flowers, rabbit ice.

Amongst other names, all of these refer to the phenomenon mostly commonly known as needle ice, which forms during winter in the

presence of strong temperature gradients and silty, porous soil. As winter sets in, the earth cools in a top-down manner, with the soil that is directly exposed to cold air and precipitation freezing sooner than deeper, more protected layers. In areas of high moisture, the cold temperatures pull moisture upward through the soil via capillary action. As the thin streams of water move through the cold upper layers, they rapidly freeze and expand, pushing through to the surface as more water is drawn from below. These frozen

tubes and spires will then often fuse together, forming crystalline structures that resemble a patchy field made of ice instead of grass. Once the soil freezes through, the gradient is disrupted and the process ends, which is why needle ice is usually seen in late fall and early spring.

However, any time the soil thaws and refreezes needle ice may form, making it more common in mild winters where temperatures rise above freezing during the day, and drop back down overnight. While we have had a cold winter so far, alternating warm and cold spells in the coming weeks may provide plenty of opportunity to encounter this phenomenon. Next time you are out at Thacher, check for signs of needle ice!

- Victoria Gellatly



*Photos of Needle Ice by Christine Gervasi*

### ***Friends of Thacher Park Meeting Dates for 2025***

**Wednesdays, March 12, May 14, July 9, September 10, and November 12.**

**7:00 pm at Thacher Visitor Center. Come join us!**

**As always, you can find a color version of the newsletter at [www.friendsofthacherpark.org](http://www.friendsofthacherpark.org)**