NYFA Newsletter

New York Flora Association - New York State Museum Institute
Steve Young and Laura Lehtonen, Editors
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NYFA's 2004 Field Trip Schedule

NYFA has planned three field trips for 2004. More information will be posted on the website. Due to the sensitive habitats of these sites, each field trip is limited to 20 participants. These are reserved on a first come, first serve basis. Please contact Troy Weldy (weldy@nynhp.org or 518-402-8952) to reserve your spot.

June 26-27: Indian River Lakes region of Jefferson County (26th) and Bonaparte Swamp in Lewis County (27th)

The Indian River Lakes area is near Redwood (near border of Jefferson and St. Lawrence County). We will spend most of our time around Butterfield Lake and Grass Lake. The area has limestone belts running through sandstone. This region is fairly un-botanized, but preliminary fieldwork suggests a rich and diverse flora. The Indian River Lakes area is also a wonderful place to kayak/canoe. If anyone wishing to spend a few additional days boating this area, we have a contact person that could arrange approval. Prior notice is needed. This trip has been arranged by NYFA member Anne Johnson with the approval of the Indian River Lakes Land Conservancy.

Bonaparte Swamp is a well-known botanical hot spot. The rich area contains many exemplary community types including rich graminoid fen, rich shrub fen, northern white cedar swamp, and other calcareous influenced wetlands. Rare plants include *Aster borealis, Sparganium natans, Valeriana uliginosa*, and various orchids. This site is the perfect location to start the summer field season.

July 17-18: Byron-Bergen Swamp (17th) and Mendon Ponds (18th)

Bergen Swamp has one of the state's finest example of marl fen in a mosaic of calcareous wetlands that support many rare and interesting plants. Under the protection of the Bergen Swamp Society, the swamp is easily accessible.

Mendon Ponds Park is a well-preserved county park with many different wetland types, most of them calcareous, and a long list of rare plants growing within the glacial kettle and kame topography.

August 21: Hulett's Landing, Lake George

Join us on a joint field trip with the Lake George Land Conservancy to survey the flora of a recent acquisition in the northeastern corner of Lake George. This land contains a mix of rich upland and wetland community types. Community types on the property include northern white cedar swamp, spruce-fir swamp, and limestone woodland. We anticipate recording a diverse flora for this understudied area.

Inside this issue:

Blue Vervain
(*Verbena hastata* L.)

By Knowlton Foote (kfoote@twcny.rr.com)

Blue Vervain is a wild flower that we occasionally see in mid-summer in our northeastern wetlands along with Purple Loosestrife, the Cattails, Swamp Milkweed, Joe-Pye Weed and Jewelweed. It has a moderately large, handsome, purple inflorescence consisting of many flower spikes. Edward Alexander, writing in the journal *Addisonia* in l928, considered Blue Vervain "the most brilliantly colored of its genus in the northeast and possibly the southeast as well, and for its blooming season and color, would be well worth cultivation." Blue Vervain is a native North American wildflower, as are many of the species in the genus *Verbena*.


Jim Stasz @ USDA-NRCS PLANTS Database

Its name and classification

Blue Vervain was given its formal name, *Verbena hastata*, by Swedish taxonomist Carolus Linnaeus in l753. It is a member of the Verbenaceae or Vervain family. The genus *Verbena* consists of about 230 species found mostly in temperate and tropical America. In the Northeast, Gleason and Cronquist (l991) list 11 species. In New York State, Mitchell and Tucker (l997) list 8 species including *Verbena stricta* (Hoary Vervain) and *Verbena urticifolia* (White Vervain). Blue Vervain plants are occasionally seen with pink or rose colored flowers (*Verbena hastata* forma *rosea)* and white flowers (*Verbena hastata* forma *albiflora)* (Gleason l963).

The origin of the word Verbena is obscure (Perry l933). The name has been handed down to us as representing certain Northern European herbs used in sacred rites by the ancients. These plants were considered sacred to Dioscorides and were used to clean festive tables. Verbena may also be an ancient Greek name given by Roman naturalist Pliny to this species (Shosteck l974). Hastata signifies "spear-shaped" and describes the shape of the basal leaves with two upward-pointing basal lobes. The common name Vervain is believed to have come from the Celtic word *ferfaen*, from *fer*, to remove, and *faen*, stone as *Verbena officinalis* (European Vervain) was once used in bladderstone treatments, as well as a treatment for sore eyes and numerous other ailments (Alexander l928).

Its discovery in North America

One of the first botanists to report this North American native species was Carolus Linnaeus – in Sweden. In l753 Linnaeus described this species as occurring in Canada in his *Species Plantarum.* Whenever Linnaeus named a species, he described it with a specimen in front of him. He acquired his large herbarium collection of over 7300 species from his own collecting, from growing specimens in his Uppsala garden from seeds and cuttings sent to him by botanical explorers, and from acquisition of the herbaria of 34 other collectors. These collectors included Philip Miller, Pehr Kalm, Bernard de Jussieu, Fredrick Hasselquist, and Jan Fredrik Gronovius. Linnaeus's Blue Vervain specimen perhaps came from one of the acquired herbaria, or he may have grown the plant in his garden from seeds sent to him by early explorers in North America, such as Kalm, who collected extensively in eastern North America from l748 to 1751.

Another early report of Blue Vervain was by French botanical explorer Andre Michaux in his *Flora Boreali-Americana* in l803. Michaux arrived in New York from Paris in l785. Over the next 12 years he made numerous expeditions from the Carolinas to Hudson Bay and as far west as the Mississippi River in Illinois. He recognized 8 species of *Verbena* as occurring in this region.

Description and Life cycle

This perennial herbaceous species reproduces primarily from buds growing from a short perennial root-stock and also by seeds. The life span of these plants has not been reported, but is best described as a short-lived perennial capable of producing seeds for much of its life, i.e. it is polycarpic. An estimate of the life span comes from other perennial species of similar habitat: Swamp Milkweed (*Asclepias incarnata*) lives 5 to 10 years, Purple Loosestrife (*Lythrum salicaria*) can live as long as 20 years.

Stems are 1 to 2 meters high, hollow, and square

in cross section. The hollowness of the stem is important in that it may allow flow of gases down the stem into the rootstock system. This adaptation has been shown in other wetland species such as *Typha* and *Phragmites*. The hollow stem allows roots to get oxygen in anaerobic wet soils. The leaves are opposite, lance-shaped, 7.5 to 15 cm in length, and have a rough texture. The lower leaves sometimes have three lobes. The edge of the leaf is prominently serrated. The rhizome is woody and short (up to 7.5 cm in length) from which grows a mass of lateral roots up to 30 cm in diameter. The plant is clumped usually with 3 to 12 stems growing out of the base. Each tall stem projects its inflorescence above the surrounding vegetation, making it easy for both pollinating insects and admiring humans to spot. The candelabra-shaped inflorescence comprises the top third of the plant usually without leaves. Within the candelabra may be found 20 to 50 pencil-thin attractive spikes commonly 7.5 to 12.5 cm long. The overall shape of the inflorescence is quite similar to Purple Loosestrife

On each spike are found numerous (75-125) small flower buds which open towards the top (acropetally) producing purplish flowers about 6 mm long with 5 fused petals, each petal with a small flaring lobe. The top of the floral tube curves outwardly away the stem so that it is not exposed to rainfall. At the base of each flower is found a small leaf-like bractlet. The sepals are united into a calyx tube 2.5 to 5.0 mm long. The corolla tube is somewhat longer. The diameter of each floral tube is similar to the calyx tube, 2.5 to 5.0 mm. The flowers of the spike are sessile and spirally arranged on the stem. Each spike is indeterminate; it may continue to grow and produce new flowers as long as growth conditions are favorable. Thus a spike can simultaneously have seeds ripening at the bottom, flowers blooming in the middle, and flower buds developing at the top.

HABITAT AND RANGE

Blue Vervain is widely distributed in North America. It occurs in southern Canada from Nova Scotia to British Columbia, south throughout the United States (Perry l933). It may be found in almost any moist site: damp fields, wet prairies, ravines, roadside ditches, stream banks, even on top of a beaver dam as I saw it in Westport, Ontario. In the Northeast, it is mainly a plant of stream banks and marshes. This species does best in sandy, gravelly, or loamy soils which are neutral or slightly acidic (Wiegand and Eames l925). Moisture seems to be key to its success. Lovell and Lovell (l939) reported in Maine that " during years of great moisture, it bloomed in great profusion…"

FLORAL BIOLOGY

Flowers open first at the base of the spike. Six to 10 flowers on each spike are usually in bloom at a time forming a ring around the spike thus enhancing the visibility of the small flowers to pollinators. Daily, this floral ring moves progressively up the spike. The flowering period extends from July to early September in central New York.

The entrance to the corolla tube is almost totally restricted by a grating of 100 to125 fine purplish hairs that almost completely block the entrance of the floral tube to insects. Small insects such as thrips can pass through the center of the grate as can the tongue or proboscis of insect pollinators. The ring of hairs is useful in excluding rain and insects that could consume nectar without transferring pollen (nectar thieves). Inside of the floral tube are small whitish hairs. These hairs probably serve to discourage nectar thieves but are not thick enough to block a probing tongue, proboscis, or small insect. Just beneath the ring of hairs are four yellow stamens, the filaments of which are quite small and attached (adnate) to the inside of the corolla wall. The stamens consist of two pairs of unequal length (i.e. slightly didynamous): an upper pair which lies close to the grate of hairs and a slightly lower pair. The anthers open introsely, i.e. on the side towards the center of the flower releasing their pollen grains to the inside of the floral tube and thus making them available for insect removal. The number of pollen grains has been reported to be 402 per anther (Cruden et al 1990). The pollen is yellow, sticky, and remains in the anthers or close to them after they have opened unless removed by an insect. Some 80% of the pollen grains remain viable after two days (Poindexter l962).

The style is about half the length of the corolla tube and is topped by two unequal stigmatic lobes (see Fig 1 by Lovell and Lovell l939). There is a slight spatial separation between the anthers and the stigma. The stigma is below the lowest anther by 0.5 mm (Cruden l990). The larger lobe is the true stigmatic lobe, is light green and bulbous almost filling half of the floral tube. The smaller lobe is smooth, whitish, pointed and sterile (Perry l933, Lovell and Lovell l939). If the smaller stigmatic lobe was like the larger lobe in size, the passage of a bee's tongue into the corolla tube would be nearly impossible physically. At the base of the style is a 4-celled ovary capable of producing 4 seeds.

A detailed study of the floral biology of Blue Vervain and three other *Verbena* species was made by Robert Cruden and his ecology class at the University of Iowa (l990). The flowers of *V. hastata* were found

to open between 9:30 and 11:00 am and generally lasted 2 to 3 days before the corolla fell off. While the nectar of Blue Vervain wasn't tested, that of *V. stricta* (Hoary Vervain, also present in New York) was 37.5% sugar. When the flowers were open pollinated, 93% produced the maximum of 4 seeds per flower. When the flowers were bagged to eliminate pollinators, only 8% produced 4 seeds per flower. And when the flowers were bagged and treated with malathion to eliminate thrips in the flowers, l00% of the flowers produced no seeds whatsoever.

The above information implies it is virtually impossible for a flower to be self-pollinated. On rare occasions, a pollen grain may reach the stigmatic surface (Cruden et al l990). It is difficult for pollen to fall down onto the stigmatic surface since pollen grains are sticky and not free to move about, there is a slight spatial separation between the anthers and the stigma, and the curvature of the corolla tube is horizontal to one side of the spike. So self-pollination within a flower (autogamy) does not occur most of the time, a conclusion also supported by Lowell and Lowell (l939). Normally pollen is cross-pollinated by pollinators to other flowers on the same plant to other plants. Self-pollination within a flower can occur, however, if thrips, aphids, or other small insects are in the flower to move the pollen. As a result, Cruden et al (l990) described this species as being "faculative xenogamous," a mixed mating system of primarily cross-pollination to other flowers with limited self-pollination occurring when small insects are present.

The high rate of seed production (93% of flowers producing 4 seeds per flower) can be partly explained by the high number of pollen grains landing on a stigma. Cruden et al (1990) observed that after flowers were open-pollinated for 12 days, 91% of the stigmas received an average of 60 pollen grains to fertilize 4 ovules.

POLLINATORS

Because of its attractive flower color and shape, the presence of both nectar and pollen, and a congested inflorescence, Blue Vervain is visited by a large variety of insects. Nectar is secreted at the base of the corolla, is colorless and produced in small amounts (Lovell l926, Cruden et al l990). An insect's tongue needs only to be about 3 to 4 mm long to reach the nectar. Short-tongued insects such as sweat bees (genus *Halictus*) where the tongue length is 1.5 mm are unable to reach the nectar. Those longer-tongued insects that get nectar after penetrating the ring of hairs are numerous and diverse: honeybees, bumblebees, solitary bees, wasps, hoverflies, butterflies and moths (Lovell l926, Robertson l929, Cruden et al l990). Lovell and Lovell (l939) reported in New England the following species on Blue Vervain: a ruby throated hummingbird (*Trochilus colubris*), 10 bees and 1 wasp (order Hymenoptera), 2 butterflies (order Lepidoptera), 4 species of flies (order Diptera), and 1 bug (order Hemiptera). Charles Robertson (l929) in Illinois observed 69 different species! The most common visitor was the honeybee (*Apis mellifera)*. Lovell and Lovell (l939) reported a honeybee visiting 53 flowers in just one minute going from one spike to another. Not to be overlooked are butterflies and moths as pollinators. Robert Dirig of the Bailey Hortorium at Cornell has observed 20 species of moths and butterflies visiting this species in New York State. The lepidopterans appear to be effective pollinators. Both Lovell and Lovell (l939) and Cruden et al (1990) observed that once a proboscis was withdrawn from a flower wet with nectar, it was usually dusted with pollen.

FRUITS AND SEEDS

The dry fruit produced by a flower is a schizocarp consisting of 4 hard, nut-like seeds that are retained in a persistent calyx which separate at maturity. The seeds are quite small, 2.5 mm long and weigh an average 0.32 mg or 1,418,000 seeds per pound (Stevens l932). However, an amazing high number of 20,000 seeds can be produced by a single plant in a season (Stevens l932). The nutlets are released and simply fall to the ground or water by late fall-early winter. The seeds initially float on water, but if the water is agitated, they sink similar to seeds of Purple Loosestrife. The longevity of seed buried in the soil has not been determined, but 19% of seeds stored in fresh water germinated after 5 years (Comes et al l978).

CHROMOSOME NUMBER

Chromosome counts for Blue Vervain generally show the diploid number to be 2n = 14 (Dermen l936, Poindexter l960, Mulligan l961). However, Kanda (l920) reported one count of 2n = 12 in Illinois. This number is also been reported in European plants (Mulligan l961). Dermen (l936) also reported a chromosome number of 2n = 14 for *Verbena stricta* and *Verbena urticifolia*.

HYBRIDIZATION

With a similar chromosome number for many *Verbena* species, hybridization is a possibility and readily occurs (Moldenke l958). Gleason (l963) lists 7 hybrids of *Verbena* in the Northeast – two involving Blue Vervain. Jerold Poindexter (l962) of the University of Kansas re-

ported natural hybridization among Blue Vervain, Hoary Vervain (*V. stricta*), and White Vervain (*V. urticifolia*) – all species which occur in eastern North America. The hybrids of these three species can be recognized by most taxonomists and were first described from plants collected in Illinois and Missouri in l844 (Poindexter l962). The main isolating mechanism that separates these species appears to be ecological. They tend to grow in different habitats. All three species are distinctive in shape and structure of the plant. Mitchell and Tucker (l997) list *Verbena hastata x urticifolia* as occurring in New York State. This ability of *Verbena* species to hybridize successfully with one another has made this genus important in horticulture.

CONCLUSION AND A CONCERN

Considerable information on this species has been obtained by years of research by many researchers. However, further research is needed to learn such information as longevity of the plants, rhizome physiology, seed germination requirements, seedling physiology, and an analysis of the nectar.

I have a concern about this species. I don't see it very often in the marshes around Central New York, the southern tier of New York or up to the St. Lawrence River area. In 1925 Wiegand and Eames described this species as "common." in central New York. In 1928 Alexander also wrote that this species "runs rampant through our marshes." While not in jeopardy, it appears that the aggressive spread of Loosestrife and *Phragmites* in our New York State marshes over the past 50 years is crowding Blue Vervain out.

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New York People
New York Plants

An update of who is doing what across the state

The College of Environmental Science and Forestry at Syracuse is an important center for plant studies in New York. Professors Donald Leopold and Robin Kimmerer are supervising numerous graduate students who are carrying out a wide variety of plant research. Here is an update on what they are doing.

Matt Buff (mfbuff@mailbox.syr.edu)

I am using New York Natural Heritage records and GIS to build predictive habitat models for rare plants. These models use a large number of environmental variables, such as topography, soils, geology and climate to identify areas of habitat most similar to known locations of rare plants. These predictions will allow for more efficient field searches for new populations of plants on state land.

Emily Cloyd (etcloyd@mailbox.syr.edu)

I am interested in the effects of human disturbances on wetland ecosystems of the Laurentian Great Lakes region, especially in how plant and fish communities have been impacted by development and water level regulation.

James Costello (working with R. Kimmerer; jecost01@mailbox.syr.edu)

I am studying the presence of pickerelweed (*Pontederia cordata*) as an indicator and facilitator to the successful establishment and growth of northern wild rice (*Zizania palustris* var. *palustris*).

Matt Distler (mtdistle@mailbox.syr.edu)

Succession and vegetation dynamics in Lake Ontario coastal fens. As a member of a larger group investigating the paleoecology of Lake Ontario wetlands, I am focusing my work on describing successional changes in vegetation of Lake Ontario coastal medium fens using macrofossil analysis of peat cores. In this work and future work based on surveys of extant vegetation, I plan to study the dynamics of cattail (*Typha* spp.) and swamp community expansion in these fens as well as determining potential driving forces behind changes in these wetlands.

Tony Eallonardo (aseallon@mailbox.syr.edu)

I am studying the effects of calcium, nitrogen and phosphorus treatments on understory vegetation of a northern hardwoods forest in the Catskill Mountains, NY. The Catskill Mountains have been subject to over 50 years of some of the highest rates of acid deposition in the United States, such that many researchers suspect that the deposition of these acids has significantly altered the soil environment not only in the Catskills but also throughout the Northeast. Through these elemental additions I hope to address nutrient limitation on the growth of the understory and regeneration of the overstory and make inferences regarding the ecological and anthropogenic meaning of my observations.

Jodi Forrester (joforres@mailbox.syr.edu)

Short and long term dynamics of the old-growth maritime American holly forest (Sunken Forest) on Fire Island.

Laurie Galluzzi (working with R. Kimmerer; lagulluz@mailbox.syr.edu)

Indigenous harvesting practices and the maintenance of restored sweetgrass populations.

Kevin Godwin (ksgodwin@mailbox.syr.edu)

Hydrogeology of fens in New York State.

Kay Hajek (klhajek@mailbox.syr.edu)

Diversity patterns in fens of New York State.

Alison Halpern (adhalper@mailbox.syr.edu)

I am studying the ecology and control of the aquatic invasive plant Eurasian frogs-bit, *Hydrocharis morsus-ranae*. Specifically, I am interested in assessing the potential of two native herbivores (the semi-aquatic moth *Synclita obliteralis* and the aquatic mite *Hydrozetes*) and determining the abiotic factors that may limit the growth of this invasive species.

Hope Hornbeck (jhhornbe@mailbox.syr.edu)

Managing state-protected orchids in heterogeneous landscapes: Is rarity controlled by mycorrhizae? An examination of the relative rarity of orchids along forest successional gradients relative to the distribution of their mycorrhizal fungal associates.

Stephen Reynolds (sharrisonreynolds@hotmail.com)

Hydrogeochemical relationships with vegetative community structure and diversity in fens of the Fall Creek Watershed, NY. I am currently investigating correlations between hydrogeochemistry and fen plant diversity. Extensive vegetative surveys plus detailed hydrogeochemical analysis have catalogued current community composition and abiotic conditions with specific attention given along microtopographical (hummock-hollow) gradients in several central New York fens. This information is crucial to understand these wetlands as well as to conserve the diverse and rare flora found in such systems.

Lisa Goodell (lagoodel@mailbox.syr.edu)

Structural and floristic diversity patterns of upstate New York state forestland. I am comparing a set of forest stand development stages (based on stand structure) to understory plant species diversity patterns between stands of varying development stages, varying forest types, and with varying levels of anthropogenic influences.

Sara Scanga (sescanga@mailbox.syr.edu)

The role of canopy gaps in the conservation of the rare wetland wildflower *Trollius laxus* (spreading globeflower). To test for the effect of light on *T. laxus* vigor, 11 canopy gaps were created over *T. laxus* populations at Nelson Swamp Unique Area, Madison County, NY. Preliminary results indicate that populations under canopy gaps tend to be more vigorous than populations under paired, closed-canopy control areas. Field monitoring will continue for one more field season, accompanied by a controlled greenhouse experiment.

Robin Tait (working with R. Kimmerer; crtait@mailbox.syr.edu)

I am studying the spatial pattern and habitat preferences of New York State populations of goldenseal (Hydrastis canadensis), an internationally protected medicinal herb. I am using both site-specific field data and landscape level GIS data for my analysis.

Amos Eaton's First Edition of A Manual of Botany

by Stephen W. Eaton
emeritus professor of biology, St. Bonaventure University
2596 Ten Mile Rd., Allegany, N. Y. 14706

On August 16 and 17, 1968 my wife went to a household sale in Helen Morgan's home in Naples, New York. For fifty cents she bought a box of books which contained several old Bibles and other books. In the Bibles was a complete genealogy of the Morgan family from their emigration from England to their settlement in Springfield, Massachusetts in 1636. After following this complete genealogy from Springfield to the household sale in Naples I turned to a small leather bound book 4 ½ by 7 inches which was labeled on the spine "Botany>"

On opening the book I saw a bookplate of John C. Morgan. The title page read: A Botanical Dictionary, being a translation from the French of Louis-Claude Richard, Professor of Botany at the Medical School in Paris; with additions from Martyn, Smith, Milne, Wildenow, Acharius, &. New-Haven: published by Hezekiah Howe. N.Whiting, Printer. 1817. The book is inscribed to Eli Ives, M.D., Professor of Botany and Materia Medica in Yale College and signed by "the Author", New-Haven, Sept. 16, 1816. The Dictionary is some 78 pages long and in alphabetical order. Following the dictionary is a catalogue of books for sale by Hezekiah Howe, New Haven. The most expensive is "Classes and orders of the Linnaean System of botany, illustrated by select specimens of foreign and domestic plants on 240 coloured plates, 3 volumes, 8vo. Calf $56.00; another is "Darwin's Principa Botanica, a concise and easy introduction to the sexual system with notes, 8vo…$4.50.

Following the two page catalogue of books is a tile page: A Manual of Botany for the Northern States comprising generic descriptions of all Phenogamous and Cryptogamous plants to the north of Virginia hitherto described; with reference to the natural orders of Linnaeus and Jussieu. Each Genus is further illustrated by short Descriptions of its most common Species. By the Members of the Botanical Class in Williams' college, (Mass.). From a Manuscript System, Compiled by the Author of RICHARD'S BOTANICAL DICTIONARY. Albany. Printed by Websters and Skinners. 1817.

So far the author has not identified himself so if you had found this book in an old box of books at a household sale you might not come immediately to the importance of your find. (continued on Page 8)

New York Flora Association Membership Form

Your membership expires at the end of year listed on your address. Please keep your dues up to date.

Annual Membership dues: _____ Renewal $10 _____ New Member $15
Additional donation to support NYFA's efforts $_____ **Total** $_____

Name: _____

Address: _____

Address: _____

City: _____

State: _____ Zip Code: _____

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

NY Flora Association
3140 CEC
Albany, NY 12230

Amos Eaton's Manual

Continued from Page 7

The author, of course, is Amos Eaton whose Manual of Botany went on to eight editions by 1840. In the preface to his 8th edition he says – "in 1816, I translated from Pursh, Persoon, and Michaux, and made extracts of other authors sufficient to furnish materials for the first edition of the Manual of Botany. I was favored with books and advise by Prof. Ives of Yale College; also with books by Gov. Clinton of New York. The first edition was published in a very contracted form, by seventy-two students of Williams College', Mass., as no book seller would risk the publication. A thousand copies were published and ready for use in June; and not a copy was left in market after six months."

This rare book of 1817, of which there were 1000 copies printed, ended up in Naples, N.Y. in the early 1800s. I wonder how many of the other 999 copies still survive scattered over the northeast in various unknown boxes of books? This particular copy was owned by the Rev. John C. Morgan, on of the 72 Williams College students who published Amos Eaton's first edition of his Manual of Botany. Morgan had gone on to become a minister and spent most of his life in Naples ministering to his flock.

More Conference News . . .

NYFA Business Meeting and Guest Speaker Announcement

On Wednesday, May 19th, the New York Flora Association will host an open business meeting followed by a seminar on the Pennsylvania Flora project. The business meeting is open to all members. During this meeting we will discuss NYFA current status and entertain ideas of where members would like to see NYFA grow in the future. This should be an engaging discussion that will help determine NYFA possible future expansion. This meeting will run from 6:30 pm to 7:30 pm and it will be held in the Museum Theater of the NY State Museum, Empire Plaza, Albany, New York.

Following this discussion, Dr. Ann Rhoads, author of The Plants of Pennsylvania and The Vascular Flora of Pennsylvania: Annotated Checklist and Atlas. Ann will discuss the Pennsylvania Flora Project, impart some knowledge about Pennsylvania plants, and share some field stories from our southern neighbor. Without a full flora of New York, The Plants of Pennsylvania flora is becoming a widely used flora manual for New York botanists. NYFA is very pleased that Ann is able to share more about the Pennsylvania Flora Project. This should be an entertaining and educational talk.