

The Wisconsin Flora_{The}

Newsletter of the Botanical Club of Wisconsin Fall 2020



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Letter from the president

2020 has been a very different kind of year in so many ways! In order to stay healthy and safe we have had to change many of our habits and limit our activities. In this vein, the BCW Board of Directors made the decision to suspend all club activities until further notice. We canceled fieldtrips, botany blitzes, and even our Annual Meeting and the Botanical Foray. We are also not able to hold our monthly meetings in Madison where we have had speakers and workshops

and social events. This has been difficult, but we believe it has been the best course of action to not put our members at risk.

orchid). So sit back and enjoy these articles and plan your visits to these places and plants for the coming year.

The BCW Board appreciates you hanging in there with us and continuing your membership through these

To end on a positive note, I can report that, even though we couldn't go out together as a club, many of you and other Wisconsin plant enthusiasts put on

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Area Kevin Doyle

Located along the Dodge Branch of the Pecatonica River in southern Iowa County, the Sylvan Road Conservancy is a 99 acre preserve situated in a Driftless Area valley. The site, owned and managed by The Prairie Enthusiasts, protects nice examples of oak woodland, southern dry-mesic, and southern mesic forest huddled around an exceptional southern sedge meadow. Small pockets of wet prairie, shrub-carr, pine relict, and southern dry forest are scattered throughout the site as well.

The Prairie Enthusiasts asked the Botanical Club to inventory Sylvan Road Conservancy to inform future management efforts, and the plan was to advertise the inventory to BCW members and conduct plant surveys in groups throughout the summer. But as was true with many plans in 2020, they were laid to waste. Instead small groups of 1-3 people visited Sylvan Road between late May and early October.

The oak woodland is on an east facing slope overlooking the sedge meadow. The canopy is

dominated by white oak (*Quercus alba*) and bur oak (*Q. macrocarpa*), but these combine for less than 60% canopy cover, typical for a community that is intermediate between a savanna and a forest. Indicators of this semi-open canopied site include Tinker's weed (*Triosteum aurantiacum*), shooting star (*Primula meadia*), Culver's root (*Veronicastrum virginianum*), alumroot (*Heuchera richardsonii*), silky wild rye (*Elymus villosus*), and Short's aster (*Symphyotrichum shortii*), and all were noted during our surveys. In

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total, 160 species were found in the oak woodland during early and late season surveys. Unfortunately, brambles (*Rubus* spp.) are also present, abundant in many places, likely where prescribed fires have recently opened up the canopy.

A southern dry-mesic forest covers the north-facing slope at the southern end of the site. This community has a more closed canopy than the oak woodland and a stronger presence of red oak (*Quercus rubra*) and basswood (*Tilia americana*). The slope is quite steep, likely protecting it from grazing.

Groundwater expressions, either via seeps in the slope or through cliff faces, are noticeable and supported unique plants like swamp saxifrage (*Micranthes pensylvanica*), skunk cabbage (*Symplocarpus foetidus*) and, in the case of the cliff faces, a potentially interesting bryophyte flora. Spring wildflowers included may apple (*Podophyllum peltatum*), bloodroot (*Sanguinaria canadensis*), showy orchis (*Galearis spectabilis*), *Geranium maculatum* and others, but ferns were particularly common and included nice species: intermediate wood fern (*Dryopteris intermedia*), spinulose

polypody (*Polypodium virginianum*), interrupted fern (*Osmunda claytoniana*), maiden hair fern (*Adiantum pedatum*), common oak fern (*Gymnocarpium dryopteris*), and northern beech fern

(*Phegopteris connectilis*).

On the west side of the forest, the site becomes drier and more open. *Quercus velutina* and *Q. ellipsoidalis* replace *Q. rubra* and there is even a prairie knob sporting huckleberry (*Gaylussacia baccata*), poverty grass (*Danthonia spicata*), rough blazingstar (*Liatris aspera*), and prairie violet (*Viola pedatifida*). As with the oak woodland, recent management has opened up the canopy, which has, in the short term, allowed brambles to dominate in places. In total,



Above: Sylvan Road Conservancy, shaded in green, occupies a valley and portions of the uplands along the Dodge Branch of the Peconica River northwest of Hollandale. A road and former railroad dissect the wetland but it has remained very high quality despite presumed alterations to the local hydrology. Below: The sedge meadow is the heart of the preserve but the uplands, including a pine relict seen in the distance, are good quality

as well. Photos and map by Kevin Doyle.

wood fern (*D. carthusiana*), fragile fern (*Cystopteris fragilis*), lady fern (*Athyrium filix-femina*), common 173 species were found in the

southern dry-mesic forest.

On the north side of the site, a

southern mesic forest with a small

inclusion of pine relic sits above

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lake sedge (*C. utriculata*), lake sedge (*C. lacustris*), spotted Joe Pye weed (*Eupatorium maculatum*), broad-leaved cattail (*Typha latifolia*), and shining aster (*Symphyotrichum firmum*). The diversity is driven by high microhabitat and hydrologic diversity with areas of tussock sedges, Sphagnum moss, marsh, seeps, ponds, wet prairie pockets and scattered shrub thickets of *Salix discolor*, and *Spiraea alba*.

improvement. It's certain that with continued management and monitoring more botanical treasures will be revealed.

Sylvan Road Conservancy is located between Dodgeville and Hollandale. From State Highway 191, head south on Banner Road to Sylvan Road. There is a kiosk at the intersection and the preserve lies to the west.

the wetland. The stand was likely grazed historically, though it is now fenced off. American elm (*Ulmus americana*) and sugar maple (*Acer saccharum*) dominate the canopy while may apple (*Podophyllum peltatum*), wild geranium (*Geranium maculatum*), Virginia waterleaf (*Hydrophyllum virginianum*) and blue cohosh (*Caulophyllum thalictroides*) occur underneath. In total, 83 species were found in the southern mesic forest.

Overall, the Sylvan Road Conservancy is in good shape and

The complete species list for Sylvan Road Conservancy will be posted on the WisFlora website



The southern sedge meadow sits in the heart of the property and is the crown jewel. With 129 species

survey, it is one of the highest quality and Short's aster (*Symphotrichum shortii*) and Tinker's weed (*Triosteum aurantiacum*) are two oak woodland indicator species commonly found at Sylvan Road Conservancy. Photos by Kevin Doyle.

found during multiple surveys, including a 2016 DNR

most diverse sedge meadows in all of Wisconsin's Driftless Area. The sedge meadow is dominated by prairie sedge (*Carex prairea*), tussock sedge (*C. stricta*), woolly

fruit sedge (*C. lasiocarpa*), yellow well worth a visit. The diversity of natural communities will hold the interest of any botanist, and though parts are in the early stages of restoration, the seeds

are there for continued under the Checklists—> BCW Botany Blitzes tab. (<http://wisflora.herbarium.wisc.edu/projects/index.php?proj=20>).



Natural Area Profile—The Hogback Prairie State Natural Area Justin Nooker

Justin Nooker is a Conservation Biologist with the Wisconsin DNR and Natural Areas Crew Leader for the Driftless Area.

Why would anyone want to travel to Crawford County, Wisconsin? To study the Driftless Area? Visit unglaciated terrain? Learn about strongholds for rare herptiles? Visit historically rich places from Native Americans, early settler trading routes, U.S. military forts? Yes, these are all attractions to Crawford County, but my favorite activity is to BOTANIZE!

A favorite visit of mine is to a place holding onto many of Wisconsin's rarest species: regal fritillary butterflies, dusted skippers, American blue racers, death camas (*Anticlea elegans*), purple milkweed (*Asclepias purpurascens*). Such interesting geology and hydrology – including

an old oxbow of the Kickapoo River, alternating bands of sandstone and dolomite. A ridge that faces north, east, west, and even some south exposures. An abundance of species on a site with history of farming practices, yet strong ecological management on private and public lands through positive relationships with neighbors.

“The Hogback.” Many know this place, some may not. In the center of Crawford County and the Driftless Area lies a hidden gem, surrounded by forested ridges. The Hogback Prairies State Natural Area hosts one of Wisconsin's last remaining examples of dry prairie remnants holding onto a full suite of prairie species from plants to herptiles to invertebrates and avifauna. From

death camas to purple milkweed, hills thistle (*Cirsium hillii*) to meadowsweet (*Spiraea alba*) and great St. John's wort (*Hypericum ascyron*) - feet apart from each other. Other commonly found species include Bell's Vireo, dusted skipper, regal frits, leaf hoppers, juniper hairstreak, hognose snake, bull snake, American blue racer. One can find many species including those listed above but more exciting is the task of documenting new species. Maybe mullein foxglove (*Dasistoma macrophylla*), or ovate beak grass (*Diarrhena obovata*)? Swan sedge (*Carex swanii*)? You never know what a day of exploration may bring at the Hogback! You are bound to experience fascinating views, astounding geology, unique flora and fauna.

A Peek into the Flora of the Northwest Sands' Barrens Communities

Derek Anderson and Paul Hlina

[pine barrens](#) [oak barrens](#)
[sand prairies](#)



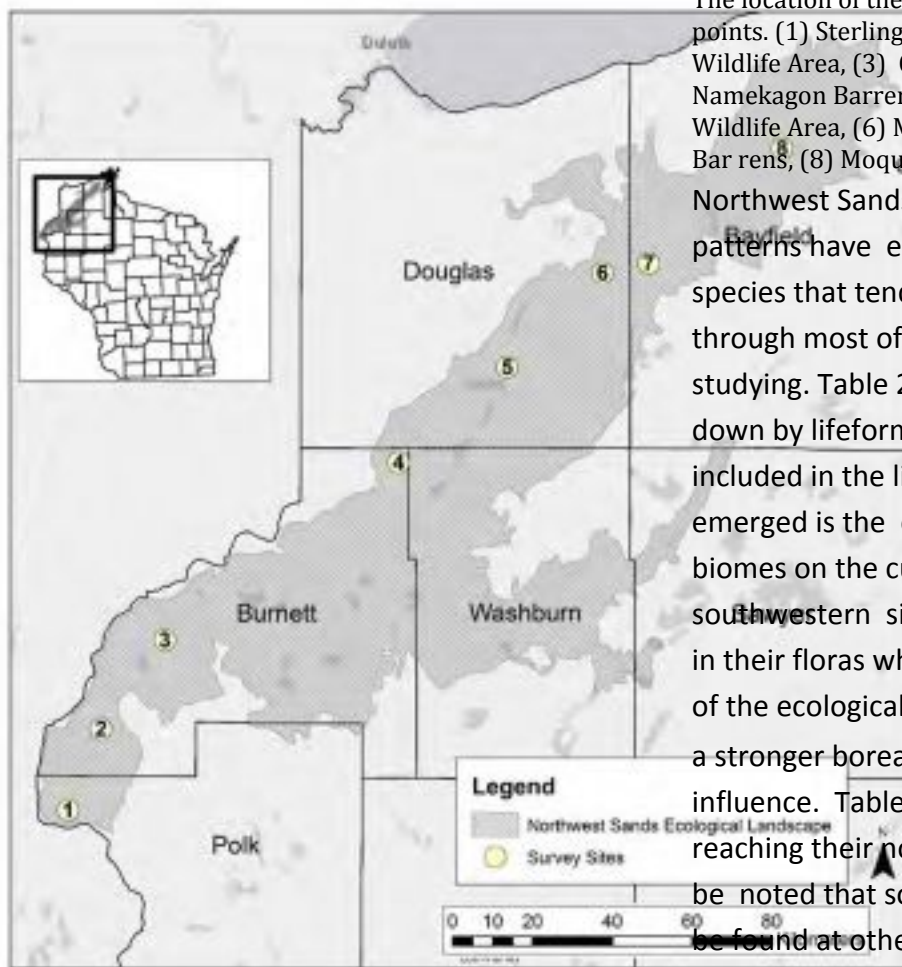


Figure 1. Map showing the northwest sands ecological landscape in Wisconsin. This ecological landscape is approximately 5,066 square kilometers (1,956 square miles).

The location of the study sites are represented by circled points. (1) Sterling Barrens State Natural Area, (2) Fish Lake Wildlife Area, (3) Crex Meadows Wildlife Area, (4) Namekagon Barrens Wildlife Area, (5) Douglas County Wildlife Area, (6) Motts Ravine State Natural Area, (7) Barnes Barrens, (8) Moquah Barrens.

Northwest Sands Ecological Landscape, a few patterns have emerged. One of these is a set of species that tend to be common or ubiquitous through most of the barrens sites we have been studying. Table 2 is a list of these species broken down by lifeform type (introduced species are not included in the list). Another pattern that has emerged is the obvious influence of other past biomes on the current community composition. The southwestern sites show a stronger prairie influence in their floras while those in the northeastern reaches of the ecological landscape have a stronger boreal forest and northern dry forest influence. Table 3 highlights some of the species reaching their northern and southern limits (it should be noted that some of these species on this list may be found at other latitudes in the state; this list is only referring to the distribution with the barrens communities of

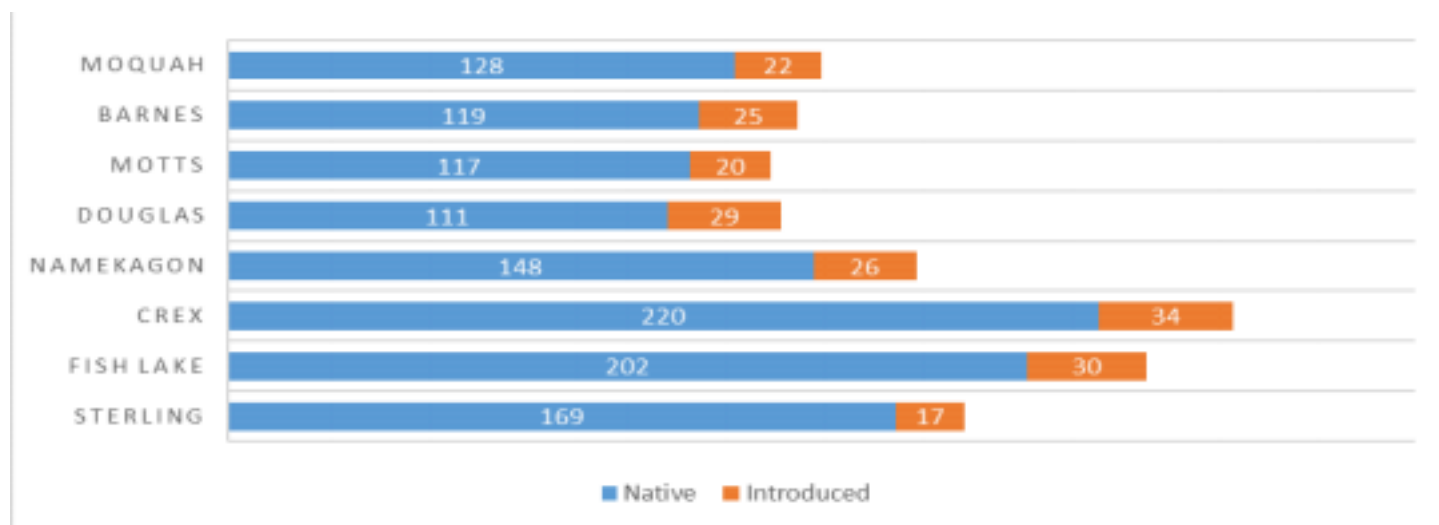


Figure 2. A bar graph showing the number of native and introduced species documented at each site.

Table 2: Barren Species Observed in at least seven of the eight sites surveyed

Graminoids	Herbaceous Forbs	Trees/Shrubs
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<i>Agrostis scabra</i> <i>Andropogon gerardii</i> <i>Bromus kalmii</i> <i>Carex pensylvanica</i> <i>Danthonia spicata</i> <i>Dichanthelium acuminatum</i> <i>Koeleria macrantha</i> <i>Muhlenbergia glomerata</i> <i>Schizachne purpurascens</i> <i>Schizachyrium scoparium</i>	<i>Achillea millefolium</i> <i>Ambrosia artemisiifolia</i> <i>Antennaria parlinii</i> <i>Apocynum androsaemifolium</i> <i>Calystegia spithamea</i> <i>Campanula rotundifolia</i> <i>Chamerion angustifolium</i> <i>Comandra umbellata</i> <i>Conyza canadensis</i> <i>Crocanthemum bicknellii</i> <i>Erigeron strigosus</i> <i>Fragaria virginiana</i> <i>Helianthus occidentalis</i> <i>Heuchera richardsonii</i> <i>Hieracium umbellatum</i> <i>Liatris aspera</i> <i>Lechea intermedia</i> <i>Lithospermum canescens</i> <i>Monarda fistulosa</i> <i>Oenothera biennis</i> <i>Polygala polygama</i> <i>Pseudognaphalium obtusifolium</i> <i>Pteridium aquilinum</i> <i>Rudbeckia hirta</i> <i>Solidago juncea</i> <i>Solidago nemoralis</i> <i>Solidago ptarmicoides</i> <i>Symphyotrichum oolentangiense</i> <i>Symphyotrichum urophyllum</i>	<i>Acer rubrum</i> <i>Amelanchier spicata</i> <i>Arctostaphylos uva-ursi</i> <i>Ceanothus herbaceous</i> <i>Comptonia peregrina</i> <i>Corylus americana</i> <i>Pinus banksiana</i> <i>Populus tremuloides</i> <i>Prunus pumila</i> <i>Prunus virginiana</i> <i>Rosa acicularis</i> <i>Rubus flagellaris</i> <i>Quercus ellipsoidalis</i> <i>Quercus macrocarpa</i> <i>Salix humilis</i> <i>Vaccinium angustifolium</i>
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the Northwest Sands Ecological Landscape).

Rare and Notable Species

Below are a few notes about interesting and rare species that we have documented in the barrens of the northwest sands.

Asclepias ovalifolia is a threatened species in Wisconsin. This small milkweed has been documented from the Sterling Barrens to the Namekagon Barrens. It was frequently encountered within the Fish Lake and Crex Meadows Wildlife Areas.

This species, along with *Allium stellatum*, seems to appear and rebound after brush and tree reduction.

Avenella flexuosa (formerly *Deschampsia flexuosa*), more commonly found on beaches and dunes of Lake Superior's south shore, was observed often in the ancient dunes of the Moquah Barrens in north-central Bayfield County.

Botrychium tenebrosum (*B. simplex* var. *tenebrosum*) is a small diminutive moonwort fern

that has been found growing with *Botrychium simplex* at Fish Lake Wildlife Area.

While not a listed species, we have only documented this species at one site thus far in our survey work. With lots of additional habitat to search, it seems likely that we may find more.

Dalea villosa is a species of special concern in Wisconsin. While this species is restricted to the Sterling Barrens and Fish Lake Wildlife Area of our study area, it is doing

Table 3: Species Reaching Their Northern or Southern Extent in the Barrens		(Crex Meadows) Sporobolus undulatus (Fish Lake) Symphyotrichum sericeum (Crex Meadows) Tradescantia occidentalis (Crex Meadows) Veronicastrum virgatum (Crex Meadows)	
Southern Sites (where species reach their northern limit)	Northern Sites (where species reach their southern limit)		
<i>Agalinis tenuifolia</i> (Crex Meadows) <i>Allium stellatum</i> (Crex Meadows) <i>Ambrosia psilostachya</i> (Crex Meadows) <i>Amorpha canescens</i> (Crex Meadows) <i>Aristida tuberculosa</i> (Fish Lake) <i>Asclepias viridiflora</i> (Fish Lake) <i>Bouteloua curtipendula</i> (Sterling) <i>Bouteloua hirsuta</i> (Sterling) <i>Calamovilfa longifolia</i> (Fish Lake) <i>Carex richardsonii</i> (Namekagon) <i>Coreopsis palmata</i> (Crex Meadows) <i>Dalea candida</i> (Crex Meadows) <i>Dalea purpurea</i> (Crex Meadows) <i>Dalea villosa</i> (Fish Lake) <i>Delphinium carolinianum</i> (Crex Meadows) <i>Euphorbia corollata</i> (Crex Meadows) <i>Euthamia</i> <i>gymnospermoides</i> (Fish Lake) <i>Geum</i> <i>triflorum</i> (Fish Lake) <i>Hesperostipa spartea</i> (Crex Meadows) <i>Hieracium longipilum</i> (Crex Meadows) <i>Juniperus</i> <i>virginiana</i> (Sterling) <i>Lespedeza capitata</i> (Crex Meadows) <i>Liatris cylindracea</i> (Fish Lake) <i>Liatris pycnostachya</i> (Crex Meadows) <i>Lupinus perennis</i> (Crex Meadows) <i>Mirabilis alba</i> (Crex Meadows) <i>Monarda punctata</i> (Crex Meadows) <i>Packera plattensis</i> (Sterling) <i>Panicum virgatum</i> (Crex Meadows) <i>Penstemon gracilis</i> (Crex Meadows) <i>Penstemon</i> <i>grandiflorus</i> (Sterling) <i>Phlox pilosa</i> (Namekagon) <i>Physalis heterophylla</i> (Fish Lake) <i>Phemeranthus rugospermus</i> (Sterling) <i>Polygonatum biflorum</i> (Crex Meadows) <i>Ranunculus</i> <i>rhomboideus</i> (Namekagon) <i>Rhus</i> <i>glabra</i> (Crex Meadows) <i>Scutellaria parvula</i> (Crex Meadows) <i>Sisyrinchium campestre</i> (Crex Meadows) <i>Solidago missouriensis</i>	<i>Aralia hispida</i> (Barnes) <i>Aralia nudicaulis</i> (Barnes) <i>Avenella flexuosa</i> (Moquah) <i>Camnoides sempervirens</i> (Motts) <i>Corylus cornuta</i> (Moquah) <i>Cynoglossum boreale</i> (Moquah) <i>Dichanthelium linearifolium</i> (Moquah) <i>Epigaea repens</i> (Barnes) <i>Geranium bicknellii</i> (Motts) <i>Geum fragarioides</i> (Barnes) <i>Hieracium scabrum</i> (Motts) <i>Juniperus communis</i> (Douglas) <i>Melampyrum lineare</i> (Motts) <i>Piptatheropsis pungens</i> (Motts) <i>Pseudognaphalium macdoumii</i> (Barnes) <i>Sibbaldia divaricata</i> (Douglas) <i>Solidago hispida</i> (Namekagon) <i>Trientalis borealis</i> (Barnes)	<p><i>Geranium bicknellii</i> and <i>Capnoides sempervirens</i> are annual or biennial plants. These two plants were the only flowering forbs observed only three weeks following a spring burn at Mott's Ravine in the Brule River watershed. <i>Capnoides sempervirens</i> was only found at Mott's Ravine on this one occasion, while <i>Geranium bicknellii</i> was found on burned areas in Moquah and Barnes Barrens as well.</p> <p><i>Scleria triglomerata</i> is another species of special concern that has been found in the southern sites of our study. A few populations have been found in slightly wetter areas within the barrens landscape at both Crex Meadows and Fish Lake Wildlife Areas. This species could easily be overlooked and may turn up in additional locations with more survey work</p>	<p>underneath <i>Quercus</i> sp. and <i>Salix humilis</i> shrubs. In the Barnes barrens large populations were found at the edge of a recently harvested jack pine forest to be converted to open barrens, on a narrow north facing slope paralleling a sandy road.</p>

well, with several larger populations discovered at both sites.

Epigaea repens is often found in northern dry-mesic forests on the

sandstone cliffs of Lake Superior on the Bayfield peninsula, growing under *Pinus resinosa*, *Pinus strobus* or *Pinus banksiana*. At Moquah Barrens the plant was found at the base of a hill

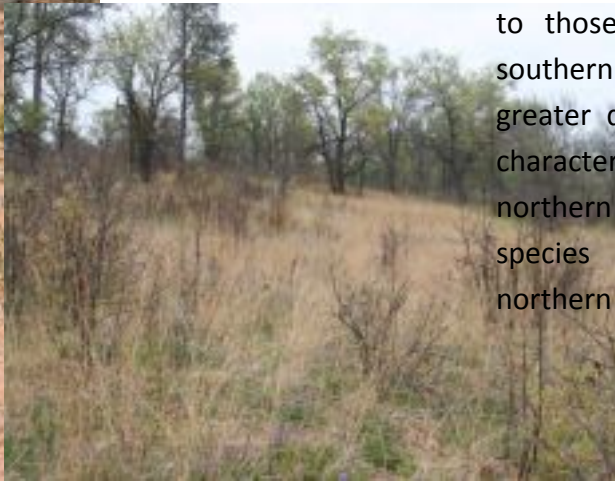
in the future.

In addition, we would also mention a couple other common species with interesting distributions in the barrens of our



Barrens, plants were found at the top of the highest hills of the site, perhaps an ancient shoreline of Glacial Lake Duluth.

At Fish Lake, an extensive



study. *Arctostaphylos uva-ursi* is a species we find at all of the barrens sites. At northern sites like Moquah Barrens, Barnes Barrens and Mott's Ravine, it is abundant to dominant throughout the sites. However, at southern sites like Sterling Barrens, Fish Lake Wildlife Area and Crex Meadows Wildlife Area, populations are mostly local and sporadically distributed. Finally, *Hudsonia tomentosa* was found at two sites at both ends of the northwest barrens landscape (Fish Lake Wildlife Area and Moquah Barrens). In the case of Moquah

population was found in a dune complex and was likely an ancient shoreline of Glacial Lake Grantsburg.

Conclusion

Now, after completing three years of survey work, several trends have developed in the species that we have observed in the

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continuum of sites spanning northwestern Polk County in the south, and central Bayfield County in the north. There appears to be a higher diversity of species in the southwestern sites in comparison to those in the northeast. The southern sites are marked with a greater diversity of species more characteristic of prairies, while the northern sites tend to have species more characteristic of northern dry forests and



Left: Beach heather (*Hudsonia tomentosa*) in a dune/blow out area at Fish Lake Wildlife Area. This species was also observed at Moquah Barrens. Upper right: Oak savanna/barrens at Crex Meadows in early spring. Lower right: Silky prairie clover (*Dalea villosa*) at Sterling barrens. Photos by Paul Hlina and Derek Anderson.

woodlands. We believe that survey work next season will continue to support this

conclusion.

Management in the form of fire, has been a critical component in maintaining these sites. In fact, additional work is planned to

expand sites like the Namekagon and Barnes Barrens. Surveying after this management would be highly beneficial to document the resurgence and expansion of pine barrens species. Additionally,

these surveys should target rare species listed by the state. It will be beneficial to document their responses to management and incorporate this information into conservation efforts



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Every year in the last days of July, *Triphora* in Wisconsin; the majority of the roughly two dozen *Triphora* species are found in the tropical forests of South and Central America.

The range of *T. trianthophoros* itself is expansive, albeit highly scattered, ranging from Guatemala and Mexico north through the Eastern U.S. and Ontario. Here in Wisconsin, where it reaches its northwestern extent, it is listed as special concern and known only from a handful of mesic forest sites in the Driftless Region.

Across the U.S. portion of its range, flowering occurs in a short period from late July to mid August, then

late August to mid September (particularly in the Florida and Texas segments), yielding those rapid-fire Perhaps it's a byproduct of the tumultuous year, but I've found myself on social media more the past few months. Specifically, I've been keeping close watch on the spectacular flowers posted in native plant groups around the country, daydreaming about one day travelling to see them myself. But I noticed that in this network of posters and naturalists few plants elicit such a wide response as the three birds orchid, *Triphora trianthophoros*. the first posts roll in: a sighting in social media posts. Colonies do not necessarily emerge every year and can remain as dormant tuberoids for many years. When flowering occurs, single sites may harbor as many as tens of thousands of stems at a time. Colonies flower synchronously 1-3 times a year, lasting only a day at a time, making the online naturalist and photographer networks vital for capturing a photo of a flowering colony.

Triphora trianthophoros is the only member of the genus observations suggest that plants

It has been heavily speculated as to what triggers the nearly

synchronous flowering of *T. trianthophoros* across the range. Folkloric advice states that a drop in nighttime temperatures triggers the opening of flower buds, or the emergence of shoots follows the first heavy precipitation in August. With such an inconspicuous plant, records for emerged but pre-bloom plants are scarce, making it hard to assess claims of certain conditions triggering shoot emergence.

Nonetheless, some personal observations suggest that there may be something to the effect of a drop in temperature on flowering. Flowering at a Sauk County, Wisconsin site in 2019 occurred following a 10°F drop in low temperature from the previous two nights. In 2020, blooming at the same site followed consecutive nights of 5°F drop. However, in further preliminary investigations with older herbarium records and climate data, the pattern appears to be inconsistent. Surely, it warrants further investigation.

Besides the flowering phenology, *T. trianthophoros* is a rarity among understory herbs in our region in other respects, too. Few short statured plants emerge as late in the season as it does, while the canopy is closed and the effectiveness of photosynthesis limited by heavy shading. In contrast to many late summer blooming plants, the ovate leaves are strikingly small, rarely surpassing 2cm in length. While it is not the only orchid in our region



Capsules of three birds orchid hold tiny, dust-like seed. A new population was discovered this year in a residential setting in Madison.

to emerge late in the season (e.g. the wintergreen, spring-flowering *Calypso bulbosa* and *Aplectrum hymale*), it is unique in having a short growing-reproducing period: emergence in August to

senescence in October may occur entirely before the canopy clears.

The combination of photosynthetic limitations and other observations such as the persistence of achlorophyllous albino mutants has led to ongoing conjecture that *T. trianthophoros* must rely heavily on soil fungi to augment the acquisition of carbon through the growing season and to maintain itself underground until favorable growing conditions arise. In my ongoing graduate research, I have been gathering evidence to test this hypothesis by using stable isotope analysis to

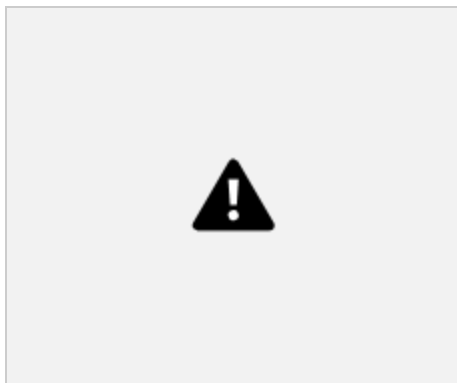
determine the relative carbon gain from photosynthesis versus soil fungi. Just this year, additional compelling support came unexpectedly when a new population of *T. trianthophoros* was discovered in a flower bed behind the house of a UW Madison Botany Department employee in Madison, Wisconsin. Given that it's unlikely such a large and presumably mature cluster of a few dozen stems would go unnoticed year by year, it's possible that the rhizomes have waited silently belowground for decades, subsisting entirely on the carbon from soil fungi, possibly

even pre-dating the house's 1940's construction.

Although rarely encountered, the tiny three birds orchid is one of the most fascinating components of our Wisconsin flora. For such a little plant, it packs quite the punch of stories and unanswered questions, perhaps driving its popularity online. And importantly, as we advance through the Genomic Age, *Triphora* goes to show that there is no substitute for careful documentation, attention, and observations in the field.

Tea, Anyone?

By Patrick Goggin



The undersides of Labrador tea leaves are densely hairy. Initially white, gradually they turn a rust color. Photo by Merel R. Black.

This article was first published in the Lake Tides (volume 26, number 2), a free newsletter from University of Wisconsin—Extension Lakes.

Labrador tea (*Rhododendron groenlandicum*) is a workhorse shrub of our northern Wisconsin open bogs (treeless wetlands) and lowland forests that reaches a height of 1-1/2 to 5 feet. It is most recognizable by its thick evergreen leaves. The edges of these leaves curl downward and they are woolly, often with orangish hairs beneath their waxy topcoat of green (I.E., in the *Ericaceae* family, a group of woody plants with evergreen leaves). Its fragrant white flowers have five petals and are arranged in clusters that begin popping out in May and on into June.

Labrador tea is distributed throughout Canada, Alaska, and the northern fringe of the United

States. The southernmost Pacific and Atlantic coast extents of Labrador tea are in Oregon and New Jersey. As a result of land use, climatic, or other changes, Labrador tea is vulnerable or rare in several states at its southern limit including Ohio, Connecticut, New Jersey, and Pennsylvania. It may be in additional jeopardy in the future because of global climate change and warming trends, as this shrub is well adapted to cooler climates and conditions.

Labrador tea is typical of poorly drained habitats such as boreal forests, open conifer bogs, treeless bogs, wooded swamps, wet barrens, and peatlands throughout its range. Feather mosses are common in the

understory of Labrador tea wetland habitats—these include plants like big red stem moss (*Pleurozium schreberi*), splendid feather moss (*Hylocomium splendens*), and knights plume moss (*Ptilium crista-castrensis*), all of which help keep the roots of Labrador tea in ‘wet feet’ conditions.

The common name of Labrador tea in part comes from its many medicinal uses. In *Ethnobotany of the Menomini Indians* (1923) and *Ethnobotany of the Forest Potawatomi* (1933) Huron H. Smith describes assorted uses for a tea solution of the plant’s leaves

utilized for combating fever, aiding head issues and sore eyes, helping with kidney problems, assisting in muscle pain and rheumatism relief, and helping to alleviate rashes and certain allergies.

Research into flower pollination of Labrador tea has shown that hidden nectar sources of the plant’s flower are visited by many types of insects. One study in southern Ontario recorded over twenty insects per hour visiting Labrador tea flowers. Labrador tea had the greatest diversity of insect visitors of the plant species studied in this bog, and bees were

most common. In a different study, results suggested that butterflies may utilize the plant significantly as well. While insects utilize the plant significantly, browsing of Labrador tea by deer, caribou, elk, moose, and mountain goats is not popular to these animals’ palates. Snowshoe hares too munch on it a little bit.

So next time your trouncing around a bog and perusing the wildflowers, mosses, and shrubs found there, pay closer attention to the Labrador tea. You just may see a parade of insect critters enjoying a nectar feast.

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Wisconsin’s only organization dedicated to the study of our native flora.

Founded in 1968 as an affiliate of the Wisconsin Academy of Sciences, Arts and Letters, the Botanical Club serves the interests of amateurs and professionals, toward the common goal of learning more about our state’s diverse vegetation.

Check us out on the web at <http://sites.google.com/site/botanicalclubofwisconsin/> And on Facebook at <https://www.facebook.com/BotClubWis>

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