

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

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Long Island Rare Plants To Watch Out For

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(New York Natural Heritage Program)

We know you're out there! Show yourselves or we can't protect you! There are a number of rare plants that grow on Long Island that we think are more common than our documentation reflects and we would like members to help us find them before their habitat is gone forever. We give these plants so-called double ranks to reflect this situation. [Editor's note: an explanation of Heritage ranks and codes is provided at the end of this article.] For example, if a plant has a rank of S2S3 then we have documentation to rank it an S2 (6-20 occurrences statewide) but think it has enough undiscovered occurrences for a rank of S3 (21-100 occurrences statewide).

The following list contains ten plants for which we need surveys to resolve the double ranks. They are plants that are easily identifiable so you don't need a dissecting microscope to know what they are. I present this list to you in the hope that you will keep them in mind when you are out botanizing during the field season. If you find any occurrences of these plants I would appreciate a call or note and I will follow it up. My telephone number is 518-783-3925, and my address is 700 Troy-Schenectady Road, Latham, NY 12110-2400, email is

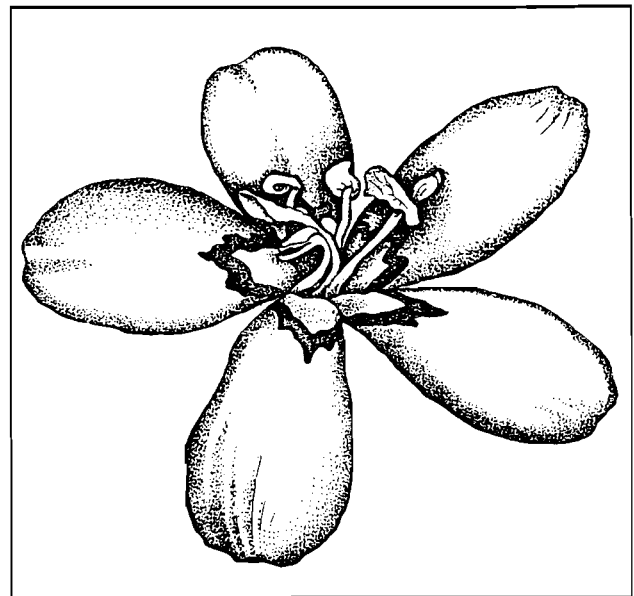
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smyoung@gw.dec.state.ny.us. Any discoveries will be published in future newsletters. Thanks and happy hunting!

Agastache nepetoides S2S3 **Yellow giant-hyssop**

A member of the mint family this plant grows from 2-5 feet tall and is topped with a dense spike of yellow-greenish flowers. It is not a hard plant to miss. It likes openings in disturbed deciduous woods that can be fairly weedy. On Long Island it is known from Alley Pond Park in Queens. There are historical records for Nassau County at Roslyn, Port Washington, Locust Valley, and Mill Neck. There are probably more occurrences in northeastern Nassau County and northwestern Suffolk County but may also be in other parks in Nassau County where it has been overlooked. A good time to look is from late August through October. It is illustrated in Newcomb's Wildflower Guide.



SEA-PINK (*Sabatia stellaris*): Close-up of Flower.
Illustrated by Audrey Watson Wigley

***Botrychium oneidense* S1S3 Blunt-lobe grape fern**

Here is one for the fern-lovers and more of a challenge. This is grape fern is closely related to *B. dissectum* and *B. multifidum* and can be mistaken for them, especially younger leaves of the latter two. The broader, more rounded leaf divisions and the more shady habitat are characteristic. The blade is evergreen and can be seen throughout the winter. It likes shady banks of stream corridors in woodlands or swamps. On Long Island it is presently found along the Nissequogue River drainage in an acid wooded swamp and in a red maple swamp. It is known historically from Manorville, Gardiner's Island and many localities upstate. Described and illustrated in Lellinger's *Ferns and Fern Allies of the U.S. and Canada*.

***Desmodium ciliare* S2S3 Little-leaf tick trefoil**

Desmodiums can be a tricky group of plants to identify but there are only a couple that look like *D. ciliare*. Stems are slender and usually with long spreading hairs intermixed with shorter hooked ones. Leaves are only 0.1-1.5 cm long with short grooved petioles. The terminal leaflet is abundantly hairy above, less so beneath. It is illustrated in Newcomb's *Wildflower Guide*. A similar species is *Desmodium marilandicum* but it is essentially glabrous with petioles 1.2-2.7 cm long. It occurs in open woods in sandy soil, pine barren sands, sandy hills, and disturbed remnants of sandy grasslands. Look for it in late summer and fall in pitch pine-scrub oak barrens, pitch pine-oak-heath woodland, and pitch pine-heath barrens. Currently there are 6 extant occurrences and 9 historical records on Long Island. The historical records are from Westhampton, Amagansett, Mattituck, Long Pond Riverhead, Montauk, Southold, Shelter Island, Central Islip and Cold Spring Harbor.

***Gaylussacia dumosa* S1S2 Dwarf huckleberry**

Black huckleberry (*G. baccata*) is common on Long Island but the dwarf huckleberry is much more rare. It has thicker leaves with green and shiny upper sides to the leaves and it is the only small bushy shrub that has glandular pubescent black fruit. Even though it is edible it feels awful in your mouth. It is illustrated in Newcomb's *Wildflower Guide*. There are known populations in Islip and Southampton southeast of Riverhead. Historical records are from Manorville, Three Mile Harbor, Jamesport, Merrick, Hempstead Plains and Brookhaven labs. Look for it in late July through September around sandy ponds and other wetlands in pitch pine-scrub oak barrens, pitch pine-oak-heath woodlands, and pitch pine-heath barrens. It was recently found in Putnam County as a co-dominant in a dwarf shrub bog.

***Hottonia inflata* S1S2 Featherfoil**

This is such a strange member of the Primrose family it is one of only two species in its genus. The other is *H. palustris* from Eurasia. It is not pictured in the common field guides but this aquatic plant cannot be confused with anything else. Its feathery leaves and stems grow below the surface of the water but when it flowers the flower stalks resemble a stack of progressively smaller miniature sausages. Three to ten small white flowers arise in whorls around each constriction of the stalk. It's pretty bizarre. Featherfoil likes shallow water (up to 4 feet) like shallow ponds, kettle holes and interdunal swales. This winter annual (biennial?) seems to overwinter the first year as a seed and the second year in the seedling stage. Sometimes thousands of small seedlings can be seen in the mud or shallow water of a pond shore. It flowers in May and early June and then disintegrates quickly making it almost impossible to find into July. That's why it may be overlooked since many people aren't interested in looking for aquatics until July or later when most of them flower. It is known from only a handful of small ponds on eastern Long Island and Staten Island with a few new records in the lower Hudson Valley. There are historical records for Sound Ave at Northville, Riverhead (pool on 2nd Ave.), Noyack and Southold but I don't expect a large number of additional records to be found. Please prove me wrong.

***Listera australis* S1S2 Southern twayblade**

You need sharp eyes and a lot of patience for this one. I'll admit that this orchid is more common upstate because there are more sphagnum bogs but there are a few current records from eastern Long Island sphagnum bogs and more bogs could be searched. There are historical records from bogs in South Haven park and Manorville. This tiny orchid varies in numbers from year to year and its small size and tiny greenish flowers make it very hard to see if the numbers are low. It is illustrated in Newcomb's *Guide* and other orchid guides. Search in mid June to early July and be kind to the bogs. They are sensitive areas.

***Plantago maritima* subsp. *juncoides* S2S3 Seaside plantain**

A native plantain? Yes and you don't have to dig it out of your yard. In fact, this is the only one found in salt marshes and definitely not a weed. It has narrow succulent leaves and is only 6 inches high but usually occurs in masses in the high salt marsh and fairly easy to see. It has also been found in pools near the cliffs of Montauk. Other habitats that are listed in the field guides include coastal rocks and beaches but we have not yet found it in

these habitats in New York. It is illustrated in both Newcomb's and Peterson's Guides. The best time to look is August and September. Most of the present and historical records are from the salt marshes of the South Fork and Eastern Long Island.

Sabatia stellaris S2S3 **Sea-pink**

There are four species of *Sabatia* that are rare in New York, all from Staten and Long Islands and all are beautiful. *Sabatia stellaris* and *S. dodecandra* are the only ones found in salt marshes but *S. dodecandra* is now considered extirpated in the state. The other two species, *S. angularis* and *S. campanulata* are found in fresh water wetlands. They are nicely illustrated in color in both Peterson's and Newcomb's Guides. *Sabatia stellaris* is presently known from about seven salt marshes, mainly from eastern Long Island and the South Fork but many salt marshes on Long Island, big and small, need to be searched for this species. Mid August to mid September is the best time to look. Historical localities include Gilgo Beach, mouth of Wading River, Channel Pond, Long Beach Smithtown, Jones Beach State Park, East Quogue and Three Mile Harbor.

Salicornia bigelovii S2S3 **Dwarf glasswort**

The glassworts are also denizens of the salt marsh and unmistakable. Their jointed succulent stems remind me of legless caterpillars on a stick. There are three species that may be found on Long Island and the rarest is the dwarf glasswort. It is also the only one that has joints that are wider than long and it does not have creeping woody stems like *S. perennis* (= *S. virginica*). The most common glasswort is *S. europaea* but it has joints longer than wide. The three species are well illustrated in Peterson's Guide to Wildflowers. A good place to see *S. bigelovii* is at the salt marsh at Orient Point but like the previous species, there are many salt marshes that need more detailed searching. Most of the historical records are from the north shore and the north shore of the South Fork. Search from September to frost.

Stachys hyssopifolia S2S3 **Rough hedge-nettle**

Here is another member of the mint family but smaller and bluer than giant hyssop. It grows up to 20 inches tall and has a few whorls of purple flowers at the top. It is also called hyssop hedge nettle because of its narrow opposite leaves. There are good illustrations in Newcomb's Wildflower Guide and Peterson's Guide. It likes sandy wet shores of pine barren ponds and lakes but can also be found in wet sand of swamp edges and maritime grasslands. Almost all the New York records are found on Long Island but most of the western Long Island occurrences, from such places as North

Hempstead, Hillside, Cypress Hills, and Garden City, have been extirpated. There are a substantial number of historical records however from the pine barrens of Suffolk County including Long Pond Wading River, Artists Lake, Long Pond Greenbelt, Lake Ronkonkoma area, Quogue, Manorville, Middle Island and even Shinnecock Hills. Late July to early September is the best time to look for this species.

Literature Cited

- Lellinger, D. B. 1985. A field manual of the ferns and fern allies of the United States and Canada. Smithsonian Institution Press, Washington, D.C.
Newcomb, L. 1977. Newcomb's wildflower guide. Little, Brown and Company, Boston.
Peterson, R. T., and M. McKenny. 1968. A field guide to wildflowers of northeastern and north-central North America. The Peterson Field Guide Series. Houghton Mifflin Company, Boston.

Explanation of Heritage Ranks and Codes

Each rare plant species has a global (G) and state (S) rank. The global rank reflects the rarity of the species throughout the world and the state rank reflects the rarity within New York State. Only state (S) ranks were discussed in the above article.

STATE RANK

- S1** = Critically imperiled in NYS because of extreme rarity (5 or fewer sites or very few remaining individuals) or extremely vulnerable to extirpation from NYS due to biological factors.
S2 = Imperiled in NYS because of rarity (6-20 sites or few remaining individuals) or highly vulnerable to extirpation from NYS due to biological factors
S3 = Rare in NYS (usually 21-100 extant sites).
S4 = Apparently secure in New York State.
S5 = Demonstrably secure in New York State.



Featherfoil
(*Hottonia inflata*)
A bizarre aquatic
species in the
Primrose Family

Plant Sightings

Society News

Mike Bottini discovered a small population of Downy Rattlesnake Plantain (*Goodyera pubescens*) at Fresh Pond Town Park in Amagansett, during January 1998. The evergreen leaves of this wild orchid display unique colorations and patterns that somewhat resemble snake scales; ancient herbalists thought that this orchid could be used to counteract the effects of snakebite.

The spring wildflower bloom on Long Island was two to three weeks early this year. **Henry Bookout** reported that "the Shad had an early run this year," referring to several native species of *Amelanchier* growing on the East End. The Smooth Shadbush (*A. laevis*) began flowering on April 6th; *A. canadensis*, *A. stolonifera*, and *A. nantucketensis* began to flower about two weeks thereafter.

Jim Ash reported Bird's-foot Violet (*Viola pedata*) in flower in East Hampton during the last week of April. Fifteen years ago, this species literally blanketed roadsides throughout the Township of East Hampton, but during recent years the Highway Department has severely altered roadside soils resulting in the drastic decline in numbers of several native plant species.

Since 1991, **Arthur Skopec** has been monitoring a small population of the Sessile-flowered Maroon Trillium (*Trillium cuneatum*) growing in the rich woodlands north of Oakland Lake in Queens County. This year the trillium flowered early, and Art photographed it on March 28th. Two weeks later all that was left were two holes in the ground where the plants had been dug up.

Long Island has received above average amounts of precipitation during the past six months and most ponds are brimming this spring; many vernal ponds probably won't dry up this year. **Eric Lamont** has been monitoring the Curly-grass Fern (*Schizaea pusilla*) population at Napeague during the past few years. In November of 1997 the sandy depressions at Napeague flooded with more than a foot of water and have remained flooded during the past five months. It will be interesting to observe if *Schizaea* can survive underwater for such an extended period of time. **Jim Ash** reported that the Wood Duck boxes at Chatfields Hole are also underwater; these are the highest water levels in at least 17 years.

John Potente and **Tom Meoli** performed a plant rescue in early April. They dug up more than 100 May Apples (*Podophyllum peltatum*) from a site slated for development in western Suffolk County. The land was bulldozed the next day. The rescued plants were transplanted to a three acre piece of land owned by John. (It is the opinion of the LIBS Flora Committee that Long Island populations of May Apple have been introduced.)

January Meeting. Members Night: **Barbara Conolly** presented a display of "10 Years of LIBS Field Trips" documented in a dozen photo albums. **Rich Kelly** showed slides of assorted natural history topics from the northeastern states, including orchids and gentians, reptiles, amphibians, butterflies, and a spectacular shot of an American Sea Lamprey from the Connecticut River. **Eric Lamont** showed slides of showy composites from the inner coastal plain of North Carolina, including several species of blazing star (*Liatris*) and their relatives (*Carphephorus*), plus numerous eupatoriums; habitat slides included the longleaf pine-turkey oak forest, sandhills, and pond cypress swamps. A change of pace ensued when **Max Wheat** read four of his botany related poems. The last poem, entitled "Wilbur Breslin's Mall," was read with strong passion and emotion; listeners responded with gnashing of teeth and rending of sackcloth. **John Potente** concluded the evening with slides of his back yard in Happaugue which he has allowed to revert back to a non-managed condition (he hasn't mowed the lawn since 1990). The yard has been recolonized by a large population of broomsedge (*Andropogon virginicus*) and several native wildflowers, including blue toadflax (*Linaria canadensis*).

February Meeting. **Terryanne Maenza-Gmelch** presented a program on forest, climate, and fire history of the Hudson Highlands during the last 12,500 years, as revealed through analysis of plant fossils isolated from sediment cores of Sutherland Pond (Black Rock Forest, NY) and Spruce Pond (Harriman State Park, NY). The earliest pollen assemblages deposited after glacial retreat, some time greater than 12,500 years ago, represent a tundra-like environment with scattered trees. Dramatic climatic warming occurred 12,500 years ago, with the development of a mixed boreal coniferous-temperate deciduous woodland. An abrupt climatic flip back to cold conditions occurred at approximately 11,000 years ago and lasted for roughly 1000 years. Warm conditions, similar to the present, were established by 10,175 years ago. Early expansion of oak forests at around 10,000 years ago occurred in a setting of frequent fire. Euroamerican settlement (approximately 1700 A.D.) is well-documented in the pollen record by dramatic rises in ragweed (*Ambrosia*).

March Meeting. **Skip Blanchard** gave a multimedia presentation on the anatomy of plant adaptations utilizing photographs of microscope slides prepared by **Jane Blanchard**. Skip began with an intriguing historical

note: Jean Baptiste de Lamarck, best known for championing the "wrong" explanation for how evolution works, was also apparently the first to point out something that now seems obvious . . . that organisms are adapted to their environment. Many adaptations in plants relate to moisture availability, and terms have been coined to distinguish "xeromorphic" plants (those having dry-habitat features) and "hydromorphic" plants (those having wet-habitat features). As field botanists, we are accustomed to recognizing these adaptations at the organ or whole organism level, but a look at the cell and tissue levels provides an interesting perspective as well. For example, leaves on many xeromorphic plants have a thick cuticle, a multiple epidermis, sunken stomata, and mechanisms for rolling up the leaves. By contrast, many floating aquatic species have stomata only on the upper leaf surface, extensive air spaces, and reduced vascular systems.

Executive Board Meeting

A meeting of the Executive Board will be held on 12 May 1998 at 6:15 pm (before the monthly meeting and program) at the Museum of Long Island Natural Sciences, Room 137, SUNY at Stony Brook. All members are welcome.

LIBS Exhibit

On 6 June 1998 **Thomas Allen Stock** will display the education exhibit at Sweetbrier Nature Center's "Nature Fair." Other features include nature walks, demonstrations on composting, rain forest programs, a vivarium (butterfly house), formal gardens, and many other exhibits by environmental groups. For further information call Sweetbrier Nature Center at 516/979-6344.

1st Life Member

LIBS is pleased to extend its sincere appreciation to **Andrew Sabin**, the Society's first Life Member.

Native America

Dr. John E. Potente is the founder of a new environmental organization: "Native America." The first issue (1998) of a very impressive, 8 page color publication contains the following statement: "Native America was founded in 1995 and is dedicated to the reintroduction of native plant and animal species to their respective places in the American lands through education, research, and habitat restoration." For information on joining the organization, please contact John at 516/232-1566.

Field Trips

2 May 1998 (Saturday), 9:30am. The Paul Simons Memorial Preserve, Head of the Harbor (just west of Stony Brook). Join members of the LIBS Flora Committee as they assist the Museum of L.I. Natural Sciences by conducting a floristic inventory of the site.

Leader: **Doug Winkler**. Meet at 9:30am at entrance to the preserve. Directions: From LIE (Rte. 495) or Nesconset Highway (Rte. 347) proceed north on C.R. 97 (Nicolls Road) to end. Turn left onto North Country Road (25A West) to Main Street, Stony Brook. Turn right onto Main Street. Take Main Street to Harbor Road (first left past pond). Turn left onto Harbor Road. Take Harbor Road to Shep Jones Lane (second left). Turn left onto Shep Jones Lane and take to small parking area on right before bend in road. For further information call **Doug Winkler** at 516/632-8230.

16 May 1998 (Saturday), 10:00am. Open & Forested Wetlands on Staten Island.

Leader: **Dr. Margaret Gargiullo**. Start at Blue Heron Pond Park and visit several wetland sites on Staten Island. Directions: Go over the Verrazano Narrows Bridge (\$7 toll, round trip) and continue on the Staten Island Expwy. Take the exit for 440 (West Shore Expwy) toward the Outerbridge Crossing. Get off at the Huguenot Ave exit. Take Huguenot Ave south to either Amboy Rd or Hylan Blvd, turn left and go to Poillon Ave, take Poillon to the parking lot of the new Environmental Center in Blue Heron Park. Bring lunch. For further information contact **Al Lindberg** at 516/571-8500 or evenings at 516/922-0903.

30 May 1998 (Saturday), 9:30am. Sayville Grasslands, for local flora and butterflies.

Leader: **Skip Blanchard**. For specific meeting location and additional information please contact Skip at 516/421-5619.

13 June 1998 (Saturday), 10:00am. Sussex Branch Trail, Andover, New Jersey for limestone-loving ferns and other local specialties. Leader: **Karl Anderson**. Directions: Meet at the NE corner of A&P shopping center in Andover. Take George Washington Bridge to Rte 80; Rte 80 W for about 46 miles to Rte 206; N on Rte 206 for 6.6 miles; A&P is on the right. Bring lunch, and be prepared for rocky and possibly wet walking. For further information contact **Karl Anderson** at 609/261-2495 (w) or 609/267-2195 (h). [If anyone wants to spend the weekend near Andover, Karl recommends the Byram Motel, on Rte. 206 a few miles S of Andover; phone 201/347-1007. Adequate and inexpensive.]

LONG ISLAND BOTANICAL SOCIETY

Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Skip Blanchard
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Membership	Lois Lindberg
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	Karen Blumer
Education	Mary Laura Lamont
	Thomas Allen Stock
Hospitality	Betty Lotowycz
	Jane Blanchard
Editor	Eric Lamont

Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Road, Oyster Bay, NY 11771-3111

PROGRAMS

12 May 1998 - 7:30 pm*

Dr. Eric Lamont

(President, L.I. Botanical Society)

"The Grandifolia Sandhills of Long Island"

A slide show illustrating the natural landscape features & plant communities of this globally rare ecosystem.

Location: Museum of L.I. Natural Sciences,
Room 137, SUNY at Stony Brook.

9 June 1998 - Annual LIBS Barbecue

Lois & Allan Lindberg will host
this year's evening of activities.

Location: Bill Patterson Nature Center,
Muttontown Preserve, East Norwich.

**[Please see the enclosed flier
for specific information.]**

*Refreshments & informal talk begin at 7:30pm, the meeting starts at 8pm. For directions to 1) Muttontown Preserve call 516/571-8500; 2) MOLINS call 516/632-8230

LONG ISLAND BOTANICAL SOCIETY

c/o Muttontown Preserve

Muttontown Lane

East Norwich, New York 11732

