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Field Notes and Morphological Observations of some Montauk Oaks

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Introduction

Laurence (“Larry”) Penny, long-time naturalist working for the Department of Environmental Conservation of the Town of East Hampton, called our attention to the existence of certain oak (*Quercus*) specimens in Point Woods, Montauk, that did not appear to correspond to any of the oak species recognized from Long Island. He suggested they might be *Quercus falcata* specimens. Our field work on three occasions suggested these oaks were widespread and possibly locally dominant.

The Montaukett Native Americans occupied Point Woods during pre-colonial and colonial history. English colonists grazed sheep on the “Montauk Downs” and may have cut wood from the forest. Taylor (1923) described a pastoral landscape in which woody



Figure 1. Profile of Oak/American Holly/Mountain Laurel Forest, typical of the Point Woods, Montauk. Left: *Quercus* sp. trees; center and right: *Ilex opaca*; *Smilax* understory (leafless); ?*Kalmia latifolia* behind *Quercus* specimens. Photo by AMG, March 28, 2012.

vegetation was confined to kettle holes and to the Point Woods. A photograph of the Hamlet of Montauk in 1930 reveals a treeless landscape (Anonymous 1998). Woody vegetation has been growing in extent and height at least since that time. In the 1940’s, Camp Hero was carved out of the Point Woods. It was the site of a military installation of the World War II era. Extensive earth moving, battery construction and road building transformed the east-central part and seaward margin of the area, but left intact most of the native woods around the camp.

Subsequent road-building and landscaping were attendant upon the creation of a New York State Park that includes the whole Camp Hero site south of Montauk Highway (Route 27; Laurence Penny, pers. comm. 11/26/12).

* Two of the authors, Victoria Bustamante and Larry Penny, have been studying the flora of Montauk intensively for the past two years in order to revise Norman Taylor’s outstanding work covering the vegetation of the Montauk Peninsula published in 1923. Larry Penny has been cataloguing the plants of the South Fork and elsewhere in eastern Long Island since 1981 when he worked with associates describing the flora of the Mashomack Preserve for the master plan of that large Nature Conservancy holding on Shelter Island. He has rediscovered many of the rare species on the South Fork that are now part of the state’s Natural Heritage list including, in 1981, the sandplain gerardia (*Agalinis acuta*) population at Shadmoor State Park, one of New York’s federally endangered species, when the land was privately held and being considered for development. Victoria Bustamante is an accomplished botanist and photographer who has recently turned her attention to the flora of East Hampton and Southampton Towns and intends to publish on that subject with L. Penny in 2014. Together, they have started the South Fork Herbarium, where many of the Montauk specimens photographed, collected and pressed now reside.

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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.

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Society News

Phragmites removal at Walking Dunes. Karen Blumer, Larry Penny, and Vicki Bustamante were awarded a contract in 2012 from NYS Office of Parks, Recreation and Historic Preservation to remove *Phragmites australis* from the cranberry "bogs" within the Walking Dunes ecosystem of Hither Hills State Park in Amagansett. The initial cutting of about one to two acres of phragmites, spread out over nearly five acres of "bogland," was completed in October 2012. The site is known to support a high diversity of native plant species including several species of orchids, ferns, many sedges and rushes, and other herbs and woody plants. An inventory of the flora was conducted before the phragmites was removed and changes in the vegetation will be monitored as the project progresses.

As part of their research, the team visited the New York State Herbarium in Albany during the winter of 2013 where Dr. Charles "Chuck" Sheviak assisted in locating historical collections from the site. During the same trip to Albany, they also visited the Natural Heritage Program office where Nick Conrad shared historic field data from Montauk.

The next phase of the project will be implemented during the 2013 growing season. The entire task is being documented with photographs and a paper is planned for submission to the LIBS Newsletter.

Drinking Water Protection Program threatened in Suffolk County. LIBS partnered with the Long Island Pine Barrens Society, The Nature Conservancy, The Group for the East End, and other environmental groups in speaking before the Suffolk County Legislature on 18 June 2013. The environmental community opposes a proposed bill (Resolution 14-65) by County Legislator Al Krupski that would alter the 25-year water protection bill that has successfully preserved and protected the island's most sensitive environmental regions and underlying aquifer. Environmentalists stated that the people of Suffolk County have a right to a mandatory referendum on this issue and urged the legislature to defeat the proposed bill.

Watch for Giant Hogweed

Giant hogweed (*Heracleum mantegazzianum*), an invasive plant that can cause painful burns, has been found on Long Island. Please use the NYSDEC Giant Hogweed Hotline for all inquiries: ghogweed@gw.dec.state.ny.us or 845-256-3111.



The hotline is a place for people to report new sites, get help identifying suspect giant hogweed plants, ask questions about the plant and how to control it, and connect with the statewide control project. From mid-June through mid-July DEC gets hundreds of inquiries and it may take us a week or two to respond at that time.

Another resource is the NYSDEC giant hogweed web page <http://www.dec.ny.gov/animals/39809.html> which provides information about the plant, how to identify it, how to control it, a map of NY state sites, NYSDEC's control project, and more.

-Steve Young, Coordinator of Long Island Invasive Species Management Area (LIISMA)

(*Montauk Oaks cont. from cover*)

Site Description

Montauk Point, in the Town of East Hampton, Hamlet of Montauk, Suffolk County, forms the eastern tip of Long Island, New York. It receives ca. 45 inches (114 cm) of precipitation each year. Montauk Point Woods are centered on 41° 03' 28"N, 71° 53' 00"W, about ½ mile west of the point proper, at a maximum elevation of 100 ft (≤30.5m) asl, but mostly 30-80 ft (Miller and Frederick 1969). The woods are bisected by Route 27, which extends from the Hamlet of Montauk to Montauk Point. At Bridgehampton, L.I. (located about 20 miles southwest of Point Woods), normal mean January temperature is 30.6° F (-0.77°C), normal mean July temperature is 71.5°F (21.94°C) and normal mean annual temperature is 50.8° F (10.44°C; Climatography of the United States No. 81 [New York], 1982).

The Montauk Peninsula extends eastward from the southeastern portion of Long Island. It was formed by the Ronkonkoma Moraine, a late-Pleistocene (Wisconsinan) advance of the North American continental ice sheet. The Montauk Soil Series, which underlies most of the peninsula, was characterized from a site in East Hampton on the Montauk Peninsula. The following account serves to describe the Point Woods substrate: "Montauk soils are on glaciated uplands and moraines. Slopes range from 0 to 35 percent. The landscape in some areas has many closed depressions, some of which are filled by perennial ponds or wet spots. The soils formed in thick moderately coarse or medium textured till mantles underlain by firm sandy till. Some areas have very stony or extremely stony surfaces" The typical pedon is "Montauk sandy loam" which varies in color from brown to yellowish-brown with increasing depth (National Cooperative Soil Survey, U.S.A.).

Vegetation in Montauk Peninsula has been changing through the process of ecological succession since grazing and farming ceased in the middle of the 20th Century. For example, low forests of *Amelanchier* sp., *Sassafras*, *Ilex opaca* and *Nyssa sylvatica* appear to have grown where grazed land once stood. In other areas low woods of a mixture of oaks, wild black cherry and sassafras are emerging. Taylor (1923) recognized a Beech-[Red]Maple forest as common in the area. On a recent field trip to the area, AMG and VB could find very few stands with beech (*Fagus grandifolia*) and red maple (*Acer rubrum*) occurring together. Instead, red maple forms nearly pure stands in the wettest sites and sourgum (*Nyssa sylvatica*) on slightly drier sites either in pure stands or with *Fagus*, *Betula lenta*, *Quercus rubra*, *Carya cordiformis*, *Amelanchier* sp., *Sassafras*, *Ilex opaca* and an occasional *Carya alba* and *Quercus* cf. *velutina*. Pure stands of *Fagus grandifolia* are not uncommon. And *Sassafras* and *Carya cordiformis* can be found in smaller, monospecific groups. Perhaps tree species have been differentiating their habitat preferences since 1923.

The following four forest types were recognized by Greller (2001, 2002) for Montauk Point: a. Swamp Forests: "8. Red Maple-American Beech Association (Point Woods); 17. Bitternut Hickory-Sourgum Association (Hither Woods)." b. Microclimatic (maritime) Variants of New York State (continental) Upland Forests: "1. Black Oak-Beech-Black Birch/American Holly Association; 2. Black Oak-Scarlet Oak/American Holly/Mountain Laurel Association." Greller (1977) gave species composition of prominent plants for these forests. The hydro-mesic forest mentioned in the paragraph above should also be included (*Fagus grandifolia*, *Betula lenta*, *Nyssa sylvatica*, *Quercus rubra*, *Carya cordiformis*, *Amelanchier* sp., *Sassafras*, *Ilex opaca*, occasionally including *Carya alba* and *Quercus* cf. *velutina*.)

The classification above pre-dates the recognition of a *Quercus falcata*-type tree in the Point Woods. The oak-dominated forest at Point Woods should then be described as being formed by *Quercus* cf. *falcata*, *Quercus velutina* and *Quercus coccinea*. Other oaks occurring with them are *Quercus alba* and *Quercus rubra*; *Fagus grandifolia*, *Betula lenta*, and *Ilex opaca* are also common (Figure 1). The proportions of the dominants and sub-dominants have yet to be determined. Nevertheless, it is likely that *Quercus* cf. *falcata* specimens number in the many hundreds and may extend westward on the southern coast of Long Island at least as far as Great River, where a few similar oaks occur along the shore (Bayard Cutting Arboretum, AMG, pers. observ., Autumn 2012).

Weldy et al. (2013), in the New York State Flora Atlas, list the following oaks as occurring in Suffolk County, Long Island: *Quercus alba*, *Q. bicolor*, *Q. coccinea*, *Q. ilicifolia*, *Q. macrocarpa*, *Q. marilandica* var. *marilandica*, *Q. montana*, *Q. muehlenbergii*, *Q. palustris*, *Q. phellos*, *Q. prinoides*, *Q. robur*, *Q. rubra*, *Q. stellata*, *Q. velutina*. It is likely that *Q. macrocarpa* and *Q. robur* are introduced and may be escaping from cultivation locally. Norman Taylor (1910) reported a specimen of *Q. pagodaefolia* (now considered a variety of *Q. falcata*), from West Hempstead, L.I. Eric Lamont (pers. comm. September 29, 2012) examined Taylor's specimen and found it to have been collected during the spring season and to be lacking acorns, and so of doubtful determination.

The likelihood of *Q. falcata* being intentionally introduced for forestry seems remote because most Long Island forests have been cut over indiscriminately and repeatedly for firewood since early colonial days. Recently emerging forests show no signs of human modification.

Morphological Characters of Montauk Oaks Compared with *Quercus falcata* and *Quercus velutina*

Using the newly updated Muenscher's Key to Woody Plants (Cope and Muenscher 2001) on diagnostic summer characters

(Continued on pg 28)

(Montauk Oaks cont. from page 27)

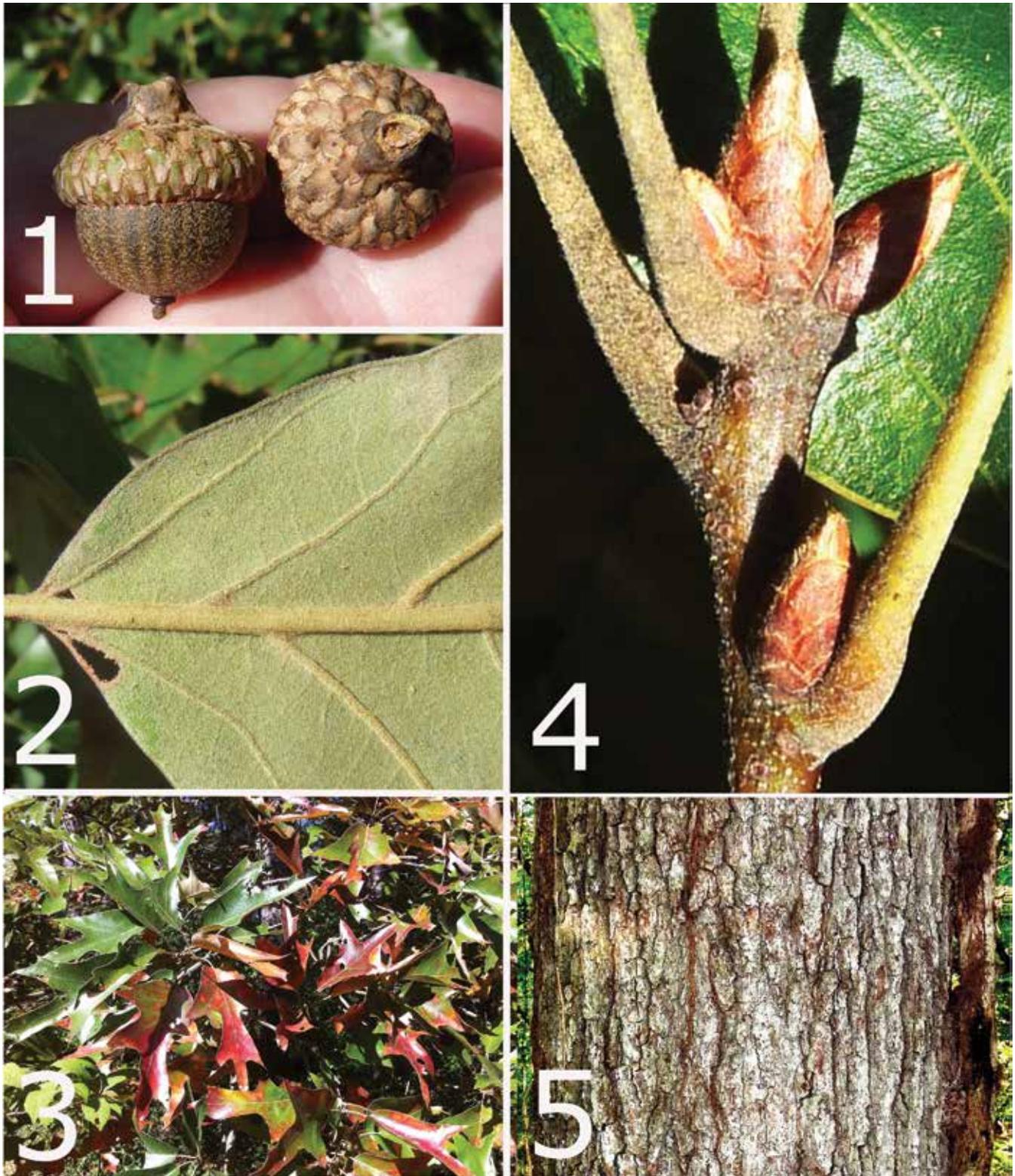


Plate I. *Quercus falcata* specimens from Georgia

Figure 1. Acorns from Brazelton, northern Georgia (Oct. 12, 2012). Note scales at margin of cap are tightly appressed. Also note hair in stripes on nut.
 Figure 2. Lower surface of leaf with uniform pubescence tan-white in color.

Figure 3. Leaves narrow, deeply incised; few lobes; lobes with 1-3 tines; early autumn color red (Georgia Botanical Garden, Athens).
 Figure 4. Terminal bud complex and a lateral bud. Base of petiole densely pubescent. Some pubescence and lenticels on branch.
 Figure 5. Bark of a 2 ft dbh specimen (note *Toxicodendron radicans* vine at right of trunk). (Brazelton, GA).

of our Montauk oak specimens, we noted a close match with *Quercus falcata*: slightly hairy buds (eliminating *Quercus rubra*); sharp pointed terminal buds (*Quercus coccinea* buds have gray pubescence on rounded tips); (sparsely) hairy throughout abaxial (underleaf) surface, petiole, and subtending branchlet (eliminates *Quercus velutina* which has no hairs on branchlets or petioles and hairs only in underleaf vein axils); leaves highly variable, usually bearing only 1-3 lobe pairs.

After careful observation of many specimens of *Quercus falcata* from northern Georgia (October 10-13, 2012; Brazelton and Athens, GA), AMG made the following observations: *Quercus falcata* acorns have tightly appressed marginal scales, as do most of the acorns we collected of the Montauk oak species in question. Characteristic leaves of *Quercus falcata* have 3 pairs of lobes: the middle pair is twice as wide as the proximal and distal pairs, which are often reduced to small triangular lobes or are absent. The number of tines on *Q. falcata* leaf lobes usually range from 1 to 3, with the larger number confined to the middle pair of lobes. *Quercus falcata* leaf undersurfaces are uniformly pubescent with dense, light-tan hairs. *Quercus falcata* has long petioles, so the leaf blades hang down from the stems. The nuts (acorns) of the Georgia *Q. falcata* specimens show uniformly spaced stripes of short hairs that radiate from the dried style tip to the edge of the cup. Sun leaves turn cardinal red; one dying shade leaf was yellow.

In addition, and not mentioned in Muenscher's Key, *Quercus velutina* has larger acorns than *Q. falcata*. *Quercus velutina* has acorn cup marginal scales that flare. AMG found some Montauk oak acorn specimens with a few flaring marginal scales on cups that otherwise show tightly appressed scales. The Montauk oak also shows variation in acorn size and cup morphology that spans the ranges of *Q. velutina* and *Q. falcata*. The nut (acorn) of the newly recognized Montauk oak shows uniformly spaced stripes of short hairs that radiate from the dried style tip to the edge of the cup; *Q. velutina* nuts lack that feature. Also, *Quercus velutina* leaves are wider, with shallower sinuses, more numerous lobe pairs and typically more than 3 tines on each lobe tip. Typical autumn coloration of Long Island oaks is: *Quercus coccinea* (deep cardinal red), *Quercus rubra* (pastel red), and *Quercus velutina* (yellow). VB observed only yellow autumn color on the leaves of one of our putative *Q. falcata* trees (BBG collection number P121004-13). On October 4, 2012 we collected 11 specimens of Montauk Point oaks, including for comparison *Quercus rubra*, *Quercus coccinea* and *Quercus velutina*. Most of these specimens were presented to RN for deposit in the herbarium of the New York Botanical Garden. They were subsequently deposited in the Herbarium of the Brooklyn Botanic Garden.

Plates I – III illustrate the general characters of the habit, bark, buds, acorns and leaves of three oaks, *Q. falcata*, *Q. velutina* and the Montauk oak.

Range of *Quercus falcata*

Belanger, in the U. S. Forest Service Silvics Manual, gives the range of *Quercus falcata* var. *falcata* as: "Long Island, N.Y., southward in New Jersey to northern Florida, west across the Gulf States to the valley of the Brazos River in Texas; north in eastern Oklahoma, Arkansas, southern Missouri, southern Illinois and Ohio, and western West Virginia. It is comparatively rare in the North Atlantic States where it grows only near the coast. In the South Atlantic States its primary habitat is the Piedmont; it is less frequent in the Coastal Plain and is rare in the bottom lands of the Mississippi Delta." The Flora of North America also records it from Long Island and, further, states that it has been reported to hybridize with *Quercus velutina*, among many other oaks. USDA Plants Database (U.S.D.A., N.R.C.S., 2013) lists *Q. falcata* as reaching no farther north in the northeast than New Jersey and Pennsylvania. The Brooklyn Botanic Garden New York Metropolitan Flora range map for *Quercus falcata* shows it no further north than northern New Jersey, adjacent to Staten Island, N.Y. New York State Flora Atlas does not record it anywhere in the State.

Putative *Quercus falcata* at Montauk Point

We believe that many characters of *Quercus falcata* are recognizable in trees in the oak forests of Montauk Point and possibly elsewhere on the south shore of Long Island. Whether this is a northern form of the species or a hybrid with *Quercus velutina* (*Quercus* × *willdenowiana*) has yet to be determined. *Quercus falcata* has been accepted as present in northern coastal New Jersey (Brooklyn Botanic Garden, NYMF) and has long been recognized elsewhere in New Jersey (e.g., U.S.D.A. Plant Database). More herbarium work and field work is needed to make a final determination of the identity of our Montauk oak.

Acknowledgements

The authors wish to thank Eric Lamont and Steve Young for help in locating records of *Quercus falcata*.

Bibliography

- Anonymous. 1998. [Time Machine] Montauk: Miami of the North. Long Island Newsday, Sunday, December 13, 1998.
- Belanger, R. P. U.S. Forest Service Silvics Manual. Volume 2: Hardwoods: *Quercus falcata* Michx. var. *falcata*, Southern Red Oak. http://www.na.fs.fed.us/spfo/pubs/silvics_manual/volume_2/quercus/falcata.htm. Accessed January 29, 2013.
- Brooklyn Botanic Garden, New York Metropolitan Flora Project. *Quercus falcata* Michx. Southern Red Oak [map]. http://nymf.bbg.org/profile_map.asp?id=452. Accessed January 29, 2013.

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(Montauk Oaks cont. from page 29)

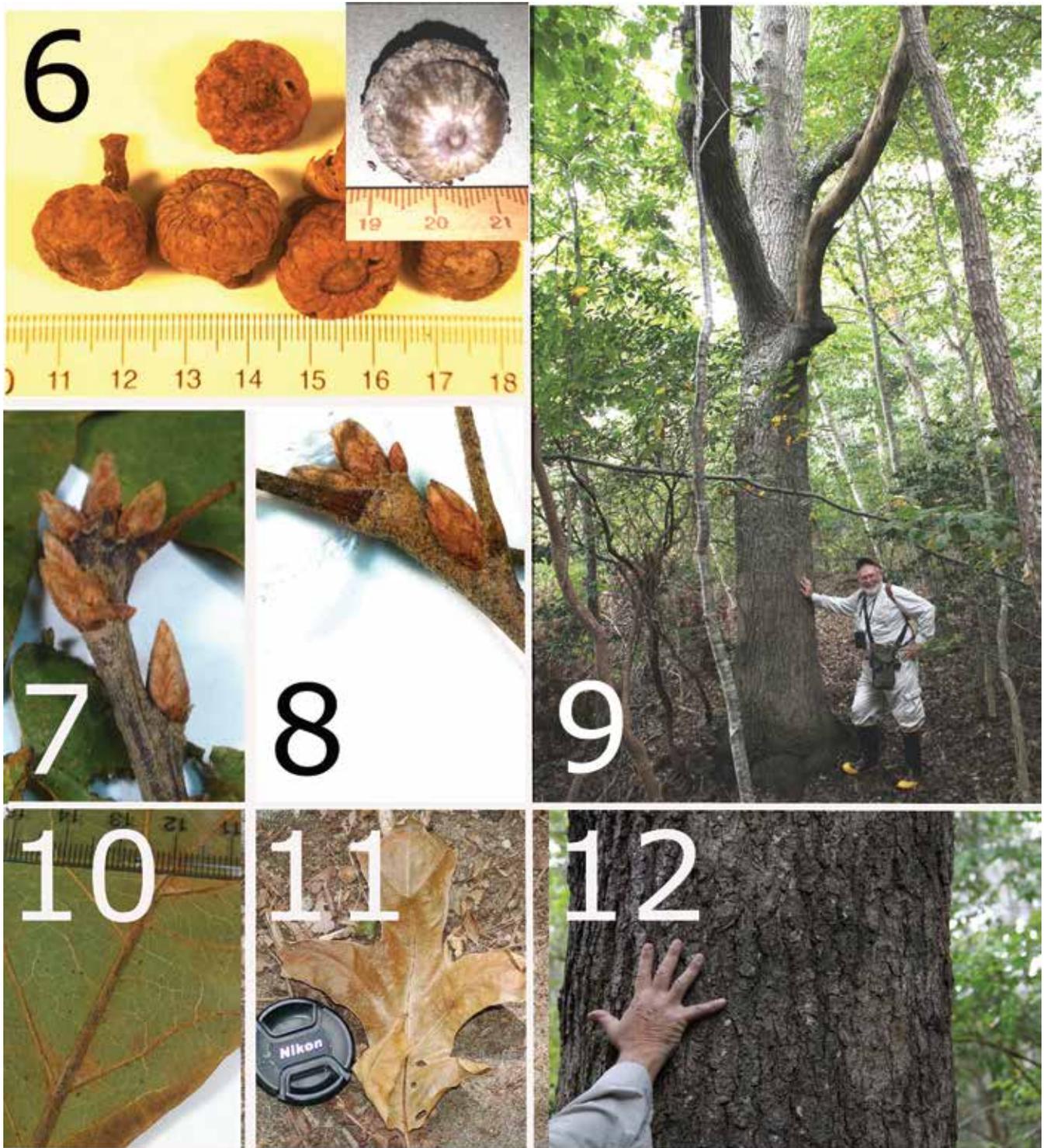


Plate II. *Quercus* hybrid from Point Woods, Montauk, Long Island, N.Y.

Figure 6. Acorns (abortive) with inset of a fertile specimen (note hairs in stripes on the nut).

Figure 7. Cluster of terminal and axillary buds.

Figure 8. Branch tip with buds (note pubescence).

Figure 9. Montauk hybrid oak and AMG (P121004-13; Camp Hero Road).

Figure 10. Leaf undersurface near petiole, with patchy pubescence on lamina.

Figure 11. Fallen leaf with one prominent lobe pair (cap= 55mm).

Figure 12. Bark of tree in Figure 9, ca. 2 ft dbh.



Plate III. *Quercus velutina* from Long Island, N.Y.

Figure 13. Terminal bud complex showing sharply angled buds, dense tan hairs and glabrous petioles.
 Figure 14. Close-up of terminal bud complex showing dense, tan pubescence.
 Figure 15. Base of tree ca. 2 ft dbh (Syosset-Woodbury Park, Nassau Co.). Note variability of bark compared with Figure 18.
 Figure 16. Acorns showing free margins of cap scales.

Figure 17. Branch bearing numerous leaves (Camp Hero, Montauk Point). Note relatively shallow sinuses and wide leaf blades.
 Figure 18. Bark of *Quercus velutina* (ca. 2 ft dbh; Syosset-Woodbury Park).
 Figure 19. Undersurface of leaf to show tan hairs confined to major vein axils. Lamina otherwise glabrous. (Credit: © Copyright Steve Baskauf, 2002-2011 <http://bioimages.vanderbilt.edu/>).

Notes on the Swamps and Forests of North Fork Preserve, Suffolk County, NY

Eric Lamont
President, Long Island Botanical Society

Nestled among the gentle slopes of Northville's North Fork Preserve is a mucky wetland composed of deep, black, organic sediments. Fresh water flows into the wetland from natural springs and seeps located on some of the forested slopes above the wetland. The seeps are soggy areas where water trickles out of the earth and flows down to join other similar flows. Eventually, these embryonic streamlets meet in the wetland below.



Figure 1. The giant green leaves of skunk cabbage explode into a lush, dense carpet of green covering only those areas with mucky sediments.

Around mid-March when the ground is still covered with undecayed leaves, twigs, and larger branches and limbs, the streamlets blend into the surrounding rolling landscape and it's only when you lightly walk across the hidden muck, and your feet begin to sink into the earth, that you begin to understand the hydrology of the land. There is also another indicator of the mucky sediments below: skunk cabbage (*Symplocarpus foetidus*) begins to push up its bizarre flowers in February and throughout March.

By mid-April the forest trees are still leafless and the landscape is gray, but around this time the giant green leaves of skunk cabbage explode into a lush, dense carpet of green covering only those areas with mucky sediments. The once conspicuous flowers of the skunk cabbage are now overshadowed by the plant's leaves towering above. The contrast between lush green and dull gray is striking (Figure 1).

A close look into the wetland reveals other plants, including ferns (*Osmundastrum cinnamomeum*, *Thelypteris palustris*, and *Onoclea sensibilis*) and jewelweed (*Impatiens capensis*), emerging from winter sleep. By May 1st,



Figure 2. A red maple-black gum swamp showing an intermittent pond dominated by tupelo (black gum) along the edge.

splashes of violet appear as dozens of marsh violet (*Viola cucullata*) spring to life. A few years ago, I noticed a new spring wildflower in the wetland. It had small white flowers and was a species of bitter-cess (*Cardamine*), a common inhabitant of wetlands. But something seemed wrong because I had been observing this wetland for more than 20 years and the cress had never appeared before. Why now? I closely examined the plant with a hand lens and identified it as the hairy bitter-cess (*C. hirsuta*), a non-native

species from the Old World. This species looks very similar to some of our native bitter-cesses (*C. parviflora* var. *arenicola* and *C. pensylvanica*). In the skunk cabbage wetland, hairy bitter-cess occurs as widely scattered individuals and appears to have stolen the birthright of its native brothers. This usurper will require watching because it has the potential to become invasive.

The preserve's wetlands are linked to each other like a necklace strung along the bottom of an ancient valley winding its way northward through undulating, forested hills. Because this land is so hilly and too wet to farm, the soil has never been cultivated. In the 1700s, most of the trees in the region probably had been cut for lumber and shipped to Manhattan Island by the early colonists. But because this land was never farmed, a remnant old growth forest remains at North Fork Preserve and represents one of Long Island's last forests that has not changed much since Native Americans lived there.

Two different types of forest border the skunk cabbage

wetland at North Fork Preserve. The first is known as a red maple-black gum swamp and it is dominant throughout the northern half of the preserve (Figure 2). This type of swamp forest is “imperiled in New York State because of rarity” according to New York Natural Heritage Program, a government agency that includes experts in ecology and biology. North Fork Preserve supports one of the best examples of this forest in New York. Bordering the swamp forest, in slightly drier uplands, is another rare type of forest known as a coastal oak-beech forest. Other regions of the preserve feature groves of swamp white oak (*Quercus bicolor*) and extensive red maple swamps. One particular slope provides habitat for a colony of sweet birch (*Betula lenta*) while another supports a single American sycamore tree (*Platanus occidentalis*), both rare native species on eastern Long Island.

When I first began investigating the swamps and forests of North Fork Preserve in the 1980s, the old growth forest consisted solely of native plants; but garlic mustard (*Alliaria petiolata*), an invasive, non-native, herbaceous species from Europe, grew along some of the nearby trails. In the 1990s, scattered

individuals and small colonies of garlic mustard appeared in the forest, but not in dense monocultures. Then in the early 2010s, something unexpected began to occur: the number of garlic mustard individuals in the forest began to decline for some reason that I do not understand. I have observed no evidence of deer browse nor did the plants appear to have been attacked by insects, fungi, or any other biological agent.

The swamps and forests at North Fork Preserve provide excellent habitat for many species of reptiles and amphibians, as well as birds of special concern. Populations of milk snake, green snake, black racer, ring-neck snake, garter snake, as well as box turtle, painted turtle, and snapping turtle, all live in this ecosystem. The swamps, marshes, and ponds, along with a wide forest border, provide critical habitat for populations of tree frog, wood frog, green frog, and spring peeper, all biological indicators of a healthy environment. The chorus of singing male frogs in the spring is a cacophony of croaks, peeps, and twangs. The old growth forest is among Long Island’s most natural and wild regions. The preserve is located in the Township of Riverhead, on the north side of Sound Avenue, just east of Church Lane.



Figure 3. a. “Fiddle-heads” of cinnamon fern in April, b. Close-up of a jewelweed flower, c. Skunk cabbage flowers emerging from muck in February, d. Red maple-black gum swamp, e. Close-up of the woody fruits of witch-hazel (*Hamamelis virginiana*), a shrub in the understory of the coastal oak-beech forest, f. Coastal oak-beech forest: looking uphill at the source of water seeping down into the skunk cabbage wetland. [All photos taken at North Fork Preserve by E. Lamont.]

Chainsaw Massacre: A Follow-up

Lois Lindberg

Regarding the issue of indiscriminate felling of healthy trees in Nassau County Parks in the aftermath of Superstorm Sandy, there has been a lot more talk, not much action...

The investigation into several questionable practices has continued. In late April, in response to my article in the last issue of this newsletter (Quart. Newslett. Long Island Bot. Soc. 23(2): 13, 15) the Minority Chief of Staff of the Nassau County Legislature, David Gugerty, invited LIBS to make a public comment before the Legislature. No one was available on that date, so I provided a written summary and comment on the issues. I did not hear the outcome of that session. In his email, Mr. Gugerty provided a link to a very impressive online map of the trees that had been cut in Nassau County. The map clearly indicated the concentration of post-storm tree clearing within the preserves and parks. That link--and the map--no longer seems to be available without a password.

Several news stories have since appeared that revealed additional information. The tree service received between \$200 and \$4600 per tree, and the total bill for county-wide tree work (not just in the preserves) amounts to almost \$70 million. The County hopes to be reimbursed for about 90% of that. County records showed that 466 trees were cut down in Sands Point Preserve, and one crew reported it had taken down 50 trees in 6 ½ hours--or one every 8 minutes! Until public complaints raised these issues, the County claimed that FEMA wanted the work paid per tree, while FEMA itself said there are several options for reimbursement policies after a disaster. So, various questions still remain.

RETRACTION NOTICE

Greller, A.M., & G. Herth. 2011. Report on the 2011 finding of *Houstonia pusilla* Schoepf and *Oxalis exilis* A. Cunn. at two New York State parks on the south shore of Long Island. Quart. Newslett. Long Island Bot. Soc. 21(4): 34-35.

This article has been retracted, in part, by the authors. The identity of the *Oxalis* species was recently brought into question by Ivan Hoste of the National Botanic Garden of Belgium, and upon further discussion with the senior author, it was determined that the specimen most likely represented a depauperate example of a local *Oxalis* species. The report of the discovery of *Houstonia pusilla* remains unchanged.

(Montauk Oaks bibliography cont. from page 29)

Climatography of the United States [New York]. 1982. Monthly Normals of Temperature, Precipitation, and Heating and Cooling Degree Days 1951-1980, New York. NOAA, National Climatic Center, Asheville, North Carolina.

Cope, E. A. and W. C. Muenscher. 2001. Muenscher's Keys to Woody Plants, Revised edition. Comstock Publishing Associates, Ithaca, New York.

Flora of North America. Vol. 3, Fagaceae, *Quercus* 20. *Quercus falcata* Michaux, no. 16, plate 28. 1801. http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=233501030. Accessed January 29, 2013.

Greller, A.M. 1977. [Field Trip Reports]. Point Woods, Montauk Point State Park, N.Y. Torreyia 104: 399.

Greller, A.M. 2001. Outline of a revised classification for mature forests and related woody vegetation on Long Island, NY. Quart. Newslett. Long Island Bot. Soc. 11(2): 16-17, 11(3): 33-34.

Greller, A.M. 2002. Outline of a revised classification for mature forests and related woody vegetation on Long Island, NY: a second approximation. Quart. Newslett. Long Island Bot. Soc. 12(1): 10.

Miller, J.F. and R.H. Frederick. 1969. The precipitation regime of Long Island, New York. U. S. Geological Survey Professional Paper 627-A.

National Cooperative Soil Survey, U.S.A. Montauk Series. https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MONTAUK.html. Accessed January 29, 2013.

Taylor, N. 1910. Local Flora Notes--VI. Torreyia 10: 224-228.

Taylor, N. 1923. The Vegetation of Long Island. Part I. The vegetation of Montauk. Brooklyn Bot. Gard. Mem. 2: 1-107.

U.S.D.A., N.R.C.S. 2013. The PLANTS Database. *Quercus falcata* Michx., southern red oak. National Plant Data Team, Greensboro, NC 27401-4901 USA. <http://plants.usda.gov/java/profile?symbol=QUFA>. Accessed January 29, 2013.

Weldy, T., D. Werier and A. Nelson. 2013. New York Flora Atlas. [S. M. Landry and K. N. Campbell (original application development), Florida Center for Community Design and Research, University of South Florida]. New York Flora Association, Albany, New York. <http://newyork.plantatlas.usf.edu/Browse.aspx?cat=Scientific+Name>. Accessed January 29, 2013.

2013 FIELD TRIPS

AUGUST 17, 2013 (SATURDAY) 10 AM

Calverton Ponds Preserve, Calverton, Suffolk County, NY

Trip leader: Diana Van Buren

Email: northforkaudubon@mac.com

This 350-acre oak-pine forest contains coastal plain ponds, which represent one of the rarest wetland types in North America. Calverton Ponds hosts more than 30 rare plants, several rare amphibians and fish and a number of rare dragonflies, butterflies and moths. Bring water, snacks and bug repellent (be prepared for ticks).

Directions: Please e-mail mdfeder2001@yahoo.com to register for this trip and for directions to our meeting location.

AUGUST 25, 2013 (SUNDAY) 10 AM

Edgewood Preserve, Deer Park, Suffolk County, NY

Trip leader: Michael Feder Cell: (917) 714-4461

(day of trip only) Email: mdfeder2001@yahoo.com

The Edgewood Preserve is one of the largest remnant pitch-pine scrub oak habitats in New York and is the largest natural wildlife corridor in Western Suffolk County. We will be exploring a power-line cut that runs through the preserve. Be prepared for possible wet walking. We can expect to see some uncommon plants and a wide variety of *Cyperus* species growing syntopically. Bring plenty of water, bug repellent and snacks.

Directions: Please contact trip leader by e-mail for meeting location and directions. Note that a permit is required from the DEC in order to access the preserve and rangers are sometimes present to check for them. The permit is free and easy to obtain through e-mail by visiting <http://www.dec.ny.gov/outdoor/7815.html> and clicking on the Region 1 State Land Access Permit link in the upper right hand corner.

AUGUST 31, 2013 (SATURDAY) 10 AM

South Fork Natural History Museum (SOFO),

Bridgehampton, Suffolk County, NY

Trip Leader: Eric Lamont

(Co-listed with SOFO)

We will explore a pond that supports *Hypericum adpressum*, *Stachys byssopifolia*, *Rhexia virginica*, et al.; fields covered with goldenrods, asters, and other herbs; and other plant communities. If the water table is low and it's a "drawdown year" and if there's interest, we can also visit nearby coastal plain ponds (eg. Long Pond, Crooked Pond, Round Pond) in the afternoon. The am walk will last about 2 hrs. Bring water, lunch, and insect/tick repellent.

Directions: Meet at South Fork Natural History Museum (SOFO), Bridgehampton, on the South Fork of Long Island. Take Sunrise Hwy. (Rte. 27) east across Shinnecock Canal. The 4-lane highway narrows to 2-lanes; continue east past Southampton and turn east onto Montauk Hwy and continue to the town of Bridgehampton. At the east end of town, turn north onto the Bridgehampton/Sag Harbor Turnpike (County Road 79). Cross the railroad tracks and SOFO will be just ahead on the right (east). Please plan for potential Labor Day weekend traffic.

SEPTEMBER 21, 2013 (SATURDAY) 10 AM

Hempstead Plains, Nassau County, NY

Trip leaders: Betsy Gulotta, Conservation Project Manager, and Scott Emmons, Friends of Hempstead Plains. Call 516-572-7575-x26531 or Email info@friendsofhp.org. (Co-listed with the Torrey Botanical Society)

Over 200 species of native and non-native flowering plants have been identified at the 19-acre Hempstead Plains at Nassau Community College. The native grasses characterizing the tall grass prairie are particularly beautiful this time of year. The walk takes about an hour. Bring water and sturdy shoes.

Directions: From either Meadowbrook Parkway Exit M4 or Merrick Ave. north of Rt. 24 Hempstead Turnpike, take Charles Lindbergh Blvd. west. Turn at first right into East Parking of NCC. Go to first intersection. See parking along fence and sign for Hempstead Plains.

OCTOBER 5, 2013 (SATURDAY) 9:30 AM

Brentwood to Southampton, Suffolk County, NY

Trip leader: John Turner, Email: redknot@optonline.net

Atlantic white cedar trees grow slowly and may live for more than 1000 years. In New York they are a threatened species with approximately two dozen populations. We'll make four to five stops to look at representative cedar groves, heading as far east as Southampton. The trip will run until approximately 4-4:30. Bring water, lunch, and insect repellent.

Directions: We will meet at the northeast corner of the Wicks Road Park and Ride of the LI Expressway at 9:30 a.m. The address of the Park and Ride is 500 Wicks Rd. Brentwood, NY 11717-1132.

UPCOMING PROGRAMS

September 10, 2013* Tuesday, 7:30 PM

Jane Jackson: "The North Shore Land Alliance - Protecting Open Space through Ownership, Easement, and Stewardship."

This program will describe how and why the North Shore Land Alliance has been working to protect land on Long Island's north shore for a decade. It will highlight their activities that focus on invasive plants, New York State invasives legislation, and native alternatives. Jane still feels like a Long Island newcomer, having moved in 2007 from Brooklyn to Oyster Bay for her position as Associate Director of Stewardship with the North Shore Land Alliance. She came here after her five-year stint as Director of Programming for New York Restoration Project in the City, which followed a position as Stewardship Specialist in the Rhode Island Field Office of The Nature Conservancy in her native New England.

Location: Bill Paterson Nature Center, Muttontown Preserve, East Norwich

October 8, 2013* Tuesday, 7:30 PM

Stephen Schott: "Nonindigenous Macroalgae Species (NIMS) in Long Island Waters."

The potential costs and impacts of introduced marine macroalgae, or seaweeds, are largely overlooked in the invasive species realm. This talk will cover the ecology, impacts, and potential management of the 12 nonindigenous seaweeds that have either been confirmed in LI waters, or pose an imminent threat of introduction. Steve has a B.S. in Botany and an M.S. in Biology, both from the University of Rhode Island, with a focus on marine plants and ecology. He has been working for Cornell Cooperative Extension's Marine Program for over 13 years in habitat monitoring and restoration.

Location: Museum of Long Island Natural Sciences, Earth and Space Science Building, Gil Hanson Room (Room 123), Stony Brook University, Stony Brook

* Refreshments and informal talk begin at 7:30 p.m.
Formal meeting starts at 8:00 p.m.

Directions to Muttontown or Stony Brook: 516-354-6506