NYFA New York Flora Association

Mitchelliana

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Editor's Note: Hopefully many of you have been able to take advantage of a workshop or trip (or two) this year. They have been very popular and well attended. In this issue we have an article of historic interest written by Steve Young, a follow-up to last year's trout lily article by Tom Yancy, some trip reports, and some notes (be sure to take a look at the president's message and the Annual Meeting announcement on page 18). If you have some botanical items that you would be willing to share for the newsletter, please let us know; we are always on the look-out for interesting articles and stories to include here.

Articles Inside:

New York Flora Association

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Botany Meets Geology in Rand Tract Park in Syracuse

by Fred Haynes

In western New York State the Paleozoic sedimentary rocks dip gently (generally 2-3 degrees) to the south. As a result, where glacial deposits do not cover them, the more resistant limestone and dolomite units crop out, often in linear ridges with steep topography. The Devonian age Onondaga Limestone (~390 million years old) is one such unit, forming the caprock to what is referred to as the Onondaga Escarpment which surfaces periodically along an east to west belt from southern Ontario to Albany.

Much of the topography in Syracuse, New York is a result of Onondaga Creek eroding a channel through the multiple carbonate units of the Onondaga Limestone into softer units below. Rand Tract Park is a small 100-acre park in south Syracuse where Onondaga Limestone cliffs occupy the western flank of Onondaga Creek Valley. With 1.9 miles of marked trails, this City of Syracuse park is an excellent location for a spring botany visit.

On May 4, David Dubois, land manager for the Baltimore Woods Nature Center in Marcellus, NY led about a dozen NYFA members through the forested portion of the Rand Tract. We entered along the base of the escarpment and walked south through a wet forested woods. Several spring wildflowers were spotted including a great white trillium (*Trillium grandiflora*) with green striped petals caused by the bacterial organism or phytoplasma *Candidatus Phytoplasma pruni*. About a half-mile into the park, we climbed through a break in the escarpment to a ridge partway up the steep hillside. This allowed us to loop back north along a trail some 30-40′ higher in elevation than our point of entry.

On the left, *Trillium grandiflora* with *Candidatus Phytoplasma pruni* and on the right the intricate 10 mm flowers of *Mitella diphylla*.

The return was particularly rewarding botanically as we could investigate flora thriving directly on the limestone outcrops and within weathered cracks. For wildflower enthusiasts, there were plenty; including red columbine (*Aquilegia canadensis*), wild blue phlox (*Phlox divaricata*), two-leaf miterwort (*Mitella diphylla*) and squirrel corn (*Dicentra canadensis*). Sara Stebbins produced the list of over 100 observed species that is published with this report.

For the pteridologists in the group, ferns were abundant throughout the park. In addition to several species of wood fern (*Dryopteris*), there were rock-loving ferns such as fragile fern (*Cystopteris fragilis*), rock polypody (*Polypodium virginianum*) and silvery spleenwort (*Deparia acrostichoides*).

Charlie Ippolito, Raquel Mennella, and David Dubois work to differentiate *Cystopteris tenuis* from *C. fragilis* on the moss-covered limestone. David reports that they "ended up calling it *C. fragilis* after much hemming and hawing".

Everything on the forest floor was green, due mostly to the ubiquitous presence of calcium loving mosses covering every block of limestone. I do wish I knew the mosses better, but I think my favorite was the rose moss (*Rhodobryum ontariense*). Several sedges were identified, including Carey's sedge (*Carex careyana*), a New York S2 species. But not everything was green: we did spot several eastern half-free morels (*Morchella punctipes*) along the ridgeline. I believe the Rand Tract Park would be well worth visits in different seasons and I hope to return, perhaps in autumn.

Rhodobryum ontariense (rose moss) and *Morchella punctipes* (eastern half-free morel).

The happy group at the Rand Tract.

Rand Tract plant list, 5/4/25, an asterisk denotes a non-native.

Acer nigrum, black maple
*Acer platanoides, Norway maple
Acer saccharum, sugar maple
Actaea rubra, red baneberry
Adiantum pedatum, maidenhair fern
*Aegopodium podagraria, goutweed
*Alliaria petiolata, garlic mustard
Allium tricoccum var. tricoccum, wild leek
*Allium vineale, wild garlic
Aralia nudicaulis, sarsaparilla
Arisaema triphyllum ssp. triphyllum, common jack-in-the-pulpit
Asarum canadense, wild ginger
*Berberis thunbergii, Japanese barberry
*Berberis vulgaris, common barberry
Brachyelytrum erectum, bearded shorthusk
*Brachypodium sylvaticum ssp. sylvaticum, slender false brome
Cardamine concatenata, cut-leaf toothwort
Cardamine diphylla, two-leaf toothwort
Carex albursina, white bear sedge
Carex careyana, Carey's sedge
Carex plantaginea, plantain-leaved sedge
*Carex sylvatica, European woodland sedge
Carpinus caroliniana ssp. virginiana, musclewood
Carya cordiformis, bitternut hickory
Carya glabra, pignut hickory
Carya ovata var. ovata, shagbark hickory
Caulophyllum giganteum, early blue cohosh
*Celastrus orbiculatus, Asian bittersweet
Celtis occidentalis, northern hackberry
*Chelidonium majus, celandine
Claytonia caroliniana, Carolina spring beauty
Collinsonia canadensis, horse-balm
*Convallaria majalis ssp. majalis, Eurasian lily-of-the-valley
Cornus alternifolia, alternate-leaved dogwood
*Crataegus monogyna var. monogyna, one-seeded hawthorn
Cystopteris bulbifera, bulblet fern
Cystopteris fragilis, fragile fern
Deparia acrostichoides, silvery spleenwort
Dicentra canadensis, squirrel-corn
Dryopteris goldiana, Goldie's woodfern
Dryopteris marginalis, marginal woodfern
*Elaeagnus umbellata, autumn olive
Erythronium americanum ssp. americanum, trout lily
Eurybia divaricata, white wood aster
Fraxinus americana, white ash
Galium aparine, cleavers
Geranium maculatum, wild geranium
Geranium robertianum, herb Robert
Geum canadense, white avens
Hackelia virginiana, Virginia stickseed
Hepatica acutiloba, sharp-lobed hepatica
*Hesperis matronalis, dame's rocket
Hydrophyllum virginiana, Virginia waterleaf
*Impatiens sp., jewelweed
Juglans cinerea, butternut
Laportea canadensis, wood nettle
*Leonurus cardiaca, motherwort
*Ligustrum sp., privet
Lindera benzoin, spicebush
Liriodendron tulipifera, tulip tree
*Lonicera morrowii, Morrow's honeysuckle
Maianthemum racemosum, false Solomon's-seal
Mitella diphylla, two-leaf miterwort
Nabalus albus, white rattlesnake root
Nabalus trifoliatus, three-leaved rattlesnake root
Osmorhiza claytonii, sweet cicely
Ostrya virginiana, hop hornbeam
Parthenocissus sp., woodbine, Virginia creeper
Phlox divaricata ssp. divaricata, wild blue phlox
Phryma leptostachya, lopseed
Poa alsodes, grove bluegrass
Podophyllum peltatum, mayapple
Polygonatum pubescens, downy Solomon's-seal

Rand Tract plant list, cont.
Polymnia canadensis, leafcup
Polypodium virginianum, rock polypody
Polystichum acrostichoides, Christmas fern
Populus deltoides ssp. deltoides, eastern cottonwood
*Potentilla indica, mock strawberry
*Prunus avium, bird cherry
Prunus serotina var. serotina, black cherry
Prunus virginiana var. virginiana, choke cherry
Quercus alba, white oak
Quercus rubra, red oak
Ranunculus abortivus, kidney-leaved crowfoot
Ranunculus recurvatus, hooked crowfoot
*Rhamnus cathartica, buckthorn
Ribes cynosbati, prickly gooseberry
*Rosa multiflora, multiflora rose
Rubus occidentalis, black raspberry
Sambucus racemosa, red elderberry
Sanguinaria canadensis, bloodroot
*Solanum dulcamara, deadly nightshade
Solidago caesia var. caesia, wreath goldenrod
Solidago flexicaulis, zigzag goldenrod
Staphylea trifolia, bladdernut
*Taraxacum officinale, dandelion
Taxus canadensis, Canada yew
Thalictrum dioicum, early meadow-rue
Tiarella cordifolia, foamflower
Tilia americana var. americana, American basswood
Toxicodendron radicans, poison ivy
Trillium grandiflorum, white trillium
Tsuga canadensis, eastern hemlock
Ulmus rubra, slippery elm
Ulmus thomasii, rock elm
Uvularia grandiflora, large-flowered bellwort
*Viburnum opulus var. opulus, highbush cranberry
*Vinca minor, periwinkle
Viola canadensis var. canadensis, Canada violet
*Viola odorata, English violet
Viola pubescens var. pubescens, downy yellow violet
Viola rostrata, longspur violet
Viola sororia, common violet
Vitis riparia, riverbank grape

Sphagnum Workshop at Zurich Bog, Wayne County

by Charlie Ippolito

We began the day in the Zurich Bog parking lot, where everyone gathered for introductions. Our leaders, Tom Phillips & Jon Shaw, gave an overview of the day's objectives and what we could expect to see. We also learned a little bit about the land use history—during the early-to-mid 20th century, portions of Zurich Bog were disturbed by peat mining. At that time, peat was harvested for use as a soil amendment and possibly as fuel. This activity altered the hydrology and topography of parts of the bog, creating some of the distinct corridors, or “rooms”, still visible today. These rooms can be described as peat-filled depressions bordered by shrubs and are what was left after the peat harvesting and natural succession.

In 1957, Zurich Bog became one of the first National Natural Landmarks designated in the U.S. thanks to efforts led by The Nature Conservancy and local advocates. The landmark designation recognized the bog's ecological value and rare flora, including numerous sphagnum moss species and carnivorous plants. Today, Zurich Bog is owned and managed primarily by The Bergen Swamp Preservation Society, a private conservation organization. It is maintained for scientific study, educational use, and passive recreation such as guided hikes. Ongoing efforts aim to protect its sensitive habitats from invasive species, hydrological changes, and human disturbance

From the parking lot, we made our way to the interior of the bog. This was our first encounter with *Sphagnum palustre*, and our introduction to the genus in the field. It was here that we began learning the fundamentals of moss identification: 1) the different sphagnum sections, 2) the basic anatomy of sphagnum mosses, 3) common species found in woodlands, 4) grouping techniques based on morphology, 5) field identification tips using hand lenses, 6) growth forms and site preferences, and 7) the ecological roles of sphagnum in peat formation and water retention.

Our next stop was the first of several peatland rooms. These rooms were composed of open mats of sphagnum moss bordered by shrubby corridors of highbush blueberry, huckleberry, pink azalea, and bayberry. Common herbs found in these mats were pink lady slipper, grass pinks, and cranberry. Here, we were introduced to more sphagnum species. These rooms offered a fascinating view of the microcosm of bog life. A memorable moment!

After leaving the first room, we entered a hemlock-dominated forest. The cool shade and moisture presented a slightly different environment and we discussed how forested conditions influence moss composition.

Next, we emerged onto a wide bog mat filled with pitcher plants and other acidic adapted plants. Here we encountered more *Sphagnum* on the hummocks.

We continued on through additional bog rooms, each with its own character. One room in particular featured a nice selection of plants including tufted loosestrife, shrubby cinquefoil, bogbean (with unusually late flowers) and various sedges. Each new room highlighted a different stage or condition of peatland development, shaped by subtle variations in water, disturbance, and plant succession.

List of Sphagnum species encountered:

Sphagnum angustifolium
Sphagnum capillifolium
Sphagnum divinum
Sphagnum fimbriatum
Sphagnum flexuosum
Sphagnum fuscum
Sphagnum girgensohnii
Sphagnum palustre
Sphagnum papillosum
Sphagnum rubellum
Sphagnum squarrosum
Sphagnum subsecundum
Sphagnum teres

The First Plant Collections and A Checklist of Rare Species Collections on Whiteface Mountain, Essex County, New York.

by Steve Young, Botanist, Botany Visible (botanyvisible@gmail.com)

Introduction

My first trip up Whiteface Mountain was in 1972 when I was a student at SUNY Environmental Science and Forestry and we had some time off from summer forestry camp at Pack Forest in Warrensburg. It was the year the Whiteface fire tower that had stood since 1919 was dismantled. Little did I know then that I would learn the mountain's vegetation, with SUNY ESF professor Dr. Ed Ketchledge as my guide, after I became the chief botanist for the New York Natural Heritage Program and began helping the summit stewards with plant identification (Figure 1). After Dr. Ketchledge died, I took over the updating of the plant list for the top of the mountain that he had started many years before I came along. In recent years I have been leading annual trips to the top (above the Lake Placid turn) for the New York Flora Association to see if we can find new species - and we usually do. In the last few years, I became interested in the history of plant collecting and botanizing on the mountain and wondered who the first people were to summit the mountain and make the botanical collections that still exist in herbaria.

Figure 1. A photo I took of Ed Ketchledge and the summit stewards on Whiteface in 2001.

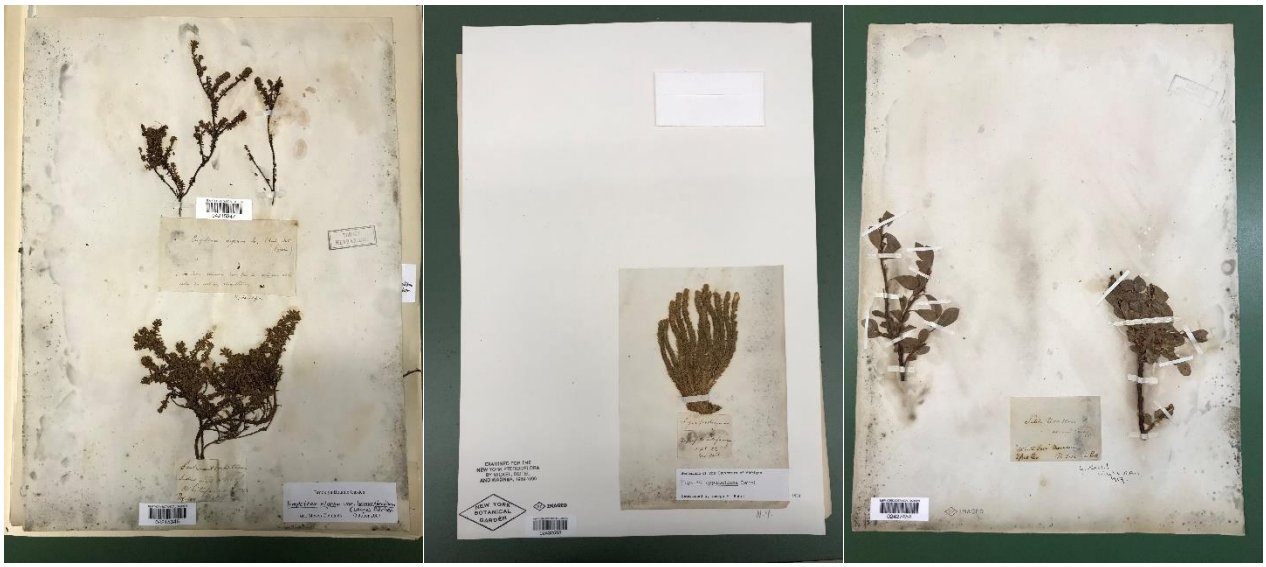
The first accounts of Whiteface ascents

Tim Tefft, in his account of the early history of Whiteface Mountain (2011), mentions that Native Americans were familiar with the mountain and that it was one of the first tourist mountains in the High Peaks. There were many names chiseled on the summit rocks from the early 1800s and a trail for horses was opened as early as 1870. Spafford's 1813 Gazetteer of the State of New York mentions seeing Montreal from the top, so someone was there before then (Spafford 1813), but there is no record of the first European to ascend. The mountain was the first of the high peaks to have an established trail to the summit, around 1860, but the first scientific expeditions were earlier (Tefft 2011).

The first scientific and botanical expeditions

On September 20, 1836, Ebenezer Emmons and James Hall of the New York State Geological Survey ascended Whiteface to study the elevation and geology of the mountain. This was the first official scientific ascent (Tefft 2011). Emmons was 37 years old and Hall, his assistant at the time, had just turned 25. During their visit Hall collected a few plants that are now deposited in the Steere herbarium of the New York

Botanical Garden, these being the first collections from the mountain. The plants were *Empetrum nigrum*, black crowberry, *Huperzia appressa*, mountain firmoss, and *Salix uva-ursi*, bearberry willow. The *Huperzia* has a date of September 22nd which seems to be an error (Figures 2, 3, and 4). Emmons wrote in his 1842 *Geology of the Second District* that the mountain had "a greater extent of surface upon its top than any other mountain of the northern counties; and hence, as a botanical field, it would exceed the other summits for yielding a harvest of alpine plants." (Tefft 2011).



Figures 2, 3, and 4. Specimens by Hall, from left to right: *Empetrum nigrum*, *Huperzia appressa*, and *Salix uva-ursi*.

The next recorded ascent was in 1839 when a botanist from Montreal, W. F. MacRae, visited the mountain with one of his professors when he was a student at the University of Vermont (MacRae 1839). His collection of *Carex bigelowii*, Bigelow's sedge, (without date) is in the University of Massachusetts Amherst herbarium (Figure 5) but I could find no other Whiteface specimens from him. In John Torrey's Flora of New York State (1843), he documents *Nabalus boottii*, Boott's rattlesnake root, as occurring on Whiteface based on a report by MacRae, so they must have corresponded about the trip.

Figure 5. *Carex bigelowii* specimen by MacRae.

The third recorded botanical expedition was undertaken by Dr. Charles C. Parry. Dr. Parry was born in England but moved to Washington County, New York with his parents in 1832 when he was nine. He studied medicine and botany under John Torrey, Asa Gray and George Engelmann (Wikipedia 2025). He moved to Davenport, Iowa in 1846 where he turned exclusively to botany and was known for his botanical discoveries in the western United States where many plants are named after him. In July 1851 he made a trip back to Washington County to visit his family. On July 27th, 1851, he wrote a letter to John Torrey about a short botanical trip he made to Essex County and Whiteface (Biodiversity Heritage Library 2025). Unfortunately, he does not mention the specific date he went there, and his specimens do not have a day, only a month, on the labels. Also unfortunately, all his specimens say they were collected in August 1851 but that is in error. His letter proves he went in July.

This is what he wrote to Torrey about what he saw: "Being several hundred feet lower than Mount Marcy, its exclusive alpine character was less apparent and in warmer crevices many of the lowland plants had found a resting place. Thus, we had at the very summit *Cornus canadensis*, *Ledum palustre* (*Rhododendron groenlandicum*), *Rubus strigosus* (*Rubus idaeus* ssp. *strigosus*), *Amelanchier canadensis* (probably *A. bartramiana*), *Ribes rostratum* (probably *Ribes glandulosum*), and even in one place I noticed a dandelion. The more inclusive alpine plants have been mostly before referred to this locality *Arenaria groenlandica* (*Mononeuria groenlandica*), *Potentilla tridentata* (*Sibbaldia tridentata*), *Empetrum nigrum*, *Lalia cutleri* (quite abundant) (*Solidago leiocarpa*), *Kalmia glauca* (*Andromeda polifolia* var. *latifolia*), *Nabalus boottii*, *Solidago virga-aurea* (probably *Solidago macrophylla* since *virga-aurea* is a European species), a few grasses and carices. On the ascent I procured a fine flowering specimen of *Platanthera obtusa* (probably *Platanthera obtusata*). A recent fire that swept over the summit has obscured most of the mosses and lichens, but I have selected a few for Mr. Tuckerman and will bring any you may desire down with me. On my way back I followed down the Ausable River to its mouth and thence up the lake home. Where the two branches unite and thence form the boundary between Essex and Clinton County, I noticed quite an abundant growth of *Pinus resinosa*. In fact, I imagine more than half the timber sawn on that stream is of that character. In your state flora I observe you notice but one locality for the species in New York."

Exploring herbarium specimens online I could locate two rare species that Parry collected during his trip, *Carex bigelowii* ssp. *bigelowii*, and *Salix uva-ursi* (Figures 6, 7). There is also a documented specimen of *Agrostis mertensii* from New York Botanical Garden that I have not seen. A specimen containing two common *Carex* species, *Carex novae-angliae* and *Carex brunnescens* are also at the New York Botanical Garden Figure 8).

Figures 6 and 7. Specimens collected by Parry. Left: *Carex bigelowii*, and Right: *Salix uva-ursi*.

8. *Carex specimens* by Parry.

Other botanical collections and rare species

After 1851, there were many more botanical expeditions to the top of Whiteface Mountain that included famous botanists like Nathaniel Lord Britton from the New York Botanical Garden, Willard Rowlee, Liberty Hyde Bailey and Walter Muenscher from Cornell, John Redfield, Charles Sumner Williamson, and Samuel Smyth VanPelt from the Philadelphia Academy of Natural Sciences, and Albert Spear Hitchcock from the Smithsonian (who was fond of making duplicates). Botanists from the state museum herbarium included Charles Peck, Stanley Smith, Eugene Ogden, Richard Mitchell, Norton Miller, and Gordon Tucker. The botanists were interested in the rare alpine plants at the top of the mountain and many collections were made of them. When the New York Natural Heritage Program was established in 1985, the presence, abundance and quality of the occurrences of the rare plants were documented over time by botanists Robert Zaremba and me, and continue today with Richard Ring and Tim Howard. Many amateur and other professional botanists have also contributed information about the rare plants, especially with iNaturalist. Below I have listed the collections that were made of the rare plants over time that I have found online in the Mid-Atlantic and Midwestern consortiums and those I have seen in herbaria in New York State. Fortunately, all of these species have had sufficient numbers of plants to withstand the number of collections that have been made from 1836 to 2013 and almost all collecting stopped after the 1990s. The advent of iNaturalist has made it possible to study these plants in the future without taking any more specimens.

Specimens of S1-S2 rare species on Whiteface Mountain

State Botanist Charles Peck only put the month on his labels, but he collected plants for the state museum between 1866 and 1913. I split the difference and designated his collection year as 1890 for sorting. I could not find any information about when he visited Whiteface Mountain except for one specimen of *Carex scirpoidea* at the Buffalo Museum dated 1867. More research at the state museum might reveal more dates.

The citation order is by Collector (Collection Number), then Year Collected, and Herbarium Code. Herbarium codes are: NY=NY Botanical Garden; NYS=NYS Museum; CU=Cornell University; PH=Philadelphia Academy of Natural Sciences; BUF=Buffalo Museum of Natural History; BRU=Brown University; MASS=University of Massachusetts Amherst; CONN=University of Connecticut; SRYF=SUNY ESF; ACAD=Acadia University; QFA=Universite Laval; GH=Harvard University; MO=Missouri Botanic Garden; F=Field Museum; SIM=Staten Island Museum; USF=University of South Florida; CMN=Canadian Museum of Nature; KHD=Denver Botanic Gardens.

Agrostis mertensii – S2
northern bent
Parry, C.C. 1851. NY.
Redfield, J.H. (s.n.). 1870. NY.
Peck, C.H. (s.n.). July. NYS.
Britton, N.L. (s.n.). 1894. NY.
Rowlee, W.W. et al. (s.n.). 1899. CU.
Rowlee, W.W. et al. (s.n.). 1899. NY.
Vanpelt, S.S. (s.n.). 1906. PH.
Hitchcock, A.S. (442). 1917. NY.
Hitchcock, A.S. (442). 1917. MO.
Hitchcock, A.S. (442). 1917. CU.
Hitchcock, A.S. (442). 1917. PH.
Hitchcock, A.S. (442). 1917. F.
Hitchcock, A.S. (442). 1917. USF.
Smith, S.J. and P.F. Fendt (22996). 1957. NYS.
Breisch, A. (s.n.). 1967. NYS.
Tucker, G.C. and R.S. Mitchell (10947). 1995. NYS.
Young, S.M. (2943). 2013. NYS.

Anthoxanthum monticola ssp. *monticola* – S2
alpine sweetgrass
Redfield, J.H. (s.n.). 1870. NY.
Peck, C.H. (s.n.). July. NY.
Rowlee, W.W. (s.n.). 1899. CU.
Rowlee, W.W. (s.n.). 1899. NY.
Williamson, C.S. (s.n.). 1906. PH.
Hitchcock, A.S. (s.n.). 1917. NY.
Hitchcock, A.S. (s.n.). 1917. PH.
Hitchcock, A.S. (438). 1917. MO.
Hitchcock, A.S. (438). 1917. USF.
Hitchcock, A.S. (438). 1917. GH.
Smith, S.J. and J.D. Dwyer (10162). 1951. NYS.
Breisch, A. (s.n.). 1967. NYS.
Darbyshire, S.J. (1326). 1981. CMN.
Terrell, E.E. and C. Burch (5109). 1986. NYS.
Zaremba, R.E. (9179). 1992. NYS.

Carex bigelowii ssp. *bigelowii* – S2
Bigelow's sedge
MacRae, W.F. (s.n.). n.d. MASS.
Parry, C.C. (s.n.). 1851. NY.
Peck, C.H. (s.n.). July. NYS.
Vanpelt, S.S. (s.n.). 1906. PH.
Muenscher, W.C. et al. (244). 1929. CU.
Zaremba, R.E. (9178). 1992. NYS.
Young, S.M. (2066). 1999. NYS.
Oldham, M. (27453). 2002. MICH.

Carex scirpoidea ssp. *scirpoidea* – S1
Canadian single spike sedge
Peck, C.H. (s.n.). 1867. BUF.
Peck, C.H. (s.n.). July. NYS.
Peck, C.H. (s.n.). August. NYS.
Peck, C.H. (s.n.). n.d. BRU.
Zaremba, R.E. (9164). 1992. NYS.
Zaremba, R.E. (9165). 1992. NYS.

Empetrum nigrum – S2
black crowberry
Hall, J. (s.n.) 1836. NY.
Redfield, J.H. (s.n.) 1870. NY.
Rowlee, W.W. et al. (s.n.). 1899. NY.
Larson, G. (70). 1958. KHD.
Breisch, A. (s.n.). 1966. NYS.
Slack, N. (s.n.). 1972. NYS.
Tucker, G.C. and R.S. Mitchell (10942). 1995. NYS.

Nabalus boottii – S1
Boott's rattlesnake root
L. (s.n.). 1862. BUF.
Olmstead, J.C. (s.n.). 1874. CONN.
Rowlee, W.W. et al. (s.n.). 1899. NY.
Rowlee, W.W. et al. (s.n.). 1899. CU.
Rowlee, W.W. et al. (s.n.). 1899. GH.
Peck, C.H. (s.n.). June. NYS.
Peck, C.H. (s.n.). n.d. BUF.
Peck, C.H. (s.n.). July. NYS.
Smith, S.J. and T. Weaver (7697). 1950. NYS.
Smith, S.J. and P.F. Fendt (22987). 1957. NYS.
Dean, J.K. (364). 1979. NYS.

Oreojuncus trifidus – S2
highland rush
Peck, C.H. (s.n.). July. NYS.
Peck, C.H. (s.n.). July. NY.
Brooks, K.L. and S.J. Smith (473). 1951. NYS.
Smith, S.J. and J.D. Dwyer (10159). 1951. NYS.
Smith, S.J. and P.F. Fendt (22990). 1957. NYS.
Breisch, A. (s.n.). 1967. NYS.
Zaremba, R.E. (9166). 1992. NYS.

Pyrola minor – S1
lesser shinleaf
Smith, S.J. and N. Miller (31514). 1961. NYS.
Smith, S.J. et al. (38627). 1965. NYS.
Smith, S.J. et al. (40395). 1966. NYS.
Smith, S.J. et al. (49607). 1973. NYS.
Darke, F.P. (9239). 1984. PH.
Darke, F.P. (9240). 1984. PH.
Young, S.M. (1858). 1997. NYS.
Miller, N. (12476). 1998. NYS.
Young, S.M. (2074a). 1999. NYS.

Salix uva-ursi – S2
bearberry willow
Hall, J. (s.n.) 1836. NY.
Parry, C.C. (s.n.). 1851. NY.
Rowlee, W.W. et al. (s.n.). 1899. CU.
Rowlee, W.W. et al. (s.n.). 1899. NY.
Vanpelt, S.S. (s.n.). 1906. PH.
Peck, C.H. (s.n.). n.d. NYS.
Muenscher, W.C. et al. (343). 1929. CU.
Christ, J.H. (17126). 1947. NY.
Smith, S.J. and T. Weaver (7698). 1950. NYS.

Smith, S.J. and E.C. Ogden (10154). 1951. NYS.
Smith, S.J. and P.F. Fendt (22988). 1957. NYS.
Breisch, A. (s.n.). 1966. NYS.

Solidago leiocarpa – S2
alpine goldenrod
Britton, N.L. (s.n.). 1894. NY.
Leng, C.W. (s.n.). 1894. SIM.
Rowlee, W.W. et al. (s.n.). 1899. NY.
Rowlee, W.W. et al. (s.n.). 1899. CU.
Rowlee, W.W. et al. (s.n.). 1899. NYS.
Brown, H.P. (s.n.). 1915. SYRF.
Johnson, F.W. (1619). 1918. NYS.
Dobbin, F. (s.n.). 1936. NYS.
Bailey, L.H. (s.n.). 1938. CU.
Pruski, J. and J. Bietel (s.n.). 1986. NY.

Spinulum canadense – S2
northern bristly clubmoss
Smith, S.J. et al. (27394). 1958. NYS.
Smith, S.J. and D.J. Starck. (52945). 1976. NYS.
Zaremba, R.E. (9945). 1992. NYS.

Trichophorum cespitosum ssp. *cespitosum* – S2
Deer's Hair Club Sedge
Peck, C.H. (s.n.). July. NYS.
Vanpelt, S.S. (s.n.). 1906. PH.
Zaremba, R.E. (9163). 1992. NYS.
Zaremba, R.E. (9645). 1993. NYS.

Vaccinium boreale – S2
northern lowbush blueberry
Peck, C.H. (s.n.). August. NYS.
Vander Kloet, S.P. (67881). n.d. ACAD.
Gauthier, R. (96-074). 1996. QFA.

References

Biodiversity Heritage Library Website. C.C. Parry and John Torrey correspondence, 1846-1868. Holding Institution: New York Botanical Garden, LuEsther T. Mertz Library. Website: https://www.biodiversitylibrary.org/item/124339#page/1/mode/1up (accessed June 22, 2025).

MacRae, Willam F. 1839. Letter from W. F. MacRae to Sir William Jackson Hooker; from Montreal, 2 Nov 1839. Eight page letter comprising eight images. Royal Botanic Gardens, Kew, folio 319. Description of the letter at https://plants.jstor.org/stable/10.5555/al.ap.visual.kusdc1245

Spafford, H. G. 1813. A Gazetteer of the State of New York. H. C. Southwick, 94 State Street, Albany, NY.

Tefft, Tim. 2011. Whiteface Mountain in: Heaven Up-h'isted-ness! The History of the Adirondack Forty-Sixers and the High Peaks of the Adirondacks. Adirondack Forty-Sixers, Cadyville, NY.

Wikipedia 2025. Charles Parry. Website: https://en.wikipedia.org/wiki/Charles_Christopher_Parry. Accessed June 22, 2025.

Plant Quiz

Can you name this plant? See page 19 to see if you are correct. Photo by Mike Corey.

Observations on the Co-occurrence of Trout lily and Maple Trees in Western Adirondack Forests

by Tom Yancey

Spring 2025 was been a good season for trout lily (*Erythronium americanum*) in the maple forests of the western Adirondacks. The long, wet spring weather delayed the leafing-out of hardwood trees, allowing sustained light penetration to the now-exposed forest floor, and excellent growing conditions for early spring flowering plants. Trout lily is one of the first plants to appear, poking up through the decaying leaf litter covering the forest floor. They came up in abundance this year and large areas of maple forest had high densities of trout lily plants (Figure 1). Most of the trout lily plants were at the single-leaf growth phase but the two-leaf seed-producing phase plants were present as well (Figure 2). A short survey at a site in the town of Croghan revealed a density of more than 200 leaf-bearing plants per meter square of ground, accompanied by the equally common early growth of Canada mayflower (*Maianthemum canadense*). This high density of trout lily (and Canada mayflower) extended in all directions from the survey site, covering many acres of land. It was also observed that trout lilies commonly grow close to the trunks of sugar maple trees (*Acer saccharum*). Intrigued by this, further observations on the extent of this abundance were made, which revealed that every area of sugar maple-dominated forest growing on sand soil in this region had similar high density of trout lily. This suggested there is a close association of trout lily with stands of maple trees, or they have similar soil/site condition requirements.

Figure 1 (left): High density of trout lily on forest floor, and Figure 2 (right): double-leafed trout lily plant with remnants of flower petals surrounding seed pod. Note the mottled coloring of the leaves; a persistent character that distinguishes the plants throughout the growing season, both photos taken on 25 May 2025.

However, single maple trees growing within patches of eastern hemlock (*Tsuga canadensis*) in the hardwood maple forest were devoid of trout lily—complete absence of, not simply a sparse occurrence. Similarly, no trout lilies were seen in a nearby pine forest although ground conditions there are similar to ground conditions present in the maple forest. The immediate conclusion was that the closed canopy cover of conifers, particularly the dense closed canopy of hemlock, does not allow enough early spring light penetration to allow for trout lily growth, though Canada mayflower was observed growing in all forests.

More detailed observations were made on a small, ovoid stand of old-growth, sugar maple-dominated, closed canopy forest surrounded by cropland (Figure 3), located a mile away from the first site. Similar ground cover and soil conditions were present at the two sites: sparse brush cover and deep sand soils. The results were comparable with the preceding observation and added details about the importance of sunlight and the influence of ground plant cover. Abundant trout lilies were present within the eastern half of the forest stand and on a narrow band along the western margin of the forest. The eastern half corresponds with

forest conditions that allow low angle penetration of early morning sunlight; sunlight shining in between tree trunks (Figure 4) as well as overhead lighting later in the day, conditions favorable for early morning growth of ground plants. Late afternoon sunshine penetration on the western margin of the forest does not provide a similar advantage for trout lily. Although trout lily is very common in most of this small maple stand, it is absent beneath clumps of hemlock trees (dashed line on Figure 3) and from a patch of ground covered with early growing fern (dotted line on Figure 3). Hemlock produces an especially dense, light-excluding cover and clusters of hemlock are always low-light environments at ground level. This type of exclusion was observed in multiple hemlock stands, here and in several other locations. The simple explanation is that sunlight penetration beneath hemlock is too limited to allow trout lily to grow, though other factors may contribute to cause complete exclusion.

Figure 3 (left): Small grove of mature, old-growth maple forest surrounded by crop land. The large trees in the grove have been tapped for maple sap for nearly 150 years. The area within the dashed line is dominated by hemlock trees and contains no trout lily. The ground layer of the area within the dotted line is dominated by early growth ferns and contains no trout lily as of 1 June 2025, photo from Google Earth, 2022. Figure 4 (right): Portion of the eastern edge of the small maple grove showing mature trees with little growth between them, allowing for early morning light penetration. Near center of photo at ground level, glimpses of the western crop field can be seen between the trunks of the large trees, photo 4 June 2025.

The slope of the ground surface is also a factor known to limit or exclude trout lily occurrence. Sloping ground surfaces present difficulties for plants spreading by growth of runners from parent bulbs. Holland (1974) noted an absence of trout lily on slopes greater than 15° on Mont St. Hilaire, Quebec, but here in the western Adirondacks they grow and spread on sand soil slopes up to ~30° under growth of sugar maple trees. Another example of limitation on trout lily growth was observed when noticing that solitary maple trees growing on roadsides lacked trout lily associates. Roadside maple trees almost always have thick grass or brush growing beneath them, extending up to the trunk of the tree. Those well-rooted plants limit the growth of trout lily, a plant known have small to tiny roots at all growth stages (Blodgett, 1910). This instance of trout lily nonoccurrence is readily explained by the inability of the species to survive in the presence of well rooted plants capable of outcompeting them.

Further observations were made to determine if these thoughts on the distribution of trout lily and association with maple growing on sand soils apply to occurrence on rough, irregular ground with boulders and exposed knobs of crystalline rock: ground conditions typical of the Adirondack dome. Those irregular surfaces have greater concentration of conifers, varied composition of forest trees growing among scattered exposure of bedrock, and poor drainage producing wet, water-soaked pockets of ground. Observation showed sparse occurrence of trout lily. Steep slopes and rough ground surfaces were mostly brush-covered, providing growth conditions unfavorable for runner-producing ground plants. Small patches of trout lily were observed around mature maple trees on low sloping ground but not around maples present on rougher, more irregular ground; a great contrast with their occurrence on sand soils. Often, the occurrences of trout lily that were

present in rough terrain were related to new colonization in disturbed soil, commonly on the edges of dirt roads where the species readily colonizes the disturbed ground, but spreading growth is limited.

More data on limitation of trout lily occurrence was obtained by observations on a large plot of sandy soil land with a history of clearance followed by replanting to red pine plantation. The pine on this tract has been harvested and natural reforestation allowed to proceed with hardwood trees growing among the thinning pine. Regrowth consists mostly of maple (both *Acer rubrum* and *A. saccharum*) and American beech (*Fagus grandifolia*). On this plot and on adjacent land that had natural regrowth in varied stages of reforestation after tree clearance, the survey results were surprising. The only land with trout lily associated with sugar maple was the least disturbed portion. On land in the former pine plantation, trout lily was nearly absent and observed only in roadside disturbed soil. The dominant regrowth maple there is young red maple and it lacked trout lily associates. Even the scattered young sugar maple did not have trout lily beside them.

Can trout lily be so specific that it doesn't occur with red maple? It seems improbable. Red maple also produces sweet sap (though less sweet than sugar maple) and where present in sugar bushes they are tapped for sap to produce maple syrup. Early observation had focused on sugar maple. Observation now was showing a possible nonoccurrence with red maple. The qualification is that red maple tends to grow on the rough, irregular ground where trout lily doesn't prosper. It is also not as long-living. A trip onto the forested rocky surface at a higher elevation within an area of exposed crystalline bedrock in the western Adirondack dome finally yielded some observations that provided clarification and some answers. Sugar maple is uncommon on these rocky upland areas and red maple is common, usually growing among conifer trees. Upon encountering nearly flat well-drained ground dominated by red maple trees and having little brush present on ground between the trees, examination revealed that there was trout lily growing among the red maple. The ground there is comparable to that present in sugar maple-dominated sugar bushes on lower elevation land. Again, ground condition is a dominant factor in growth of trout lily. Red maple doesn't often grow to form groves on the well-drained land that trout lily favors—a simple, satisfying resolution to a puzzling question.

Taken together, these field observations reveal much information about the natural occurrences and controls on distribution of trout lily in western Adirondack forests. Field observation has been able to draw some conclusions about distribution pattern over an elevation range of 900 to 1400 feet above sea level. What is the nature of this trout lily-maple association? A visit to many sites with stands of old growth sugar maple within a five-mile radius revealed a strong correlation with maple trees in closed canopy maple forest and nonoccurrence was limited to ground beneath conifers, on brush-covered ground, and on steep slopes. Trout lily distribution seems to spread mostly by the lateral emplacement of runners and is slow to spread into new growth maple forest. Maple trees seem to obtain little if any benefit from the presence of trout lily, so the relationship between them is probably coincidental. However, trout lily prospers in the growing conditions provided by maple and plants occur in great abundance and dense concentrations on the favorable forest floor present under mature maple trees.

Seed dispersal is a conventional method for spreading a species and colonizing newly exposed ground. As a follow-up to the distribution of trout lily, observation was made on the formation of seeds produced by the two-leaf-bearing growth stage (Figure 5). After a couple weeks of growth, trout lily leaves wither and decay and the leaves disappear from view. Flower stems wither but persist longer, during the time when spring curls (above-ground loops of upward-growing runners producing bulblets that arch up out of the ground (Yancey, 2019, 2024)) are present. In the maple woods examined, runners commonly extend along the boundary between mineral soil and leaf litter. Some runners where leaf litter had been stripped away by sheet wash measured 22 cm long. The white color of spring curls makes them easy to notice among the darker colors of the forest floor and are a reliable indicator of the presence of trout lily in late spring after their leaves and flowers have disappeared.

Figure 5 (left): Double-leafed trout lily plant with green leaves and well-formed seed pod laying on forest floor, photo 17 May 2025, and Figure 6 (right): Trout lily seed pod at stage when it lays prostrate on the forest floor and the flower stalk has withered and no longer is nourished by the parent bulb; immature seed pod divided into three compartments, photo 12 June 2025.

Trout lily seed pod production was especially common near a small shed in a woodland area with high density of plants, a place where the ground had been disturbed by road grading and the shed building five years before. Many (40+) seed pod-producing plants were present in two main clusters. It is assumed that the disturbed ground by the shed provided growing conditions favorable for the plants to pass easily through their multi-generational life cycle (Blodgett, 1894, 1910) to the final seed pod production stage. However, even in this area, some plants did not grow beyond the beginning formation of a seed pod before withering and disappearing. All of the remaining stalks with seed pods soon collapsed onto the ground and lay prostrate, leaving seed pods laying directly on the forest floor (Figure 5). In this position they continued to grow to full size as the stalk shriveled. The seed pod remained green for a couple weeks before beginning to turn brown as the seeds matured (Figure 6). Blodgett (1910) stated that seed matures in late June, a date that agrees with occurrence in the western Adirondacks. At this stage of growth, the seeds are then available for small animals to carry and disperse, providing a means for colonization of new grounds (Figures 7 and 8).

Figure 7 (left): Dissected trout lily seed pod with un-ripened seeds, contained in three compartments with two seeds in each compartment, photo 17 June 2025, and Figure 8 (right): dried mature seeds collected from the forest floor, darkened by exposure to air, photo 20 June 2025. Note: Trout lily seeds are often dispersed by ants due to elaiosomes, visible in the picture.

References

Blodgett, F. H., 1894, On the development of the bulb of the adder's tongue; The Botanical Gazette, v. 19(2), p. 61-65, pls. 7-8.

Blodgett, F. H., 1910, The origin and development of bulbs in the genus Erythronium; Botanical Gazette, v. 50, p. 340-373, pl. 8-10.

Holland, P. G., 1974, The growth behavior, ecology, and geography of Erythronium americanum in northeast North America; Canadian Journal of Botany, 52(7), p. 1765-1772.

Yancey, T. 2019. Trout Lily, Erythronium americanum; New York Flora Association Newsletter (Mitchelliana), 30 (2): 1-4.

Yancey, T. E., 2024, Observations and thoughts on the spring curls in a hardwood forest; New York Flora Association Newsletter (Mitchelliana), v. 35(3), p. 1-4.

Tall Tree Trek Trip Report

by Erik Danielson

On the morning of Sunday May 18, an assemblage of botanists filed in and parked along a sleepy stretch of dirt road in the Lake George Wild Forest, just north of Bolton Landing. Looming above this unassuming spot, they had been assured, were the tallest forest canopies to be found in the state of New York. In spite of bugs and the threat of rain, 17 attendees were intrigued enough to make the drive to see these superlative trees and explore the plant communities of the surrounding landscape. Several years before, I had explored the area to locate and measure the tallest trees with the guidance of LiDAR data. Measuring trees leaves limited time for botanizing the smaller things, so I was looking forward to exploring the site's herbaceous flora in greater detail with a group of like-minded folks.

Our first destination was a rock outcrop and talus zone upslope from the road. We noted various north-country staples on our way up, including the ferns *Asplenium trichomanes* and *Cystopteris tenuis* growing from cracks in the rocks. Continuing uphill around the rocks, we entered a pine-northern hardwood forest with many tall, straight trunks in a sheltered valley. As the group coalesced in a cluster of white pines, I revealed that one of these was the tallest tree in NY- remeasured that morning to 171.6 feet tall (52.3m) - and asked the group to guess which trunk it was that belonged to the tallest. As it turns out, it wasn't easy! The tallest tree did not receive any nominations, though most of the trees that did are over 50 meters tall. I find it's often the case that the tallest trees are responding to competition by devoting more energy to vertical growth than to thickening their trunks, resulting in slimmer trunks that don't stand out to observers on the ground. In this case, the tallest tree is just 31.7 inches in diameter at breast height (80.5cm).

The group exploring a rock outcrop

After taking in the surprisingly svelte height champion, we ascended out of the valley to traverse a series of ridges with zones of open sedgy woodland (one of which made for a great lunch spot), stumbling into an odd upland patch of *Corallorhiza trifida* along the way. The alternating ridges and valleys of this section reflect a local geography shaped by graben faulting of the bedrock, most of which is igneous but which also includes some narrow bands of limestone. Scouring by glacial ice and then meltwater was followed by deposition, partial erosion, and new deposition of zones of sediment by successive glacial lake phases in the development of the Northwest Brook valley.

We then dropped into a deeper ravine with a richer understory and sugar maple, white ash and basswood dominant above. On the north side of the ravine we found *Carex backii* in a section of fern-rich talus slope

below seepy rock outcrops that were covered in tangled mats of *Floerkea proserpinacoides* growing in a tall, stringy form that threw some of us off at first. While we did not relocate the *Adlumia fungosa* we were hoping for, one of the group spotted a bright color beneath a dense growth of tall ferns- *Galearis spectablis*! We ended up finding a couple dozen plants in all. Everyone agreed that this rich ravine was a pretty special spot. Finally, we continued downstream to return by way of the floodplain of Northwest Bay Brook.

Galearis hiding beneath tall ferns.

Tall Tree Plant List
Acer pensylvanicum
Acer saccharum
Acer spicatum
Actaea pachypoda
Adiantum pedatum
Ageratina altissima
Alliaria petiolata
Allium tricoccum
Amphicarpea bracteata
Aquilegia canadensis
Aralis nudicaulis
Arisaema triphyllum
Asplenium trichomanes
Betula alleghaniensis
Betula lenta
Betula papyrifera
Botrychium virginianum
Brachyelytrum sp.
Capnoides sempervirens
Cardamine diphylla
Cardamine maxima
Cardamine parviflora
Carex arctata
Carex backii
Carex bromoides
Carex communis
Carex deweyana
Carex eburnea
Carex gracillima
Carex hystericina
Carex peckii
Carex pedunculata ssp. pedunculata
Carex plantaginea
Carex sp. Sect. Laxiflorae
Carex torta
Carpinus caroliniana
Carya cordiformis
Carya ovata var. ovata
Caulophyllum sp.
Circaea alpina
Claytonia caroliniana
Corallorhiza trifida
Crataegus sp.
Cystopteris cf. fragilis
Deparia acrostichoides
Dicentra canadensis
Dirca palustris
Dryopteris goldiana
Dryopteris intermedia
Dryopteris marginalis
Erythronium americanum
Eurybia divaricata
Fagus grandifolia
Floerkea proserpinacoides
Fraxinus americana
Galearis spectabilis
Galium triflorum
Geranium robertianum
Geum fragarioides
Gymnocarpium dryopteris
Hepatica acutiloba
Hepatica americana
Huperzia lucidula
Laportea canadensis
Lysimachia borealis
Maianthemum canadense
Maianthemum racemosum
Matteuccia struthiopteris
Medeola virginiana
Micranthes virginiensis
Mitchella repens
Mitella diphylla
Monotropa uniflora
Mycelis muralis
Nabalus sp.
Onoclea sensibilis
Oryzopsis asperifolia
Osmorhiza claytonii
Osmunda claytoniana
Osmundastrum cinnamomeum
Oxalis montana
Panax quinquefolius
Parthenocissus inserta
Phegopteris connectilis
Phegopteris hexagonoptera
Pinus strobus
Poa saltuensis ssp. saltuensis
Polygaloides paucifolia
Polygonatum pubescens
Polypodium virginianum
Polystichum acrostichoides
Populus grandidentata
Potentilla norvegica
Quercus alba
Quercus rubra
Ranunculus abortivus
Reynoutria japonicum
Ribes cynosbati
Sambucus racemosa
Schizachne purpurascens
Solidago caesia
Solidago flexicaulis
Streptopus lanceolatus
Thelypteris noveboracensis
Tiarella stolonifera
Tilia americana var. americana
Trillium erectum
Trillium undulatum
Tsuga canadensis
Urtica gracilis
Uvularia sessilifolia
Veratrum viride
Veronica officinalis
Viola blanda
Viola canadensis
Viola cucullata
Viola eriocarpa
Viola labradorica
Viola pubescens
Viola renifolia
Viola rostrata
Viola sororia
Zizia aurea

Message from the President

Dear Friends, The Spring rains have brought out a lush vegetation here in the North Country. Lakes, ponds, rivers and streams are straining at their banks even though melting snows are long gone, and the field botany season is in full swing. This year we are again offering a diverse lineup of field trips and workshops across the state. There are still a few open slots, so, if you haven't yet, check out our website and sign up for a trip. In any case, get out in the woods and fields, decompress from your daily routine and enjoy the floral succession through the growing season. And a reminder: the NYFA Annual Meeting will be held on September 13 this year in Black Rock Forest (see announcement below). We would love to see you there! Yours botanically, Dan Spada, NYFA President.

New York Flora Association 2025 Annual Meeting

Saturday, September 13, 10 am - 3 pm

https://nyflora.org/events-directory/2024-nyfa-annual-meeting/

The NYFA Annual Meeting will be held at Black Rock Forest in the Lower Hudson Valley on September 13th. The meeting will include the presentation of this year's plant conservationist award to Dr. Linda Rohleder, followed by lunch, Steve's Plant Quiz and an exciting afternoon of botanizing. Black Rock Forest is in Orange County, the full address is 65 Reservoir Road, Cornwall, NY 12518. Carpooling to the meeting site is required as parking space is limited. Two recommended meet-up spots include the CVS on Quaker Avenue in Cornwall to carpool a short distance, and the public lot at the entrance gate.

In accordance with the Organization and Bylaws, the Nominating Committee is recommending that the following current Directors whose terms expire in 2025 return for another three-year term: Emily Debolt, Ed Frantz, Mike Hough, Anna Stalter, David Werier. Write-in candidates are also accepted. Please cast your ballots by email at annualmeeting@nyflora.org, snail mail, or otherwise prior to or in person at the NYFA Annual Meeting. Officers will be elected at the first board meeting following the annual meeting.

NYFA is pleased to award this year's Conservationist of the Year award to Dr. Linda Rohleder. Dr. Rohleder received her PhD in Ecology from Rutgers University in 2013, where she studied the effects of deer on forest understories. She founded the Wild Woods Restoration Project, a project that aims to "restore the health and diversity of our Hudson Valley forests with local native plants grown by volunteers and to inspire a passion for continued stewardship." Under her guidance, volunteers collect local ecotype seeds, grow them into plants, and install them in restoration plantings at local parks. With a focus on our disappearing forest understories, the effort has already grown over 30,000 native plants, worked with a dozen parks, and engaged more than 300 community volunteers in preserving and amplifying the local native plant populations.

In her prior role as Director of Land Stewardship at the New York – New Jersey Trail Conference, Dr. Rohleder established the organization's Stewardship department, beginning with the development of the Invasives Strike Force volunteer program in 2011. Under her leadership, the program trained over 400 invasives-mapping volunteers who surveyed more than 1,500 miles of hiking trails for invasive plants. She orchestrated over 100 invasives-removal workdays and led seasonal conservation corps crews for seven years, tirelessly combating invasive species in parks across southern NY and northern NJ; was instrumental in the creation of the Conservation Dog program, which trained canines to detect invasive species of multiple taxa; and was the founding coordinator of the Lower Hudson Partnership for Regional Invasive Species Management (PRISM). Her passion for conservation goes beyond her professional responsibilities, as she has dedicated over 20 years to creating native plant wildlife habitat on her properties in both New Jersey and New York, embodying a true commitment to fostering biodiversity and preserving our native flora.

Quiz Answer

You are correct if you recognized the very showy flower on page 11 as partridge berry (*Mitchella repens*). Close up views can be surprisingly showy! The fused ovaries of the paired flowers unite to produce a berry-like fruit. Partridge berry flower photos by Mike Corey, and fruit photo by Steven Daniel.

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