LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

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Trees of the Long Island Pine Barrens

Daniel Karpen

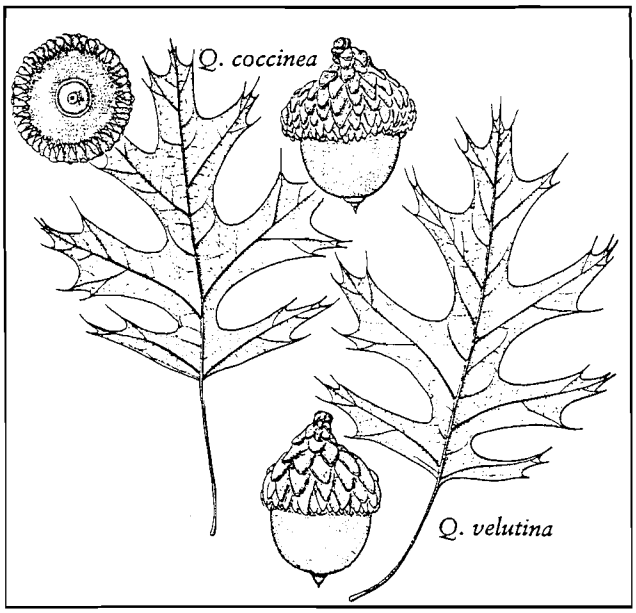
This short primer will introduce you to some of the more common trees of the Long Island Pine Barrens. There are approximately 88 species of trees believed to be native to Long Island, according to the list provided by George Peters in the third edition (1973) of *The Trees of Long Island.*

The Long Island Pine Barrens is characterized by forests with the most common trees being Pitch Pine (*Pinus rigida*), White Oak (*Quercus alba*), Scarlet Oak (*Q. coccinea*), Scrub Oak (*Q. ilicifolia*), Dwarf Chestnut Oak (*Q. prinoides*), Post Oak (*Q. stellata*), Atlantic White Cedar (*Chamaecyparis thyoides*), Red Maple (*Acer rubrum*) and Tupelo (*Nyssa sylvatica*). Although Eastern White Pine (*Pinus strobus*) may be found in the Prosser Pines County Park in Middle Island, this stand was planted in the early 1800's and the species is not native to the Long Island Pine Barrens, although it occurs naturally in the northwest woods of East Hampton township.

The Pitch Pine is the most characteristic tree of the Long Island Pine Barrens. When one talks of the Long Island Pine Barrens, one talks of forests containing Pitch Pine. This pine is a hard pine, or yellow pine, with needles in clusters of three, growing three to five inches. The needles are stiff to the touch, and stay on the tree for three to five years. Pitch Pine reaches its largest size in the Connetquot River Valley, with trees approaching two to three feet in diameter. Along the river, the water table is within several feet of the surface, and Pitch Pine grows larger than in areas of less moisture. Normally, mature trees are 10 to 18 inches in diameter, with the oldest Pitch Pines in the Long Island Pine Barrens reaching about 150 years.

In the Oak Brush Plains in western Suffolk County Pitch Pines may be widely scattered. In the central Pine Barrens in Islip and Brookhaven towns, Pitch Pine is usually found in association with oaks. In western Southampton Town, pure forests of Pitch Pine may be found, with the best examples along Route 24 from the Long Island Expressway to Riverhead.

In Westhampton, the genetically different dwarf Pitch Pines are found, and these trees reach a maximum height of 6 to 12 feet. This area is about 2,500 acres. Several hundred acres were burnt over in the fire in late August, 1995. The dwarf Pitch Pines will regrow by sprouting from the stumps. Several days after the fire, the first



Scarlet Oak (*Q. coccinea*) & Black Oak (*Q. velutina*). Illustration from Flora of North America, Vol. 3 (1997); Oxford University Press.

Highlights

Trees of the Pine Barrens, continued from page 7

sprouts of green needles were seen forming at the base of the trees.

Mixtures of oaks with Pitch Pine are generally found throughout the Pine Barrens. The most common oak is probably the Scarlet Oak, with its crimson red pointed leaves. It grows up to about two feet in diameter. Scarlet Oak is a short lived oak, and trees exceeding 120 years old are rare. Usually, by about 80 years old, the trees have developed heart or butt rot.

White Oak, with its grayish white flaky bark, is also a common oak of the Long Island Pine Barrens. It has rounded lobes on the leaves, compared with the pointed lobes of the black oak group. White Oak may be very long lived oak, with ages of 200 years or more not unusual. Its wood is very hard, and tan in color, compared to the reddish of the lumber known as Red Oak in the trade. In some areas, there may be almost pure stands of White Oak. The leaves turn brown in the fall.

Scrub Oak is the common small oak of the Long Island Pine Barrens. It can be found throughout the Pine Barrens from Farmingdale east, and is usually absent outside of the Pine Barrens on Long Island, whereas the other oaks may be found in the richer woods on the north shore moraines. Its leaves are 5 or 7 pointed, small, from 2 to 5 inches long. Scrub Oak rarely reaches tree size. Its leaves are fed upon by many species of insects, including the Buck Moth. Its trunk is crooked, with crooks every foot or so. The leaves are waxy to protect them from drought. The acorns on the small trees are easily reached by deer and other mammals without them having to fall off the tree. In the Dwarf Pines, only the Scrub Oak is found in association with the Pitch Pines. Here, the trees will cover the ground and form impenetrable thickets that are extremely difficult to walk through. Scrub Oak will sprout from the roots after a fire.

Another small oak is the Dwarf Chestnut Oak. It has a small leaf similar to the Chestnut Oak of the rocky moraines. It can be found in the Oak Brush Plains in Edgewood. The tree also sprouts from the stump after a fire.

The Post Oak is a less common oak of the White Oak family found in the Long Island Pine Barrens. It has a leaf with the lobes in the shape of a cross. The leaves are very dark green in color. The bark of the Post Oak is similar, but not identical to the White Oak. These trees may reach very old age, sometimes up to 200 years old. It can tolerate salt water, and may be found in maritime areas as well as in the Pine Barrens.

Atlantic White Cedar may be found in the freshwater swamps of the Pine Barrens. Formerly more common, most of the stands were cut by the early colonists, as the wood was extremely durable and resistant to decay. Almost all of the remaining stands of Atlantic Cedar are now protected in the Suffolk County Park System, with the best stands of Atlantic White Cedar located from Riverhead to the Shinnecock Canal. A particularly fine stand is located at the head of Birch Creek in Flanders, with trees up to 18 inches in diameter.

Red Maple is the maple of the freshwater swamps. It can be found along margins of creeks, rivers, and in low lying ground. Its leaves are smaller than the Sugar Maple or Norway Maple commonly planted along sidewalks. Its shallow root system, usually less than 12 inches in depth, makes larger Red Maple trees subject to toppling during storms. One of the largest Red Maples on Long Island, a tree about 5 feet in diameter, may be found next to a small pond in Maple Swamp about a mile south of Flanders Road. It is not restricted to wet areas, and occasionally may be found in upland areas as well.

Tupelo, or Black Gum, is also a tree of the freshwater wetlands in the Pine Barrens. It is a very slow growing tree, and may reach ages in excess of 200 years. It has thin branches, which grow in a horizontal direction from the trunk. Its bark, when young, has narrow ridges, but it changes to plates in old age. The leaves are red, purple, and blue in the fall months.

This primer is an introduction to some of the trees in the Long Island Pine Barrens. Go out to the field, and enjoy the forests. More information may be found in standard works on identifying trees.

ABOUT THE AUTHOR: **Daniel Karpen** is a resident of Huntington, and received a Bachelor's Degree in Forestry from the University of Washington. He has studied the ecology of Long Island for the past 40 years.

Botany Quiz

Thomas Allen Stock

Trees: Their Common Names and a Remembrance Phrase

Common Name	Remembrance Phrase
1. ____Ailanthus	A. The Canoe Tree
2. ____Sassafras	B. The Burnt Potato Chip Tree (bark)
3. ____Tulip	C. The Elephant Skin Tree (bark)
4. ____Sycamore	D. The Mitten Plant (leaf)
5. ____Black Cherry	E. The Fence Post Tree (trunk)
6. ____Maple	F. The Prickly Cone Tree (cones)
7. ____Locust	G. The Monkey Face Tree (leaf scar)
8. ____Norway Spruce	H. The Shade Stealer Tree (tree)
9. ____Pitch Pine	I. The Clothes Line Tree (branch)
10. ____American Beech	J. The Itchy Ball Tree (fruits)
11. ____Black Walnut	K. Tree of Heaven (stinky leaves)

[see page 11 for answers]

Walking Dunes

Margalo Eden Krumholz

On my last visit
The dunes were encroaching upon the forest,
Devouring it gradually, but whole,
The crowns of the tallest trees poking up as lean shrubs
Through the sandy summits, remnants of a hearty meal
Forgotten in the feaster's teeth.
Tours of harmless nature-lovers tromp over the dunes,
Sighing at the sad gardens in the valleys between,
Where silver desert plants replace the lush and green. Here and there,
Dog ticks cling to tall grasses, arms outstretched,
Reaching as a suicide poised on a bridge reaches for God or
Death, waiting to grasp the next unwary
Pants leg to brush by. The mounds of sand move
Too slowly for human senses, without so much
As a whisper to mark their passage. But, under the waning sun
Their blue-black shadows hover like words, "The dead shall
not praise You, nor all those who go down to silence."

[Printed with permission from the author. From: *A Force of Tides: Poems of the Natural World and Beyond*, Anchor Thom Publishing. Ms. Krumhiolz can be contacted at 718/769-9876 for information on purchase of her book of poems.]

Plant Sightings

The following reports from September through October 1998, were announced during the monthly LIBS meetings, but are only now printed due to previous space limitations in the newsletter.

New populations of Kudzu (*Pueraria lobata*) continue to emerge throughout western L.I. **Barbara Conolly** reported a new population from along Tiffany Road in Oyster Bay, and **Eric Lamont** reported another new population along route 110, just north of Northern State Parkway, in Huntington Township. **Allan Lindberg** reported a stand of approximately two dozen individuals of Cucumber Tree (*Magnolia acuminata*) from Tiffany Creek Woods. Al also reported *Solidago sempervirens* var. *mexicana* from Welwyn Preserve in Glen Cove and also from Roosevelt County Park. **Skip Blanchard** reported a sizable population of St. Andrew's Cross (*Hypericum hypericoides* var. *multicaule*) from Heckscher State Park, and *Eupatorium serotinum* from Stony Brook. **Eric Lamont** reported *E. serotinum* from along the L.I.E. service road in Islandia, and Skip noted seeing it near Exit 57 along the L.I.E. in the township of Islip. Several interesting plants were observed on **Tom Meoli's** September field trip to the David Weld Preserve in Nissequogue, including four species rare or uncommon on Long Island: Moonseed (*Menispermum canadense*), Flatsedge (*Cyperus odoratus*) listed as rare in New York by NYNHP, an uncommon hybrid of Indian Hemp (*Apocynum* x *medium*), and the unusual goldenrod hybrid *Solidago* x *asperula* (= *S. sempervirens* x *rugosa*). **Elsa L'Hommedieu** reported an unverified occurrence of Blunt-leaved Grape Fern (*Botrychium oneidense*) from her property in Nissequogue, and **John Potente** reported two unidentified individuals of *Botrychium* from the Native America preserve in Hauppauge. Finally, **Steve Glenn** from Brooklyn Botanic Garden has been taking a close look at Long Island's poisonous species of *Toxicodendron* (which includes Poison Ivy, *T. radicans*). For many years confusion has shrouded the identity of the shruby, upright taxon lacking aerial roots. The late **Arthur Cronquist** (1991) of the New York Botanical Garden considered this taxon to be *T. pubescens*, and listed Long Island as the northern limit of its range. However, botanists from BBG are not convinced, and believe that *T. radicans* may also include a form lacking aerial roots. For more details contact **Steve Glenn** at 718/941-4044 ext. 241, or email: steveglenn@bbg.org

Compiled by Eric Lamont

New York
Natural Heritage Program

New York State Department of Environmental Conservation
700 Troy-Schenectady Road
Latham, New York 12110-2400
(518) 783-3932
Fax (518) 783-3916

January 29, 1999

Dr. Eric Lamont
President of the Long Island Botanical Society
717 Sound Shore Rd.
Riverhead, NY 11901

Dear Dr. Lamont:

Our program has information that there are two globally rare and two state rare natural communities located at the Traditional Links/Friars Head Farm/Grandifolia Sandhills site. One of these occurrences is estimated to be the best example of its type globally and one is estimated to be one of the three best examples in New York.

Maritime beech forest, a globally rare natural community, occurs on the bluffs and along the dune blowout edges at the Traditional Links/Friars Head Farm/Grandifolia Sandhills site. This location is estimated to be the global exemplary site for this natural community. Maritime beech forest is ranked G2 meaning that it is imperiled throughout its range due to rarity.

We also have information that pitch pine dune woodland, also a globally rare natural community, occurs in the south central part of the Traditional Links/Friars Head Farm/Grandifolia Sandhills site. Pitch pine dune woodland is ranked G2G3 meaning that it is imperiled to very rare throughout its range.

Coastal oak-beech forest, a state rare natural community, occurs throughout the Traditional Links/Friars Head Farm/Grandifolia Sandhills site. This location was chosen as one of the three best sites for this natural community in New York and is proposed as a candidate for global exemplary site. In addition, it is probably vital to the longterm viability of the maritime beech forest. Coastal oak-beech forest is ranked S3 meaning that it has limited acreage.

We also have information that maritime dune, another state rare natural community ranked S3, occurs at the Traditional Links/Friars Head Farm/Grandifolia Sandhills site.

Our office sent DRU Associates information about the maritime beech forest occurrence on September 16, 1998. However, we have more recent information that is in the process of being entered into our database. Please contact me for further information.

Sincerely,

Adele Olivero

Adele Olivero
Associate Ecologist

New York State Department of Environmental Conservation and The Nature Conservancy
with support from Return a Gift to Wildlife contributions
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Society News

Grandifolia Sandhills Update

The paid consultants of the Traditional Links mega-golf resort development project continue to characterize the Grandifolia Sandhills as ecologically worthless, while the entire environmental community of L.I. and statewide environmental experts consider the region priceless (see the letter from N.Y. Natural Heritage Program, on p. 10). The Long Island Botanical Society has called for the Town of Riverhead to reject the applicant's Environmental Impact Statement and has called for an independent review of the project by impartial experts. The Town is expected to make a determination on 2 March 1999.

Metro Forest Council: Conference

Conserving Forests in a Changing Landscape:
A Steward's Guide to Urban & Suburban Forest Fragments

Are you concerned for your local forest and want to learn more from the leading scientists, managers, and educators in the metropolitan area about the most pressing issues facing our regional forests? Then join Metro Forest Council for this informative "how to" conference on Wednesday, 24 March 1999, from 8:30am to 4:30pm at Columbia University, Shapiro Center for Engineering. For information call Metro Forest Council at 212/229-1349, or e-mail MFC at confmfc@aol.com, or fax at 718/965-6595.

SUNY Grad Student seeks input from LIBS Members

Wei Fang is working on her Ph.D. in plant ecology at Stony Brook University. The topic of her doctoral dissertation centers on the ecological impacts of Norway Maple (*Acer platanoides*) and Tree of Heaven (*Ailanthus altissima*) upon ecosystems, and she is currently in the process of locating sites for her study. If you are aware of large stands of Norway Maple and Tree of Heaven on L.I. or in the greater metropolitan region please contact **Wei Fang** at the Dept of Ecology & Evolution, SUNY at Stony Brook, Stony Brook, NY 11794-5245 [tel: 516/216-2177; e-mail: weifang@life.bio.sunysb.edu].

Answers to Botany Quiz (from page 9): 1. K, 2. D, 3. A, 4. J, 5. B, 6. H, 7. E, 8. I, 9. F, 10. C, 11. G.

Elections for the New Millennium

Current terms for LIBS officers expire in 1999, and nominations are being accepted for a new slate of officers to serve for 2000-2001. Elections will take place at the November, 1999 monthly meeting. **Vincent Puglisi** is chairman of the Nominating Committee; **Betty Lotowycz** and **Eric Lamont** are also members. Please contact Vince at 516/735-9458 if you would like to become more involved in LIBS by serving as an officer. Also, anyone interested in editing the newsletter should contact Eric at 516/722-5542.

New Publication: Curly-grass Fern on Long Island

The American Fern Society has recently published "Status of *Schizaea pusilla* [Curly-grass Fern] in New York, with notes on some early collections," by **Eric Lamont**. An historical account of the earliest collections and currently known populations is presented.

Complimentary copies of the publication are available upon request from Eric Lamont, Biology Dept, Riverhead High School, Riverhead, NY 11901, or tel: 516/722-5542, or e-mail: elamont@hamptons.com

Treasurer's Report — 1998

Opening Balance (1 Jan. 1998)	6,848.87
Income Total	2,545.05
Expenses Total	2,449.43
Net Gain	95.62
Closing Balance (31 Dec. 1998)	$6,944.49

Respectfully submitted: **Carol Johnston**, Treasurer

Spring Field Trip

24 April 1999 (Saturday), 10:00am.
Heldeburg Escarpment, Altamont, NY
Leader: **Al Breisch** [518/478-3057 (w), 518/765-2880 (h)]

For early spring wildflowers. Optional afternoon trip to the marl fen at the base of the slope, and optional Sunday trip to the Albany Pine Bush.

[please see enclosed flier for more info]

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	722-5542
Vice President	Skip Blanchard	421-5619
Treasurer	Carol Johnston	676-6648
Rec'rd Sec'y	Barbara Conolly	922-5935
Cor'sp Sec'y	John Potente	
Local Flora	Steven Clemants	
Field Trip	Allan Lindberg	
	Tom Meoli	
Program	John Potente	
Membership	Lois Lindberg	
Conservation	John Turner	3
	Karen Blumer	5
Education	Mary Laura Lan	42
	Thomas Allen S	23
Hospitality	Betty Lotowyc:	447
	Jane Blanchard	519
Editor	Eric Lamont	542

Member
Membership is open to all, and we
Annual dues are $10. For member ayable
to LONG ISLAND BOTANICAL SOCIETY and ... Lois
Lindberg, Membership Chairperson, 45 Sandy Hill Road, Oyster Bay, NY 11771-3111

PROGRAMS

9 March 1999 - 7:30 pm*
Eric Morgan
(Director, Clark Botanic Garden)
"History of Clark Botanic Garden"
The history & current projects in native plant restoration at CBG will be presented
Location: Bill Patterson Nature Center, Muttontown Preserve, East Norwich.

14 April 1999 - 7:30 pm*
Don Riepe
(Jamaica Bay Wildlife Refuge)
"The Natural History of Jamaica Bay Wildlife Refuge"
Location: Bill Patterson Nature Center, Muttontown Preserve, East Norwich.

*Refreshments & informal talk begin at 7:30pm, the meeting starts at 8pm. For directions to Muttontown Preserve call 516-571-8500.

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