Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

The Minnesota Native Plant Society – *A non-profit organization dedicated to the conservation and appreciation of Minnesota's native plants and plant communities* through education *and public awareness.*

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Eastern Spruce Dwarf Mistletoe: A Parasite with a Purpose in Minnesota's Black Spruce Forests

by ***Ella Gray, Biology Department, College of St. Benedict/Saint John's University***

If you've spent much time in northern Minnesota, you've seen a black spruce forest even if you didn't notice it. They line the highways between the lakes and pines and hardwood forests. From the road, they're unassuming, just a wall of dark foliage and not particularly tall (**Figure 1**). They're easy to miss, until you start looking for them. Once you're looking, you quickly realize just how common they are.

Black spruce (*Picea mariana*) usually grows in pure stands as few other species can thrive in the wet, acidic peatlands where black spruce is commonly found. Unassuming from the road, the interior of a mature black spruce stand is a collage of greens and browns (**Figure 2**); the forest floor is a quilt of mosses, each a slightly different shade and texture, the slow-growing trees are straight with dark grey-brown bark, and finally the canopy of spruce needles is a deep forest green.

Intermixed with the trees and mosses, many unique species can be found in these forested bogs. Ericaceous shrubs are common, including Labrador tea (*Rhododendron groenlandicum*) and bog laurel (*Kalmia polifolia*), as are Minnesota's native carnivorous plants, the purple pitcher plant (*Sarracenia purpurea*) and sundews (*Drosera* spp.). Lowbush blueberries (*Vaccinium angustifolium*) provide snacks late in the summer. Another unique, lesser-known plant species that is often found in black spruce bogs is eastern spruce dwarf mistletoe (*Arceuthobium pusillum* Peck).

Dwarf mistletoes, not to be confused with true mistletoes (*Viscum* spp.) that show up as decorations around Christmas, are plants in the genius *Arceuthobium* that parasitize conifer species. Worldwide, there are 42 dwarf mistletoes each associated with a specific conifer species.

Figure 1. A mixed black spruce and tamarack stand lining a dirt road in northern Minnesota. Image courtesy Ella Gray.

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The *Minnesota Plant Press* is the newsletter of the Minnesota Native Plant Society. The newsletter is published quarterly, in January, April, July, and October. The deadline for contributions, which are welcome, is the first day of the publication month. Scientific names follow MNTaxa. Send articles, photos, suggestions, etc. via email to the co-editors, Brian Johnson & Steve Saupe at editors@mnnps.org. The Society officers are listed below:

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Figure 2. An undisturbed black spruce stand near the Sax Zim bog in northern Minnesota. Image courtesy Ella Gray.

Dwarf mistletoe infections begin when a seed lands on a suitable host tree; seeds can travel several meters from the parent plant and are coated in a sticky covering to ensure they adhere to a new host when they land. Once the seed has germinated, the mistletoe plant establishes a systematic infection within the host, helping itself to water, carbohydrates, and nutrients from the tree; producing areas of abnormal growth called witches' brooms (**Figure 3**); and developing shoots where flowers and seeds will develop (**Figure 4**).

For most species, dwarf mistletoe will decrease growth of infected trees but will cause mortality only in times of increased stress for the host tree (as has been documented with western hemlocks during drought years). Black spruce, however, is not most species; dwarf mistletoe will cause mortality of infected black spruce trees within 15-20 years, making it one of the most common and important disturbance agents of the species in Minnesota.

Our understanding of the role of dwarf mistletoe in Minnesota's black spruce forests has changed and evolved over decades of research. An early study proposed that it facilitated a "reversal of succession" since the authors observed an increase in tamarack (*Larix laricina*) in heavily infected stands. Foresters focused on timber production have viewed it as a pest, working to eradicate it from their stands to avoid timber volume losses while wildlife biologists promote it because it creates habitat for several bird species.

Recent research has focused on how dwarf mistletoe infections affect not just black spruce, but the whole community of tree species that can occur in these forests. These studies have found increases in species diversity as infected black spruce trees die, with tamarack, quaking aspen, northern white-cedar, red maple, and birch seedlings establishing in canopy openings. They have also found changes to the physical structure of the forest as infections progress, with a greater variety of tree sizes and heights present.

Many questions still remain about how dwarf mistletoe affects these forests in the long-term, but we are starting to better understand how infections create change in black spruce forests, increasing species diversity and structural complexity. So, the next time you are up north, keep an eye out for some black spruce stands and, if you spot one, look for witches' brooms – if you spot them, they're a sign that change will be coming to that forest.

Figure 3. (above) A black spruce stand infected with dwarf mistletoe. The trees in the foreground show the characteristic "witches' brooms" caused by the infections; areas of excessive growth that form a clump or ball-like shape. Image courtesy Ella Gray.

Figure 4. The shoot of an eastern spruce dwarf mistletoe plant on a black spruce twig. Shoots of this species are 1-2" long, making them difficult to see in the canopy. Image courtesy Ella Gray.

Minnesota Wildflowers Plant of the Month: *Lilium michiganense*

by ***Katy Chayka, Minnesota Wildflowers (www.minnesotawildflowers.info)***

Family: Liliaceae (Lily)
Common name: Michigan lily
Life cycle: Perennial
Plant height: 3 to 6 feet
Bloom season: June – August
Habitat: Part shade, sun; moist to wet soil; moist meadows, bogs, fens, seeps, swamps, woods, wet ditches, river banks Sun; average to dry sandy or gravelly soil; prairies, dunes, savannas, bluffs, rock outcrops

Plant Description

Flowers: One to 11 nodding flowers in a whorl at the top of the stem, each flower at the end of a long ascending stalk, often also arising from leaf axils on the upper stem (**Figures 5** & **7**). Flowers are 2½ to 3 inches in diameter with 6 petal-like tepals that strongly curve back, the color ranging from yellow-orange to deep red-orange, with numerous purplish-brown spots. Six long, brown-tipped stamens and a long reddish style extend from the flower throat and flare out.

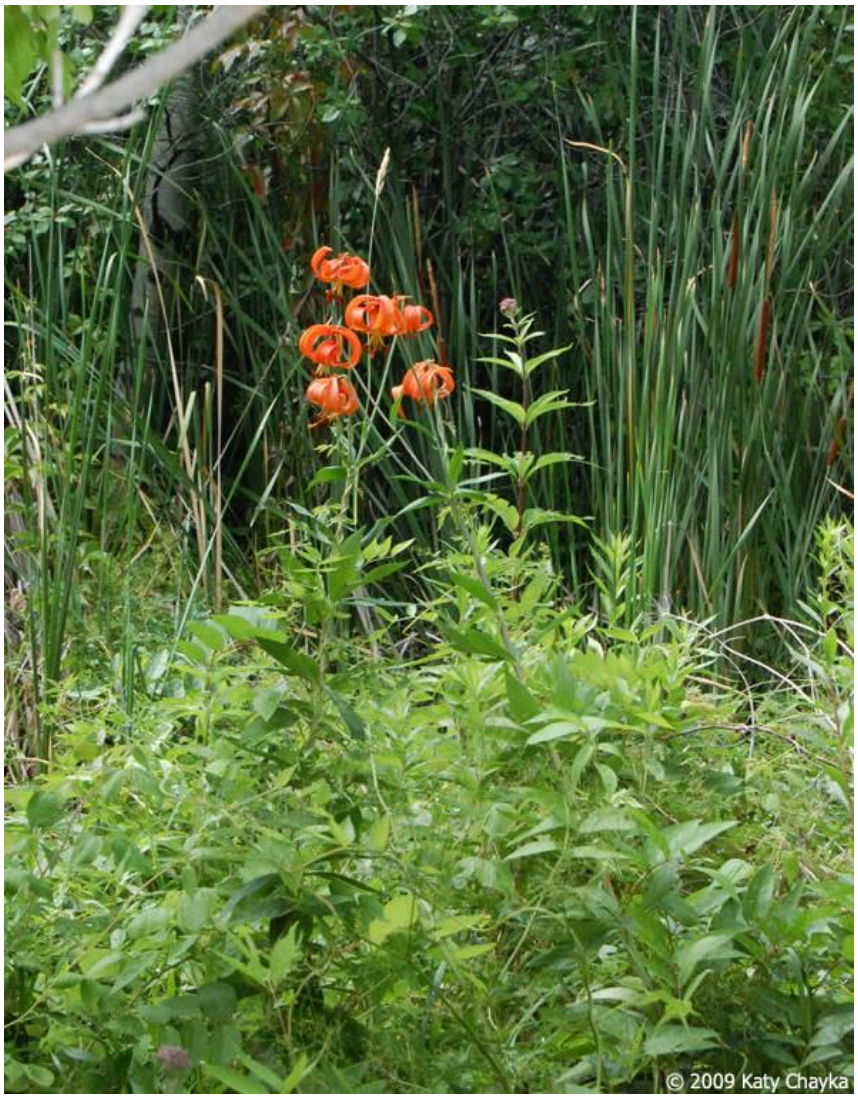

Figure 5. Image by Katy Chayka. All images taken in Anoka and Ramsey counties.

Leaves and stems: Leaves are whorled in groups of 3 to 13, up to 6 inches (5 to 15 cm) long, up to ~1 inch (6 to 22 mm) wide, narrowly elliptic to sword-like, tapering to a pointed tip, hairless, toothless, stalkless, with prominent parallel veins that are roughened on the underside. Stems are erect, unbranched, and smooth (**Figure 8**).

Fruit: Flower stalks quickly become erect after pollination. Fruit is a 3-valved capsule up to 2 inches (2.8 to 5 cm) long, cylindric to broadly club-shaped at maturity and containing many seeds.

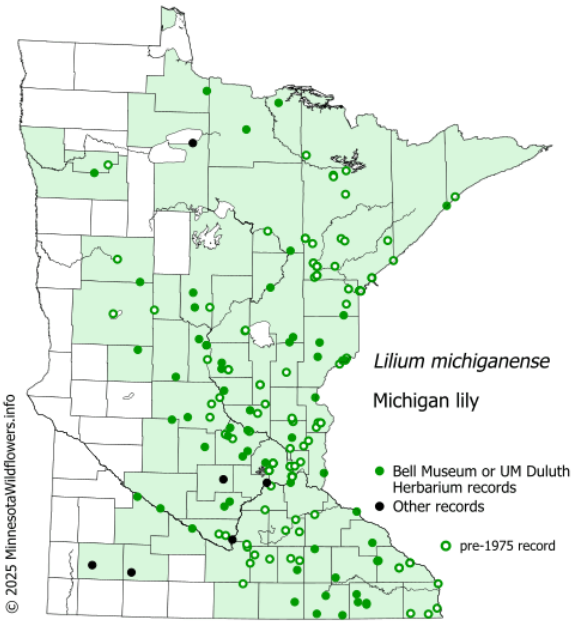

Figure 6. Minnesota county distribution map ©Minnesota Wildflowers Information.

Figure 7. (above) Image by Katy Chayka. All images taken in Anoka and Ramsey counties.

Notes

Michigan Lily is often mistaken for (or mistakenly called) Turk's-cap Lily (*Lilium superbum*) but there are subtle differences between them. *L. superbum* is not native to Minnesota (**Figure 6**), but is found farther south and east, has smooth leaves and flowers have a green style where Michigan Lily has rough-textured veins on leaves and a red style. Michigan Lily flowers also resemble those of Tiger Lily (*L. lancifolium*), which has alternate leaves with distinctive bulbils in the upper leaf axils.

I'm always cheered when I see this or its cousin Wood Lily (*Lilium philadelphicum*) in the wild. The bold flower color contrasts beautifully with the typically green surroundings. Both are available in the garden trade.

Figure 8. Image by Katy Chayka. All images taken in Anoka and Ramsey counties.

News from the Herbarium

by ***Tim Whitfeld (Collections Manager, Bell Museum Herbarium at the University of Minnesota)***

While there are many uses for herbarium specimens, their core value has always been to advance taxonomic research. Taxonomy (the science of naming and classifying) has three main tenants: identification, description, and phylogeny. Physical specimens are crucial to all three and also fulfill the basic principles of verifiability and repeatability which are fundamental to the scientific method.

Asa Gray, the father of North American botany, in an address to the American Academy of Arts and Sciences in 1865 said: "The Herbarium is the only certain record of species, the only means of transmitting to posterity the knowledge we have acquired and the only means of making the full comparisons which botanists have to make between the plants of different parts of the world."

At the heart of taxonomy is the description of new species, which is a surprisingly byzantine process governed by the *International Code of Botanical Nomenclature*, overseen by the International Association of Plant Taxonomy (IAPT). "The Code," as it is known colloquially, was one of the first properly global scientific standards and it provides a set of rules and recommendations to guide the naming of algae, fungi, and plants.

The first iteration dates to 1867 and it has been updated every six years since then at the International Botanical Congress, the Olympic Games of the plant world. The current 18th edition of *The Code* was published on July 21, 2025 following the Madrid congress held in July 2024. If you care to purchase a copy as a summer read, it is available in paperback for $45 (228 pages) or you may access an online copy at the following link: https://www.iaptglobal.org/_functions/code/madrid.

For botanists, *The Code* is an important reference because the valid and legitimate publication of any new species must comply with its rules. Luckily, IAPT provides a summary "How to" procedural guide for naming new species. It begins with checking that your species does not already have a name (to avoid creating a synonym). You must then choose a grammatically correct scientific name (genus and species). For this, you might consult the classic tome by William T. Stearn, "Botanical Latin" (539 pages). After that, you must select a type specimen (more on this later) and cite where that specimen is housed. Finally, you'll need to write a detailed morphological description of the type specimen and mention where, when, and who made the collection. Interestingly, until 2012, *The Code* required this description to be published in Latin. Today, in an attempt to streamline the process (slightly), it only needs to be in English.

At this point, you're ready to submit your protologue (as these publications are known) to a journal for peer review. Reviewers may take issue with different aspects of the protologue but as long as all the rules have been followed and, after some back and forth, the new name, with you as the author, will go out into the world for others to use.

As mentioned, a key part of naming species is the designation of a type specimen. These specimens can be checked by other botanists if they want to verify a species concept as described in a published protologue. Each of the nearly 400,000 plant species that have been published over the centuries has a type specimen that is housed in a herbarium collection somewhere in the world.

The University of Minnesota Herbarium has 3,572 type specimens for species described from Minnesota (**Figure 9**), many other North America states and provinces, and dozens of countries around the world. As with ketchup, there are many varieties of types including the original holotype named in the protologue, isotypes (duplicates of the holotype), paratypes (other specimens cited in the protologue beyond the holotype), lectotypes (specimens designated as types when the original is lost or destroyed), and several other variations on these themes. Informally, there's also the "kleptotype," a designation for specimen fragments that were taken (stolen) from the holotype.

In the Bell Herbarium, many type specimens are clearly marked as such but there are others, especially isotypes or paratypes, which are not so obvious. When going through specimens, I often see one that looks suspiciously like a type so I check the databases to verify its status. One easy tell is when "n. sp." (short for "new species") is written on the label. A slightly more subtle indication is when the author of the scientific name is the same as the person who collected the specimen (botanists have egos and they often select their own specimens for types!). In other cases, the species name is the same as the person who collected the specimen (see **Figure 10**). Whatever the case, it is always exciting to locate a type specimen that has been overlooked. We can then add an annotation label to the sheet to indicate its status and move it to its rightful place with the other types, which, in the Bell Herbarium, is in a room separate from the main collection. If catastrophe befalls the Herbarium, we'll be able to quickly move these specimens out of harm's way and save these priceless references that are so critical to taxonomy and botany.

Figure 9. Type specimen of Liatris cylindracea (Rough blazing star), Bell Museum Herbarium. Image courtesy Tim Whitfeld.

Figure 10. Isotype specimen of Cordylanthus pringlei; Bell Museum Herbarium. Image courtesy Tim Whitfeld.

Destination Botany: Roscoe Prairie SNA

by Brian Johnson *(MNNPS newsletter coeditor)*

In late May Steve Saupe and I received a tip that Roscoe Prairie had been burned and the wildflowers were now showing off. Time for a road trip to one of Minnesota's nicest prairies!

Roscoe Prairie SNA is situated just outside the town of Roscoe, about 30 miles southwest of St. Cloud. A local resident originally brought the prairie to the attention of the DNR and noted that it contained a wide variety of butterflies. A DNR survey in the mid-seventies noted 37 species of prairie butterflies, including many of the prairie obligate species such as the Dakota skipper. It became an SNA in 1981. Unfortunately, the number and variety of butterflies there has declined for reasons that are not completely understood.

Figure 11. Roscoe Prairie. The access road and ditch run parallel to and in front of the SNA sign. The wet transitional zone is in front of the willows and cattails in the background, and the mesic prairie is the bulk of the area behind the sign. Images in this story courtesy Brian Johnson & Steve Saupe

Figure 12. Seneca snakeroot at Roscoe Prairie.

Though the SNA is relatively small (56 acres) there are two distinct biomes there. In the south by the SNA sign is a southern mesic prairie. The DNR's website notes that it has a conservation status of S2 (imperiled). On its north side, the mesic prairie slowly grades into a cattail marsh, with moisture-loving plants in the transition.

The road ditch offers a third area to botanize. To see the widest variety of plants, one may wish to proceed north along the road ditch, make a ninety degree turn to follow the transitional zone, and then complete the triangle back to the sign by walking the mesic prairie (see **Figure 11**).

We later learned that a western portion of the SNA was burned on April 30, about a month before this visit. Upon our arrival, the effect of the burn was immediately obvious. The burn seemed to have completely removed thatch from the prairie and set back the encroaching popple and willows.

As we walked along the ditch, a number of interesting plants greeted us. The burn made smaller plants such as Seneca snakeroot (*Polygala senega*, **Figure 12**), field blue-eyed grass (*Sisyrinchium campestre*), and prairie violets (*Viola pedatifida*) really stand out. Other finds in this

wetter area included wood betony (*Pedicularis canadensis*, **Figure 13**) and yellow star-grass (*Hypoxis hirsuta*, **Figure 14**).

The time came for our turn into the transitional zone between the cattails and mesic prairie. At this point it is possible to look down the shoulder of the transition. A subtle but noticeable elevation change of only a foot or so creates a different plant community on each side. As we followed the wet prairie, we observed yellow Indian paintbrush (*Castilleja coccinea*, **Figure 15**) and golden Alexander (*Zizia aptera* and *Z. aurea*). Then clumps of small white lady's slippers (*Cypripedium candidum*, **Figure 16**) appeared. These little beauties were in full bloom.

Finally, we turned into the mesic prairie and followed it back to the car. A portion of this zone hadn't been burned, so we could see the difference. This slightly drier area contained leadplant (*Amorpha canescens*) and fragrant false indigo (*A. nana*), ground plum (*Astragalus crassicarpus*) and two-flowered Cynthia (*Krigia biflora*), among other species. A lone monarch fluttered by.

I returned a couple of weeks later. As part of the magic of an ever-changing prairie, new species such as prairie phlox (*Phlox pilosa*) were now blooming but the Indian paintbrush and lady's slippers were not blooming and hard to find.

Figure 13. Wood betony at Roscoe Prairie.

A trip to Roscoe Prairie is worthwhile anytime. In the summer, various species of blazing stars and the native swamp thistle (*Cirsium muticum*) attract butterflies. Later it is possible to see downy gentians (*Gentiana puberulenta*), bottle gentians (*Gentiana andrewsii*) and lesser fringed gentians (*Gentianopsis virgata*) on the same day. The keen observer can also find great plains ladies' tresses (*Spiranthes magnicamporum*) hiding in the grass. The New England asters (*Symphyotrichum novae-angliae*) and other species still attract good numbers of monarchs.

Add this prairie to your "must visit" list.

Figure 14. Yellow star grass at Roscoe Prairie.

Figure 15. Yellow paintbrush at Roscoe Prairie.

Figure 16. Small white lady's slipper at Roscoe Prairie.

Freeclimbing Plants

by Stephen G Saupe, *newsletter co-editor*

One of most amazingly awesome feats of courage – or perhaps lunacy – that I've ever seen was in the award-winning film, "Free Solo." This movie, which premiered at the Banff Centre Mountain Film Festival, featured Alex Honnold's free-climb of El Capitan in Yosemite National Park.

Prior to watching this movie, I had never dreamed that someone would consider scaling a 2,900-foot vertical rock wall without ropes. Since I get nervous if I have to climb a six-foot step ladder, the thought of scaling El Capitan without ropes, harness, or a parachute is incomprehensible to me.

This past January (2026), Honnold was in the news again when he free-climbed the 11th tallest building in the world, Taipei 101, in Taiwan. This achievement was even livestreamed on Netflix – "Skyscraper Live." Though the commentary can be a little cheesy, if you didn't see it live, it's worth watching the summary documentary.

Figure 17. Cymbalaria muralis, ivy-leaved toadflax, clings to a wall in the Lakes District, United Kingdom. Images in this story courtesy S. Saupe.

Like Honnold, some plants also seem to defy gravity. Species that cling to Minnesota cliffs and rocks include harebell (*Campanula rotundifolia*), encrusted saxifrage (*Saxifraga paniculata*), butterwort (*Pinguicula vulgaris*) and ferns like smooth cliff brake (*Pellaea glabella*), purple cliff brake (*P. atropurpurea*), and rusty woodsia (*Woodsia ilvensis*).

The DNR classifies plants that grow in these communities as part of the Cliff/Talus ecological system (Plant communities in this system tend to be "sparse or patchy

Figure 18. Cymbalaria majalis.

Figure 19. Butterwort (Penguicula vulgaris) growing along the north shore of Lake Superior near Grand Marais.

because of scarcity of soil." Their density is determined by how many cracks and shelves occur on the rocky surface.

For a rock climber and a cliffside plant, gravity is your biggest problem. You must have some way to grip the surface to avoid falling off. For Honnold, holding onto the rock involves a combination of superhuman hand strength, dipping his fingers in climbing chalk to keep his fingers dry and improve friction, and climbing shoes with extra grip.

For a plant, roots are the solution. Once a root squirms its way into a crack, the plant is tightly anchored in place, thumbing its botanical nose at gravity. And, there is the added bonus of absorbing water and dissolved minerals.

The bigger problem for a plant is getting to the rock surface in the first place. As a result, rock-loving plants have evolved a number of adaptations to increase the odds that a seed will find a suitable crack.

First, most cliff-dwellers have tiny seeds. Being small allows the seed to squeeze into a tiny crack where it can germinate. As an added bonus, tiny seeds are also ideal for wind-dispersal (anemochory), which is a feature of the majority of rock-lovers. This explains, in part, the presence of ferns on rock face. Small spores are easily blown to potential perches.

Ivy-leaved toadflax (*Cymbalaria muralis*, **Figures 17** & **18**), a common wall inhabitant in Europe, has evolved my favorite dispersal adaptation. As their fruit capsule ripens, a remarkable thing happens. The fruiting stalk, called a peduncle, turns and grows away from the light.

In other words, the peduncle becomes negatively phototropic searching out a darkened region of the environment. As a consequence, the elongating peduncle grows toward a crack or crevice, where it finds a protected place to bury the seeds. If the peduncle remained positively phototropic, like virtually all other plant parts do in order to maximize photosynthesis, the seeds would simply fall to the base of the cliff when released from the capsule.

Plants that grow on cliffs and rocks must also be tolerant of environmental extremes. The exposed rocks result in large daily fluctuations in temperature, high light intensity, and limited moisture availability. Not surprisingly, many cliff plants, like Leedy's roseroot (*Rhodiola integrifolia* subsp. *leedyi*), are succulent or have other adaptations (*i.e.,* hairs, scales) for drought resistance.

Living in a crack with thin soil also means that cliff plants must also tolerate limited nutrients. To supplement their diet, at least one rock-inhabiting species (Butterwort, *Penguicula vulgaris*) has evolved carnivory (**Figure 19**). Its sticky leaf margins curl around and ingest small insects. It has been suggested that encrusted saxifrage, which commonly traps insects in its hairy surface, may also be carnivorous (Hemphill, 2022).

You might expect to find the same plants growing on a cliff face or on a European wall. However, a study in Poland showed that the communities of plants on cliffs and walls differed (Lanikova & Lososova, 2009). For example, ivy-leaved toadflax is common on walls but relatively rare on vertical rock surfaces.

One reason the plants differ is because walls tend to be wetter. Water accumulates between bricks and within the wall much more readily than it persists on a smooth rock surface. The calcareous mortar found in many walls and the closer proximity of walls to people and disturbance, are two additional reasons for the difference in species composition.

Not many of us will ever achieve the rock-climbing status of Alex Honnold. However, we can all admire the amazing evolutionary adaptions of plants that like to grow on the cliffs and rock surfaces that he likes to climb.

References

- Lanikova, D. and Z Lososova (2009) Rocks and walls: Natural *versus* secondary habitats. *Folia Geobot.* 44:263–280.
- Hemphill, S (2022) Quirky plants on Lake Superior's rugged shore. *Agate* (March 22, 2022). https://www.agatemag.com/2022/03/quirky-plants-on-lake-superiors-rugged-shore/)

Iron Springs Bog Scientific and Natural Area Field Trip

When: Saturday August 15, 2026 (10:00 AM to 2:00 PM)

Where: Iron Springs Bog SNA, MN Trunk Highway 200, Clearwater County.
Latitude: 47.25226, Longitude -95.23390

Leader: Rhett Johnson, MNDNR, Minnesota Biological Survey.

What: A day of touring the SNA. The field trip will be led by Rhett Johnson and will involve exploring the native plant communities on the SNA, including Mesic Hardwood Forest NPCs, Forested Peatland NPCs, Wet Meadow, and an upland prairie restoration on the adjacent University of Minnesota property. Waterproof boots are recommended.

As always, this field trip is for members of the MN Native Plant Society only and will be limited to 10 registrants. In the event of potential bad weather, participants will be notified of any changes to the day. To register for this field trip, reply to Ken Arndt (ken.arndt@mnnps.org) to be added to the list of participants.

Figure 20. Sarracenia purpurea – growing at Icelandite Coastal Fen SNA – is one of the plants that might be found at Iron Springs Bog. Image courtesy Scott Milburn.

President's Column: Icelandite Coastal Fen Scientific and Natural Area – by Scott Milburn

While traveling through the state during the summer months, our Scientific and Natural Areas (SNA) provide an excellent break from the world, allowing one to imagine what the state looked like before European settlement. Although the SNA program is well-known to our membership, many of our fellow Minnesotans are unaware of or unfamiliar with the program itself. Although there is little financial gain to the state coffers, there is incredible value in what the program provides. And that value lies in the protection of some of the best remaining examples of intact natural systems that remain across the Minnesota landscape.

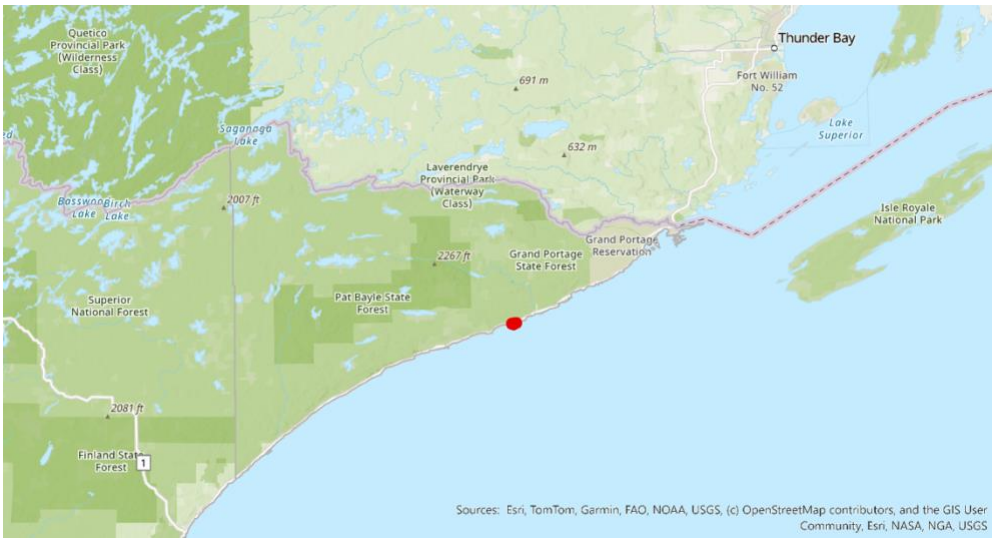

Figure 21. Location of Icelandite Coastal Fen SNA. All images in this story courtesy Scott Milburn.

On just a normal summer Saturday on the North Shore, two co-workers and I decided to take a detour as we headed back home after a week of work to explore the recently anointed Icelandite Coastal Fen Scientific and Natural Area, located between Grand Marais and Hovland. Just off of Highway 61, this spot is tucked away and likely overlooked by those traveling this route (**Figure 21**).

Figure 22. Shrub-rich fen (water track) at Icelandite Coastal Fen SNA.

Figure 23. ***Graminoid rich fen at Icelandite Coastal Fen SNA.***

Upon entering the fen (see **Figures 22** & **23)**), I immediately appreciated the high quality of this particular area. The vegetative composition was incredible, with a combination of areas dominated by low shrubs, primarily *Myrica gale*, along with *Dasiphora fruticosa* and ericads, and other portions dominated by graminoids including *Trichophorum alpinum* and *T. cespitosum*. These two species grow intermixed but are readily distinguished by growth form, perianth bristles, and culm shape. Other observed sedges include *Carex chordorrhiza*, *Carex limosa*, *Carex livida, Carex tenuiflora, Carex utriculata*, and *Eriophorum viridicarinatum*. Lastly, there are the forbs that include *Arethusa bulbosa* and several carnivorous species, including *Drosera rotundifolia, Utricularia intermedia*, and the charismatic *Sarracenia purpurea*. The latter happened to still be in flower during our visit.

We are fortunate to live in a conservation-minded state, but places like this fen remind us why we still need to advocate for these resources and support the SNA program, particularly as conservation funding faces new pressure at the state and federal level.

Figure 24. Eriophorum viridicarinatum at Icelandite Fen SNA.

New Feature! "Mystery Plant Quiz"

In this issue we are initiating a new feature, the MN Native Plant Society "Mystery Plant Quiz". We are planning to make this a regular feature. In each issue, we will include images of MN plants for readers to identify. We will often provide a location (county level). The answers will be on the last page of the newsletter. We encourage everyone to submit photos for this feature. This is a great opportunity to share your pictures that are beautiful, unusual or just a little bit odd! Send your photos, with location (county is fine), and other interesting tidbits to editors@mnnps.org. Now, can you identify the following mystery plants?

Figure 23. (above) There are two related plants in this photo from Lincoln County submitted by Brian Johnson. Can you name them?

Figure 24. (right) Thanks to Brian Johnson for submitting this photo of a plant in Stearns County showing a weird morphology. Which plant is it and why is it weird?

Figure 25. (left) Thanks to Brian Johnson for submitting this photo of a diminutive plant growing in a forest opening in Lake of the Woods County. Can you name this plant?

Figure 26. (right) Steve Saupe submitted this photo of a new weed that appeared in his garden in Stearns County. Can you name the weed?

Figure 27. Thanks to Carmen Converse for submitting this patriotic photo from Polk County. It is the perfect way to wrap-up the July 2026 Minnesota Plant Press, published 250 years after the birth of our nation. What is this plant?

Answers to the Mystery Plant Quiz. Figure 25. *Astragalus crassicarpus* (left, Ground plum, round inflated fruit) and *Astragalus flexulosus* (right, Slender milk-vetch, pea-like pods); **Figure 26** – *Cypripedium reginae*, Showy lady's slipper, white form; **Figure 27** – *Botrychium neolunaria (New World moonwort)*; **Figure 28** – *Chenopodium glaucum*, Oak-leaved goosefoot); **Figure 29** – *Platanthera praeclara (Western prairie fringed orchid*, July 4th, 2026)

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