

NYFA Newsletter

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of the New York State Museum Institute

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New York State Museum The Nature Conservancy

ADDRESS ALL CORRESPONDENCE TO NYFA, 3132 CEC, ALBANY, NY 12230 - DUES \$10 PER YEAR

Dog-Days: Invasive Native Plants Issue

Sleuthing for Rare Plants in the Bronx, New York.

by Eric Lamont, Riverhead, New York

My years of graduate study at the New York Botanical Garden in the Bronx were hectic but rewarding. Once or twice a week, after teaching high school biology on eastern Long Island, I rushed into the Bronx, usually arriving at the Garden between 3:40 and 4 pm, but the Long Island Expressway and city bridges are always unpredictable. One memorable afternoon the Throgs Neck bridge was aflame from an accident involving an oil truck. Long and unexpected delays are a way of life in New York City. After arriving at the Garden I usually met with my major professor, Arthur Cronquist, for an hour or so; then I'd venture into the Bronx jungle for a bite to eat.

Leaving the Garden is like leaving a fortress. The security booths and stone walls reinforced with cast iron are left behind, as filthy and overpopulated streets loom ahead. The short walk to the pizza shop entails walking past abandoned and vandalized vehicles, police cars whizzing by with sirens screaming, drug pushers, who sometimes approach you, and the smell of urine. There is a small wooded lot where Bedford Park Boulevard crosses over the Metro North railroad tracks. I wouldn't think of entering the deep shadows of the oak and hemlock grove, even though the woodland aster goldenrod and other sunflower-like plants beckon.

My story now jumps ahead a few years to August, 1993, when I was botanizing along the east side of the Susquehanna River in Pennsylvania. A patch of tall yellow composites, growing alongside railroad tracks, caught my eye as I drove north on Route 147. As I walked toward the comps, a clambering plant ripped at my pants; this was my first encounter with *Polygonum perfoliatum* L., a recently introduced member of the buckwheat family, commonly called mile-a-minute weed. Even at that speed, it has not yet reached New York, but undoubtedly soon will. After crossing a wet ditch, I encountered a 6-foot, yellow

comp. It looked like a sunflower, but all the leaves were alternate, whereas all our species of sunflower have at least some opposite leaves. Then I noticed that the stem was more or less winged. I quickly got out the "Green Bible" (Gleason and Cronquist, 1991) and keyed the plant to *Verbesina alternifolia* (L.) Britt., a wingstem. There were several hundred individuals in the population, so I collected a voucher specimen.



Verbesina alternifolia (L.) Britt., a rare, native wingstem, survives in a waste place in the Bronx.

Only after I returned home did I recall that the species is listed as rare in New York, with only eight sites currently known from the state.

Two months after my field work in Pennsylvania, I was once again in the Bronx, walking past the isolated grove of oak and hemlock that had somehow escaped being buried by cement and asphalt. I greeted the native asters and goldenrods, and immediately focused on a small patch of tall sunflower-like plants growing amid plastic and other discarded garbage. For the first time in ten years I ventured into the grove. My suspicions proved to be correct. To say the least, I was quite surprised to find such a rare plant in the heartland of the Bronx jungle; it took only a few seconds to confirm the identity of *Verbesina alternifolia*. I cannot say that the few plants looked stately and graceful; rather, they were dirty and ragged, surviving in a harsh and cruel environment. Although my discovery was exciting, it also brought sadness. These giant composites in the Bronx were possibly at one time hearty explorers, pioneering unsettled land hundreds of miles east of the tall-grass prairies where the species thrives. The ones I found may be the last individuals of a bygone era. It is probably only a matter of time before the little grove gets developed and paved over, but, for the time being, these old-timers will brighten my dreary walk along Bedford Park Boulevard.

Editor's Note: I don't mean to throw a wet blanket on the romantic notion that these plants are descendents of past pioneers, but an equally viable theory is that they are adventive in the Bronx and are carrying out that brave invasion right now. A number of rare native plant species are well-adapted to disturbance (eg. *Chenopodium standleyanum*), and it is hard to know how to treat their rarity status when they show up in trashy sites. R. Mitchell.

Whorled Mountain-Mint: Another Pesky

Pycnanthemum -

by Michael Corey, Minerva, New York

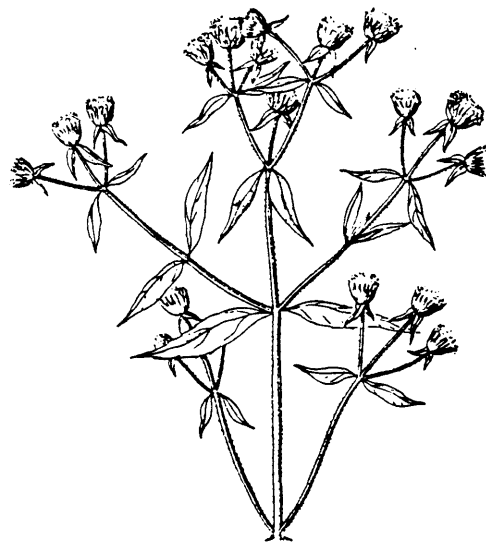
A first glance at Griffiss Air Force Base and its surrounding property might lead one to shrug a shoulder or two and walk away, muttering something about beat, trashed landscapes and vegetational wastelands. Thankfully, first glances can often be misleading. Such is the case with this military facility, which is likely to be closed in the near future. It is true that much of the property *has* been heavily abused, which makes finding a rare plant among the ruins that much more satisfying.

During the spring, summer and fall of 1993 I had the pleasure of working under contract with The Nature Conservancy through the Natural Heritage Program for the purpose of rare plant species and significant natural communities inventory at the Rome, New York Air Force Base. One August visit to the base resulted in the discovery of a couple of populations of *Pycnanthemum verticillatum* (Michx.)

Pers. var. *verticillatum*, a plant ranked S1/Threatened in New York State.

Thanks to help from both Bob Zaremba and Steve Young, I've been able to assemble a little information about whorled mountain-mint. Biological Conservation Data System records from the Natural Heritage Program indicate that the plants, listed historically as either *Pycnanthemum verticillatum* (Michx.) Pers. or *Koellia verticillata* (Michx.) Kuntze, have been collected in New York State from counties as distant as Suffolk, Rensselaer and St. Lawrence. Most records date back to 1928 or before, although there is one 1980 collection from Delaware County.

It was at least a little surprising that a rare plant could actually be present, not just surviving, but thriving on the Base property. The most remarkable aspect of its presence was the thoroughly unpleasant set of circumstances under which the plants were growing. One population was located less than 100 feet from the main Base runway at a site regularly mowed and/or brush-hogged. The other was happily growing with an assortment of rich fen species at a site containing groundwater monitoring wells and actively oozing some reddish, oily and very unfriendly-looking leachate from a nearby abandoned dump. Both sites contained saturated soils of a high calcium ion content. Most soils on the base supported acidic- or neutral-oriented vegetation, with only the two whorled mountain-mint sites exhibiting high pH. Associated with the rich fen were: *Thuja occidentalis*, *Equisetum variegatum* and *E. fluviatile*; bryophytes included: *Campylium stellatum*, *Tomenthypnum nitens*, and *Calliergonella cuspidata*.



Pycnanthemum verticillatum (Michx.) Pers., a rare mountain mint apparently thriving amidst "red ooze."

Pycnanthemum, a genus belonging to the very diverse mint family, is characterized by species with flowers often in crowded cymes at branch and stem tips. Individual flowers are small and white or purplish. The plants are perennial, with foliage and stems that vary in degrees of pubescence. They generally grow in dry, open woods or prairie-like habitats; seven species and varieties are recognized as being native to New York State. Of these, three are listed as rare in the state, including one that is possibly extirpated.

The pesky aspect of *Pycnanthemum verticillatum* var. *verticillatum* is that it, and other closely related members of the genus, are prone to hybridization. This promiscuous propensity calls into question the taxonomic status of some species. A monograph of the genus published by Elizabeth Grant and Carl Epling (1943) recognized 21 species throughout the United States, but the authors were not shy about stating how difficult the delimitation of species had been. In this publication, *Pycnanthemum verticillatum* was placed in a phylad (related group) with four other species: *P. torrei*, *P. flexuosum*, *P. pilosum*, and *P. virginianum*. This is an assemblage of narrow-leaved plants more or less similar in form; subtle differences focus on the shape of calyx lobes and the details of the pubescence of various plant parts.

According to Gleason's Britton and Brown flora, typical habitat for whorled mountain-mint is upland woods and thickets, while Gray's Manual places it in moist fields and open woods. At Griffiss Air Force Base, its habitat is neither dry nor "moist," but saturated. Both sites in which it was found showed rich fen tendencies and assorted human impacts. The possibility of hybridization with other species of its ilk may be complicated by other environmental influences such as moisture and nutrients. Whatever the case, a lesson can be learned here that might go something like this: "Unspeakable reddish ooze at a site may not necessarily a wasteland make".

New Plants from West Hills County Park, Suffolk County, New York.

by Andrew Greller, Queens College, and Steven Clemants, Brooklyn Botanic Garden

Over the past several years we have been studying the flora of West Hills County Park in Suffolk County. A total of 280 collections were made, and 177 species collected in the course of this study. Photographic records and personal field observations suggest that the flora of this small valley and its slopes exceeds 200 species. This note will relate some of our results, particularly the identification of several native, naturalized species that have not been previously reported for New York State.

The park site is a south-facing valley occupied primarily by a Chestnut Oak Forest (cf. Reschke,

1990) with several paths traversing it. One small area turned up several taxa listed as "rare escaped, rare," or "new" species for New York State.



One of the highlights of the study was finding *Oxydendrum arboreum* (L.) DC., sourwood, as a locally dominant tree. Previously it had been reported only as a rare escape in the state (Mitchell, 1986). We also found *Castanea pumila*, which was reported as possibly extirpated (Mitchell, 1986). *Rhododendron maximum*, which we found in dense masses, naturalizing from plantings, had only been reported once from Long Island, by John Torrey in the first half of the 19th century.

Among the species new to the flora of the State are: *Symplocos tinctoria*, *Asarum shuttleworthii*, *Eubotrys recurva*, and *Galax aphylla*. Several species have been reported as rare escapes by Mitchell, including: *Pachysandra terminalis*, *Cytisus scoparius*, *Ajuga reptans*, *Pinus sylvestris* (saplings), *Malus floribunda*, *Malus sieboldii*, and *Pyrularia pubera*. All of these species are growing without cultivation in the park, and should be considered naturalized and part of the flora. In a future paper we will discuss the probable provenance of these taxa.

Part of this study was funded by a grant from the New York Flora Association, for which the authors are grateful.

Literature:

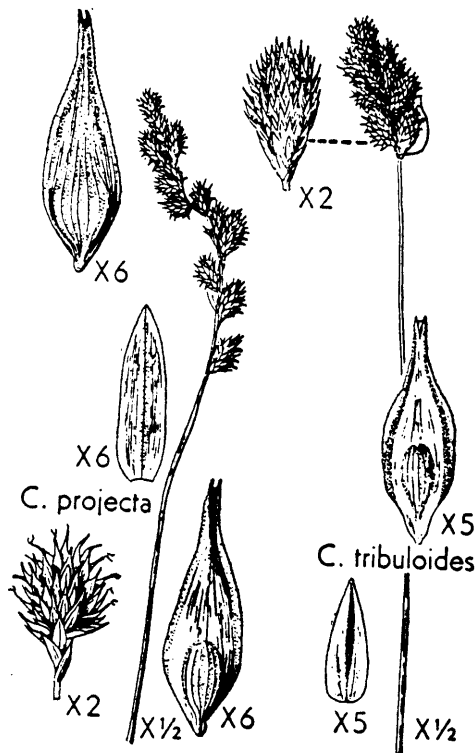
- Mitchell, R. 1986. A Checklist of New York State Plants. New York State Mus. Bull. 458. 272 p.
 Reschke, C. 1990. Ecological Communities of New York State. N.Y. Natural Heritage Program, N.Y.S. Department of Environmental Conservation, Latham, N.Y. xi + 96 p. + ecozones (map).

Above-ground *Carex* Stems and Propagation -

by John M. Bernard, Ithaca College

The genus *Carex* has about 2,000 species worldwide, about 220 of which occur in New York. Most field biologists have had trouble at one time or another with identification of *Carex* species, even though many differ considerably from one another in growth form and structure. For the most part, the stem in *Carex* is an underground rhizome that may bud at the nodes, giving rise to above-ground shoots composed of a series of overlapping leaves. These are not true stems; the only true above-ground stem in such species is the flowering shoot.

A few *Carex*, however, produce true, upright, leafy stems with nodes and internodes. One peculiar plant, *Carex assiniboinensis*, native to moist woodlands in the Midwest, is apparently unique in that it produces a stolon up to 2m long that will tip-layer and develop new plants when it touches the ground. The other more common type, probably first noted by Holm (1896), is found in those species that produce true above-ground leafy stems. These species are scattered throughout the sections of the genus, apparently most common in the Ouales [*C. projecta*, *C. tribuloides*, *C. longii*] but also characteristic of *C. chordorrhiza*, *C. sartwellii*, *C. limosa* and *C. disticha* (Reznicek and Catling, (1986)).



Weatherby (1945) was apparently the first to notice that two of these species, *C. projecta* and *C. tribuloides*, do a rather strange thing in autumn and early winter. As the leaves die, the stems fall over and lie on the ground, seemingly dead, but in reality remaining green

and alive. Then, during autumn, and especially during the following spring and early summer, they begin to bud at the nodes and form new shoots and even clumps. Later, Eaton (1960) found that *C. longii* (and *C. vexans* in Florida) did the same thing; some of the axillary shoots of the former even grew enough to produce inflorescences.

Field observations and experiments on *C. projecta* at Ithaca College have shown that almost all nodes on prostrate stems will produce shoots but only those nodes in contact with moist soil will produce roots. These will die back later, when the prostrate stem begins to die and the connection to other shoots is severed. Shoots that do develop roots begin to take up water and nutrients, and they may transport some of these toward the tip of the prostrate stem, not back toward the parent clump. The net effect of this type of growth form is that these plants are able to position new clumps at a distance from the parent where environmental conditions are suitable for the establishment.

So, next time you collect a specimen of *Carex*, check carefully to see that you are getting all parts of the plant. You may be missing important information if you leave the prostrate stems behind.

Literature:

- Eaton, R. J. 1960. Vegetative reproduction in *Carex longii* and *C. vexans*. *Rhodora* 62: 338-339.
 Holm, T. 1896. Studies on the Cyperaceae. I. On the monopodial ramification in certain North American species of *Carex*. *Amer. Jour. Science* 1: 348-350.
 Reznicek, A. A. and Catling, P. M. 1986. Vegetative shoots in the taxonomy of sedges (*Carex*, Cyperaceae). *Taxon* 35: 496-501.
 Weatherby, C. A. 1945. Vegetative reproduction in *Carex tribuloides* and *C. projecta*, *Rhodora* 47: 39-40.

Cladonia metacorallifera -- a New Lichen for New York State -

Claire K. Schmitt, Biological Survey, New York State Museum

Cladonia metacorallifera Asah. is a lichen long known from Japan, South America, Alaska, and western Canada (Thomson, 1984) that was also recently reported in New Brunswick, Canada (Gowan and Brodo, 1988). In examining a group of red-fruited *Cladonia*s that I had collected with Evelyn Greene at Wilmington Notch, Essex County, New York, Teuvo Ahti determined that one of the specimens was *Cladonia metacorallifera* Asah., not previously reported for the lower 48 states.

Wilmington Notch (Lat 44° 20' N, Long. 73° 53' W) is a deep valley between the Sentinel Range and Whiteface Mountain of the Adirondack Mountains. It is located on New York Rte. 86 about 9.5 km. south of the town of Wilmington. The West Branch of the

Ausable River flows through the valley at an elevation of 500 m., and the adjacent mountains rise to 1183 and 1484 m. The collection site is on a talus slope of large boulders, partly wooded and partly exposed, facing northwest. It is a cool spot where the snow lasts late into spring, and ice can sometimes be seen among the boulders. The area has long been cherished by botanists for its interesting plants.

The 1963 Foray of the American Bryological Society visited the site, and the collections made there were described in Redfearn and Thomson (1965).

Cladonia metacorallifera was collected in an exposed area on the top of a large boulder with a thin layer of humus and mosses. *Cladonia rangiferina* (L.) Nyl. and *C. stellaris* (Opiz) Brodo were common at the site, and *Cladonia borealis* Stenroos and *C. pleurota* (Florke) Schaerer were also present. The bedrock of the area is gneiss and presumably the boulders are also. Thomson describes Alaskan habitats for *Cladonia metacorallifera* as "soil rich in humus, often on hummocks in the tundra." Gowan found it "on rocks and mosses over rocks; in deep, open ravines" in Fundy National Park.

Cladonia metacorallifera is a cup-forming, red fruited plant. The cups flare gradually, and the edges frequently form an irregular margin. The surface of the podetium is covered with small squamules. Color reactions are K-, KC+, P-.

Specimen cited: NEW YORK, ESSEX COUNTY, on exposed, large boulder of cool northwest-facing talus slope of Wilmington Notch, ca. 700 m., 9.5 km. south of Wilmington on NY Rte. 86; Schmitt 6941, 1 May 1990 (NYS).

Acknowledgments: I am indebted to Teuvo Ahti for identifying the specimen, to Irwin M. Brodo for information about the New Brunswick specimens, and to Carol Reschke for description of the site.

Literature:

Gowan, S. P. and I. M. Brodo. 1988. The Lichens of Fundy National Park, New Brunswick, Canada. *The Bryologist* 91: 255-325.

Redfearn, P. L. Jr. and J. W. Thomson. 1965. The 1963 Foray of the American Bryological Society in New York. *The Bryologist* 68: 119-124.

Thomson, J. W. 1984. *American Arctic Lichens 1. The Macrolichens* Columbia University Press, NY.

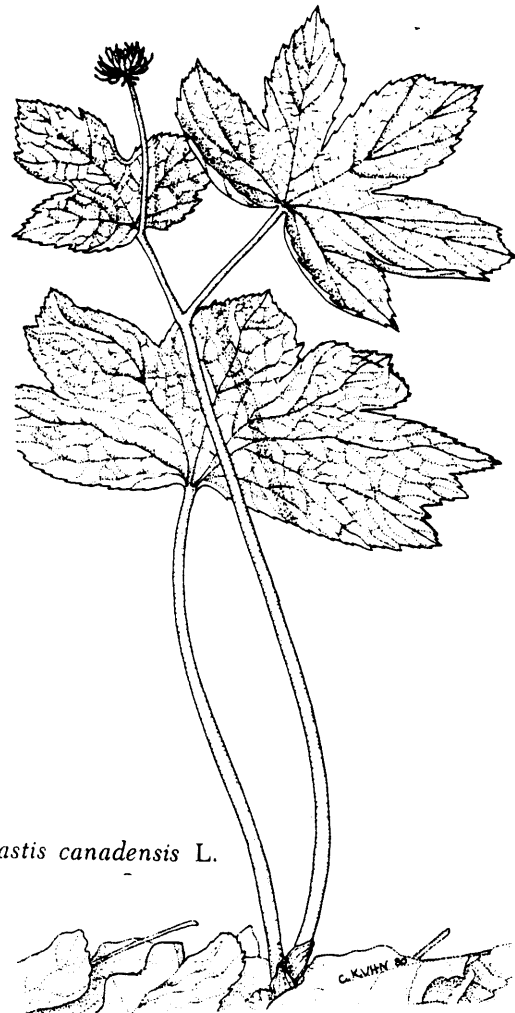
Report on June Field Trips of the New York Flora Association -

Steve Young, New York Natural Heritage Program.

Twenty-one participants attended the field trip to Letchworth State Park on Saturday, June 11, led by park naturalist Doug Bassett. The trip started at the Glen Iris Inn at the south end of the park and finished around 5 p.m. at the north end of the park. We were introduced to a wide array of habitats, geological features and flora, both common and rare.

The rain put a damper on the first hour of the trip but the rest of the day was rain-free. Our thanks go to Doug for an interesting and informative trip.

On Sunday the 12th some of the participants from the Letchworth trip joined others from Central New York for a short tour of Clark Reservation State Park. Bernie Carr, a volunteer thoroughly familiar with the natural history and vegetation of the park, led the group down the limestone cliffs for a look at the rare Hart's Tongue fern and diverse flora of this calcareous habitat. A brief shower failed to dampen the spirits of the enthusiastic group of plant-lovers (although that last long stairway was quite a challenge). Our thanks to Bernie and Diane Wheelock of the parks department for planning that trip.



Hydrastis canadensis L.

Letchworth State Park List -

Compiled by David M. Hunt, The Nature Conservancy.

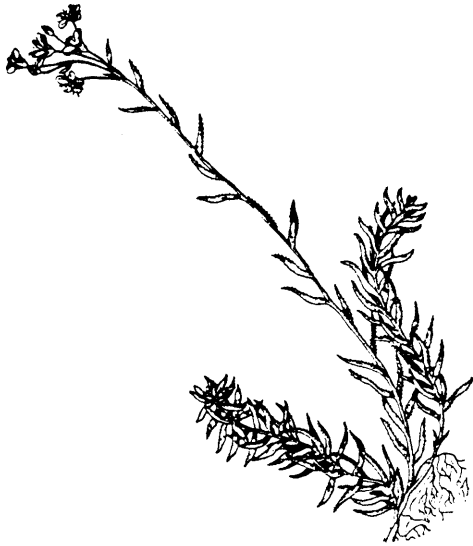
Observed on June 11, 1994 on NYFA Field Trip:

- Acer pensylvanicum*
- Acer saccharinum*
- Acer saccharum*
- Acer spicatum*
- Achillea millefolium*

Actaea pachypoda
Actaea spicata
ssp. *rubra*
Adiantum pedatum
cf. *Agastache scrophulariifolia*
Agropyron sp.
Alliaria petiolata
Allium vineale
Ambrosia artemisiifolia
Amelanchier arborea
var. *laevis*
Amelanchier stolonifera
Amphicarpea bracteata
Anaphalis margaritacea
Anemone virginiana
Anemonella thalictroides
Antennaria plantaginifolia
Anthoxanthum odoratum
Apocynum androsaemifolium
Apocynum cannabinum
Aquilegia canadensis
Aralia nudicaulis
Arctium minus
Arisaema triphyllum
Artemisia vulgaris
Asarum canadense
Asclepias incarnata
Asclepias quadrifolia
Asclepias syriaca
Aster macrophyllum
Aster puniceus
Aster undulatus
cf. *Astragalus neglectus***
Athyrium thelypteroides
Aureolaria flava
Barbarea vulgaris
Bellis perennis
Betula alleghaniensis
Betula lenta
Betula papyrifera
Brachyelytrum erectum
cf. *Bromus secalinus*
Bromus tectorum
Capsella bursa-pastoris
Cardamine concatenata
cf. *Carex atlantica*
Carex aurea
cf. *Carex comosa*
*Carex emoryi***
Carex gracillima
Carex granularis
cf. *Carex interior*
Carex laevivaginata
Carex lasiocarpa
ssp. *americana*
Carex leptalea
cf. *Carex normalis*

Carex pallescens
Carex pensylvanica
cf. *Carex platyphylla*
Carex prasina
cf. *Carex rosea*
Carex scabrata
Carex stipata
Carex swanii
*Carex willdenowii***
Carpinus caroliniana
Carya cordiformis
Carya glabra
Carya ovata
Caulophyllum thalictroides
Celastrus scandens
Centaurea maculosa
Cerastium sp.
Circaea lutetiana
Cirsium sp.
Clematis virginiana
Comandra umbellata
Conopholis americana
Cornus florida
Cornus foemina
ssp. *racemosa*
Cornus rugosa
Cornus sericea
Crataegus sp.
Cryptotaenia canadensis
Cynoglossum officinale
Cystopteris bulbifera
Dactylis glomerata
Daucus carota
cf. *Desmodium cuspidatum*
Dianthus armeria
Dipsacus fullonum
Disporum lanuginosum
Dryopteris carthusiana
Dryopteris intermedia
Elymus virginicus
Epilobium sp.
Epipactis helleborine
Equisetum arvense
Equisetum hyemale
Erigeron philadelphicus
Eupatorium maculatum
Eupatorium rugosum
Fagus grandifolia
Festuca elatior
Fragaria vesca
*Frasera caroliniensis***
Fraxinus americana
Galium circaezans
Galium mollugo
Galium palustre
Galium triflorum
Geranium maculatum

Geranium robertianum
Geum canadense
Glechoma hederacea
Glyceria striata
Hamamelis virginiana
Hepatica nobilis
 var. *acuta*
 var. *obtusa*
Hesperis matronalis
Hieracium caespitosum
Hieracium venosum
*Hydrastis canadensis***
Hydrophyllum virginianum
Hypericum perforatum
Impatiens capensis
Inula helenium
Iris versicolor
Juglans nigra
Juncus effusus
Juncus tenuis
 var. *uniflorus*
Juniperus communis
Juniperus virginiana
 cf. *Lactuca biennis*
Laportea canadensis
Lathyrus latifolius
*Lathyrus ochroleucus***
Leonurus cardiaca
Lepidium campestre
Leucanthemum vulgare
Ligustrum sp.
Linaria vulgaris
Lonicera sempervirens
Lonicera tatarica
Lotus corniculata
 cf. *Luzula campestris*
 var. *pallescens*
Lysimachia ciliata
Lysimachia nummularia
Magnolia acuminata
Maianthemum canadense
Malus coronaria
Matteuccia struthiopteris
Melilotus officinalis
Menispermum canadense
Mertensia virginica
Mitchella repens
Myosotis arvensis
Myosotis laxa
Nepeta cataria
Onoclea sensibilis
Osmorhiza longistylis
Osmunda claytoniana
Ostrya virginiana
Oxalis stricta
Panax trifolius
Parthenocissus inserta
Penstemon hirsutus
Phleum pratense
*Pinguicula vulgaris***
Pinus resinosa
Pinus strobus
Plantago lanceolata
Plantago major
Plantago rugelii
Podophyllum peltatum
 cf. *Poa alsodes*
Poa annua
Poa compressa
Poa pratensis
Polygala senega
Polygonatum pubescens
Polygonum virginianum
Polypodium virginianum
Polystichum acrostichoides
Populus deltoides
Populus grandidentata
Populus tremuloides
Potentilla argentea
Potentilla recta
Potentilla simplex
Prenanthes sp.
*Primula mistassinica***
Prunella vulgaris
Prunus serotina
Prunus virginiana
Quercus alba
Quercus montana
Quercus muhlenbergii
Quercus palustris
Quercus rubra
Quercus velutina
Ranunculus abortivus
Ranunculus acris
 cf. *Ranunculus hispidus*
Ranunculus recurvatus
Ranunculus sceleratus
Rhamnus cathartica
Rhus aromatica
Rhus typhina
Ribes sp.
Robinia pseudo-acacia
 cf. *Rosa carolina*
Rubus idaeus
 ssp. *sachalinensis*
Rubus odoratus
Rumex acetosella
Rumex crispus
Rumex obtusifolius
 cf. *Salix fragilis*
Sambucus canadensis
Sanguinaria canadensis
Saponaria officinalis



*Saxifraga aizoides***
Saxifraga virginensis
Senecio aureus
Shepherdia canadensis
Silene vulgaris
Sisyrinchium angustifolium
Smilacina racemosa
Smilacina stellata
Smilax herbacea
Solanum dulcamara
Solidago caesia
Solidago macrophylla
*Solidago ohioensis***
Sorbus aucuparia
Stellaria graminia
Streptopus roseus
Symplocarpus foetidus
Taraxacum officinale
Thalictrum dioicum
Thalictrum pubescens
Thelypteris noveboracensis
Thelypteris palustris
Thlaspi arvense
Tilia americana
Toxicodendron radicans
Tragopogon pratensis
Trifolium dubium
Trifolium repens
Trillium undulatum
Tsuga canadensis
Tussilago farfara
Typha latifolia
Ulmus americana
Ulmus rubra
Uvularia perfoliata
Vaccinium pallidum
Vaccinium stamineum
Verbascum thapsus
Veronica anagallis-aquatica

Veronica arvensis
Veronica chamaedrys
Veronica officinalis
Veronica serpyllifolia
Viburnum acerifolium
cf. Viburnum opulus
Viburnum recognitum
cf. Vicia americana
cf. Vicia sativa
Vicia tetrasperma
Vinca minor
Viola palmata
Viola sororia
Vitis riparia

Nomenclature:

Mitchell, R. S. 1986. A Checklist of New York State Plants. New York State Museum Bull. 458.

Identifications:

"cf." - affinities with (subsequent identification uncertain).

** Rare species currently on the New York Natural Heritage Program active inventory list.

August NYFA Field Trip - Staten Island Sites, Saturday, August 27

Note Changes

We will meet at the Serpentine Art and Nature Commons on Van Duzer St. at 10:00 AM Saturday morning. Here we have a chance to see the rare green milkweed and slender knotweed. From there we will be heading south and west to the hybrid oaks and paw site, Bloodroot Valley and Clay Pit Ponds State Park, a pine barrens relict with Virginia pine and other interesting plants.

Directions: From the Goethals Bridge or the Verrazano Narrows bridge take the Staten Island expressway to the Clove Road exit (closer to the Verrazano bridge). Clove Road north about 0.4 miles to Victory Blvd. Make a right turn on Victory and go about 1.5 mile to a right on St. Pauls Ave. (as Victory bends to the right). Go down St. Pauls about 0.8 mile where it feeds into Van Duzer St., a one way street going south. When you reach Van Duzer St. look for a parking place within that block on the left side of the street. The Serpentine Art and Nature Commons will be a steep hill on the right side of the street. We will meet at the base of the hill. If you think you will be late, you can contact Dick Buegler until 9:30 at 718-761-7496. We will start out on the one trail up the hill then turn right onto the bluff. See you there!

Field trip to Bashbish Falls - September 26, 1994, to be led by Gordon Tucker. Details are not available at the time of this publication. Contact him at 518-486-2026.

**The Nineteenth Annual A. Leroy Andrews
Bryology Foray- September 16-18, 1994.
Bear Brook State Park; Concord, New
Hampshire.**

For information contact:

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802-888-5968 (home)

Hudsonia Natural History Courses

Hudsonia, at Bard College in Annandale, New York, is offering credit-free courses on Saturdays. A fee of \$40. per student per course will be charged. Payment is required 10 days in advance. For information concerning course descriptions, instructors, and registration, call Laura Pilkington at 914-758-1881.

Upcoming courses:

- Wetland delineation, 27 August, Gretchen Stevens.
- Mid-Hudson Region Significant Habitats, 10 September, Gretchen Stevens.
- Acidic Crests, 24 September, Spider Barbour.
- Stream and Wetland Restoration, 1 October, Sven Hoeger.

Nineteenth Century Mushroom Paintings on Exhibit at the New York State Museum in Albany.

Fifty one exceptional folk-art style watercolors of fungi by Mary Elizabeth Banning are featured in the exhibit called "Each a Glory Bright" at the State Museum in Albany, New York from June 24, 1994 to January 8, 1995. These remarkable mushroom portraits from Banning's unpublished manuscript, "The Fungi of Maryland," were painted between 1868 and 1889. The exhibit, curated by John Haines, includes recordings of personal, often humorous anecdotes from her manuscript and letters about collecting trips in her home state of Maryland. In 1890, the manuscript was presented by Mary Banning to Charles Peck of the Museum, who was her mentor in the study of mycology. It was not published, and the paintings and manuscript remained in storage, all but forgotten, until 1981, when portions of the work were exhibited to the public for the first time. Banning's poignant letters to Peck reveal a contrast between her personal life, filled with tragedy and failing health, and the joyous days she found to explore for her beloved mushrooms.



Aggressive, non-native weeds pose perhaps the greatest threat to the survival of our native species and plant communities. The Illinois Natural History Survey has been pursuing bio-control of two major pests, Lythrum salicaria and Alliaria petiolata. This work, conducted with Federal Funding, has resulted in this year's trial release in northern Illinois of several insects that are promising control agents for Lythrum. The Alliaria work is presently in the greenhouse stage, where several pathogens are being tested.

The Intrepids

