



## New York Flora Association Newsletter Winter 2018

**Editor's Note:** Each year NYFA provides monetary awards to promote botanical research within the state, and it is always interesting to read about what botanical studies are going on in NY. This issue contains two such reports from this year's grant recipients, as well as a number of other interesting and varied articles to help us through these cold days. Just as this issue was about to go to press, we received notice that David Werier's *Catalog of Vascular Plants of NYS* has been published, see page 18, where we also ask for nominations for the 2018 Plant Conservationist Award. If you haven't already renewed your NYFA membership, see page 19. Happy winter to all, and thanks to all who contributed!

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## 34 Years Later: Vegetation Change in the Adirondack Alpine Zone of New York

by Monica Dore, SUNY Oneonta

The alpine zone of the Adirondack Park consists of just 20 treeless summits. These small areas are home to diverse communities of plants well adapted to the harsh climatic conditions on these exposed summits, which include strong winds and unpredictable temperature changes (Ketchledge and Leonard 1984, Robinson et al. 2010).

Until the mid-twentieth century much of the vegetation on these alpine summits was severely impacted by hiker trampling and subsequent erosion caused by wind. In an effort to stabilize soils and prevent further erosion, Dr. Edwin H. Ketchledge conducted revegetation projects atop a few of the Adirondack summits during the 1980's (Ketchledge and Leonard 1984). Additionally, he helped found the Adirondack Summit Steward program in 1989 as a means to educate the public and prevent further vegetative damage (Robinson et al. 2010). To determine the success of these revegetation projects, and to monitor possible changes in species composition, E.H. Ketchledge and Brian T. Fitzgerald established 11 permanent transects on four summits in the MacIntyre Range in 1984. Three 30-meter transects were established on each of the alpine summits of Algonquin, Iroquois, and Wright, and two transects were established on the summit of Boundary Peak. Using the point-intercept method, these transects have been resurveyed approximately

every ten years since their establishment (Robinson et al. 2010).

This summer, we made several trips to the Adirondacks to resample the transects. In addition to using the point-intercept method, three of the transects were sampled using the line-intercept method and a series of 1m<sup>2</sup> quadrats. These additional methods were added to provide a broader data set to understand species composition and species associations. In addition, utilizing quadrat sampling and line-intercept sampling will make our data more comparable to similar studies being conducted by the Appalachian Mountain Club on alpine summits in the White Mountains of New Hampshire.

Unfortunately, we were not able to sample all of the 11 transects, as we could not find the bolts to three of them. These bolts, one on Algonquin Peak, one on Boundary Peak, and one on Wright Peak, were lost, potentially due to over 20 years of harsh climatic conditions. However, it is also possible that these bolts have been hidden by lush vegetation. Preliminary analyses of the data collected this summer indicate that there has not been a significant change in the total cover or frequency of vegetation on the transects since they were last surveyed in 2007. However, shifts in species composition reported in Robinson et al. (2010) appear to still be occurring. In particular, an overall shift from lichen and bryophyte cover to vascular plants is apparent (Robinson et al. 2010). More detailed analysis of the data, along with comparisons between the three sampling methods will likely elucidate additional patterns.

Summit stewards reported contact with 31,625 hikers this season, a four-fold increase since the Summit Steward Program began 28 years ago (Goren and White 2017). With the increasing popularity of the high peaks region, and with the growing threat of climate change, continued monitoring of the alpine communities is vital. With proper monitoring and management, and the continued support of the Adirondack Summit Steward Program, the Adirondack alpine summits will be available for people to enjoy for years to come.

### **Acknowledgements:**

I would like to thank my adviser and mentor, Dr. Sean Robinson, who is responsible for the success of this project and who has been a kind and patient teacher. I would also like to thank Matthew Dami, Micki Colbeck, Tyra Olstad, and Kayla White for their help in data collection. I am grateful to the Adirondack Summit Stewards, past, present and future, who diligently protect the Adirondacks and keep them beautiful. Funding for this project was generously provided by New York Flora Association.

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Ketchledge, E.H. and R.E. Leonard. 1984. A 24-Year Comparison of the Vegetation of an Adirondack Mountain Summit. *Rhodora* 86: 439-444.

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Line intercept sampling.





Quadrat sampling.



Project area.



## A Legacy of Fire in the Clintonville Pine Barrens of New York

by Emily Dolhansky, Yale University

The Clintonville Pine Barrens in Clinton County, New York are home to one of the northernmost examples of a pitch pine-heath community. These plant communities are commonly referred to as “pine barrens” and were once widespread across the Northeast. Pine barrens are notable for their overstory of pitch pine (*Pinus rigida*) and understory of Ericaceous shrubs, including blueberry (*Vaccinium vacillans*) and sheep laurel (*Kalmia angustifolia*). They were first described as “barren” by European settlers because of their sandy, acidic soils, and sparse canopy cover.

Historically, pine barrens were maintained by Native Americans and European settlers who burned land for agriculture, hunting game, and foraging berries. Pitch pine grows well after forest fires and young trees can survive even recurring fires. In the recent past, fire has been excluded from most of the Northeast and pine barrens have shrunk in size by as much as 48% since the start of the Industrial Revolution. When fire is excluded from these communities, fire intolerant species, such as white pine (*Pinus strobus*), will outcompete pitch pine and become the dominant overstory species. When this happens, it can lead to a closed canopy forest that shades out understory species and causes them to decline as well.



Clintonville Pine Barrens.

This summer, I conducted research in the

Clintonville Pine Barrens on the effects that fire suppression has had on these natural plant communities. Fire has been excluded from this preserve since the 1990s due to its proximity to houses and timberlands. I completed inventories on tree regeneration and understory species and compared them to data collected in 1995 by researchers John Bernard and Franz Seischab. So far, I have found that pitch pine is continuing to decline and that understory species, such as prairie redroot (*Ceanothus herbaceus*), pipsissewa (*Chimaphila umbellata*), white moccasin flower (*Cypripedium acaule* forma *albiflora*), and red columbine (*Aquilegia canadensis*), are also less abundant than they used to be. The research conducted at Clintonville is part of a larger study on the effects of management practices in pine barrens across the Northeast.



Pipsissewa (*Chimaphila umbellata*).

It is easy to forget about the role fire once had in natural areas throughout the Northeast, and for many forest managers it is difficult to reintroduce fire into small, isolated pine barrens communities. There are many social barriers to implementing controlled burns, and the abundance of fuels that have built up in these forests over time makes them susceptible to crown fires. Through my research I hope to show the effects that other types of management have on regenerating pitch pine, such as creating canopy gaps through tree removal and exposing the mineral soil underneath to simulate fire. Pine barrens are an ecological reminder of the region’s storied past with fire, and are an important part of New York’s diverse ecosystem. Protecting these plant communities also means protecting a pillar of our natural heritage.





An example of an epicormic sprout, one of pitch pine's many adaptations to fire.



*Cypripedium acaule*, pink ladies' slipper.



## The Adirondack Orchid Survey Completes Its First Season

by Steve Young, New York Natural Heritage Program

Over the years there has been growing interest in surveying the orchids of the Adirondacks, and this year the plans gelled into a formal survey sponsored by the Adirondack Botanical Society. I agreed to coordinate the survey and a kick-off meeting was held in Keene Valley on April 28, with twelve attendees excited to start surveying for orchids. The group agreed to use the iNaturalist program for the first season of surveys and set about developing a guidelines document for recording data and a map outlining the boundaries of the survey as well as the ecoregions where the surveys would occur. We discussed resources that would be best to identify orchids and saw a presentation by Julianna McGuinness of the North American Orchid Conservation Center on their role in conserving orchids and how they could partner with us. The goals for the Adirondack project are to obtain baseline data on the number of species, locations (including checking historical records), and abundance as well as phenology, stressors, trends, natural history information, and to assess whether our survey methods can be used for a larger survey of the state. Additional goals include involving people in field botany, educating people about orchids, producing publications, and obtaining data to support management strategies. We agreed that the locations of all observations would be displayed within a larger area on iNaturalist so that precise locations could not be seen. An overarching goal of the project is to have fun getting out in the field and finding one our favorite plants, orchids!

Before the field season began we spent a fun and productive day at the herbarium at the New York State Museum obtaining label information on past sightings of orchids in the Adirondacks so we could check to see if they are still there. Staff members Diana Hurlbut and Lori Leonardi kindly showed us where the collections were housed and gave us a tour of other collections including mosses and lichens. Tierney Rosenstock and I transcribed the information into a form that could be easily accessed by the surveyors. We also plan to obtain more information from the New York Botanical Garden and the Brooklyn Botanic Garden herbaria this winter and other regional herbaria in the future. We now have information on 50 species of orchids that occur within the boundaries of the survey.

Our first field season resulted in eighty five observations of thirty species by ten people including two rare species for New York. We had fifteen people help us confirm identifications on iNaturalist.

The species were:

*Arethusa bulbosa* – dragon’s mouth  
*Calopogon tuberosus* – grass pink  
*Corallorhiza maculata* var. *maculata* – late spotted coralroot  
*Corallorhiza odontorhiza* var. *odontorhiza* – autumn coralroot  
*Corallorhiza trifida* – early coralroot  
*Cypripedium acaule* – pink lady’s slipper  
*Cypripedium parviflorum* var. *pubescens* – large yellow lady’s slipper  
*Cypripedium reginae* – showy lady’s slipper  
*Epipactis helleborine* – helleborine  
*Galearis spectabilis* – showy orchid  
*Goodyera pubescens* – downy rattlesnake plantain  
*Goodyera repens* – dwarf rattlesnake plantain  
*Goodyera tessellata* – checkered rattlesnake plantain  
*Liparis loeselii* – Loesel’s twayblade  
*Malaxis unifolia* – Green adder’s mouth

*Platanthera aquilonis* – northern green bog orchid  
*Platanthera blephariglottis* var. *blephariglottis* – white fringed orchid  
*Platanthera clavellata* – little club spur orchid  
*Platanthera dilatata* var. *dilatata* – white bog orchid  
*Platanthera flava* var. *herbiola* – northern tuberculed orchid  
*Platanthera grandiflora* – large purple fringed orchid  
*Platanthera hookeri* – Hooker’s orchid  
*Platanthera lacera* – ragged fringed orchid  
*Platanthera macrophylla* – large-spurred round-leaved orchid  
*Platanthera orbiculata* – small-spurred round-leaved orchid  
*Platanthera pycodes* – lesser purple fringed orchid  
*Pogonia ophioglossoides* – rose pogonia  
*Spiranthes cernua* – nodding ladies’ tresses  
*Spiranthes lucida* – shining ladies’ tresses  
*Spiranthes romanzoffiana* – hooded ladies’ tresses



Surveyors (listed from most to fewest observations) were: Jackie Donnelly, Emily DeBolt, Carol Gates, Tierney Rosenstock, Lem Hegwood, Brian McAllister, Steve Young, Steve Langdon, Tim Howard and Ray Curran.

Our post-field season meeting took place on November 3<sup>rd</sup>. The ten participants discussed the results of the field season and how to improve on our survey for next season. Overall, we thought the iNaturalist app worked well but that there were some challenges. We came up with about ten scenarios of surveying that should be clarified, for example, how to map many species at one site and how to count occurrences with a number of plants. This winter we will also evaluate other databases that may work better for our purposes. We will compile a guide to characters that need to be photographed for each species, or groups of species, and a guide to what distinguishes the varieties of four species.

We wholeheartedly agreed that the project should continue and will schedule another meeting next April to discuss the next field season and a training that we will provide for surveyors. If you are interested in joining the survey you can contact Dan Spada at [adkflora@gmail.com](mailto:adkflora@gmail.com) and let him know your interest in the project and your experience with surveying orchids. We look forward to a fruitful 2018!



*Platanthera grandiflora*, photo by Emily DeBolt.



### *Spiranthes ovalis* var. *erostellata*, New to New York

by Steven Daniel and Anne Johnson

(a version of this article was originally published in Phytoneuron, October 2017).

*Spiranthes ovalis* var. *erostellata*, oval or October ladies tresses, a member of the *Spiranthes cernua* complex (Pace & Cameron 2016), is known from the southeastern to the upper midwestern US and southwestern Ontario. We found it in extreme northern New York, a location over 500 km north-northeast of the closest confirmed record in central Pennsylvania and nearly 700 km northeast from the nearest known record in southwestern Ontario, on Walpole Island.



Distribution of *Spiranthes ovalis* var. *erostellata*. Modified from Sheviak and Brown (2002) to include records (red circles) from central Pennsylvania and the recent record from New York.

Throughout most of its northern range *Spiranthes ovalis* var. *erostellata* is considered a rare or uncommon species. It is listed as S1 (critically endangered) in Ontario (Oldham & Brinker 2009), where it was first found in 1985 (Brown 1986). Michael Oldham, Botanist for the Ontario Natural Heritage program, has records from four sites, but he is not aware of any reports in the province in more than a decade (Oldham, pers. comm.). It is not ranked in Michigan (Natureserv 2017), where there are records from five counties, all in the southern part of the state (Michigan Flora Online 2017). It is ranked S1 in Pennsylvania (Natureserv 2017), with five records. In addition to a 1961 collection in Franklin County in south-central Pennsylvania (Pennsylvania Flora Project 2017), the Carnegie Museum of Natural History has four herbarium collections, two from Greene County in southwestern Pennsylvania, made in 2003 and 2005, (Consortium of Midatlantic Herbaria Data Portal 2017), and two 1996 collections from Blair and Huntingdon counties in central Pennsylvania (Consortium of Midwest Herbaria Data Portal 2017). Further afield there have been several recent collections in the Chicago region (Wilhelm & Rericha 2017) and it was recently reported from southeastern Wisconsin, where it is ranked S1 (NatureServ 2017; Carter & Pace 2013). Published reports suggest that it is expanding its range (Wilhelm & Rericha 2017; Homoya 1993; Brown et. al 1987; Sheviak 1974).







Habitat of *Spiranthes ovalis* var. *erostellata* adjacent to the Wiley Dondero Canal of the St. Lawrence Seaway, near Massena, New York. Photo by S. Daniel.

In September 2015 we found a small population of this species at a site near the St. Lawrence Seaway in northern New York. We puzzled over it extensively and mistakenly called it *Spiranthes casei*, a species known from New York but not one familiar to the authors. At that time we did not consider *S. ovalis* as a possibility, possibly blinded by the fact that it was so far out of its known range. In August 2017 we found what we determined to be good *S. casei* at a different location in St. Lawrence County. We strongly suspected, due to differences of phenology, flower structure, and habitat that what we had seen in 2015 was a different taxon altogether. We returned to the original site on September 16, 2017 while leading a botany field trip. After a search, one of the participants found four plants, which led to our finding a total of seven flowering stems in a small area. Close inspection of it revealed that this was *S. ovalis* var. *erostellata*. We sent pictures to A.A. Reznicek, curator of the University of Michigan Herbarium, who confirmed the identification.

Var. *erostellata*, described in 1983, is more common than var. *ovalis*, differing from it in the lack of a viscidium and rostellum and thus not being insect pollinated but instead self-pollinated or autogamous (Catling 1983). It was this character, along with the very small (less than 5 mm long) flowers, that helped us confirm the identification. Note the absence of viscidium and rostellum in the photo.





*Spiranthes ovalis* var. *erostellata*. Left: opened flower; note lack of viscidium and rostellum. Right: inflorescence. Photos by S. Daniel.

While the habitat for this species has been described as open woodland or oak savanna, often on thin, calcareous soils, in Ontario it has been found in wet-mesic prairie (Brown et al 1987). It has also been found in disturbed habitats, including old fields, ditches, and on fill (Wilhelm & Rericha 2017).

The site where we found *Spiranthes ovalis* var. *erostellata* is adjacent to the Wiley Dondero Canal of the St. Lawrence Seaway. It grows there on fill — dry, calcareous, clayey, dredge spoil from the construction of the St. Lawrence Seaway in the 1950's (Soil Survey Staff 2017). The habitat was somewhat open with low-growing herbaceous plants and a few scattered trees and shrubs nearby. The places we found the most plants tended to lack high density competition from other species.

After the initial discovery of seven flowering stems on September 16, we returned to survey twice more, on September 21 and October 6. Our highest count was on October 6, when we tallied 66 flowering stems. They ranged in height from about 12 cm to 36 cm tall. On our October 6 survey, most plants had at least some flowers still in bud towards the top of the stem, a few plants were completely in fruit, while a few others appeared to have recently emerged, with just the lower flowers beginning to open. We searched more areas of this field as well as other nearby sites that appeared to share similar habitat features and associated species, but we only found the *Spiranthes ovalis* var. *erostellata* within a single area encompassing approximately 0.2 hectare. Within this area, the plants tended to be clustered in three discrete groups of 18, 28, and 16 flowering stems, each group within an area of approximately 40–60 m<sup>2</sup>. A few other plants were outliers, found singly.

The dominant associates in the meadow included locally common old field species such as *Danthonia spicata*, *Symphotrichum pilosum* var. *pringlei*, and *Solidago juncea*. Other plant associates included such native species as *Carex pellita*, *Carex granularis*, *Euthamia graminifolia*, *Fragaria virginiana*, as well as non-native species including *Daucus carota*, *Euphrasia stricta*, *Agrostis gigantea*, and *Phragmites australis*. The wetter portions of the site, where *S. ovalis* var. *erostellata* was not found, included several interesting



species, including a large (over 100 flowering stems) population of *Spiranthes magnicamporum*, which had been recently discovered in New York (Brunton 2015), as well as *Gentianopsis crinita*, *Solidago ptarmicoides*, and *Carex viridula*.

This species is easy to overlook. It is the latest-flowering *Spiranthes* species in northeastern North America and flowers at a time when not many botanists are in the field. Further it can easily hide in taller vegetation. While *S. magnicamporum* tends to stand out, *S. ovalis* var. *erostellata* can be missed. As the fill from the St. Lawrence Seaway construction is a relatively recent event, we wonder how long this species has been present at this site and how long will it remain? Will natural succession cause it to disappear?

## ACKNOWLEDGEMENTS

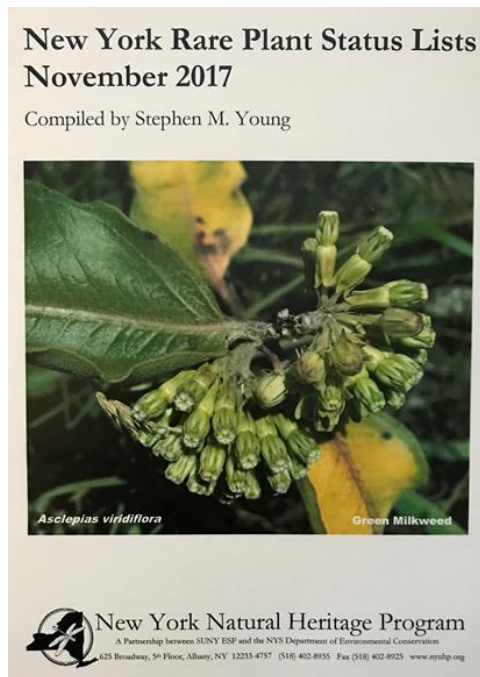
We appreciate the assistance provided by botanists near and far. David Werier encouraged us to publish on our find and provided helpful insights on this paper. Tony Reznicek confirmed our identification of *Spiranthes ovalis* var. *erostellata*. Mike Oldham provided key information regarding the species status in Ontario. Bonnie Isaac and Steve Grund provided specimen data for the species in Pennsylvania, and Jerry Wilhelm offered information on its status in the Chicago area. Dan Brunton and Rich Ring were with us in our original discovery of this population in 2015 and puzzled with us about it at the time.

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## The 2017 Rare Plant Status Lists Now Available



The first rare plant list in seven years is now available from the New York Natural Heritage Program. Compiled by chief botanist Steve Young, the list contains the scientific and common names, Heritage ranks, protected status, counties of occurrences and phenology of 678 rare plants in New York State. There is also a list of changes from the 2010 list since many names and ranks have been changed in that time, especially with David Werier's update of the catalogue of the New York flora. The review list contains 110 taxa that may be rare within New York but more herbarium and/or field work is needed to determine their true rarity status.

The list can be downloaded at [http://www.dec.ny.gov/docs/wildlife\\_pdf/2017rareplantlists.pdf](http://www.dec.ny.gov/docs/wildlife_pdf/2017rareplantlists.pdf). A sortable table of the list can also be viewed at <http://www.dec.ny.gov/animals/66348.html>. Here you can sort the list by family, name, and rank. We hope you have the opportunity to see some rare plants in the field this year or make some new discoveries!



## Update on New York Flora Atlas Sponsorship Program

by Joseph McMullen, Treasurer, New York Flora Association

As indicated in my article in the Summer 2017 Newsletter, we are launching a sponsorship program to support the New York Flora Atlas. The Atlas is a tremendously popular resource product of the New York Flora Association. It is free to everyone and used by thousands of individuals from around the world. We should all be thankful for the volunteer efforts of David Werier in maintaining the plant nomenclature in the Atlas over the years, and Andy Nelson for inserting all the photographs.

In early 2018, the Atlas website will include a Support the Atlas icon that when opened will provide details on the Atlas sponsorship levels and how to become a sponsor. In recognition of a contribution, all



sponsors will be listed by donation level on the Atlas and NYFA websites.

Development of the sponsorship levels was an interesting journey, especially after we decided to name each sponsorship level for a plant species or plant group. Trying to reach a consensus on a handful of representative plant names with a group of botanists was a real challenge (herding cats comes to mind). Iterations included: only showy plants, only common plants, only rare plants, plants from low elevation to high elevation, successional plant communities, plants with New York in their name, and many, many more.

Steven Daniel, Steve Young, and I eventually settled on the sponsorship levels and associated names listed below. With a mix of common species, showy species, and rare species, I think they are a great compromise. We decided to provide a little information about each level name and I developed brief notes on each. As a NYFA member, all of you have helped support the Atlas over the years. Any additional sponsorship support would be greatly appreciated.

**NYFA Plant Atlas Sponsorship Opportunities**

A variety of sponsorship levels are available to support the NYFA Flora Atlas. These sponsorships will help to defray the annual hosting cost (currently \$2,750) of the Atlas, as well as provide funds to keep the Atlas up-to-date and add new features. Each sponsor will be acknowledged in the Atlas and NYFA websites under the level of sponsorship contribution.

**Goldenrod (*Solidago spp.*) .....\$50 to \$199**

What fall would be complete without the golden flowers of goldenrods? We have 29 species of goldenrods in NY in a diverse mix of habitats.

**Sugar maple (*Acer saccharum*).....\$200 to \$499**

Sugar maple is our state tree and is well known as the source of maple syrup (NY is second only to Vermont in production nationwide) and wood products.

**Showy lady’s slipper (*Cypripedium reginae*).....\$500 to \$999**

The size and flower colors of this spectacular native orchid never fails to impress.

**Prairie smoke (*Geum triflorum*).....\$1,000 to \$1,999**

This state-threatened species occurs in NY only in Jefferson County. It has unmistakable feathery fruits.

**Hart’s tongue fern (*Asplenium scolopendrium var. americanum*).....\$2,000 to \$4,999**

One of only two ferns in the continental US listed in the Endangered Species Act, Hart’s tongue fern was first discovered in North America in Onondaga County NY, where the largest single population in the US occurs today.

**Calypso (*Calypso bulbosa*).....\$5,000+**

A state-endangered orchid, Calypso has an interesting botanical name and a strikingly beautiful flower. It was found in cedar swamps in northern and central NY, but presently there are no extant records in NY. Funds for future surveys may help to discover it.



## 2017 Additions to the St. Lawrence County Flora

by Anne Johnson, with photos by Steven Daniel

We've just finished another year in the North Country and have a few more plants to add to our known flora. Among the 10 additions were a few southern surprises and one state record. The county total now stands at 1443 plant species (including subspecies and varieties). Added this year were the following (an asterisk (\*) denotes a non-native species).

**Arctostaphylos uva-ursi (Bearberry)**. An exciting (and attractive) find on a rocky point where the Indian River comes into Black Lake. I had been hoping to find this for a few years, as I knew it was close by on Butterfield Lake in Jefferson County.



**Clematis occidentalis var. occidentalis (Purple Clematis)**. Found on a rocky promontory overlooking Big Creek in the town of Pitcairn.

**Carex arcta (Northern Clustered Sedge)**. Steven Daniel came across this S1 sedge after the rest of our kayak expedition had left him and headed home (we definitely regretted not continuing on with him!). He found it in a sedge meadow along the forest edge just north of mouth of Jordan River.



**Carex livida (Livid Sedge).** Another exciting S1 sedge find by Steven Daniel, this one in a linear swale in a rich fen near Edwards. Growing with *Salix candida*, *Salix pedicellaris*, *Carex sartwellii*, and *Trichophorum alpinum*.

**Chenopodium berlandieri var. bushianum (Bush's Goosefoot).** Steven Daniel came across this on a rocky promontory overlooking Crooked Creek. He noticed distinct reticulations on the pericarp using transmitted light, otherwise it would have been hard to tell from *C. album*.

**Corylus americana (American Hazelnut).** A surprise found here and there on the shore of the Grasse River near its mouth, along a stretch of the river historically known as the Indian Meadows. It was an area revered by the St. Regis Mohawks for its food and medicine bounty. Could the hazelnut have been originally brought there and planted by native Americans travelling from areas south of the Adirondacks?

**Desmodium perplexum (Confusing Tick Trefoil).** Yet another Desmodium lurking in the Pleasant Lake State Forest. Growing on a dry wooded south facing slope on the western arm of Mud Lake, with *Helianthus divaricatus* and *Desmodium paniculatum*.

**Hydrastis canadensis (Goldenseal).** Another surprise from the south, found in rich woods on a rocky slope above a backwater of the Raquette River. At first I thought it was *Hydrophyllum canadense*, which I wasn't well acquainted with as we have it only in one place in the county, then I saw the seed head and realized it had to be something in the Ranunculaceae family.

**Juncus anthelatus (Wiegand's Rush).** When I first saw this I thought "there's something wrong with that *Juncus tenuis*". Then I saw a few more scattered about and decided it may be worth collecting and taking a closer look.

**Liatris spicata\* (Button Blazing Star).** Apparently escaped from somewhere and marching its way up the River Road in the town of Parishville.



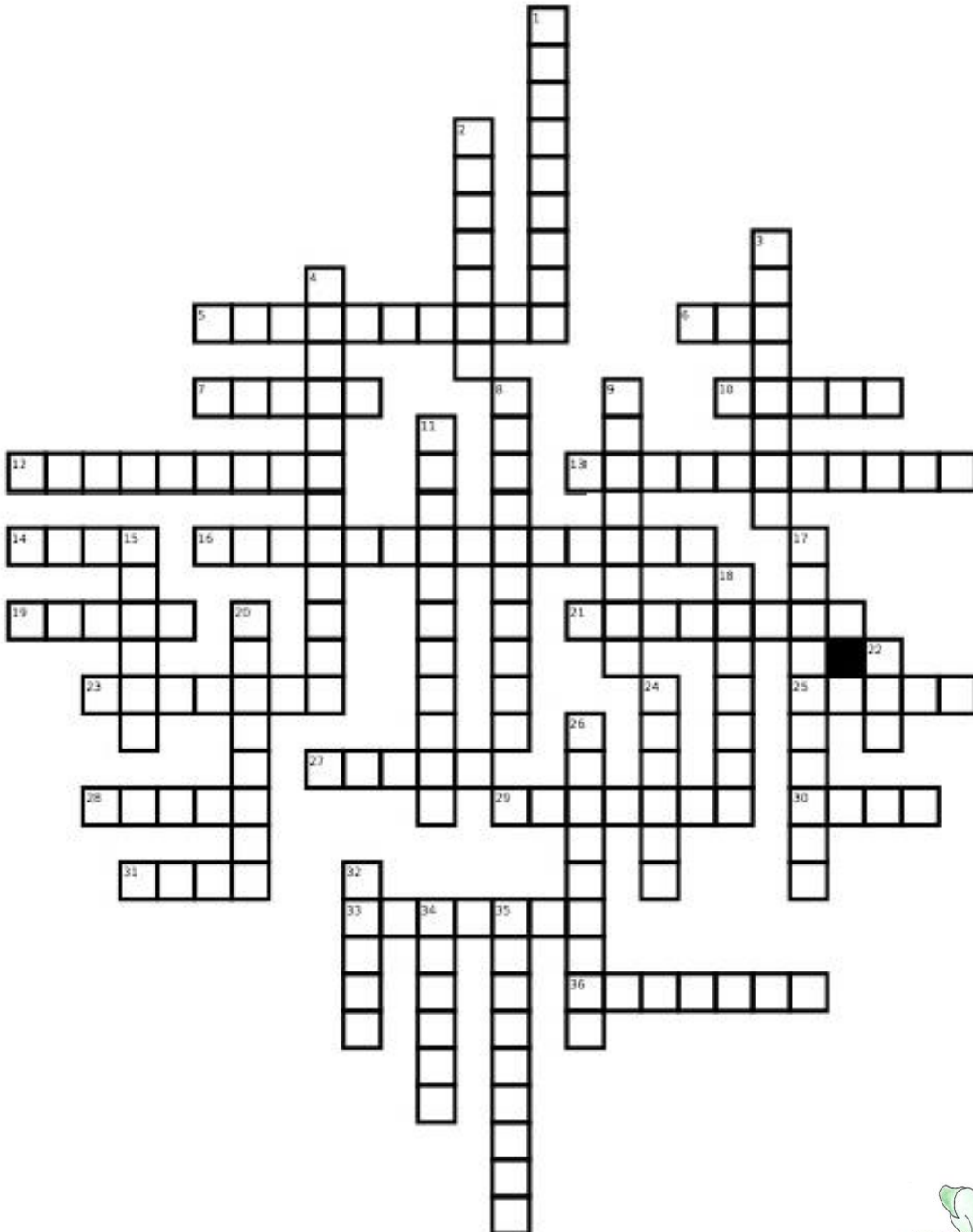
**Lysimachia arvensis\* (Scarlet Pimpernel).** A small weedy plant with an attractively colored flower found on a seldom used roadside in Robert Moses State Park.

**Spiranthes ovalis var. erostellata (Autumn (or October) Ladies' Tresses).** See the whole story earlier in this newsletter.



## Winter Reds and Greens

This puzzle was inspired by contributions to the NYFA newsletter (ca. 1990s) by Clifford Lamere. A useful starting place is the NYFA Atlas with a search on the common name “wintergreen”. Clues are found on the next page and answers on page 18. Puzzle submitted by Anna Stalter.





ACROSS

- 5. creeping, epithet with Gaultheria
- 6. Taxus
- 7. deciduous conifer genus
- 10. arborvitae
- 12. wintergreen family
- 13. aka teaberry
- 14. clonal shrub with showy red fruits (genus)
- 16. kinnikinnick
- 19. a type of fruit
- 21. another wintergreen genus
- 23. tree genus that can be evergreen in southern US
- 25. fir genus
- 27. red, Latin epithet
- 28. hemlock genus
- 29. epithet with 21 across
- 30. holly genus
- 31. genus whose accessory fruit is often red
- 33. not western
- 36. grape of the bear

DOWN

- 1. cranberry epithet
- 2. a wintergreen genus
- 3. Crataegus
- 4. of the west
- 8. wood fern genus
- 9. one flower
- 11. wetland shrub with bright red fruits
- 15. mountain ash genus
- 17. another wintergreen genus
- 18. spicebush genus
- 20. spotted, epithet with 17 down
- 22. conifer with upright cones
- 24. chokeberry genus
- 26. cranberry genus
- 32. snow (French)
- 34. has sharp pointed needles
- 35. has green leaves throughout the winter



Use the first letter of each puzzle answer noted below to decipher this quote:

3D 33A / 13A 3D 21A / 2D 16A 27A 26D 35D 18D 29A / 24D 28A / 28A 3D 12A /

19A 33A 24D 36A 10A 6A / 21A 22D / 28A 3D 12A / 11D 4D 14A 7A 8D / 30A 32D /

34D 36A 20D 20D 12A 31A / 13A 30A 18D 18D / 22D 30A 32D 8D /

33A 23A 36A 24D 7A / 17D 16A 36A 34D 35D / 22D 4D 31A /

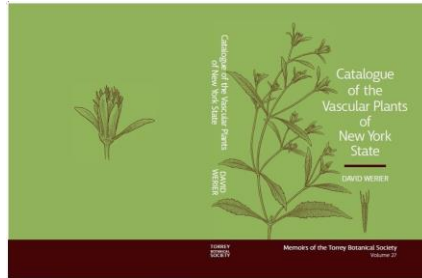
13A 21A 32D 8D 33A 14A / 16A 32D 8D / 25A 8D 2D 30A 31A 24D 28A 30A 21A 32D /

30A 32D / 13A 30A 32D 10A 35D 27A. .... John Burroughs, "The Snow-Walkers," 1866



## Botanical Notes

The New York Flora Association is seeking nominations for **The 2018 New York Native Plant Conservationist Award**. The award is meant to honor a person who has worked towards the conservation of the native flora of New York. To nominate a candidate send the following information to Steve Young (chair of the Native Plant Conservation Committee) at [nyflora1@gmail.com](mailto:nyflora1@gmail.com): Name, address, email, and phone number of nominator and nominee, why you believe this nominee deserves the award, and what the nominee has done to work towards the conservation of the native flora of New York. Deadline for submissions for the 2018 award is March 31, 2018. The NYFA Native Plant Conservation Committee will determine the winner of the award, which will be announced at our next annual meeting.



## **Volume 27 of the Memoirs of the Torrey Botanical Society, *Catalogue of the Vascular Plants of New York State*, by David Werier has been published!**

The Catalogue is a much needed up-to-date account of the vascular plants known from outside of cultivation in New York State. As a result of a fresh and independent examination of the flora, the Catalogue differs significantly from previous checklists for the state and incorporates much new research.

The Catalogue's introductory material includes a history of statewide accounts of the flora, starting with John Torrey's publications in the 1840s. The annotated species list, which includes 3,524 species, 134 additional infraspecific taxa, and 264 hybrids, contains scientific names, common names, synonyms, nativity status, nonnative status, voucher information, state ranks for rarities, and notes on certain species. Additionally, a list of taxa excluded from the flora is presented as well as a list of taxa that very likely occur, should occur, or soon may occur in the state. A thorough comparison is made between the Catalogue and the last previous checklist for the state. The Catalogue is 543 pages and costs \$35 plus shipping and handling. **Order a hard copy now!**

An electronic version will be available in the near future from JSTOR. For more information as well as to download supplemental data and errata please visit the Memoirs of the Torrey Botanical Society Volume 27: Catalogue of the Vascular Plants of New York State webpage. For help ordering, please call 800-627-0326 x 405 or email [torrey@allenpress.com](mailto:torrey@allenpress.com).



**Answers to puzzles:** 5A procumbens, 6A yew, 7A Larix, 10A Thuja, 12A Ericaceae, 13A wintergreen, 14A Rhus, 16A Arctostaphylos, 19A berry, 21A Orthilia, 23A Quercus, 25A Abies, 27A rubra, 28A Tsuga, 29A secunda, 30A Ilex, 31A Rosa, 33 eastern, 36A uvaursi, 1D oxycoccus, 2D Moneses, 3D hawthorn, 4D occidentalis, 8D Dryopteris, 9D uniflora, 11D winterberry, 15D Sorbus, 17D Chimaphila, 18D Lindera, 20D maculata, 22D fir, 26D Vaccinium, 32D neige, 34D spruce, 35D evergreen. Quote: He who marvels at the beauty of the world in summer will find equal cause for wonder and admiration in winter.



***Membership Renewal for 2018***

We thank NYFA members and friends for their continued support. It's been another exciting year of workshops and field trips. Articles in the NYFA newsletter recount those events for those unable to attend, and enrich our knowledge of the state's flora and of those engaged in its study. The New York Flora Atlas continues to be the premier reference for botanists in NY and the northeast. Your membership dues and donations help make it all possible. We hope you'll renew today!

<http://www.nyflora.org/membership/>

***Best Wishes for 2018***



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