

**New York Flora
Association Newsletter
Spring 2023**

Editor's Note: What could be more appropriate to welcome spring than an article on skunk cabbage? Thanks to Steve Young for that, and to whet everyone's appetite further for the botanizing season to come, we follow up with a spring trip report from the previous year. As a contrast, the next article is a report on Joe McMullen's popular winter workshop, after which we launch into summer with quite a few interesting articles and notes sent in by readers. Don't forget to check out the list of field trips and workshops on the NYFA website, new ones have been added since the initial announcement, and have a good botanizing season!

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Skunk Cabbage Shows Us the Way to Spring

by Steve Young, Botanist, botanyvisible@gmail.com

April is the first full month of spring and my favorite wildflower, skunk cabbage, a denizen of swamps, is in full flower with leaves starting to emerge. Of course, the timing of this process will vary depending on the part of New York you are in. In March, once the sun is high enough, skunk cabbage's winter bracts break open and new flower spathes emerge, varying in color from all dark red to yellow-streaked to the unusual all chartreuse. Sometimes flowers even emerge through ice and snow as they produce enough heat to melt an opening to the sunlight above, attracting early pollinators.



The early flowers can melt the ice and snow around them.

Soon after emerging, one side of the spathe opens to reveal the male and female flowers geometrically consolidated on an oval structure called a spadix. As spring turns to summer, the huge leaves unfurl and can eventually cover the entire forest floor. By this time the flower spathes are deteriorating and some begin to form fruits, each one a multiple of one-seeded berries on the spadix. By July the leaves are starting to fall to the ground where they are consumed by fungi, and they eventually disappear altogether by late August. You might think the plants are totally gone, but there are two structures remaining that show that skunk cabbage is still there. The first are the large black fruits that have developed from the flowers, resembling hand grenades scattered about on the forest floor. The second are the light green, almost glaucous, winter bracts that stick up from the ground and protect the leaves and some flowers during the winter (some flowers are outside of the bracts and their flattened spathes can also be seen in the winter). Since the bracts are green all year (although the big leaves are not evergreen), I assume skunk cabbage can photosynthesize throughout the year. In September, the pulp of the fruit is consumed, mainly by slugs and sometimes by chipmunks, and the tan seeds remain on the ground. The seeds can float on water and may disperse that way during high water, and a wildlife camera I set up last fall showed that blue jays also eat and carry the seeds away.



The leaves start to emerge in April while still in full flower.



By September, the leaves are gone and the fruit pulp is consumed to reveal the seeds.



In late April, the leaves get larger and the flowers start to deteriorate.



The pointy, green winter bracts can be seen sticking up above wetland soil all winter.



In May, the large leaves fully expand and cover the ground.

The next time you are in a swamp, no matter what time of year, check for signs of skunk cabbage! For more information on skunk cabbage, join the Facebook Group “Skunk Cabbage Appreciation Society” where people from all over the country contribute photos of skunk cabbage in their area.



NYFA Early Spring Wildflowers at Joralemon Park, Albany County, 5/1/2022

by Ruth Brooks and Chris Graham

A group of seven participants joined Chris Graham and Ruth Brooks to explore the spring wildflowers at Joralemon Park. The park includes a variety of habitats including a beaver pond, wetlands, limestone rock outcrops, mature forest, and Hannacroix Creek. Joralemon has been called one of the most diverse and rich locations for botany in the state. Since the installation of a disc golf course, many paths have been created, and trampled areas are evident. On the east side especially, illicit four-wheeler and dirt bike activity have left large muddy ruts and eroded trails.

We were lucky enough to have a clear sky and a warm sunny day with highs in the 60's. Walking on the west side was easy along the two-track loop, which was bordered with large areas of wildflowers. On the entry path alone we counted at least five different species in bloom, most of them calciphiles. As we walked farther we noticed early blue cohosh (*Caulophyllum giganteum*) growing profusely with its mature purple-brown flowers. We searched for the yellow-green flowers of late blue cohosh (*C. thalictroides*) flowers but did not find any. On the back side of the two-track loop, we saw green violet (*Hybanthus concolor*) just pushing up through the leaf litter, though no flowers were found.



Round-lobed Hepatica (*Hepatica americana*). Photo by Annie Jacobs.

We explored a limestone rock ledge with blooming wild columbine (*Aquilegia canadensis*) and early saxifrage (*Micranthes virginensis*). Crossing the road, we made our way over to the east side and followed a four-wheeler track to a rock outcrop overlooking a beaver pond where we had our lunch.



Trout Lily (*Erythronium americanum*) carpeting the forest floor. Photo by Annie Jacobs.



Our lunch spot. Photo by Chris Graham.



As we ate lunch, we counted close to twenty turtles basking on logs in the pond and enjoyed watching numerous tree swallows wheeling through the air and beginning to nest in the dead trees standing in the pond. Early saxifrage and lyre-leaved rock cress (*Arabidopsis lyrata*) carpeted the two main boulders, and rock spikemoss (*Selaginella rupestris*) eked out a living on the less trampled margin of the boulder. The group took turns using binoculars in an attempt to espy wall-rue (*Asplenium ruta-muraria*) clinging to the cliff face.



We weren't the only ones enjoying the warm spring sun. Photo by Chris Graham.

We took a longer walk back to our cars that involved following a path along a limestone rock ledge which led to a boardwalk through a wet area. In a damp sink hole we spotted several wild ginger (*Asarum canadense*) blooms under the ground-hugging leaves. All agreed afterwards that the extravagance of spring blooms had made the outing a rewarding one (see plant list on the next page). On a personal note, one of the leaders, Graham, along with his partner, were rewarded with the arrival of their own spring beauty the very next day: a baby girl named Tilia Mae.



Some of the group on the wildflower-covered hillside. Photo by Chris Graham.



Partial plant List from Joralemon Park, 5/1/22

<i>Actaea rubra</i> , Red baneberry	<i>Hesperis matronalis</i> , Dame's rocket
<i>Allium tricoccum</i> , Ramps	<i>Houstonia caerulea</i> , Common bluets
<i>Aquilegia canadensis</i> , Wild columbine	<i>Hybanthus concolor</i> , Green violet
<i>Arabidopsis lyrata</i> , Lyre-leaved rockcress	<i>Hydrophyllum virginianum</i> , Virginia waterleaf
<i>Asarum canadense</i> , Wild ginger	<i>Micranthes virginensis</i> , Early saxifrage
<i>Asplenium platyneuron</i> , Ebony spleenwort	<i>Mitchella repens</i> , Partridge berry
<i>Asplenium rhizophyllum</i> , Walking fern	<i>Mitella diphylla</i> , Two-leaved mitrewort
<i>Asplenium ruta-muraria</i> , Wall-rue	<i>Osmorhiza claytonii</i> , Sweet cicely
<i>Asplenium trichomanes</i> , Maidenhair spleenwort	<i>Podophyllum peltatum</i> , Mayapple
<i>Borodinia laevigata</i> , Smooth rock cress	<i>Prunus virginiana</i> , Choke cherry
<i>Cardamine concatenata</i> , Cut-leaved toothwort	<i>Ranunculus abortivus</i> , Small-flowered crowfoot
<i>Caulophyllum giganteum</i> , Early blue cohosh	<i>Sanguinaria canadensis</i> , Bloodroot
<i>Claytonia virginica</i> , Virginia spring beauty	<i>Selaginella rupestris</i> , Rock spikemoss
<i>Cornus alternifolia</i> , Alternate-leaved dogwood	<i>Staphylea trifolia</i> , Bladdernut
<i>Cystopteris bulbifera</i> , Bulblet fern	<i>Thalictrum dioica</i> , Early meadow rue
<i>Dicentra cucullaria</i> , Dutchman's breeches	<i>Thalictrum thalictroides</i> , Rue anemone
<i>Erythronium americanum</i> , Trout lily	<i>Trillium erectum</i> , Wake robin
<i>Hepatica acutiloba</i> , Sharp-lobed hepatica	<i>Uvularia grandiflora</i> , Large-flowered bellwort
<i>Hepatica americana</i> , Round-lobed hepatica	<i>Veratrum viride</i> , False hellebore



Workshop: Identification of Plants in Winter
by Barbara Chase

On January 21, 2023, 15 plant enthusiasts gathered at the Onondaga Lake Visitors Center for the Identification of Plants in Winter workshop led by Joe McMullen. Some of us were professionals working in related fields and some of us were amateur naturalists, but we were all there to learn or refresh our knowledge of identifying plants in the winter. Many of us arrived early to start the day by looking at the dozens of labeled samples of twigs and other plant materials Joe had spread out on tables for us to study.

We started the indoor part of the workshop with each of us receiving three twigs. We studied the thick horse chestnut (*Aesculus hippocastanum*) twig first to review the parts of a twig: terminal bud, lateral buds, leaf scars, vascular bundle scars within the leaf scars, terminal bud scale scars, and lenticels, all of which can help identify the twig. The American elm (*Ulmus americana*) twig was an example of a false terminal bud; it is actually a lateral bud that can be confused with a true terminal bud. The American beech (*Fagus grandifolia*) twig we received had long, thin, pointed buds with many copper-colored bud scales, and distinct terminal bud scale scars.

We studied, via lecture and a PowerPoint presentation, how to identify evergreen trees, deciduous trees and shrubs, vines, and herbaceous plants.

The most important factor in identifying evergreens is how the needles are attached to the twigs. Pines have needles attached to the twigs in bundles. The number of needles per bundle is key to identifying species of pine. Firs and spruces have their needles attached singly rather than in bundles. Fir needles are round at the tip, flat, and look like they sit on a little pad. Spruce needles are sharp, angled, and leave little stubs making the twigs rough where the needles fall off. Hemlocks have shorter flat needles rounded at the tips and have two white lines of stomata on the underside where gas exchange occurs. Their needles have short petioles. Northern white cedar (*Thuja occidentalis*) has leaves that appear to be overlapping scales.

To identify deciduous trees in winter, start by the pattern of buds and leaf scars - is it opposite or alternate? Trees and shrubs with the opposite pattern can be remembered with the phrase "MADCap Horse", which stands for Maple, Ash, Dogwood, Caprifoliaceae (+Adoxaceae), and Horse chestnut.



Once the opposite or alternate pattern has been identified, other characteristics can help identify winter twigs. The size and shape of buds, number of bud scales, size and shape of leaf scars and vascular bundle scars within the leaf scars, and presence of terminal bud scale scars all can help with identification. Many species have a single terminal bud but some, such as oaks, have a cluster of buds at the end of the twigs. Characteristics of the twig, such as relative thickness or thinness and the presence, color, and shape of lenticels, can be important.

Characteristics of the pith can help identify a twig. Pith can be solid, have partitions, (sometimes called chambered), or be hollow. The color of the pith can also help distinguish between species. For example, of the red-stemmed dogwoods, red-osier (*Cornus sericea*) has white pith and silky (*Cornus amomum*) has brown pith. Of course, bark and growth habit also can help identify woody plants in winter.

Next, we reviewed herbaceous plants that could be identified in winter. There are some ferns such as evergreen woodfern (*Dryopteris intermedia*) and Christmas fern (*Polystichum acrostichoides*) that are evergreen. Club mosses are evergreen. Plantain-leaved sedge (*Carex plantaginea*) is evergreen. Some herbaceous plants, such as common mullein (*Verbascum thapsus*) and garlic mustard (*Alliaria petiolata*), are biennials and have persistent basal rosettes.

Other herbaceous plants can be identified by the dried remains of stems, leaves, flowers, and seeds. For example, on the flowering stalk of cattails, the male flowers are above and the female flowers are below. Even when dried, one can see the separation between the sections of male and female flowers on the stalks of narrow-leaved cattail (*Typha angustifolia*) and the lack of separation between male and female flower sections on the stalks of broad-leaved cattail (*T. latifolia*).

After the lecture and PowerPoint portion of the workshop, we went into the adjacent room to study the samples Joe had brought and labeled. We saw examples of the evergreen twigs, deciduous twigs, vines, and evergreen and dried herbaceous plants we saw in the PowerPoint presentation. Some of us photographed many of these along with their labels to help us remember what we had learned.

We then bundled up warmly and went outside to walk on the trail along the Onondaga Lake shoreline. We identified many species of plants and listened to Joe describe the progress of the restoration of the habitat in the area, on which he has worked extensively.

Species identified along the trail included:

Acer negundo, box elder
Andropogon gerardii, big bluestem
Cornus amomum, silky dogwood
Cornus racemosa, graystem dogwood
Cornus sericea, red-osier dogwood
Cuscuta gronovii, common dodder
Fraxinus pennsylvanica, green ash
Myrica gale, bayberry
Panicum virgatum, switchgrass
Phytolacca americana, pokeweed
Populus deltoides, cottonwood
Quercus bicolor, swamp white oak
Rhus typhina, staghorn sumac
Robinia pseudoacacia, black locust
Rosa sp., rose
Salix sp., willow
Schizachyrium scoparium, little bluestem



The group at the end of the day.



Some Observations of a *Lilium michiganense* Population in Western New York

by Timothy A. Tatakis

In July 2014, I took a few photographs of a showy flowering plant while walking along the bank of Honeoye Creek in southern Monroe County, NY. Later that year, I tried to identify it using the *Lilium* key in Flora of North America (Skinner 2023). From the photos I took, it keyed out to *Lilium michiganense* Farwell, the Michigan Lily. When I referred to the New York Flora Association (NYFA) Atlas to look at the distribution of that species in New York in 2014, I noticed that there were only two records then in the state and that it was considered endangered in NY (an S1 species). My initial reaction was that I must have misidentified it. Not trusting my identification, I emailed Steve Young (then the NY Natural Heritage Program botanist) and included some photographs. He graciously returned my email within a few days and confirmed the photos I sent were indeed *L. michiganense*. At that point, I was amazed and excited and so I completed a rare plant form for the NY Heritage database.

The rarity of this plant in NY stimulated my interest, and I have looked for this lily in the same area along Honeoye Creek since 2014 and have kept records of my observations. The purpose of this article is to share some of the data and observations collected, although I don't profess this to be a very detailed study. I found a few plants in most years; all plants observed were in bloom, with one exception (Table 1). The location of each plant was mapped and it was apparent that different plants appeared in different years. The population size appears to be very small.

TABLE 1. Number of plants and phenology of blooms in a population of *L. michiganense* in Monroe County, NY (2014-2021).

Year	Number of Plants	Number of Plants in Bloom	First Date of Observation (blooms)	Last Date of Observation (blooms)
2014	2 or 3	2 or 3	July 3	no record
2015	0	0	—	—
2016	0	0	—	—
2017	2	2	July 4	no record
2018	5	4	July 3	no record
2019	3	3	July 4	July 11
2020	3	3	July 1	July 8
2021	3	3	June 26	July 2

All of the plants recorded in this study occurred in a small area (less than 500 m²), within 10 m of the bank of Honeoye Creek (the proximity of the creek can be seen in Fig. 3b). The area is typical floodplain habitat; the creek floods perhaps once a year on average and the site can be underwater for a period of several days after a large storm event or snowmelt. This habitat type is known to be favorable for *L. michiganense* (Voss and Reznicek 2012). In addition, *L. michiganense* is thought to prefer soils with a higher pH (Smith and Dress 1982) and other plants growing in this habitat are characterized as calciphiles (e.g. *Erythronium albidum*, and *Lysimachia ciliata*).



Regarding phenology, the population has demonstrated remarkable consistency in blooming period from year to year (Table 1). Only in 2021 was there a noticeable difference when the plants bloomed about 1 week earlier than previous years. The blooming period observed in this study coincides with that reported for *L. michiganense* in New York (Young 2021). The site was not visited as often in 2014-2018, so there were not enough records to confidently assign a last date of blooming. In 2019-2021, more visits were made specifically to determine how long the blooming period lasted. It should be noted that blooms and plants were sometimes lost due to herbivory (most likely white-tailed deer). Still, based on observations, blooms seemed to last about 7-10 days.

Many of the plants observed in this study keyed out to *L. michiganense*. The plant in Fig. 1 shows some of the typical characteristics of *L. michiganense*, including whorled leaves, reflexed tepals, red style, and stamens that are moderately exerted, with filaments that parallel the style proximally but flare out distally (Skinner, 2023). However, as this study progressed, a few plants did not key out as clearly due to variation in degree of flexed tepals and exerted stamens (Fig. 2). Observations of these plants gave me reason to investigate further.



Figure 1. *Lilium michiganense* (photo taken 07/07/2014).



Figure 2. *Lilium michiganense* (photo taken 07/03/2018).

L. michiganense is most similar to *L. canadense*. *L. canadense* differs by having tepals that are less recurved and stamens barely exerted, with filaments parallel to the style (Skinner 2023). In a review of the



Lilium genus by Adams and Dress (1982), they recognized a hybrid (*L. canadense* × *L. michiganense*) and described it as “a naturally occurring hybrid with the following characteristics intermediate between those of the parents: flower color and degree of tepal recurvature”.

I wondered if some of the individuals found in this study could be hybrids. To complicate the issue, some characteristics used to distinguish between *L. michiganense* and *L. canadense*, such as degree of tepal curvature and stamen arrangement, appeared to change gradually in individual flowers as they matured and senesced. Figure 3a shows a plant with two blooms, one open (“earlier flower”) and one closed. Figure 3b was taken 3 days later and appears to show that the tepals of the “earlier flower” have become more reflexed during the 3-day interval between photos. During this study, perhaps I observed flowers on plants in different stages of development, resulting in some being more difficult to key out with certainty. In retrospect, I should have been more aware of that possibility when making observations. A more detailed study of changes in tepal recurvature during flower development is planned for 2023.



Figure 3a. *Lilium michiganense* (photo taken 06/26/2021), “earlier flower” on left.



Figure 3b. *Lilium michiganense* (photo taken 06/29/2021), “earlier flower” on left.



According to the current NY Flora Atlas, *L. michiganense* has been historically reported from only three counties in NY, including Monroe County (Werier et al. 2023). The voucher for the Monroe County record in the Atlas was collected in 1911, several miles west of the habitat in this study, so this is certainly a different population. In recent years, there have been several additional reports of *L. michiganense* in other upstate New York counties listed on iNaturalist, although some have not been confirmed as Research Grade by the iNaturalist community (iNaturalist 2023). The location of the habitat in this study is close to the very eastern edge of the range described for *L. michiganense* by Adams and Dress (1982).

The ranges for *L. canadense* and the hybrid (*L. canadense* × *L. michiganense*) also include New York (Adams and Dress 1982). The NYFA Atlas shows *L. canadense* being widespread throughout the state and lists two counties in New York with records of the hybrid (Werier et al. 2023). Interestingly, difficulty in discerning *L. michiganense* from the hybrid (and possibly *L. canadense*) as described in this study has been noted in some of the more recent reports for *L. michiganense* in New York (iNaturalist 2023; Johnson 2019; Siskind 2020).

In conclusion, data collected during this study suggest a small population of *L. michiganense* is present in this floodplain habitat along Honeoye Creek. Observations on plant morphology, phenology, and habitat type support this conclusion. Clearly one of the questions to arise from this study is the source of the variability observed in the flower morphology of the plants through the years, sometimes resulting in challenging identification. Is the variability due to genetic differences within the population, hybridization between species, or environmental factors (or some combination of these)? It seems that more research needs to be done on this group.

I look forward to continuing the study of this population in the future. As I do, I will think about another question that I have pondered since 2014: do I collect a voucher specimen? Since *L. michiganense* is an endangered species in New York, the small size of this population and uncertain long-term viability of it have given me enough pause to not collect a voucher specimen. Is it worth risking additional stress to the survivability of this population by collecting a voucher specimen, or does the value of a voucher specimen outweigh the risk?

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Note on a recently discovered nonnative, nonnaturalized state record plant.

by Alex Petzke, apetzke@syr.edu

In October 2022, Alex Petzke and Macy Carr, both graduate students at SUNY College of Environmental Science and Forestry (Syracuse), spotted two individuals of an unexpected plant growing on the edge of a mulched, landscaped area on the SUNY ESF campus. It turned out to be *Tricyrtis hirta* (hairy or Japanese toad lily; Liliaceae), which appears to be a nonnative, nonnaturalized plant species record for New York State (D. Werier, pers. comm.). Alex searched the rest of the campus but did not locate any other individuals, planted or growing spontaneously.

Tricyrtis is a genus of 21 species native to Asia (POWO 2023), from the Himalayas to Japan and the Philippines; all species are herbaceous perennials. *T. hirta* is native to Japan, where it grows from creeping rhizomes on shady, rocky cliffs and stream banks. Many *Tricyrtis* species are available commercially as ornamentals, including *T. hirta* (Mahr 2014). The Biota of North America Program (Kartesz 2015) distribution map for *T. hirta* (dated 2014) records its presence in only a few counties in Kansas, Massachusetts, and Pennsylvania. A voucher specimen will be deposited at the Bailey Hortorium Herbarium (BH) at Cornell University.



The toad lily in situ. Photo by A. Petzke.



Close up of the toad lily. Photo by M. Carr.

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NYFA Field Trip – Flora of Goose Pond Mountain, Orange County, NY, 8/27/22

By: Daniel Atha and Patricia Butter



Goose Pond Mountain State Park is a 1,700-acre park administered by the Palisades Interstate Park Commission located halfway between Chester and Monroe, just south of Route 6. It is named for the 1050-foot peak that dominates the park and surrounding landscape. The lowlands to the east of the summit are drained by Seely Brook, which has its headwaters five miles to the south near Sterling Lake (see Seely Brook wetlands in the photo with Goose Pond Mountain in background). The extensive wetlands comprise almost half the park and can be viewed up close on a raised loop trail almost 1/3 of a mile long, with a 400-foot-long boardwalk. The trail and boardwalk were installed by the New York State Department of Transportation to compensate for wetlands destroyed by the construction of the Route 6 interchange near Chester.

Our destination for this field trip led by NY Natural Heritage Program botanist, Rich Ring, was, however, the summit (of course!) with its mixture of Red Cedar Woodlands, Chestnut Oak Forest, and scattered openings with a diverse community of prairie grasses and forbs. Chestnut Oak Forests are not known for their profusion of eye-popping herbaceous wildflowers, especially in August. But the beautiful, cool summer day and park-like open woods carpeted in deep green (of mostly *Carex communis*) did not disappoint and revealed many treasures for those with patience. We enjoyed our lunches on the edge of the 200-foot-high bluff with a spectacular view of the Seeley Valley below and across to the ridge to the east.

Due to the severe drought conditions that had prevailed in southeastern New York the past summer, we were not able to see the rare Fogg's goosefoot (*Chenopodium foggii*) that is known from that location. Much of the herbaceous vegetation near the summit was withered and dry, but there were some stalwart treasures to be found. Drought resistant species, such as American pennyroyal (*Hedeoma pulegioides*), slender bush clover (*Lespedeza virginica*) and trailing bush clover (*L. procumbens*), stood out as welcome highlights of green, and a few tough woodland sunflowers (*Helianthus divaricatus*), were valiantly blooming, despite their droopy leaves.

In rock crevices with some shade and a little moisture, we found three-lobed violet (*Viola palmata*) and hairy bedstraw (*Galium pilosum*), two species not often seen in the more developed parts of southeastern New York. If you look very carefully in the photo above, just below the summit, you can just make out the little hairy fruit of the *Galium pilosum*.

During our hike up and down the wooded slopes of the mountain, we encountered many beautiful plants, and enjoyed a robust debate about their identity. In the end, the name that won the most votes was American alumroot (*Heuchera americana*), an S3 species rare in NY.

We were also pleased to encounter some unusual sedges. A bit tattered at this late stage of the summer, but still recognizable were Muhlenberg's sedge (*Carex muhlenbergii*) and cattail sedge (*Carex typhina*), which is an S2 species (endangered in NY), not previously known from Orange County.

Walking back along Route 6, the group stopped to observe a population of far eastern smartweed (*Persicaria extremiorientalis*), a species from the Kamchatka Peninsula of Russia and Japanese Islands first



discovered in North America by Daniel in 2010 (Atha et al. 2010). Like many immigrants, the species came to Brooklyn and Queens (around JFK airport) and spread out from there, unnoticed by botanists for sixty years. It can be distinguished from the other nineteen species of smartweed (*Persicaria* spp.) in New York by the hairy lower stems; usually large, sharp-pointed leaves with a large, dark blotch over most of the upper leaf surface and long setae on the leaf margins (2 mm long); and arching racemes that are always kinked, with pink and white flowers. Today it is known from Maine to North Carolina and west to Michigan. Back in its native habitat, the species grows on glacial outwash plains composed of unstable sand, silt, and gravel. True to its nature, here in North America it is almost exclusively found on recently disturbed sandy gravel. Intolerant of competition, it persists for one year, right after disturbance and then vanishes, popping up at the next construction site after the bulldozers finish their work.

Other curiosities encountered along the roadside included seaside goldenrod (*Solidago sempervirens*), a plant that has been spreading along inland, salted roadways, and a couple plants of sideoats grama (*Bouteloua curtipendula*) plants, listed as S2 in NY and previously known from the county, but here suspiciously growing among other grasses possibly planted after roadwork.

Reference

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A species list of the vascular plants is on the next page. In addition, Patricia Butter, Devon Cummings and Kevin Sisco made eighty-three observations of sixty-two species and uploaded them to iNaturalist.



Group photo, left to right: Kevin Sisco, Devon Cummings, Rich Ring, Mei Wu, John Egenes, Daniel Schniedewind, Patricia Butter and Daniel Atha.



Goose Pond Mountain species list 8/27/22.

Ferns and Fern Allies

Asplenium platyneuron, Ebony Spleenwort
Dryopteris marginalis, Marginal Wood Fern
Polypodium virginianum, Rock Polypody
Woodsia obtusa, Blunt-lobe Cliff Fern

Grasses, Sedges and Rushes

Agrostis perennans, Autumn Bent
Anthoxanthum odoratum, Sweet Vernal Grass
Avenella flexuosa, Wavy Hairgrass
Bouteloua curtipendula var. *curtipendula*, Side Oats Grama (S2) roadside
Brachyelytrum erectum, Long-awned Wood Grass
Bromus inermis, Smooth Brome
Bromus pubescens, Hairy Woodland Brome
Carex muehlenbergii, Muhlenberg's Sedge, not previously recorded in Orange County
Carex pallescens, Pale Sedge
Carex pennsylvanica, Pennsylvania Sedge
Carex platyphylla, Broad Leaved Sedge
Carex typhina, Cattail Sedge (S2) not previously recorded in Orange County
Cinna arundinacea, Wood Reedgrass
Cyperus strigosus, Straw-colored Flatsedge, roadside
Danthonia spicata, Poverty Grass
Dichanthelium boscii, Bosc's Rosette Grass
Elymus canadensis, Canada Wild Rye
Elymus hystrix, Bottlebrush Grass
Juncus secundus, Secund Rush
Juncus tenuis, Path Rush, abundant
Leersia virginica, White Cut Grass
Microstegium vimineum, Japanese Stilt Grass, abundant
Muhlenbergia schreberi, Nimblewill Muhly
Panicum capillare, Common Witch Grass, possibly planted along roadside
Scirpus polyphyllus, Leafy Bulrush

Shrubs, Vines and Trees
Acer negundo, Box Elder, roadside
Alnus glutinosa, European Alder, next to stream
Amelanchier spp., Service Berry
Betula spp., Birch
Carpinus caroliniana, American Hornbeam
Carya glabra, Pignut Hickory
Carya ovata, Shagbark Hickory
Fagus grandifolia, American Beech
Frangula alnus, Glossy Buckthorn, roadside
Fraxinus spp. deceased
Juniperus virginiana, Eastern Red Cedar
Mitchella repens, Partridge Berry
Quercus alba, White Oak
Quercus montana, Chestnut Oak
Quercus rubra, Red Oak
Rhus typhina, Staghorn Sumac
Rosa carolina, Carolina Rose
Rubus occidentalis, Black Raspberry

Smilax rotundifolia, Common Greenbriar
Toxicodendron radicans, Poison Ivy
Tsuga canadensis, Eastern Hemlock
Vaccinium pallidum, Hillside Blueberry
Vaccinium stamineum, Deerberry
Vincetoxicum nigrum, Black Swallowwort

Herbs

Agalinis spp. budding, but not in bloom
Achillea millefolium, Common Yarrow
Ambrosia artemisiifolia, Common Ragweed
Antennaria plantaginifolia, Plantain-leaved Pussytoes
Aquilegia canadensis, Wild Columbine
Borodinia laevigata, Smooth Rockcross
Capnoides sempervirens, Rock Harlequin
Chimaphila maculata, Striped Wintergreen
Comandra umbellata ssp. *umbellata*, Bastard Toad Flax
Conopholis americana, Cancer-root
Dianthus armeria, Deptford Pink
Erechtites hieraciifolius var. *hieraciifolius* Pilewort
Erigeron canadensis, Horseweed, roadside
Eurybia divaricata, White Wood Aster
Euthamia graminifolia, Flat-topped Goldenrod
Eutrochium spp.
Galium pilosum, Hairy Bedstraw (S4)
Geum canadense, White Avens
Hedeoma pulegioides, American Pennyroyal
Helianthus divaricatus, Woodland Sunflower
Heuchera americana, American Alumroot (S3)
Hypericum gentianoides, Orange Grass
Impatiens capensis, Jewelweed
Lactuca biennis, Tall Blue Lettuce
Lespedeza cuneata, Asian Bush Clover
Lespedeza hirta, Hairy Lespedeza
Lespedeza procumbens, Trailing Bush Clover
Lespedeza violacea, Wand-like Bush Clover
Lespedeza virginica, Slender Bush Clover
Lobelia cardinalis, Cardinal Flower, next to stream
Lobelia inflata, Indian Tobacco
Lotus corniculatus, Bird's-foot Trefoil, roadside
Lysimachia quadrifolia, Whorled Loosestrife
Melilotus albus, White Sweet Clover, roadside
Micranthes virginiensis, Virginia Saxifrage
Mimulus ringens, Allegheny Monkey Flower
Oenothera biennis, Common Evening Primrose
Paronychia canadensis, Forked Nailwort
Penstemon hirsutus, Hairy Beardtongue
Persicaria extremiorientalis, Far-eastern Smartweed, roadside
Persicaria hydropiperoides, Mild Water Pepper, stream
Persicaria punctata, Dotted Smartweed, stream
Persicaria virginiana, Jumpseed
Polygonatum pubescens, Hairy Solomon's Seal
Pontederia cordata, Pickerel Weed, stream
Potentilla canadensis, Dwarf Cinquefoil
Pseudognaphalium obtusifolium, Fragrant Rabbit Tobacco



Goose Pond Mountain List, cont.

- Pycnanthemum incanum*, Hoary Mountain Mint
- Sabulina michauxii*, Rock Sandwort
- Sagittaria latifolia*, Common Arrowhead, stream
- Sanicula* spp.
- Silene vulgaris*, Bladder Campion, roadside
- Solidago bicolor*, Silver Rod
- Solidago odora*, Sweet Goldenrod
- Solidago rugosa*, Rough Goldenrod
- Solidago sempervirens*, Northern Seaside Goldenrod, Roadside, waif
- Symphyotrichum lateriflorum*, Calico Aster
- Symphyotrichum pilosum* var. *pringlei*, Pringle’s Aster
- Symphyotrichum undulatum*, Wavy Leaved Aster
- Verbena urticifolia*, White Vervain
- Veronica officinalis*, Heath Speedwell
- Viola sagittata*, Arrowleaf Violet
- Viola palmata*, Three-lobed Violet, in dry uplands with trilobed leaves



**New York’s Protected Native Plants Act –
The Need for Change**

by Joseph M. McMullen, joymcmullen2@msn.com

Background

New York’s Protected Native Plants Act (ECL Section 9-1503) became effective on September 1, 1974. The law and the associated regulations (6NYCRR Part 193.3) protected an all-encompassing list of plants, many of which were not particularly rare, but were showy species subject to over collection without the landowner’s permission. In time, in New York and throughout the country, definitions were developed to recognize categories of rare species based on the number of known occurrences in a given geographical/political area, like a state, or throughout the species’s range. Definitions for status categories, such as endangered, threatened, and rare, were fleshed out and refined. Although the national Endangered Species Act was passed in 1969, what species would be protected and specifically how they would be defined did not come until later.

Some years after the NY Protected Plant Act was enacted, it was modified to recognize four status categories of species for listing: endangered,

threatened, rare, and exploitably vulnerable. In 1990, for the first time, a list of species in each of these categories was provided in NY regulations. The list was based on the rare plant status list from Steve Clemants of the NY Natural Heritage Program and the Rare Plants of New York State (Mitchell and Sheviak 1981). Although in 1990 it was stated that “it is anticipated that the regulation will be changed every two or three years to reflect new information on the status of the plants”, species listed as endangered, threatened, or rare in the regulations were only modified a couple times since then, with the most recent change occurring in 2012. Therein lays the problem.

The Problem

The widely spaced and sporadic nature of updates to the plant protection regulations creates a problem. Any change in the rarity status of a plant species or a new discovery in the state since 2012 is not reflected in the current protected plant regulations. The past system of making formal changes every ten years or so is not an acceptable way to recognize and protect our imperiled species.

As an example, there have been several species of ladies’ tresses orchids (*Spiranthes* spp.) discovered in New York in the last six years or so. Although these species are recognized by the NY Natural Heritage Program as endangered, they are not listed as such in the regulations.

A Possible Solution

A possible solution to this problem was discussed at the 2022 NY Natural Heritage Program’s annual rare plant status meeting held on November 16, 2022. The Heritage Program updates its list of rare plant species annually. A simple potential solution is to incorporate by reference the current plant status list of the NY Natural Heritage Program into the protected plant regulation. Such a modification would automatically update the state list with any additions or changes in species’ statuses made by the Heritage Program. The change would work to keep the regulation list updated every year going forward.

Legal Protection Afforded by the Act

Plants belong to the landowner. Our laws in the U.S. are based on English law. Under old English



law, the animals belonged to the king, but the plants belonged to the landowner. Our laws follow the same basic tenet, with animals belonging to the State, and plants being the property of the landowner. As a result, there are specific federal and state laws protecting and regulating the taking or possession of animals, but, with one exception, plant protection laws are tempered by the rights of landowners.

Under NY protected plant regulations, you cannot remove any listed species (endangered, threatened, rare, or exploitably vulnerable) without the permission of the landowner. There is a stipulated fine of \$25 per plant or plant part for illegal removal.

Protected Native Plants

Effective September 1, 1974, no one may knowingly pick, pluck, sever, remove or carry away, without the consent of the owner thereof, any protected plant. Violations of the law are punishable by fines of up to \$25 each (Environmental Conservation Law § 9-1503). The following are native plants which shall be protected pursuant to the above law and state regulation (NYCRR § 193.3). Such list shall apply statewide.

The one exception is the regulation of American ginseng (*Panax quinquefolius*). American ginseng is a species that is traded internationally. The US and NY are Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This treaty agreement ensures that international trade does not threaten the existence of listed species in the wild. American ginseng is listed in Appendix II, which protects species that are not currently at risk of extinction, but could be threatened without trade controls. For a listed species to be exported, the agreement requires a state to have regulations that govern its collection and possession. In NY, although American ginseng is afforded protection under the state Act as an exploitably vulnerable species, its collection is also regulated under ECL 9-1503.4 and associated regulations 6NYCRR Parts 193.4 to 193.8. In addition to the landowner's permission requirement, the size of plants and time of year of collection and possession are regulated.



American ginseng (*Panax quinquefolius*) is afforded additional protection under the CITES treaty requirements.

Additional Protection for Endangered or Threatened Species

Although the amount of legal protection afforded to plant species by the Act can be questioned, it should



be noted that species listed as endangered or threatened are provided further protection under other state environmental conservation laws through permitting. For example, the issuance of an environmental permit, such as a wetlands permit, requires the assurance that state listed endangered or threatened species are not affected. These listed species can also be a major consideration under State Environmental Quality Review Act compliance. Without listing, many of our new discoveries in the state, like the recent *Spiranthes* species, would not be afforded this protection or consideration in environmental permitting. For this reason, it is important for the formal list of endangered or threatened species to be up to date.

Changes to Exploitably Vulnerable Species

If the state is going to undergo the process of changing the protected plant regulation definitions, there are two changes that should also be made in the exploitably vulnerable category. The first is the addition of wild leeks or ramps (*Allium tricoccum*) to the list of exploitably vulnerable species. It is not currently so listed, and its over collection is decimating populations in some areas. It is truly exploitably vulnerable and should be listed.



Wild leek (*Allium tricoccum*) is subject to over-collection, but is not currently listed as exploitably vulnerable in the regulations.

The second change that should be made is to the basic definition of an exploitably vulnerable species, which is currently defined as: “*native plants likely to become threatened in the near future throughout all or a portion of their ranges within the state if causal factors continue unchecked.*” As I have previously commented (McMullen 2001 and 2006), this definition is confusing to the public because it infers that the species listed as exploitably vulnerable are also rare. Some of the plant species in this category are among the most common in the state. They can be subject to indiscriminate collection and should be listed to protect the species and the rights of the landowner, but the definition should be changed to clarify their status. The problem in making this change is that the definition of this category is in the law itself, which is difficult to modify. An alternative solution might be to add a modifying statement explaining the nature of species listed under the exploitably vulnerable category in the regulations.

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Note on an exciting botanical find

by Anne Johnson

Many people think of rare or endangered plants as only occurring in pristine habitats, untouched by the greedy and clumsy hands of humans, but as botanists know, there can be some very special and interesting plants that occur in very disturbed habitats. I encountered one such example this past year.

I had been keeping an eye out for many-headed sedge (*Carex sychnocephala*) since 1985 or so when I had a little job checking historic plant locations in our county for the NY Natural Heritage Program. *C. sychnocephala* is in section Cyperoideae and is distinguished by its long bracts at the base of the inflorescence. I had always imagined it would look similar to *C. tribuloides* or *C. scoparia* but with a long bract originating at the base of the flowers. There had been two historic collections in the county, one from 1914 (the label reads “swamp, Canton”) and one from 1935 (with a label reading “marly soil along St. Lawrence River near Waddington”), but no reports since then, or any recent ones in the state at all.

My encounter with this sedge occurred one day when I was standing in a highly disturbed and recently drawn-down wetland waiting for my dog to make her way back to me. I glanced down and right at my feet was what had to be *C. sychnocephala*. I think my eyes really did “pop open.” It took me a moment to believe what I was seeing, but there was nothing else it could be (and it did not look anything like either *C. tribuloides* or *C. scoparia*). It was an exciting day!

How long had it been lurking in the soil in that particular wetland area? It was a spot I had visited quite often over the years and I am fairly certain I would not have missed it if it was there. The field it was in had been inundated sporadically by spillage from a beaver dam, and it had not been planted in that wet spot for a few years, though tractor ruts remained evident from previous years. There was a particularly large inundation this year and the vegetation was slow to return, and when it did, one of its components was this attractive sedge!

If this is a typical habitat for this plant, then people doing wetland delineation work in the northern portions of the state in similarly altered and disturbed places could conceivably come across this plant, but otherwise it is not the kind of place botanists normally choose to frequent. In any case, if you are in such a habitat, keep an eye out!



Carex sychnocephala inflorescence (left) and a view of its habitat (right) as seen on 6/17/2022. Photos by Steven Daniel.

Editor’s Note: If you have a story of a plant growing in an interesting spot or a similar exciting find, we’d love to include it in the newsletter, so please consider sending it to us!



President's Message

by Dan Spada

These are exciting times for the New York Flora Association and for the native plants of New York State. NYFA is currently developing our first Strategic Plan. The Strategic Plan will help identify new approaches and guide our actions regarding our plant knowledge base into the future. NYFA Board member David Werier is hard at work and making great progress on the monumental and momentous Flora of New York State. We expect more robust collaborative communication and educational programming with our regional botanical society partners. Check out our workshop and field trips for 2023; we encourage you and your friends to take advantage of these events, see them at <https://nyflora.org/events-directory/>.

Don't hesitate to drop me a line at nyfa@nyflora.org with questions, comments and suggestions regarding NYFA's role in safeguarding the native plants of New York. Here's hoping you all have a good field season!



Upcoming 2023 Field Trips and Workshops

Check out our workshop and field trip schedule for 2023 at <https://nyflora.org/events-directory/>. It is quite a full list this year: we're offering three workshops, ten Learn 10's, and twenty-three field trips in twenty-seven counties and we're partnering with eight regional botanical societies or nature preserves. Space is limited so don't delay - some trips and workshops have already filled.



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