## LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

May - June 1995 Vol. 5, No. 3

# The Gymnosperms of Long Island, NY

### Introduction

This issue represents the second installment in the Atlas of Long Island Plants that the Flora Committee has been working on for many years.

The maps that are printed here show the distribution based on specimens, visual sightings and published reports. A key to the symbols is printed on page 17. Because there are many cultivated species which rarely if ever escape into the wild we have decided not to produce maps for those species, instead we have written accounts for each species. Those species which are mapped have a \* in front of the species account. Readers should check both the maps and the species account for information about the distribution of a species.

As always, if you have information that would flesh out these maps please report that information to the Chairperson of the Flora Committee.

### PROGRAMS

- 9 May 1995 7:30 pm<sup>\*</sup>, Prof. John Silba, "Rare and Endangered Conifers of the South Pacific and Asia." Uplands Farm Nature Center, Cold Spring Harbor. (For directions to Uplands Farm call 516-367-3225).
- 13. June 1995 2nd Annual LIBS Barbecue: Glenn Richard has planned a special evening at the Swan Pond Biological Station of SUNY at Calverton.
  Please see the enclosed filer for specific information.
- Refreshments are available starting at 7:30 pm; the meeting begins at 8 pm.

### Species Accounts

- Abies balsamea (L.) Miller Balsam Fir. Native to northeastern North America, north of Long Island. Often cultivated; seedlings have been recently reported from Nassau County. More data on this species are needed.
- \*Chamaecyparis thyoides (L.) B.S.P. Atlantic White-Cedar. Native to the coastal plain of the eastern United States, including Long Island. Extensive cedar swamps formally occurred along the south shore of Nassau County at Merrick, Baldwin, Freeport, and Seaford. In addition, Atlantic White Cedar stumps can be seen at low tide just off the coast of Montauk Point. Extant populations occur near Riverhead, Flanders, North Sea, and Smithtown. The wood has been well known for its insect repellant and decay resistant qualities, and historically the trees have been exploited for use as fence posts, shingles, railroad ties, and telephone poles. Atlantic White Cedar is listed as a rare plant in New York State (Young 1992). For historical Long Island accounts see Harper (1907), Bicknell (1908), Taylor (1915) and Laderman et al. (1987).
- **Cryptomeria japonica D. Don Cryptomeria.** Native to Japan. Often cultivated; seedlings have been recently reported from Nassau County. More data on this species are needed.
- Ginkgo biloba L. Ginkgo, Maidenhair Tree. Native of China. Often cultivated; seedlings have been recently reported from Kings County (Brooklyn). More data on this species are needed.
- \*Juniperus communis L. var. depressa Pursh -Common Juniper. Native to Long Island. Widely scattered individuals occur in open pine barrens. Particularly good stands occur in western Southampton and eastern Brookhaven Townships. A fine specimen can been seen along the sandy entrance road of Cranberry Bog Preserve, just south of Riverhead. For an historical account see Davis (1917). All specimens examined have been referred to var. depressa, which forms flat-topped circular patches less than 6 feet tall and several feet wide. The arborescent Eurasian var. communis has been reported from Long Island but not verified.

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- \*Juniperus virginiana L. Eastern Redcedar. Native to Long Island. Frequently occurs as a pioneer species in old fields. On some coastal sands (eg., Orient Beach State Park) Eastern Red Cedar forms a climax forest community known as the maritime red cedar forest which is listed as a rare ecological community in New York State (Reschke, 1990). Individuals at Orient have been dated at over 130 years old. This species is known as the Long Island Christmas Tree. It was once used as a christmas tree in Old Bethpage Village. The var. crebra Fern. & Grisc. occurs scattered on Long Island, old trees were seen by John Silba in south Massapequa and in Southampton. This variety is not recognized in Flora North America.
- \*Larix decidua Miller European Larch. Native to Europe and Siberia. A rare escape from cultivation; has spontaneously reproduced and become established at Underhill Estate, Muttontown Preserve and Sands Point Preserve. It is reported elsewhere on Long Island.
- Larix laricina (Du Roi) K. Koch Tamarack. Native to northern North America (north of Long Island). All historical collections and reports from Long Island are of cultivated specimens; neither escaping nor naturalizing on the island. Jelliffe (1899) and Taylor (1915) reported that this species is "not wild on Long Island." but House (1924, p. 43) reports this plant as "formerly found at Wading River, Long Island."
- \*Picea abies (L.) H. Karsten Norway Spruce. Native to northern Europe. Escaped from cultivation on Long Island. Planted trees thrive and their seeds sometimes germinate; second generation individuals sometimes grow to approximately 20 feet in height before dying, without reproducing.
- \*Picea glauca (Moench) Voss White Spruce. Native to northern North America. Escaped from cultivation on Long Island. Planted trees thrive and their seeds rarely germinate; second generation individuals rarely grow to 15 feet in height before dying, without reproducing.
- Picea mariana (Miller) B.S.P. Black Spruce. Graves & Rusk (1949) state: "It may be seen in a swamp near Merrick". There is no confirmation in this "long and well botanized area" (Peters, 1973).
- **Picea pungens Engelman Blue Spruce.** Reported from Fishers Island by R. H. Smith in 1943, Smith reported abundant seedling reproduction (New York State Museum Flora Cards).
- \*Picea rubens Sargent Red Spruce. Native to eastern North America. One population native to Long Island, located at Gidd's Island, Orient, was destroyed by a hurricane over 50 years ago. The only other collection and all other reports from

Long Island are of cultivated specimens. For more details see the last issue of this newsletter.

- \*Pinus banksiana Lambert Jack Pine. Native to New York only in the northern counties. A small stand at Fire Island was first reported by Art (1976) and still persists, a second population (introduced in the 1960's) consisting of over 1000 self-perpetuating individuals occurs at bluff-tops overlooking Long Island Sound near Riverhead. There is a third report from Orient. This species is planted elsewhere on Long Island.
- \*Pinus echinata Miller Shortleaf Pine. A southern species native to New York only in the extreme southeastern counties; historically known from western Long Island, with one collection from Northport; not reported from Long Island during the past 80 years.
- Pinus nigra Arnott Austrian Pine. Appears to be naturalized in several areas and reproducing many seedlings which reach at least 15 years old or more. John Silba has seen this plant at Farmingdale, Massapequa, Islip, and Wading River; earlier Roy Latham saw this plant in Orient.
- \*Pinus rigida Miller Pitch Pine. Native; infrequent in western Long Island, frequent throughout Suffolk County, the common pine of the Pine Barrens; frequently occurs in dry sandy soils, but can also tolerate wet soils. A large population of dwarf individuals occurs at Westhampton, but this form is not taxonomically recognized.
- \*Pinus strobus L. Eastern White Pine. Native Long Island populations occur at Shelter Island, Greenport, Northwest Harbor, and Flanders. Peters (1957) reported isolated individuals and small populations along the north shore from Queens to eastern Suffolk. Native populations often occur in swamps; large stands on the north shore have been introduced.
- \*Pinus sylvestris L. Scotch Pine. Introduced from northern Eurasia; planted and rarely escaping from cultivation.
- \*Pinus thunbergiana Franco Japanese Black Pine. Introduced from eastern Asia by Mr. & Mrs. Joseph Fays in 1892-1893 and planted at the Edward and Cook Estates in Sag Harbor (Littlefield, 1942). It escapes from cultivation, spontaneously reproduces and persists. It was planted along the Montauk Highway as early as the 1930's and was extensively planted along barrier beaches and State highways during the 1960s to 1980s, currently dying in large numbers (Daughtrey and Kowalsick, 1988). This species once was spelled *P. thunberii* but changes in the code of botanical nomenclature necessitated the change in spelling.

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- \*Pinus virginiana Miller Virginia Pine. A southern species native to New York only in the extreme southeastern counties. Collected by Norman Taylor on the Hempstead Plains in 1914; reported from Suffolk County by Miller and Young (1874) and Middle Island by LeRoy (Eaton, 1878). There are no extant Long Island occurrences, but Virginia Pine persists on Staten Island.
- Taxodium distichum (L.) Richard Bald Cypress. Native to southeastern United States. Reported as a native from Long Pond, Bridgehampton by Hehre & Bollard (1974), but the native status of this occurrence is questionable. Escaped from cultivation at Muttontown and Whalehouse Point, Fire Island.
- Taxus baccata L. English Yew. Native to Europe. Reported as a rare escape from cultivation on Long Island; however, it is questionable whether this species spontaneously reproduces on the island.
- \*Taxus canadensis Marshall Canadian Yew. Native populations were known to occur northwest of Deer Park (off the old Motor Parkway), and on Shelter Island, but these populations have not been recently observed.
- \*Taxus cuspidata Sieb. & Zucc. Japanese Yew. Native to Japan. Recently becoming established in open woods, woodland borders, and thickets throughout the north shore of western Long Island.
- \*Thuja occidentalis L. Northern White-Cedar, Arborvitae. Native to northern North America (north of Long Island). Most historical collections are from cultivated specimens, but several natural appearing individuals currently occur in wet soil at Moores Woods, Greenport and Fishers Island.
- \*Tsuga canadensis (L.) Carrière Eastern Hemlock. Native to northeastern North America. Peters (1973) reported "scattered as single specimens or small groups on cool slopes or deep woods along the North Shore moraine from Queens to Roslyn, thence quite rare to Roanoke (Latham)." Old trees have been seen by John Silba as scattered specimens in the woods near Farmingdale College, on the south shore near Massapequa and huge old trees along the Southern State Parkway in Beech and Pine woods. Otherwise only known from cultivation. This plant is currently being attacked by the Woolly Adelgid which is decimating populations.

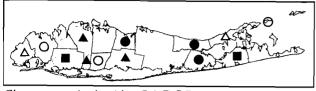
### Literature Cited

Art, H. W. 1976. Ecological studies of the Sunken Forest, Fire Island National Seashore, New York. National Park Service Scientific Monograph Series 7. 237 pp.

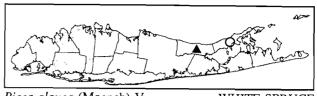
- Bicknell, E. P. 1908. The white cedar swamp in western Long Island. Torreya 8: 27-28.
- Eaton, D. C. 1878. A Catalogue of the flowering plants and higher cryptogams growing without cultivation within thirty miles of Yale College. Berzelius Society, New Haven. 71 pp.
- Daughtrey, M. and T. Kowalsick. 1988. The Japanese black pine - What's happening? Home Hort. Facts, Cornell Cooperative Extension, Riverhead, NY. 4 pp.
- Davis, W. T. 1917. Juniperus communis on Long Island and Staten Island. Torreya 17: 99-100.
- Graves, A. H. and H. M. Rusk. 1949. Guide to Trees and Shrubs: based on those of greater New York. Published by the Authors, Brooklyn, NY. 76pp.
- Harper, R. M. 1907. A Long Island cedar swamp. Torreya 7: 198-201.
- Hehre, E. J. and P. M. Bollard. 1974. The occurrence of bald cypress (*Taxodium distichum* (L.) Richard) in Suffolk County, Long Island, New York. Rhodora 76: 25-26.
- House, H. D. 1924. Annotated list of ferns and flowering plants of New York State. New York State Mus. Bull. 254: 1-757.
- Jelliffe, S. E. 1899. The flora of Long Island. The New Era Printing Co., Lancaster. 160pp.
- Laderman, A. D. et al. 1987. Atlantic White Cedar in the Glaciated Northeast. pp. 19-31. *In*: Laderman, A. D. (ed.) Atlantic White Cedar Wetlands. West View Press: Boulder.
- Littlefield, E. W. 1942. Pinus Thunbergii: A successful exotic on the North Atlantic Coast. J. Forestry 40(7): 566-573.
- Miller, E. S. & H. W. Young, 1874. Catalogue of the phaenogamous and acrogenous plants of Suffolk County, Long Island. Overton Printers, Port Jefferson, NY.
- Peters, G. H. 1957. Native Trees of Long Island. Long Island Naturalist 6: 3-19.
- -----. 1973. The trees of Long Island. The Long Island Horticultural Society Publ. No. 3. 96pp.
- Reschke, C. 1990. Ecological Communities of New York State. New York Natural Heritage Program, Latham, NY. 96pp.
- Taylor, N. 1915. Flora of the vicinity of New York. Mem. New York Bot. Gard. 5: 1-683.
- Young, S. M. (ed.) 1992. New York State rare plant status list. New York Natural Heritage Program, Latham, NY. 78pp.

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### Maps

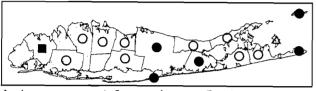


Chamaecyparis thyoides (L.) B.S.P. Native ATLANTIC WHITE-CEDAR

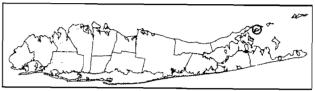


*Picea glauca* (Moench) Voss Alien

WHITE SPRUCE

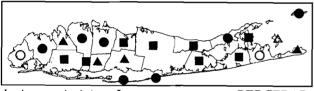


Juniperus communis L. var. depressa Pursh Native COMMON JUNIPER



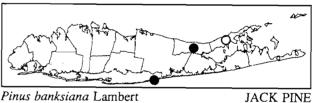
Picea rubens Sargent Native

RED SPRUCE



Juniperus virginiana L. Native

REDCEDAR

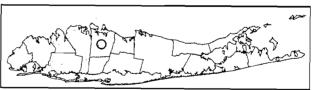


Pinus banksiana Lambert Alien



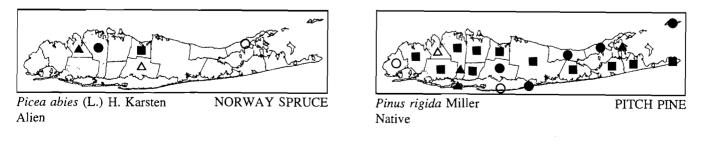
*Larix decidua* L. Alien

EUROPEAN LARCH

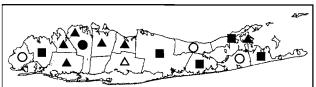


Pinus echinata Miller Native

SHORTLEAF PINE



Long Island



Pinus strobus L. Native

EASTERN WHITE PINE



Taxus canadensis Marshall Native

CANADIAN YEW

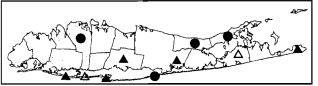
Pinus sylvestris L. Alien



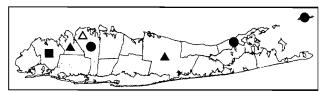
JAPANESE YEW

Alien

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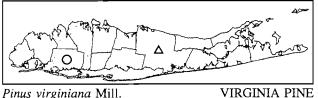


*Pinus thunbergiana* Franco JAPANESE BLACK PINE Alien



Thuja occidentalis L. Alien

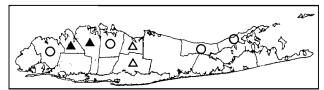
NORTHERN WHITE-CEDAR



Pinus virginiana Mill. Native

### Key to Symbols

- (closed circle) There is a specimen for this area collected after 1980.
- (open circle) There is a specimen for this area collected before 1980.
- (closed square) There is a specimen from this area collected before 1980 and a report (visual sighting or literature report) from this area after 1980.



Tsuga canadensis (L.) Carr. EASTERN HEMLOCK Native

- ▲ (closed triangle) There is a report (visual sighting or literature report) from this area after 1980.
- $\Delta$  (open triangle) There is a report (visual sighting or literature report) from this area before 1980.

Submitted by the Flora Committee

### Classification of the Native and Naturalized Gymnosperms of LI, NY

### Phylum Pinophyta (The Gymnosperms)

Class **Pinopsida** including seven families, 65 genera and about 550 species worldwide. Three families are found on Long Island: Taxaceae, Pinaceae, and Cupressaceae.

#### Taxaceae

Taxus canadensis -- Canada Yew

#### Pinaceae

Pinus echinata -- Shortleaf Pine Pinus rigida -- Pitch Pine Pinus strobus -- Eastern White Pine Larix decidua -- European Larch Larix laricina -- Tamarack Abies balsamea -- Balsam Fir Tsuga canadensis -- Eastern Hemlock Picea abies -- Norway Spruce Picea glauca -- White Spruce Picea mariana -- Black or Swamp Spruce Picea rubens -- Red Spruce

#### Cupressaceae

Chamaecyparis thyoides -- Atlantic White Cedar

Juniperus communis -- Common Juniper Juniperus virginiana -- Eastern Red Cedar Thuja occidentalis -- Northern White Cedar or Arborvitae

Prepared by Eric Glanz

### **Society News**

### March 14 meeting

**Lois Lindberg** announced an upcoming day for naturalists at Sands Point Preserve on Tues Mar. 21. Her bat exhibit is functioning and to be discussed at the all-day workshop, the exhibit will run until May 29.

Steve Clemants presented a talk on the New York Metropolitan Flora Project with samples of the work being done.

### April 11 meeting

Eric Lamont said that Steve Young is looking for reports of Uvularia puberula.

**Bob Laskowski** mentioned that **Chris Mangels** is studying *Alnus glutinosa* which is becoming a pest in the Islip area. Bob also mentioned that at Sayville the *Salix tristis* has had tremendous die-back. He wanted suggestions as to what caused this.

Marty Condon presented the evenings talk on the evolution and ecology of several Cucumber relatives in the tropics.

### **Executive Board Meeting**

A meeting of the Executive Board will be held on 23 May 1995 at 7:15 pm (before the flora committee meeting) at the Planting Fields Arboretum Library. All members are welcome to attend.

### Membership Dues

LIBS members recently received membership renewal notices. Your timely response will be greatly appreciated; it will save us time, energy, and expense by not having to send out second notices. Thank You for supporting the Long Island Botanical Society.

### Native Plant Symposium

The Brooklyn Botanic Garden will be sponsoring a symposium titled: **Native Plants: Towards a 21st-century Garden**. The symposium will be held on Thursday, June 1st. Lectures and forums will be followed in the evening by a gala celebration of the 50th anniversary of BBG's gardening book series.

For more information write Lisa Katzenstein Gomez, Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, NY 11225, or call (718) 622-4433 ext. 259.

### Field Trips

6 May 1995 -- Muttontown Preserve, East Norwich, NY. Meet at 10 am in the parking lot. Be prepared for wet walking and bring lunch, beverage, and insect repellant. Take the Belt (Cross Island) Parkway to exit 30. From there, go east about 13 miles on Route 106 (which becomes Jericho-Oyster Bay Road) about 4 miles to East Norwich. Turn west (left) on Route 25A (North Hempstead Turnpike); after 0.3 miles turn south (left) onto Muttontown lane. Go 0.2 miles into the preserve headquarters and parking lot. The leader is Dr. Patrick Cooney, 221 Mt. Hope Blvd., Hastings-on-Hudson, NY 10706; (914) 478-1803.

### 13 May 1995 -- Tungsten Mine Park/ Collis

Huntington State Park, Conn. Take the 7:30 am ferry from Port Jefferson, we will meet at the Bridgeport ferry terminal, Bridgeport, CT at about 9:00 am. We will see bloodroot, spring beauties, hepaticas, and other flora found to the north of Long Island. Chris Mangels will lead this trip. Call Glenn Richard (924-6659) by May 11 to sign up.

27 May 1995 -- Tiffany Creek Preserve, Oyster Bay Cove. Meet at 10 am. Al Lindberg will lead a field trip through the oak slope communities of Tiffany Creek Preserve, the mountain laurels and pink lady's slippers should be in full bloom. Contact Al for details at 516-571-8500 (days) or 516-922-0903 (evenings).

13 June 1995 -- Second Annual LIBS Barbeque and Sundown Field Walk, Swan Pond Biological Research Station. Meet at 5 pm, for field walk, 6:30 for Barbeque. Please call Glen Richard (924-6659) by June 9 if you plan to attend. We need people to bring food and cooling equipment, but speak to Glenn first to decide exactly what is needed. Manuel Lerdan, the current Resident Director of the Research Station, has kindly made his house available for the event. He is trying to find locations in the Long Island Pine Barrens where Japanese Honeysuckle is established, so please let us know where you've seen it.

25 June 1995 -- Pelham Bay Park. Meet at 9 am at the driving range parking lot. Take the Trogs Neck Bridge to Bruckner Expressway (route 95) north. Get off at Orchard Beach exit. Go over drawbridge, then right at the traffic light. After short distance, go into parking lot on left. Meet at the end of the lot that is farthest from the driving range. We will see Persimmon, *Lactuca floridana, Mimulus alatus, Hop-tree, Eleocharis elliptica var. pseudoptera, Tripsacum dactyloides, purple* milkweed, *Juncus brachycarpus, Iris prismatica.* Wear long pants, bring lunch and a beverage. The leader is Dave Kunstler, call him at (718) 430-1890 to sign up.

**29 July 1995 -- Cunningham Park, Queens.** Meet at 10 am. **David Lean** will lead a field trip through rolling hills and kettlehole ponds of Cunningham Park, we will observe the rich fern flora and rare plants of the area. Contact David for details at 718-464-9476.

12 Aug 1995 -- Calverton Ponds. Meet at Grace's, route 111, 1/10 miles south of LIE exit 70, 10-12 am, space is limited, call 367-3225 to sign up. Marilyn Jordan will lead this short, leisurely walk to look at the ecology of Calverton Ponds and surrounding pine barrens. We will talk about the relationship of hydrology to the development of the Calverton Ponds flora. Be prepared for ticks (long pants) and wet walking. Bring hand lens or binoculars. We will see *Drosera intermedia*, *Eriocaulon*, etc.

### 19 Aug 1995 -- Anthony's Nose and Iona Island.

Joint field trip with NYFA. Meet at 10 am at Iona Island. Enter Iona Island via the causeway, Park near the railroad tracks. On Iona Island we will visit a brackish intertidal marsh. We will see a rocky summit community on Anthony's Nose. The terrain is moderately steep. Wear footwear that can get wet for Iona Island and hiking boots for Anthony's Nose. The leader is **Bob Zaremba** (518) 463-6133, ext. 226.

#### 16 September 1995 -- Breezy Point/ Fort Tilden,

Queens. Meet at Fort Tilden Bldg. #1 at 10 am. To get to Fort Tilden take the Belt Parkway west to exit 11-S (Flatbush Ave South), cross the Marine Parkway bridge, bear right - exit for breezy Point, exit off the bridge onto Beach Channel Dr., go 100 yds. to traffic light (opposite Coast Guard Station Rockaway). Turn left into Ft. Tilden, proceed 200 yds. to Bldg. #1. **Bob Cook** will lead a walk through the dunes of Breezy Point and Ft. Tilden to look for rare plants and migrating birds. Call Bob for more information at 718-338-3730.

24 September 1995 -- Sandy Hook National Recreation Area, Monmouth Co., NJ. Meet at the north end of parking lot B, which is the first parking lot on the right after you enter the recreation area, meet at 10 am. Take the Garden State Parkway to exit 117 (Keyport, Rte 36) and take Rte 36 east for about 13 miles, then follow the signs for the Sandy Hook exit, which will be on the right just after you cross the Navesink River. Karl Anderson will lead this trip through a variety of dune and dune woodland communities. Contact Karl at 609-267-2195 for more details.

**30 September 1995** -- Jamaica Bay Wildlife Refuge. Meet at 10 am, at HQ. By car: take the Belt Parkway to Cross Bay Boulevard, take Exit 17 (Rockway). Cross the North Channel Bridge. Refuge is about 1 mile past the bridge on the right. By subway: take the IND A or CC to Broad Channel Station. Walk west to Cross Bay Blvd, then north about 0.75 miles to Refuge HQ on left. By bus: take the Green Lines Q21 to Refuge. We will see a varied fall flora of the salt marshes and their adjacent transitional habitats. Be prepared for wet walking and bring lunch, beverage, and insect repellent. Leader: **Patrick Cooney, 221** Mt. Hope Blvd., Hastingson-Hudson, NY 10706; (914)-478-1803.

Long Island

### LONG ISLAND BOTANICAL SOCIETY Founded: 1986; Incorporated: 1989.

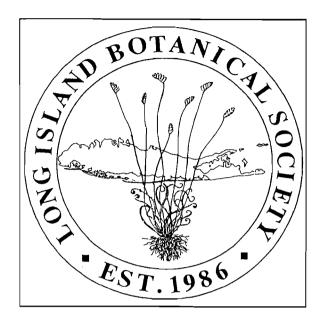
The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Steven Clemants
Treasurer	Carol Johnston
Rec'rd Sec'y	Barbara Conolly
Cor'sp Sec'y	Jane Blanchard
Local Flora	Skip Blanchard
Field Trip	Glenn Richard
	Allan Lindberg
Membership	Lois Lindberg
Conservation	Louise Harrison
	John Turner
Education	Mary Laura Lamont
	Tom Stock
Hospitality	Nancy Smith
-	Betty Lotowycz
Program	Eric Lamont
Editor	Steven Clemants 7

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 Rd., Oyster Bay, NY 11771-3111

LONG ISLAND BOTANICAL SOCIETY c/o Muttontown Preserve Muttontown Lane East Norwich, NY 11732



Long Island