New York Flora Association Newsletter Summer 2016

Editor's Note: Field trips and workshops are in full swing for the season, and if you have not partaken yet, there is still time to sign up and attend one (or more!). In this issue of the newsletter you can see what you have missed (or relive the fun): we have two field trip reports from this year, as well as a report and review of last year's Persicaria (the smartweeds, formally known as Polygonum) trip (just in time for this year's crop of smartweeds). In addition, there is very good news on the NYS botanical front - the Natural Heritage Botanist is now back in place (see page 9) and is once again taking rare plant records. Also, see his short piece on the rare green milkweed.

Articles Inside:

1

3

A Look at *Persicaria*Narrow Hill field trip
West Point field trip
Notes from Steve Young



New York Flora Association

Address: P.O. Box 122
Albany, NY 12201
Phone: (518)250-6054
Email: editor@nyflora.org
Website: www.nyflora.org
Blog: www.nyfablog.org
Twitter: @newyorkflora
Editor: Anne Johnson

A Look at *Persicaria* (and one *Polygonum*) at Alley Pond Park by Steve Young, NY Natural Heritage Program

On August 15, 2015 a group of excited smartweed enthusiasts met at Alley Pond Park in Queens to learn about the different species of *Persicaria* found in the area. They were fortunate to be led by Daniel Atha, a smartweed expert from New York Botanical Garden, and Andy Greller, who knows the flora of the park very well. (NOTE: The genus *Persicaria* contains species formerly part of the genus *Polygonum* in the buckwheat family (Polygonaceae)). *Persicaria* differs from species in the genus *Polygonum* by having flowers in terminal inflorescences (vs. axillary) and the leaves larger and not jointed at the base. Two other genera separated out from *Polygonum* include *Fallopia* and *Reynoutria*. The trip started in the ball field area in the south end of the park, proceeded to the northeast section where recent restoration work has taken place, and ended up on the trail near the visitor center. The following are the ten species they saw and some notes about each.

Polygonum aviculare – the habit is prostrate or decumbent with tepals all the same length and shape, not pouched at the base. The leaves are different sizes.

Persicaria longiseta – an Asian species with very long cilia at the top of the ochrea and pink flowers. It is usually small but can get big. Leaves are wrinkled below the middle. A very common species.

Persicaria virginiana – jumpseed is a common and easily recognized species with a long inflorescence of white downward-pointing flowers with long exserted styles.

Persicaria maculosa – cilia are 3 mm long to none. It has a thicker inflorescence than *P. longiseta* but they can be confused. Dark spots on the leaves are not a good way to separate species.

Persicaria hydropiperoides – it has consistently open, white flowers in an erect inflorescence. There are cilia on the top of the ochrea and setae on the surface.

Persicaria extremiorientalis – it has strigose hairs on the stem, short cilia on the ochrea, small glands on inflorescence (which is bent in the middle), pink flowers only (as opposed to white in the similar *P. lapathifolia*) and long antrorse hairs on the leaf margins and golden hairs below. It is a very large plant that is very early successional on disturbed sites. It was first collected here in 1961 but had been overlooked. Daniel Atha figured out that it was a separate species (Atha et al. 2010).

Persicaria lapathifolia – can get up to seven feet tall. There are yellow glands underneath the leaves that shine in the sun. It has drooping white flowers with an anchor-shaped vein on the tepals.

Persicaria pensylvanica – there are easily seen gland-tipped hairs on the peduncle and in the inflorescence. The inflorescence is short and stocky with pink flowers.

Persicaria hydropiper – the nodes are swollen because another flower is contained within the ochrea. The flowers are spread out along the inflorescence, and the leaves are very peppery, thus the name smartweed (because they make your mouth smart (hurt)).

Persicaria punctata – it has a lax, elongate inflorescence with punctate tepals. The leaves have gland dots on the undersides and the nodes are not swollen like the similar looking *P. hydropiper*.



The group examines *P. longiseta* along the path.



Inflorescence of *P. hydropiperoides* with open white flowers.



Daniel Atha checking on a sidewalk crack *Polygonum*. True urban botany!



Rich Kelly beside a stand of *P. lapathifolia*, which has white flowers.





A large stand of *P. extremiorientalis*, which has pink flowers, growing on a dirt pile.



The group at the Alley Pond Park saltmarsh overlook. Andy Greller, Daniel Atha, Donald House, Rich Kelly and Howard Robinson.

Literature Cited

Atha, D. E., M. H. Nee, and R. F. C. Naczi. *Persicaria extremiorientalis* (Polygonaceae) is established in the flora of the eastern United States of America. J. Torrey Bot. Soc. 137: 333–338. 2010.

Narrow Hill (Chemung County) Field Trip

by Scott Ward

Ah, spring in New York. Marked by 10-20 mph winds carrying with them temperatures in the lower 40s (and could those be the occasional light flurries?). Yes, that sounds about right. Heading south to Narrow Hill in Chemung Co. for a day of botanizing in mid-May, I hadn't anticipated having to rely so heavily on my hoodie and winter hat. But through a day of warm-welcomes, up-hill trudging (mind you, at a botanist's pace), the occasional smattering of sunshine, and plenty of botanical lessons later, I realized I was never truly cold. This was my first official NYFA trip, co-sponsored by the Finger Lakes Native Plant Society and led by David Werier, so I was looking forward to meeting a lot of new faces. After brief introductions and a historical description of the property by David, we were off to find what interesting mix of species might occur this far south in the state.

Starting off in the initial portion of the trail, the typical disturbed culprits abounded: Alliaria petiolata, Lonicera morrowii and L. x bella (which included a much appreciated lesson on bracteole length), Rosa multiflora and Barbarea vulgaris to name a few, but as we made it a bit farther in from the disturbed edges we began to see and hear about differences between Ranunculus, Viola, and Dryopteris species: flipping over fronds and magnifying floral parts with hand lens along the way. Lessons in Viola were indeed informative for me, because so often I'm distracted by the overwhelming vernal surge of life in the understory that my attention is drawn away from the sororias, subsinuatas and cucullatas inconspicuously growing among trilliums, trout lilies and other showy ephemerals. Making our way farther up the sloped trail and stopping at an opportune interval of sunshine for lunch, the joys of spring were popping their head up from the forest floor, including: Micranthes virginiensis, Thalictrum thalictroides, Geranium maculatum, Anemone americana, and Antennaria plantaginifolia. In addition, the vegetative beginnings of Clematis virginiana,



Aralia nudicaulis, Podophyllum peltatum were evident, while the presence of species like Helianthus divaricatus, Pycnanthemum incanum, Ceanothus americanus and at the top of the hill, Allium cernuum, were brought to our attention by the tenacious botanical eye of David. A good mix of phenology was found throughout the walk from the flowering shrubs and trees: including Ribes cynosbati and Rhus aromatica, which were toward the tail end of flowering, Quercus ilicifolia and Cornus florida, which were at the initial stages of flowering, mixed assortments of Vaccinium angustifolium and Vaccinium corymbosum, which were rich with urceolate blooms, and hillsides of Viburnum rafinesquianum, with emergent leaves shining in the erratic sunlight among showy blooms of Amelanchier amabilis. In addition to A. amabilis. other shadbush species seen included A. arborea, A. humilis, and A. sanguinea, all seeming to flower as bright as possible in an attempt to rival the breadth and showmanship of their close relative, A. amabilis.

After turning our heads to shadbush flowers and our backs away from the hilltop winds, we made our way over to a rather speciose utility-right-of-way, in which numerous fringed polygalas carpeted the ground, mixed in with an abundance of *Vaccinium angustifolium* and *Gaylussacia baccata*, and a small patch of assorted club mosses that included *Dendrolycopodium hickeyi*, *Diphasiastrum digitatum*, and *Diphasiastrum tristachyum*. These are species that I do not happen upon so often in the fragmented natural areas of the Rochester Metropolitan area, so it intrigued me to see such diversity underneath towering power lines. Clearly, years of periodic mowing has done little to abate this disturbed hillside strip of its unique diversity.

Having reached the peak, so to speak, of our botanical ascent, the group began to mosey down the hill back toward the cars for a group picture and a quick departing glance at a roadside outcrop littered with the vibrant blooms of *Aquilegia* canadensis. The columbine blooms were a great finish to an exciting day of botanical lessons and new acquaintances, marking my first official NYFA trip a successful one indeed. Here's to many more

years of botanical discoveries alongside New York's fervent naturalists!



The cold couldn't immobilize New York's botanists, but could immobilize these Andrenid bees on *Cornus florida* bracts.



Quercus ilicifolia and Amelanchier amabilis overlooking the valley.



The cold and windy weather did little to stop *Phlox subulata* from blooming bright and purple.





What flower better to see on a NYFA trip, than its very own flower of the year.



David and Robert in a thick patch of *Viburnum rafinesqueanum* at the top of Narrow Hill.



Aquilegia canadensis, perched on its proud, rocky substrate.

NYFA & FLNPS Chemung Valley plant list, 5/15/2016

Acer negundo Acer rubrum Ageratina altissima Alliaria petiolata Allium cernuum Amelanchier amabilis Amelanchier arborea Amelanchier humilis Amelanchier sanguinea Anemone americana Antennaria plantaginifolia Anthoxanthum odoratum Aquilegia canadensis Aralia nudicaulis Barbarea vulgaris Borodinia laevigata Calamagrostis porteri Cardamine pensylvanica Carex pensylvanica Carex siccata Carex umbellata Carya glabra Ceanothus americanus Cladonia rangiferina Clematis virginiana Cornus florida Crataegus macrosperma Dactylis glomerata Dendrolycopodium hickeyi Dichanthelium latifolium Diphasiastrum digitatum Diphasiastrum tristachyum Dryopteris carthusiana Dryopteris intermedia Elaeagnus umbellata

Box-Elder Red Maple White Snakeroot Garlic Mustard Nodding Onion Lovely Shadbush Downy Shadbush Low Shadbush Round-Leaved Shadbush Round-Lobed Hepatica Plantain-Leaved Pussy-Toes Sweet Vernal Grass Wild Columbine Wild Sarsaparilla Yellow Rocket Smooth Rock Cress Porter's Reed Grass Pennsylvania Bitter Cress Pennsylvania Sedge Dry-Spiked Sedge Parasol Sedge Pignut Hickory New Jersey-Tea Reindeer Lichen Virgin's-Bower Flowering Dogwood Large-Seeded Hawthorn Orchard Grass Hickey's Tree-Clubmoss **Broad-Leaved Panicgrass** Southern Ground-Cedar Blue Ground-Cedar Spinulose Wood Fern Evergreen Wood Fern Autumn-Olive



NYFA Quarterly Newsletter Summer 2016

Fraxinus americana Galium aparine Galium boreale Galium circaezans Galium lanceolatum Gaylussacia baccata Geranium maculatum Hamamelis virginiana Hedeoma pulegioides Helianthus divaricatus Hypericum perforatum Impatiens capensis Juglans nigra Lamium purpureum Lathyrus ochroleucus Linaria vulgaris Lonicera ×bella Lonicera morrowii Luzula acuminata Luzula multiflora Micranthes virginiensis Onoclea sensibilis Osmunda claytoniana Osmundastrum cinnamomea Ostrva virginiana Paronychia canadensis Phascum cuspidatum Phlox subulata Pinus resinosa Pinus rigida Pinus strobus Poa compressa Podophyllum peltatum Pogonatum pennsylvanicum Pohlia lescuriana Polygaloides paucifolia

Polytrichum commune

Potentilla canadensis

Prunus avium

White Ash Cleavers Northern Bed-Straw Forest Wild-Licorice Lance-Leaved Wild Licorice Black Huckleberry Wild Geranium Witch-Hazel American-Pennyroyal Woodland Sunflower Common St. John's-Wort Spotted Touch-Me-Not Black Walnut Purple Dead-Nettle Pale Vetchling Butter-And-Eggs Pretty Honeysuckle Morrow's Honeysuckle Hairy Wood Rush Common Wood Rush Early-Saxifrage Sensitive Fern Interrupted Fern Cinnamon Fern Hop Hornbeam Smooth Forked Nailwort A Moss Moss Phlox Red Pine Pitch Pine White Pine Canada Bluegrass May-Apple A Moss A Moss Gay-Wings Haircap Moss

Dwarf Cinquefoil

Prunus serotina Prunus virginiana Pteridium aquilinum Pycnanthemum incanum Ouercus alba Ouercus montana Quercus prinoides Ouercus rubra Ouercus velutina Ranunculus abortivus Ranunculus allegheniensis Ranunculus recurvatus Rhus aromatica Rhus typhina Ribes cynosbati Robinia pseudoacacia Rosa carolina Rosa multiflora Rubus idaeus Rubus occidentalis Scrophularia lanceolata Symphyotrichum lowrieanum Taenidia integerrima Thalictrum thalictroides Triodanis perfoliata Vaccinium angustifolium Vaccinium pallidum Verbascum thapsus Veronica chamaedrys Veronica serpyllifolia Viburnum acerifolium Viburnum rafinesquianum Vicia caroliniana Viola cucullata Viola sagittata var. ovata Viola sororia Viola subsinuata Vitis riparia

Black Cherry Choke Cherry Eastern Bracken Fern Hoary Mountain-Mint White Oak Chestnut Oak Dwarf Chestnut Oak Red Oak Black Oak Kidney-Leaved Butter-Cup Allegheny Butter-Cup Hooked Butter-Cup Fragrant Sumac Stag-Horn Sumac Prickly Gooseberry Black Locust Carolina Rose Multiflora Rose Red Raspberry Black Raspberry Lance-Leaved Figwort Lowrie's-Aster Yellow Pimpernel Rue Anemone Venus' Looking-Glass Lowbush Blueberry Hillside Blueberry Common Mullein Germander Speedwell Thyme-Leaved Speedwell Maple-Leaved Viburnum Downy Arrowwood Carolina Vetch Marsh Blue Violet Northern Downy Violet Common Blue Violet Palmate-Leaved Violet River Grape



Chemung Valley trip participants. All photos by Scott Ward.



West Point Botany Weekend, May 21-22, 2016

by Nava Tabak

Ten participants met our trip leader David Werier and West Point's Natural Resources Manager Chris Pray (and two other West Point natural resources staff) at Morgan Farm. Chris gave an overview of West Point's natural resources program, and David described the Hudson Highlands region and the previous botanical surveys and habitats of these lands.

We began our trip at Cragston Lake, where *Utricularia inflata* - a native pioneer that appears to be growing more abundant in the region - was in bloom. We then headed into the forest, examining several flowering woodland *Carex* species and other understory herbs.

Before long we took a little detour to a woodland pool and were treated to a mat of flowering *Hottonia inflata*. This species can be tough to encounter, since it is a winter annual that appears to depend on just the right conditions of drawdown to germinate.



Hottonia inflata in a woodland pool. Photo by Nava Tabak.



Close up of *Hottonia inflata*. Photo by Steven Daniel.

From here we headed up to the summit of Bare Rock Mountain. Our route took us past the edge of a large shrub swamp (which we were tempted to explore), and then up a rich talus slope with species such as *Corydalis flavula*, *Dichanthelium boscii*, and *Cunila origanoides*, as well as more open areas with a higher abundance of non-native species. At the summit of Bare Rock Mountain we explored the plants of the acidic rocky summit a habitat typical of the Hudson Highlands, and enjoyed views of the Highlands and the Hudson River. We made a loop off the summit to a woods road below, along which we looked at roadside plants as we returned to our starting point.

The following day a smaller crew met again at Long Pond for a trip up to Long Pond Mountain. Once again we ascended a rocky slope with rich areas, observing species such as *Ranunculus micranthus*, *Packera obovata*, and *Viola palmata*. The top of Long Pond Mountain features a rich, open, grassy summit, where we again enjoyed a great view and saw *Viola bicolor*, *Asclepias verticillata*, *Carex bicknellii*, and other habitat specialists.





Botanizing on the grassy summit of Long Pond Mountain. Photo by Nava Tabak.

On both days we had the pleasure of learning from David's terrific expertise. Participants also shared their considerable natural history knowledge so that botany was complemented by bird, insect, and reptile observations, making for all-around great outings. Thank you to David and West Point for hosting us on these botanically rich lands.



Hummingbird Nest. Photo by Nava Tabak.



Trip participants on a rocky outcrop on the way up to Bare Rock Mountain. Photo by Steven Daniel.



The New York Rare Plant Program is Back on Track!

by Steve Young

During the great recession, the New York rare plant program at the Natural Heritage Program was put on hold while additional funds were sought. No new records sent from outside the program were entered into the rare plant database and no new fieldwork was done. During that time I was transferred to the position of coordinator for the Long Island Invasive Species Management Area (LIISMA), a job that I enjoyed very much and where I learned a tremendous amount about invasive species and their management. Fortunately, part of our rare plant work continued under the state parks rare plant program led by Rich Ring and also with a few small projects such as the rare plants of Whiteface Mountain. I am happy to announce that this year funding has resumed for the entire rare plant program and I will be once again working to record the locations and status of rare plants across the state. Starting in July 1 will be handing over the coordination of LIISMA to the Long Island Native Plant Initiative (LINPI) and will start to work on the backlog of rare plant information that has been piling up for the last five years. I will also be working on a new rare plant status list; it has not been updated since 2010. To help me in this important effort I will be looking to find people from across the state interested in searching for and monitoring rare plant occurrences. If you are interested in participating in this group please contact me at steve.young@dec.ny.gov. Thanks!



A New Large Population of Green Milkweed Discovered

by Steve Young

Green milkweed, *Asclepias viridiflora*, is a state-threatened plant with 14 known populations, mostly on Staten Island and Long Island. Most of the populations are small, with 50 or fewer plants, because their habitat has been severely reduced by development and the lack of fire in their native grassland habitat. A private landowner in Nassau county has been working to restore native grassland habitat on their property and a survey in July turned up over 60 green milkweed plants. This looks to be the second largest population in the state depending upon whether the largest population, on Staten Island, still has its original 150 plants. Green milkweed is a little more difficult to survey than other milkweeds because it only grows 12-18 inches tall. Its stems lean out at an angle so it is difficult to see among the taller grasses and forbs and its green, drooping flower heads do not stand out like butterfly weed (see photos on next page). A survey of another population in Nassau County this month failed to find any plants in a grassland area that has been largely taken over by spotted knapweed and other invasives. We will continue to search for and update green milkweed populations throughout its New York range in the next few years to get an idea of how it is doing overall.







Green Milkweed habitat in Nassau County.





Green Milkweed (Asclepias viridiflora). Photos by Steve Young.



Have a New County Record? Send Me the Data.

by Steve Young

You may have noticed while browsing the New York Flora Atlas that there are many county records that need to be filled in for common species. We have encouraged people to fill in those records in the past but now we have a centralized place for you to send the information. When you collect a new county record you may send the species name, location (including county and town), and where the specimen will be deposited to me at steve.young@dec.ny.gov. I may ask for the specimen to be sent to an expert or to me for confirmation before we include it in the Atlas. All new county records will need to be accompanied by a voucher specimen. I maintain a database that will compile that information during the growing season and will send all of the new records to David Werier at the end of the year for him to include in the Atlas. We will also publicize the new records and their collectors on our Facebook page and in the newsletter. Thanks for your help in making our Atlas better than ever!





Find us on **Facebook**



Follow us on @newyorkflora

And check out what's On Our Website and Blog Find them at www.nyflora.org and www.nyfablog.org

NYFA Board of Directors

Michael Burgess- President Molly Marquand - Vice-President Joe McMullen - Treasurer Anna M. Stalter - Secretary

Directors (Welcome to new directors Emily and Michael!)



Steven Daniel
Emily DeBolt
Ed Frantz
Michael Hough
Eric Lamont
Andrew P. Nelson
Richard Ring
Sean Robinson
Dan Spada
Connie Tedesco
David Werier
Steve Young





NEW YORK FLORA ASSOCIATION MEMBERSHIP FORM 2016 We are a 501C3 Tax Deductible Organization!

\mathbf{W}	e are a 501C3 Tax Dedu	ictible Organizati	on!
Annual Membership dues:			
New \$20 Make checks payable to the New York Flora Association			
Renewal \$20 per year			
Renewal with paper optic			
Student Members (contin			
Additional donation to su	ipport NYFA efforts like	botany presentatio	on awards and small grants.
Total \$	Tr	7	
Name:			
Address:			
Address:		County:	
City:		State:	Zip Code:
E-mail address:			
We are only accepting credit of credit card, please use the link			
Mail this form to: NY Flora A Thank you	ssociation, PO Box 122, for supporting NYFA ar		

NY Flora Association PO Box 122 Albany, NY 12201-0122