



New York Flora Association - New York State Museum Institute

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***Hypotrachyna* and Other Lichen Stories
with *Hypotrachyna showmanii* new for New York State
by David Werier**

From mid-April to mid-May of 2005 I assisted Nat Cleavitt with a study on the impacts of air pollution on lichens and bryophytes in Acadia National Park, Maine (see Cleavitt et al. in press, for some of the results of this study). My main role was to help with lichen identification. I had been studying lichens for about 10 years at that point but my studies had been fairly casual and I was extremely excited to work intensively with lichens for a full month in the beautiful Acadia National Park along the northern coast of Maine.

My time in Acadia was incredible. I was constantly amazed at the diversity and abundance of lichens. Every day we would find stunning and exquisite species that I had never seen before. Things like *Pseudocyphellaria crocata sensu lato* (yellow specklebelly) a big chocolate leafy brown species with gorgeous bright yellow soralia (clusters of soredia, a powdery asexual propagule) lining the edges of the lobes; *Parmeliella triptophylla* (black-bordered shingle lichen) a species that is lined by a velvety blue-black mat (hypothallus) which creates a “picture frame” highlighting the main lichen body; and *Everniastrum catawbiense*

(powder-tipped antler lichen) a little cutie with suberect pale mineral-gray lobes lined with black cilia with the closest site known up until 1988 being the southern Appalachians (Hinds and Hinds 2007).



Everniastrum catawbiense – powder-tipped antler lichen
Photo by David Werier

We also started finding some equally beautiful and very rare species like “*Dendriscoaulon intricatum*” (olive thorn lichen), a wierd bushy thing which is considered to be a photomorph “species” (i.e. it is composed of the same mycobiont [or fungus] that occurs in the lichen *Lobaria quercizans* [smooth lungwort] but instead of primarily having a green alga as its symbiotic partner it is in symbiosis with a cyanobacterium).

According to Jim Hinds (one of the top lichenologist in New England, personal communication) our collection was the 10th known from New England. We also found *Parmotrema reticulata* (cracked ruffle lichen). Our collection of this species was only the 5th ever documented for all of New England and only the second documented for Maine, the other having been collected in 1911 (Jim Hinds personal communication).

Finally, I was able to convince Nat to take a day off so we could move beyond our plots and really look for cool lichens. In order to convince her, I needed to take a day off myself and bring back some photos and specimens of *Ulota phyllantha*. *Ulota phyllantha* is a really cool moss with dark red asexual propagules which contrast nicely with its green leaves and which often grows within the salt spray zone of the ocean; a species which Nat, the ultimate moss lover (not to mention top bryologist), had always longed to see in situ. Our big “day off” brought us to a predominately old-growth hardwood forest which was bisected by a river. We were having an amazing day finding all sorts of interesting species when we came across something that we knew was going to be beyond good. It had a very thick thallus (lichen body) and was covered in pale red apothecia (disc shaped fungal reproductive structures). Its margins were lined with a velvety blue-black mat (hypothallus) like our *Parmeliella triptophylla*

friend. Growing over a dense cushion of the moss *Hypnum cupressiforme* var. *filiforme* on a practically vertical section of a leaning ash tree (*Fraxinus americana*) we knew it was very special. We gathered just a tiny bit so we could determine what this thing was and to document its occurrence. We had a hard time making a determination in part because we were relying on a key, which in retrospect we found out did not include this species. It turned out to be *Degelia plumbea* (leaden lichen) an extremely rare lichen in New England - with only three collections ever made from New England all from the 19th century* (Hinds and Hinds 2007).

My excitement in retelling these stories has gotten me away from the *Hypotrachyna* stories I was meaning to share. While working on plots in Acadia we started to find a considerable amount of *Hypotrachyna revoluta* (powdered loop lichen) which according to Jim Hinds (personal communication) was extremely rare in New England with only four other sites known up until our finds. The *Hypotrachyna revoluta* finds also interested us because this species had not been found by Sullivan (1996) who did a PhD dissertation intensively documenting all of the lichens of Acadia National Park. It seemed odd that a relatively large species that we were encountering fairly frequently had been completely missed by Sullivan who appeared to have done a very thorough job cataloguing the lichens of Acadia.

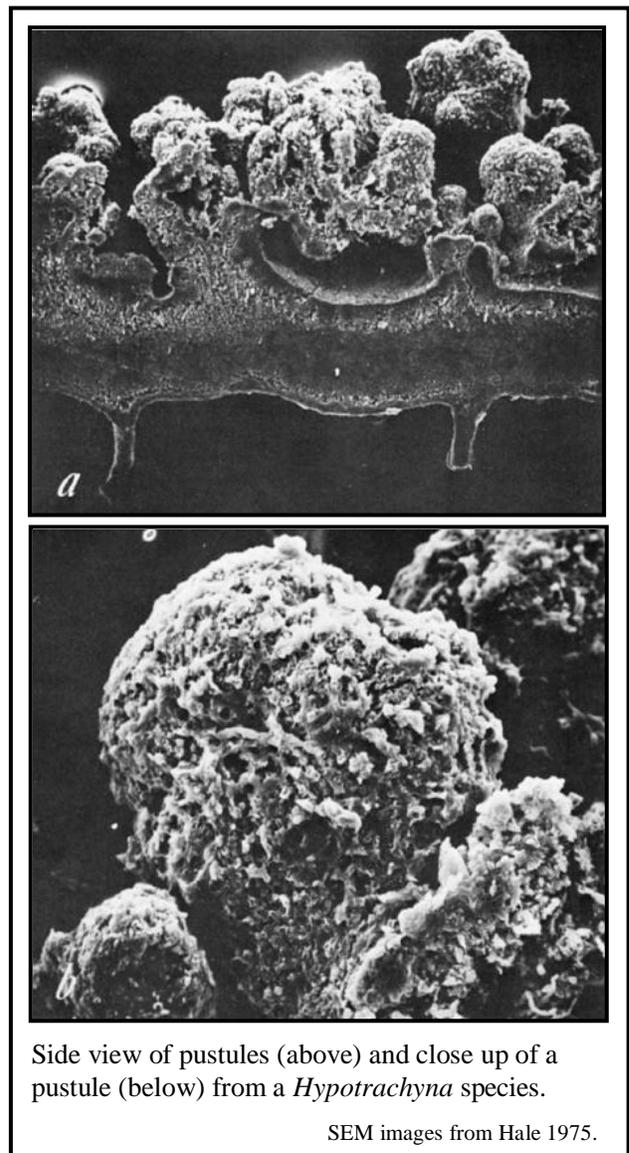
I also began to observe what appeared to be another species of *Hypotrachyna*. Both of the *Hypotrachyna* species were quite common. The two species, while somewhat similar, seemed to be distinct. I tried to determine what this second species was but with the limited resources available where we were living, I was unable to come up with a satisfactory answer. I tentatively called this unknown “*H. taylorensis*”, a species

not known from New England. Nat and I bundled up a bunch of *H. ? taylorensis* specimens along with some *H. revoluta* specimens and other goodies and sent them to Jim Hinds. I explained to Jim that I was becoming more and more confident that this other species was indeed something other than *H. revoluta* and that the best I could come up with was *H. taylorensis*. Jim wrote back, “I feel like I’m back in the 19th century, with no way to reach you by phone or e-mail, so I am forced to use U.S. Mail. I received your specimens today and took a look at them (I won’t always be this prompt!)” He went on in numerous paragraphs about the *Hypotrachyna* specimens we sent him finally concluding that our *H. ? taylorensis* specimens fit best into the concept of *H. revoluta* although he felt that this concept as currently delineated may actually encompass more than one species.

During the rest of my time in Acadia we found and collected numerous additional examples of what we began to call the pustulate *Hypotrachyna*. A pustule is a “wart-like or blister-like structure on the upper cortex of lichens” (Hinds and Hinds 2007) and many species in the genus *Hypotrachyna* possess these structures (Hale 1975). Pustule became our curse word of choice. Or for extra emphasis we used this word in its adjectival form (pustulate) placing it before a true curse word. Or at least we joked about doing this.

Nat ended up sending our specimens to James Lendemer (lichenologist, Academy of Natural Science at Philadelphia and the New York Botanical Garden) who had been working on some *Hypotrachyna* “problems” in eastern North America. He determined our specimens to be *H. afrorevoluta*, which at that time had not been recognized to be present in North America. Later that same year, along with another colleague, James published an article where he announced *H. afrorevoluta* as being present in North

America from coastal Maine (our collections) and the southern Appalachians (Knudsen and Lendemer 2005). One of the clear distinctions between *H. afrorevoluta* and *H. revoluta* is that *H. afrorevoluta* is pustulate-soresiate (i.e. it has true pustules which erode into soredia) whereas *H. revoluta* is only soresiate and lacks true pustules. There are other distinctions as well. So sweet, we had uncovered a species previously unknown to North America.



Side view of pustules (above) and close up of a pustule (below) from a *Hypotrachyna* species.

SEM images from Hale 1975.

That *Hypotrachyna* story was complete, at least for now, but others followed. In September of that same year I was in the Delaware Water Gap National Recreation Area, Pennsylvania as part of the Andrews Foray (an annual gathering of lichenologists and bryologists). On one of our outings I came across a lichen growing on a sugar maple that clearly had to be a *Hypotrachyna*. I was quite excited and was beginning to wonder if *Hypotrachyna* was starting its slow march towards world takeover. That evening I showed James Lendemer (who was also in attendance at this foray) my *Hypotrachyna* specimen that I had collected during the day. He quickly stated that it was *H. showmanii* and that there was tons around. In fact, he was making large collections to send out to various herbaria so the people who work at these institutions would have verified material of *H. showmanii* to compare.

The following year in 2006, along with another colleague, James published an article about *H. showmanii* (Lendemer and Harris 2006). *Hypotrachyna showmanii* when first described in 1975 was believed to be a “very rare lichen” with a restricted distribution of Ohio, Pennsylvania, and Virginia (Hale 1976). Lendemer and Harris (2006) showed that it really is more common and widespread, occurring from Massachusetts and Vermont, west to Ohio, and south to Tennessee and North Carolina. *Hypotrachyna showmanii* is similar to *H. afrorevoluta* but *H. showmanii* has pustules that do not break down into soredia while in *H. afrorevoluta* the pustules break down into soredia. Confusion can occur because the pustules are very fragile and when crushed, as often happens in preparation of a specimen, they can appear to be breaking down into soredia. There are many other distinctions including the presence of maculae on the lobe tips of *H. showmanii* which are lacking in *H. afrorevoluta*. Maculae are parts of the thallus that lack algae so

when a lichen thallus is viewed from above it appears pale (Hinds and Hinds 2007). In *H. showmanii* the maculae appear in a distinctive reticulate pattern creating a reticulate mottling.

The story continues. In the late fall of last year (2008) while re-organizing my personal lichen herbarium I came across two interesting specimens. One of these (from 1997; see “specimens cited” below) I had labeled “perhaps *Hypotrachyna*.” The specimen is clearly good *H. showmanii* with abundant esorediate pustules and reticulate maculae on the lobe tips. Nat recently lent me another possible *Hypotrachyna* specimen that she had collected locally in the spring of 2008 (see “specimens cited” below). It also turns out to be good *H. showmanii*. A brief review of the literature and communication with James reveal that although the range of *H. showmanii* has been shown to clearly cover New York (Lendemer and Harris 2006), no reports of this species from New York are known. This species can now be definitively added to the known lichen flora of New York (see Harris 2004 for a “preliminary list of lichens of New York”).

The other interesting specimen I came across in my personal herbarium is also a local (central New York) collection. It is clearly another *Hypotrachyna* and appears to be very close to *H. afrorevoluta*. Remember *H. afrorevoluta*? That is the species Nat and I found at Acadia that had at the time not been known from North America. I compared my possible *H. afrorevoluta* with specimens Nat and I had collected of *H. afrorevoluta* from Acadia. It compares well but still seems off in a few ways. If it turns out to be distinct from *H. showmanii* then it will most likely be another addition to the lichen flora of New York. I have contacted James and hope he can give me some insights. Stay tuned.

*As I looked at some photographs and field notes from my time in Maine I determined that

my story about convincing Nat to take a “day off” must have moved from “reality” to my imagination since my photos and notes indicate that I saw the *Ulota phyllantha* after we had already seen the *Degelia plumbea*. I left the story as is since it’s a good story and does give a sense of how hard I did work to get Nat to take a “day off”.

Specimens Cited:

hb. Werier = personal herbarium of David Werier

hb. Cleavitt = personal herbarium of Nat Cleavitt

***Hypotrachyna showmanii* specimens:**

USA. New York. Tompkins Co.: town of Caroline, W of Flat Iron Rd., on *Betula alleghaniensis* bark, 15 January 1997, Werier L-77 (hb. Werier); town of Dryden, Irish Settlement Rd., 8 April 2008, Cleavitt s.n. (hb. Cleavitt).

***Hypotrachyna ? afrorevoluta* specimen:**

USA. New York. Tompkins Co.: town of Ithaca, near Coy Glen below Elm St. Extension bridge, on downed hardwood towards top, adjacent to creek, 26 February 1997, Werier L-104 (hb. Werier).

Afterword: Since the publication of this article in *Solidago* (the newsletter of the Finger Lakes Native Plant Society) James (personal communication) has confirmed the two definite *Hypotrachyna showmanii* specimens. The third specimen which I thought might be *H. afrorevoluta* he thinks is also *H. showmanii* but with a ?. He went on to say that, “the specimen may be *H. afrorevoluta* but for the sake of record keeping I'd probably call it *showmanii* with a ?”. He agrees that it lacks maculae and in addition agrees that it is odd (for *H. showmanii*) in having pustules that erode away to expose the lower cortex. James is doing some molecular work on

H. showmanii and *H. afrorevoluta* and he hopes that this work “might solve the questions about how to separate them in North America.” Thank you James for your help with these specimens!

Literature Cited:

Cleavitt, N.L., A.C. Dibble, and D.A. Werier. In press. Influence of tree composition upon epiphytic macrolichens and bryophytes in old forests of Acadia National Park, Maine. *Bryologist* 112(2): in press.

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Hinds, J.W. and P.L. Hinds. 2007. *Macrolichens of New England*. *Memoirs of the New York Botanical Garden*. Vol. 96. New York Botanical Garden Press, Bronx, NY.

Knudsen, K. and J.C. Lendemer. 2005. Changes and additions to the North American lichen flora. IV. *Mycotaxon* 93: 289-295.

Lendemer, J.C. and R.C. Harris. 2006. *Hypotrachyna showmanii*, a misunderstood species from eastern North America. *Opuscula Philolichenum* 3: 15-20.

Sullivan, T.J. 1996. The lichens of Acadia National Park. PhD dissertation, University of Minnesota, St. Paul, MN.

NOTE: The preceding article was reprinted with the addition of an afterward with permission from *Solidago* (the newsletter of the Finger Lakes Native Plant Society) 10(1): 8-11. 2009

NEW YORK PLANTS, NEW YORK PEOPLE

Dr. Robert Naczi, Curator of North American Botany, The New York Botanical Garden



In late September 2008, Rob Naczi joined the staff of The New York Botanical Garden. Immediately prior to his arrival in New York, Rob worked as Curator of the Herbarium at Delaware State University. At DSU since 2001, he also taught graduate and undergraduate courses, and founded and directed the scanning electron microscopy lab. In addition, he served as Associate Professor and Herbarium Curator at Northern Kentucky University from 1992 until 2001.

Rob's research is devoted to vascular plant systematics, particularly of sedges (Cyperaceae) and Western Hemisphere pitcher plants (Sarracenaceae). His research is field-based. Most of his field work has been in North America, where he has explored 36 states of the U.S.A. and five Canadian provinces. Also, he has conducted field work in Belize, Costa Rica, Mexico, and Venezuela. In addition to field work, he employs herbarium and laboratory methods in his research.

At the New York Botanical Garden, Rob's primary duty is revision of Gleason & Cronquist's Manual of Vascular Plants of Northeastern United States and Adjacent Canada. The most recent revision was in 1991, and the breadth and depth of advances in botanical knowledge in the past 18 years mean the time is ripe for a full revision!

Rob looks forward to meeting members of the New York Flora Association, and exploring New York's diverse habitats and rich flora.

IMPONDERABLES

This is a new column in which a member's question will be printed each month and members are asked to send answers to the newsletter editor at

Thanks to Ruth Schottman for suggesting the column and for our first question!

Is there a height limit for woody vines that attach themselves to our trees; for example poison ivy, Virginia creeper, grapes. Does it vary from one species to another? What is presumed to be the limiting factor? Any answers or references to answers would be welcome.

Ruth Schottman



Spring Quotes

Every spring is the only spring - a perpetual astonishment.

-Ellis Peters

Everything is blooming most recklessly; if it were voices instead of colors, there would be an unbelievable shrieking into the heart of the night.

-Rainer Maria Rilke

Spring is nature's way of saying, "Let's party!"

-Robin Williams

UPCOMING EVENTS

GENERA QUEST 2009

In 2009 members have the opportunity to add to the number of genera they have seen by joining us on three more trips described below. Hope to see you in the field!

Mount Skylight, High Peaks Wilderness, Adirondacks

**Saturday June 13th (raindate Sunday
June 14th) 2009 - 6:45 AM-dark**

Description: We will meet at the High Peaks Information Center at the Adirondack Mountain Club's Heart Lake Program Center for a strenuous hike to see some of the premier alpine flora in the state. Mount Skylight is home to the state's only *Loiseleuria procumbens* population. We will also see *Geocaulon lividum*, *Diapensia lapponica*, *Rhododendron lapponica*, *Trichophorum cespitosum*, *Carex bigelowii*, and other alpine species. Some of these genera can be seen nowhere else in the state. Round trip hiking distance will be approximately 16 miles, with 2,700 feet of vertical ascent and fantastic views from the summit.

Directions: Directions will be sent upon registration

Preparations: Wear comfortable, broken-in hiking boots for walking on rugged, rocky, wet trails. Carry a backpack complete with snacks and lunch, flashlight or headlamp, minimum two liters of water, raingear, extra clothing, compass, whistle, hat/gloves, pocketknife, emergency space blanket, and matches/lighter. Wear non-cotton clothes. Gaiters are recommended.

Registration: YOU MUST PRE-REGISTER FOR THIS TRIP. This trip will only take place if the weather is good. We have set a rain date for Sunday June 14th. For this reason everyone must pre-register so we can inform them if we must postpone until Sunday due to weather. Contact Julia Goren summit@adk.org Phone: 518-523-3480 x 18 or David Werier Nakita@lightlink.com / 607-273-1765

Railroad Mills and Mendon Ponds, Rochester area

August 22, 2009. 9 AM-4 PM

Description: We will meet at the Burroughs Audubon Nature Club in the morning for a leisurely walk along an old railroad right-of-way full of interesting plants and 3 rare genera. In the afternoon we will hike around Mendon Ponds Park to see calcareous upland and kettlehole vegetation and search for the rare *Chamaelirium*. Trip will be limited to 25 people so you must pre-register to attend.

Directions: Exit Thruway exit 45 (I-490), then after toll booth exit immediately in right lane, turning right (north) on Rt. 96. Pass Eastview Mall. Approximately 2 miles after mall go under I-490 and Fishers Road is on left at traffic light (Lenel Systems on the right). Left on Fishers Road (bearing right at Y [Benson Road] staying on Fishers) approximately 1.5 miles. Right on Railroad Mills Road. Parking area for the Burroughs Audubon Nature Club at Railroad Mills is on right near bottom of hill and before creek.

Preparations: bring comfortable shoes for walking that may get wet. Pack a lunch and long pants and insect spray for the mosquitoes. Bring plenty of water and sunscreen if it's hot.

Registration: Contact Steve Daniel natdisc@rochester.rr.com. Phone 585-586-8250

Napeague Area, Long Island
September 12, 2009 9:30 AM-4:30 PM

Description: In association with the Long Island Botanical Society we will explore the beautiful beaches, dunes and swales of Napeague Beach State Park in the morning and continue with the dunes and salt marsh of Napeague Meadows State Park. We will look for the beach genera of *Ammophila*, *Cakile*, and *Salsola* and the dune and swale genera of *Hudsonia*, *Arctostaphylos*, *Polygonella*, *Rhexia*, *Pityopsis*, *Schizaea* and *Pseudolycopodiella* among others. In the marsh we should see the uncommon *Fimbristylis*, *Salicornia*, *Suaeda*, and *Sabatia*.

Directions: For the first stop take Montauk Highway east from Beach Hampton and go just under 1 mile from Cranberry Hole Road and park along the south side of Montauk Highway just after Whalers Lane. Our next stop will be Napeague Beach State Park where we will park on the south side of Montauk Highway 0.7 miles east of Shipwreck Lane at the park entrance sign and walk to the beach. After lunch at Hither Hills State Park Campground our third stop will be the salt marsh at Napeague Meadows State Park where we will park along Napeague Meadow Road just south of Cranberry Hole Road.

Preparations: Bring comfortable shoes for walking on sand that may get wet. Pack a lunch for Hither Hills and long pants and insect spray for the mosquitoes and ticks. Bring plenty of water and sunscreen if it's hot.

Registration: Contact Steve Young syoung@tnc.org Phone 518-588-8360.



Flora Association Annual Membership Meeting
and Spring Wildflower Foray
May 16, 2009

With the adoption of Bylaws and other recent changes, the New York Flora Association is instituting an annual membership meeting to discuss business related to the Association.

This year's meeting will be held in conjunction with a field spring wildflower foray in Chenango County, New York, near the Pharsalia Wildlife Management Area. It will be held on Saturday, May 16, 2009 starting at 10:30 and ending around 4:00. A picnic lunch will be provided. After the stimulating business meeting and the hearty lunch, a field trip to view the spring wildflowers in the adjacent forests and wetlands will occur. The rich deciduous forests in the area provide a very diverse array of spring ephemerals that are always exciting to see this time of year.

All members are invited to attend. Please contact Connie Tedesco at [tedec1717@oneonta.edu](mailto:tedecl1717@oneonta.edu) to sign up and to get directions to the meeting place. Dress for the weather and visits to both upland and wetland habitats. We hope to see you there!

NYFA WORKSHOPS

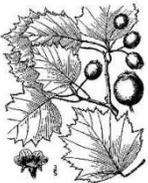
NYFA (IN CONJUNCTION WITH THE BAILEY HORTORIUM) PRESENTS A *CRATAEGUS* – HAWTHORN WORKSHOP WITH ARTHUR HAINES

Who: Arthur Haines is a plant biologist specializing in the taxonomy and identification of New England tracheophytes. He is currently employed by the New England Wild Flower Society as a research botanist and is involved in writing a new tracheophyte flora of New England. His extensive publications include *The Flora of Maine* and papers on a wide diversity of often “challenging” taxa from *Lycopodiella* to *Viola* to *Salix* to *Eupatorium* to *Bidens* to *Eleocharis* to *Poa* to *Chenopodium* and more! In addition, Arthur is a regional reviewer for the North American Flora project and director of the Delta Institute of Natural History in Maine. Lately much of his focus has been on hawthorns and he is preparing a revised treatment for New England.

Besides from being a highly recognized and astute botanist he is a skilled and approachable teacher. He has the ability to make difficult taxonomic groups feel at least some what manageable if not downright easy. His work and insights although grounded in past work are highly original and attempt to correct past mistakes. In addition to plant taxonomy, Arthur has also become highly proficient in “primitive skills”.

What: This will be an advanced intensive weekend studying *Crataegus* of the central NY region. The weekend will consist of presentations, indoor study of specimens, and plenty of field work. Participants will learn the characters useful to identifying and distinguishing between the numerous species of *Crataegus* that occur in central New York. There will also be time to work on specimens that participants bring to study.

Most of the confusion with *Crataegus* has been borne in the lab and not in the field (i.e. name proliferation and poor description of morphological characters) making this group inapproachable to most people. Hawthorn researchers have often used relative statements in keys, even when the features they were discussing could be objectively quantified. Using close-up photography and clear wording, Arthur will try to help participants understand these features making it much easier to learn the species and groups within the genus.



When: Friday May 29th 7PM to Sunday May 31st 12 Noon, 2009.

Where: Ithaca, New York. We will be based out of the Bailey Hortorium at Cornell University and will spend time both indoors and in the field in the Ithaca area.

Cost: Cost includes the entire weekend program and a group dinner at a local restaurant Saturday evening. Other meals and housing are the obligation of the participants. Total cost is \$95 for NYFA member or \$120 for non-NYFA members. Participants are encouraged to become NYFA members (\$20 membership/year). If you would like to pay by credit card please request a credit card form from David Werier.

What to bring: a 10x hand lens is a must, field journal, appropriate clothing to be outside most of the day, *Crataegus* specimens, and bag lunches for Saturday (this can be purchased locally, in the morning).

Registration: Participation is limited to 10 so sign up early to assure a slot. To register please send a check for the full amount made out to the New York Flora Association / 3140 CEC / Albany, NY 12230 or if you would like to pay by credit card please request a credit card form from David Werier (see contact information below).

In addition please send an email to David Werier (Nakita@lightlink.com) letting him know you have sent in your registration.

Questions?

Contact David Werier Phone: 607-273-1765

Email: Nakita@lightlink.com

Mailing address: 30 Banks Rd. / Brooktondale, NY 14817.

2009 SEDGE WORKSHOP WITH DR. TONY REZNICEK Thursday, June 23-25th, 2009



The New York Flora Association is sponsoring a 2 day workshop starting Wednesday June 24th through Thursday June 25th with an optional Tuesday evening session on June 23 for work with your specimens. Dr. Tony Reznicek (University of Michigan), the renowned *Carex* expert and author to various FNA Cyperaceae treatments, will again lead the workshop. The workshop will be held at SUNY Oneonta. The workshop will include both lab and field exercises. All participants are encouraged to bring plant material from their areas of interest for evening ID and discussions with Tony. The workshop will focus on sedges, but rushes and grasses will be discussed also. Participation is limited to the first twenty registrations received. Cost of the workshop is \$125 for NYFA members and students, \$165 for non-members. Questions and to reserve a spot contact Ed Frantz, 315 793-2421, efrantz@dot.state.ny.us or Donna Vogler voglerd@oneonta.edu

GRASS IDENTIFICATION WORKSHOP AT THE ALBANY PINE BUSH Saturday, August 1, 2009

We are proud to present a one-day Grass Identification Workshop this year on August 1st, led by Dennis McGee. Mr. Magee has been teaching workshops on identification of grasses for over 25 years for organizations including New England Wildflower Society, New Hampshire Association of Natural Resource Scientists, Maine Association of Wetland Scientists and Massachusetts Association of Conservation Commissions. He is sole or principal author of three reference books in field botany: *Freshwater Wetlands*, 1981, 245 pp; *Flora of the Northeast*, 1999, 1245 pp, and *Flora of the Northeast, Second Edition with CD Rom*, 2007, 1254 pp. He is currently writing *Grasses of the Northeast* under contract to University of Massachusetts Press.



This workshop will cover basic terminology and concepts necessary to identify grasses and use dichotomous keys. Key characters for distinguishing 10 different tribes will be presented along with the diagnostic features for identifying common genera within each tribe. In all around 60 genera will be discussed. Half of the workshop will be indoors for presentation of the lecture and examination of specimens and the other half outdoors identifying local grasses. A ten power lens, note pad, and a basic understanding of field botany are recommended. Bring a bag lunch.

The workshop will be held from 9:00-4:00 at the Albany Pine Bush Discovery Center at 195 New Karner Rd., Albany NY 12205. The cost will be \$35 for NYFA members, and \$50 for non-members. To register please send a check made out to the New York Flora Association, 3140 CEC, Albany, NY 12230 and send an email to Connie Tedesco tedec117@oneonta.edu to confirm registration, for directions to the APB Discovery Center, or for any other information. Sign up soon for this unique opportunity to improve your identification skills!

Other Selected Regional Events

Niagara Frontier Botanical Society Field Trips

The Niagara Frontier Botanical Society (NFBS) was established in 1983 to promote the study, appreciation and conservation of plant life in Western New York and adjacent Ontario, with an emphasis on field botany. Meetings are held at the Harlem Road Community Center on the second Tuesday of each month, September through May. The Center is located at the intersection of Harlem Road and Lincoln Street, a quarter mile south of Main Street in Snyder. For information on NFBS membership, contact birderc@aol.com or see the NFBS website at <http://www.acsu.buffalo.edu/~insrsg/botany/>

Saturday, May 9, 2009 Balls Falls

Conservation Area: This site near St. Catherines Ontario is noted for trails along the escarpment featuring access to spectacular scenery, unique rock formations, a cataract and rich plant life. We also plan to stop at the visitor's center, the Balls Falls center for Conservation, which has exhibits on natural history and local heritage. Meet at 9:00 AM at Boulevard Mall parking lot on Niagara Falls Blvd. next to the big sign for the mall. Make sure you have proper identification for crossing the border. Bring lunch. Please register with group leader Judy Hoffman at 684-2049.

BIOBLITZ at Tift Nature Preserve-

a Day of Discovery: This is a scientific race against time measuring the diversity of life to be found in a defined area. We are invited to help identify and document as many species as possible in a 24-hour period at Tift Nature Preserve. Members of the NFBS all invited to take part in the identification of the plant species.

Saturday May 30, 2009: NFBS members including non-experts are encouraged to join in and learn. Meet at the lodge at Tift Nature Preserve at 9:00AM. To register contact group leader David Spiering at 825-6397 or Michael Siuta at 822-2544.

Saturday July 11 & August 22, 2009: Follow-up trips will continue this BioBlitz plant inventory: Meet at Tift Nature Preserve at 9:30 AM and bring lunch. Call leader David Spiering at 825-6397 or Michael Siuta 822-2544.

Saturday June 6, 2009 Spring Flora at

Winhaven: Irene Wingerter invites you to visit this family retreat in Langford. See a rich variety of spring wildflowers and ferns in a verdant hardwood forest. Pack a lunch to enjoy at the cabin by a scenic pond. Meet at 10:00 AM in the parking lot of the Catholic Church on Route 75 in Langford. Call Irene at 632-06456.

Saturday July 18, 2009 Secret Plant Sites in

Buffalo. We will go in a car caravan making short visits to several interesting sites in the city. The focus is on invasives and survivors found in plant communities in an urban setting. Expect to see some interesting and rare plants in surprising locations. You may be surprised that some of these places exist in Buffalo. No strenuous walking. Meet at 9:00 AM in parking area behind the Buffalo Farmer's Market at Clinton and Bailey. Call leader: Michael Siuta 822-2544

SIXTH NORTHEASTERN ALPINE STEWARDSHIP GATHERING

ALPINE STEWARDSHIP IN A CHANGING CLIMATE

Friday, May 29th and Saturday, May 30th, 2009

The Northeastern Alpine Stewardship Gathering is an opportunity for alpine researchers, planners, managers, stewards, and interested parties to meet to share information and improve the understanding of the alpine areas of the Northeastern US. Every two years the gathering is organized and hosted by different organizations with the purpose of improving our knowledge and management of the Northeast's alpine areas. The 2009 Gathering, hosted by the Adirondack Mountain Club and held in Lake Placid, NY, will include a day of presentations related to the theme of Alpine Stewardship in a Changing Climate and a second day of diverse field trip options. Highlights include a Thursday pre-Gathering multimedia program and special presentation Friday evening. Alpine researchers, managers, planners, volunteer stewards, and individuals with an active desire to learn more about the alpine areas of the Northeast and how to manage them are invited to attend.

Where: The Crowne Plaza Resort, Lake Placid, New York

For more info contact: Julia Goren by email at summit@adk.org or by phone at 518-523-3480 x 18 or visit the website at:

http://www.adk.org/pdf/NEASG_info.pdf

ODUM CONFERENCE

"UNDERSTANDING AND MANAGING BIOLOGICAL INVASIONS AS DYNAMIC PROCESSES: INTEGRATING INFORMATION ACROSS SPACE AND TIME"

April 30-May 1, 2009

This conference will focus on incorporating a long-term perspective into invasion ecology and management; developing specific mechanisms to assemble and evaluate the needed data; and 3) fostering a collaborative research-management approach in which broad patterns are used to yield specific management recommendations. The event will feature many prominent invited speakers in invasion ecology and management. Additionally, the conference will include a poster session and fieldworkshops.

Where: The conference will largely be held at the Rensselaerville Institute Meeting Center, Rensselaerville, NY. Additional activities will take place at the adjacent E.N. Huyck Preserve and Biological Research Station, where E.P. Odum, the founder of ecosystem ecology, worked at a formative part of his career.

For a complete conference program, visit:

<http://nyisri.org/odumprogram.aspx>

HANDY RESOURCES

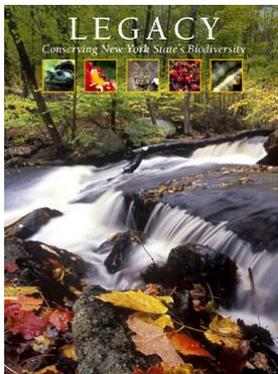
WRITTEN MATERIALS



Conserving Natural Areas and Wildlife in Your Community is a guide produced by the NYS Department of Environmental Conservation that is useful for anyone involved or interested in biodiversity conservation and local land use planning and decision-making, including

elected officials, volunteer board members, and interested citizens and organizations. It describes how to find biological information about your community and the tools and techniques that local governments can use to conserve natural areas and wildlife. It can be downloaded for free at:

www.dec.ny.gov/lands/50083.html



Legacy: Conserving New York State's Biodiversity is a 100-page, full-color book offering a remarkable glimpse into the vast array of life and beauty in New York State. Included are the birds we see at our backyard feeders, giant salamanders that quietly eat crayfish, "bottomless"

lakes, alpine tundra, forests that need fire to survive, and much, much more.

This book is a publication of the New York State Biodiversity Project, an ambitious collaborative effort by the American Museum of Natural History, New York State Biodiversity Research Institute, New York State Department of Environmental Conservation, New York Natural Heritage Program, and The Nature Conservancy. The group's aim is to improve the understanding of the state's biodiversity and to identify both challenges and solutions to protect it. You can request a copy by emailing your request and contact information to bri@mail.nysed.gov. (will ship to U.S. addresses only) or the document can be downloaded in full at

www.nysm.nysed.gov/bri/publications/legacy.htm

COMING SOON....

TO A FOREST NEAR YOU....



May-apple (*Podophyllum peltatum*)

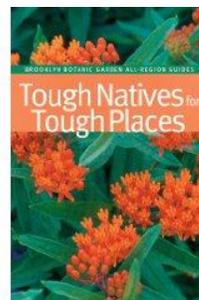


Canada wild-ginger (*Asarum canadense*)



wake robin (*Trillium erectum*)

AND TO A LIBRARY OR BOOKSTORE....



Tough Natives for Tough Places by Niall Dunne Paperback, 120 pages
Brooklyn Botanic Garden. To be released October 06, 2009

ALERTS

Hemlock Woolly Adelgid

An insect pest newly arrived in the Finger Lakes region -- the hemlock woolly adelgid (HWA) – was recently discovered in the Cornell Plantations area of Cascadilla Gorge and in the Beebe Lake natural areas and is threatening hemlock trees and the biodiversity they support. This Asian species has decimated hemlock populations across the eastern United States.

The HWA causes nearly 100 percent mortality in the native eastern hemlock (*Tsuga canadensis*). The small, aphid-like insects feed on the sap at the base of individual needles on the trees; eventually needles yellow and drop, branches die, and trees succumb in about four to 10 years.

HWAs were first reported in the central Finger Lakes region in mid-2008, and they now inhabit at least 19 local sites. Early detection of new sites of infestation is now a high priority, and local conservation groups are organizing volunteer surveys as a critical first step in managing this devastating invasive species.

Researchers at Cornell University, NYS Dept. of Environmental Conservation, and the US Forest Service are trying to determine the full extent of the HWA's distribution in the Finger Lakes and would like anyone capable of recognizing the HWA to report BOTH positive and negative sightings. If you wish to volunteer with others organized by Cornell Plantations to inspect important local Hemlock forests please go to: <http://www.plantations.cornell.edu/ourgardens/natural-areas/invasive/hemlock-woolly-adelgid>.

To report positive and negative sightings and to find further information about the HWA please visit: www.nyshwa.info.



Hemlock woolly adelgids on an eastern hemlock. Adult adelgids can be easily observed in winter and early spring at the base of individual needles, covering themselves with fluffy white, cottony wax, which remains on the branches long after the adelgids die.

Photo credit: Mark Whitmore, Cornell DNR

Emerald Ash Borer

The emerald ash borer (*Agrilus planipennis*) (EAB) was first discovered in the U.S. in 2002 in southeastern Michigan. It was also found in Windsor, Ontario the same year. This Asian beetle infests and kills North American ash species (*Fraxinus* sp.) including green, white, black and blue ash. Thus, all native ash trees are susceptible. Adult beetles leave distinctive D-shaped exit holes in the outer bark of the branches and the trunk. Adults are roughly 3/8 to 5/8 inch long with metallic green wing covers and a coppery red or purple abdomen. They may be present from late May through early September but are most common in June and July. Signs of infection include tree canopy dieback, yellowing, and browning of leaves. Most trees die within 2 to 4 years of becoming infested.



Although the Emerald Ash Borer has not yet been detected in New York, recent sightings have taken place as nearby as western and central Pennsylvania and eastern Ohio. For these reasons, NYS has instituted firewood regulations to restrict the movement of firewood to within 50 miles of its source in order to protect trees and forests in the state from EAB and other invasive insects and diseases. The US Department of Agriculture is planning an EAB, survey this summer from approximately May 25th through September 4th throughout New York, primarily in western NY but may include work in the Adirondacks and Catskill Mountains as well.

To learn more about the Emerald Ash Borer please see:

<http://www.dec.ny.gov/animals/7253.html>

To report possible sightings of EAB call DEC at 518-402-9425, or call the USDA EAB hotline toll-free at 1-866-322-4512.

New York Flora Association Board of Directors Class of 2012 Election Slate

In accordance with the Organization and Bylaws of the New York Flora Association (Approved 21 March 2008), the Nominations Committee submits the following slate for the New York Flora Association Board of Directors, Class of 2012.

Andrew Nelson, SUNY Oswego, Oswego, NY
Troy Weldy, The Nature Conservancy, Albany, NY
Steve Young, NY Natural Heritage Program, Albany, NY
Rich Ring, Botanist, NY Natural Heritage Program, Albany, NY
Christopher T. Martine, SUNY Plattsburgh, Plattsburgh, NY

**Vote for one or all of the candidates on the ballot. Ballots should be postmarked by May 11th
and mailed to:**

**Adam Ryburn,
112 Science Building 1, SUNY Oneonta,
Oneonta, NY 13820
FAX 607.436.3646**

Ballot for Board of Director Elections (Class of 2012)

Andrew Nelson, Troy Weldy, Steve Young, Rich Ring, Christopher T. Martine

A Message from the President

As we all eagerly await the first spring blooms I would like to encourage our membership to support our organization in any way they can this year. For many reasons we all see value in this organization, and find value for our employment and our own personal enjoyment. The NYFA Board is moving forward to update and spur new interests in the organization. The bylaws were updated in 2008, continued support given to the NY Flora Atlas, a stronger commitment to field trips and workshops, the development of a new web site, and a new logo that is included in this newsletter and spotlighted on the website.

My interest in native plants are many, ranging from wetland delineation work started 20 years ago, to new native roadside planting/seeding treatments for roadsides in the Adirondacks and Catskills, the latter of which could reduce mowing needs and replace invasive species adding value to society. At the same time, I find some of my greatest experiences in life to be explorations of new areas looking for a species I have never before seen.

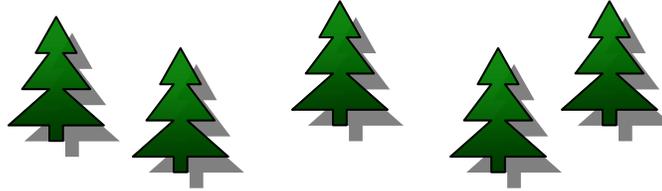
Members of the NYFA Board all have varying reasons to value NYFA and donate much of their time to support this organization. I think we all agree NYFA has much to offer; challenges such as those posed by invasive species are just an example of the superior value of native plants. As members, we can all find ways to contribute to NYFA. Recently I spoke to several friends all doing work in the field of wetland science, and when I asked them if they were aware of or were members of NYFA, I was amazed that they weren't. For this reason, please share information about NYFA with your peers, students, and colleagues. We are always looking for new field trips and ideas, and flora news from around the state. Our new web site is coming on line soon, and we are looking for a volunteer to help manage the site. If you have an idea to contribute, would like to lead a field trip or write an article to the newsletter, please let us know. If you haven't already been getting your newsletter electronically, please consider receiving it electronically rather than by mail and contact Steve Young at syoung@tnc.org if you would like to do this. It saves NYFA money and time. I hope you all have a wonderful spring and hope to see you at a field trip or workshop this year.

---Ed Frantz NYSDOT



Go Green with an Electronic Newsletter

If you don't need to renew at this time and would like to receive the newsletter electronically in .pdf format, please send an e-mail to young@nynhp.org and put "NYFA electronic newsletter" in the subject line. We appreciate your efforts to save paper, money, and time by receiving your newsletter electronically. An electronic membership has the added advantage of delivery before paper copies are sent out and includes full color photographs. To date, over 60 of our members (more than 30%) receive the newsletter electronically. We hope to convert all our members to the electronic form by the end of 2009!



New York Flora Association Membership Form 2009

Annual Membership dues:

New \$20

Renewal \$20

New Student Members Free the First Year. School: _____

Additional donation to support NYFA's efforts like botany presentation awards and small grants.

Total \$

Name: _____

Address: _____

Address: _____

City: _____ State: _____ Zip Code: _____

I would like my newsletter electronically. email: _____

Make checks payable to the **New York Flora Association** and mail to:

NY Flora Association

3140 CEC, Albany, NY 12230

Thank you for supporting NYFA and the flora of New York State!