



# Long Island Botanical Society

Vol. 28 No. 1

The Quarterly Newsletter

Winter 2018

## What is the Future of Welwyn's Relict Forest?

by Lisa Synoradzki

Senior Development Officer, The New York Botanical Garden

To be in the 204-acre Welwyn Preserve in the 1970s and 1980s was to be “amidst nature’s splendor,” with uplands, wetlands, seeps, springs, and a saltmarsh, recalled LIBS member Lois Lindberg, “Invasives were still at a minimum and ecological communities were at their prime.” Record or near-record specimens of tulip tree (*Liriodendron tulipifera*) dominated the forest, accompanied by mature white oak (*Quercus alba*), black oak (*Quercus velutina*), and yellow birch (*Betula alleghaniensis*); 12 kinds of fern were found, including the rare but non-local ostrich fern, (*Matteuccia struthiopteris*). Today, much has changed; storm damage, neglect, and invasive plant species are taking their toll on the resilience of the preserve’s native plants.

I discovered Welwyn late, in 2012, but before Hurricane Sandy, after being intrigued by the description in The Sierra Club Guide to the Ancient Forests of the Northeast, “Forty acres of statuesque tulip trees create their own skyscrapers... at least one tulip tree per acre reaches 48 inches in diameter.” The forest still held the grandeur that led to the preserve’s establishment in 1974...

### When Welwyn Had Few Equals

Glen Cove’s Welwyn Preserve was originally the 1912 north-shore Gold-Coast estate of Harold I. and Harriet Pratt whose gardens were designed by the Olmsted Brothers. In 1969, the mansion and land were given to Nassau County in perpetuity. However, in 1972, the City of Glen Cove considered the site for a much-needed landfill. Fortunately, the Lyman Langdon Audubon Society (now North Shore Audubon Society) led a coalition of environmental groups in a successful effort to convince the then Mayor of Glen Cove Vincent Suozzi as well as the County Executive Ralph Caso



Figure 1. Lois Lindberg and Allan Lindberg stand next to a huge four-trunk tulip tree in Welwyn Preserve, (Aug. 2017). When the tree was measured in 1980, it had a circumference of 21’10” at 1’8” height. [All photos by the author.]

to create a permanent preserve instead. Ralph Cioffi, President of the Lyman Langdon Audubon Society at the time, in making the case for preservation for the Land Use Committee of Audubon, wrote, “This estate contains a wooded valley of exceptional quality.... Welwyn has few equals for beauty and variety on Long Island and particularly in Glen Cove.”

LIBS member Barbara Conolly recorded at least 30 species of trees, 20 species of shrubs, and 50 species of wildflowers in her 1972 *Catalogue of Some of the Plants and Animals at Welwyn...* for Audubon, writing, “This is a magnificent wet woodland... few any place have soil rich enough to give rise to the stately tulip trees... A list of 40 breeding birds includes a pair of great horned owls which have nested at Welwyn for the past 7 years.” LIBS member Allan Lindberg measured 44 trees in his *Large Tree Survey* (Lindberg 1980), and some exceeded the ages and sizes of other champion trees recorded in the Long Island Horticultural Society’s 1972 *Big Tree Census*. A few tulip trees had circumferences of 16’8”, 15’7”, and 14’7” at chest height, with a four-trunked specimen measuring 21’10” (at 1’8”). There were also mature specimens of black and white oaks; one of the latter had a core with 300 rings at the time.

Back then, Nassau County’s Department of Parks, Recreation, and Museums had the staff, resources, and support to start and maintain natural history projects in the preserve, said Lois, who was their naturalist from 1982 to 1992. She created a wildflower garden and a nature center at the former Tennis Court building. The gardens surrounding the mansion had

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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.

Visit the Society's Web site  
[www.libotanical.org](http://www.libotanical.org)

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## Society News

**LIBS Election Results.** At the December 2017 meeting, LIBS members elected the following officers to serve two-year terms: President—Eric Lamont, Vice-President—Andrew Greller, Treasurer—Carol Johnston, Recording Secretary—Sue Avery, Corresponding Secretary—Rich Kelly.

**Membership Renewals** for 2018 are due. Mail your dues (\$25 individual, \$30 family) to Carol Johnston, LIBS Treasurer, 347 Duck Pond Road, Locust Valley, NY 11560. Thank you for promptly renewing your membership thus saving volunteer time and the cost of follow-up notices.

**Donald House, LIBS webmaster,** reports that Brentwood Public Library is planning an exhibit for April 2018 that will consist of items (herbarium sheets, field guides, specimens, field paraphernalia, etc.) from the collections of LIBS members. Items will be placed in locked cases with 24/7 video surveillance. Anyone interested in participating should contact Donald House ([dhouse@brentwoodnylibrary.org](mailto:dhouse@brentwoodnylibrary.org) / (631) 273-7883 x173).

### Citizen Science Opportunity: Help Transcribe the John Torrey Papers!

Attendees of the Torrey Botanical Society's sesquicentennial Symposium in September 2017 had the rare opportunity to view selections of John Torrey's original notes, papers, and correspondence in the Rare Book Room of the New York Botanical Garden library. NYBG has a project to transcribe these papers. Transcribing these historical documents avoids the deficiencies in optical character recognition (OCR) of handwritten documents, and makes the John Torrey Papers more searchable and readily available to a wider audience interested in American history. By helping to transcribe these papers, you will learn about Torrey, contribute to science and humanities research, and could make discoveries that shed new light on his work and community, and the historical figures with whom Torrey corresponded. Anyone interested in participating should visit: <http://libguides.nybg.org/JohnTorreyPapers/transcribe>



Andy Greller reports: Rummaging through my old photo albums, I found this shot of Roy Latham and myself, taken at his Orient farm, in November, 1974. He had just planted the *Araucaria araucana*, although he was 96 at the time. [Photo by T. Schweitzer.]

Ed. Note: East-End farmer Roy Latham was one of the best known of the old-time Long Island naturalists. For more about his interesting and productive life, see the following articles from the LIBS Newsletter: Jan-Feb 1993, pp. 1-5; Mar-Apr 1993, pp. 10-16; Mar-Apr 1994, pp. 10-11; Sep-Oct 1995, pp. 27-29. Archived issues of the Newsletter can be found at our website.

(*Welwyn's Forest continued from cover*)



Figure 2. An inspiring array of native plants found in the center of Welwyn's forest: young specimens of yellow birch, white oak, mockernut hickory, and pawpaw, as well as jewelweed, jumpseed, and New York fern.

included exotic plant species that had begun escaping into the forest. Lois focused on their removal, clearing away English ivy (*Hedera helix*) and hiring high school students from the New York State Youth Conservation Corps for three summers to remove Japanese knotweed (*Reynoutria japonica*) and Norway maple (*Acer platanoides*) as well as assist with trail maintenance. Volunteers from the Telephone Pioneers of America (retired telephone company workers) also helped build trails as well as bridges to open up new areas in the forest.

In 1992, everything changed. Massive cutbacks throughout Nassau County led to decreased funding for parks and museums that was never restored. Allan, who was Supervisor of North Shore Greenspace Preserves (including Welwyn), from 1992 to 2008, said "The focus thereafter was work that was done strictly for the public, such as trail maintenance, because funding was no longer available for restoration projects." In 1993, the Pratt mansion became the Holocaust Memorial and Tolerance Center of Nassau County, bringing more visitor traffic to the preserve.

Then came Hurricane Sandy on October 29, 2012, which dealt a major blow, causing a number of large tulip trees and other species to break and be uprooted throughout the forest. Even more damaging may have been the post-storm clean-up. Lois reported (2013) that records of trail maintenance in the preserve indicated that 31 trees had been uprooted and another 111 trees were cut down because their crowns were damaged or the trees were considered hazardous. It is believed that many healthy specimens were included in those numbers.

### Welwyn Today

I returned to Welwyn in 2017 to create an ecological portrait for The New York Botanical Garden's new Urban Naturalist program. On April 30, and May 14 and 17, 2017, I documented the flora and fauna in a small area that extended from the back of the burned-out tennis court, across the path, to just past the stream in the forest. There, non-native plants far outnumbered

native ones. Tall, mature trees dominated the canopy, including tulip tree, American beech (*Fagus grandifolia*), and northern red oak (*Quercus rubra*), while spicebush (*Lindera benzoin*) competed with an onslaught of young specimens of Norway maple (I counted 57 directly behind the tennis court). Japanese knotweed lined the stream's banks. Groundcover included English ivy and creeping euonymus (*Euonymus fortunei*). Several small saplings of red oak were struggling; one's leaves were being eaten by a caterpillar, another was covered by oak apple gall. A single tulip tree about 12' in height, beyond the stream, was surrounded by Japanese knotweed. (See Table 1 for a plant list.) There were few insects and no chipmunks.

**Table 1.**  
**Plant List of Welwyn Preserve**  
**for April 30, May 14, May 17, 2017**

<i>Acer palmatum</i> (Japanese maple)
<i>Acer platanoides</i> (Norway maple)
<i>Alliaria petiolata</i> (garlic mustard)
<i>Aralia nudicaulis</i> (wild sarsaparilla)
<i>Arisaema triphyllum</i> (Jack-in-the-pulpit)
<i>Euonymus alatus</i> (burning bush)
<i>Euonymus fortunei</i> (creeping euonymus)
<i>Erythronium americanum</i> (trout lily)
<i>Fagus grandifolia</i> (American beech)
<i>Hedera helix</i> (English ivy)
<i>Impatiens capensis</i> (jewelweed)
<i>Lindera benzoin</i> (spicebush)
<i>Liriodendron tulipifera</i> (tulip tree)
<i>Parthenocissus quinquefolia</i> (Virginia creeper)
<i>Quercus rubra</i> (northern red oak)
<i>Reynoutria japonica</i> (Japanese knotweed)
<i>Rubus phoenicolasius</i> (wineberry)
<i>Symplocarpus foetidus</i> (skunk cabbage)
<i>Toxicodendron radicans</i> (poison ivy)

On August 9, 2017, Lois and Allan guided me through the interior of the forest where the outlook was much brighter. But first we passed many trees along the western trail covered by creeping euonymus (Fig. 4), which Lois and Allan consider the forest's greatest threat. They described how it begins as groundcover before maturing into a climbing vine to wind around trees and pull them over. We crossed the stream into the heart of the forest, walking through large stands of American rhododendron (*Rhododendron maximum*). We reached a huge, fallen red oak that came down 15 years before Hurricane Sandy. It now serves as a nurse log for sweet birch (*Betula lenta*). We found many tulip trees of differing ages "reproducing quite well in the grove," noted Allan, as well as saplings of red oak, tupelo (*Nyssa sylvatica*), wild black cherry (*Prunus serotina*), and mockernut hickory (*Carya tomentosa*), as well as a mature yellow birch. Additional invasives included multiflora rose (*Rosa multiflora*), porcelain berry (*Ampelopsis brevipedunculata*),

(Continued on page 4)

(*Welwyn's Forest continued from page 3*)

garlic mustard (*Alliaria petiolata*), and Kousa dogwood (*Cornus kousa*). (See Table 2 for a list of these additional plants found.)

In another visit on September 23, I walked the eastern section of the forest. English ivy was the dominant groundcover, spreading from the driveways at the edge of the preserve into the forest. For future reference, I marked where it stopped. Both English ivy and creeping euonymus were climbing vertically. Off trail, I searched for an improved forest floor, finding white wood aster (*Eurybia divaricata*), beechdrops (*Epifagus virginiana*), mapleleaf viburnum (*Viburnum acerifolium*), and a few scattered specimens of Solomon's plume (*Maianthemum racemosum*), wild sarsaparilla (*Aralia nudicaulis*), wreath goldenrod (*Solidago caesia*), and Christmas fern (*Polystichum acrostichoides*), although it was too late in the season to assess spring ephemerals.

Back on the eastern border trail, invasive yellow archangel (*Lamium galeobdolon*) was abundant, about 50 feet downhill from its apparent point of origin—plantings in residential backyards adjacent to the preserve. By the turtle pond near the salt marsh, an encouraging number of saplings of mockernut hickory, pignut hickory (*Carya glabra*), tulip tree, and sassafras (*Sassafras albidum*) were found growing among the shrubby invasives of multiflora rose, Japanese knotweed, porcelain berry, and *Ailanthus altissima* (tree of heaven). On the east-west trail returning to the lawn area, tall stands of nearly every kind of invasive plant competed with each other, blocking the vernal pond from view. Surprisingly, the tops of multiple tulip tree saplings on the trail's edges were neatly clipped.... (See Table 3 for these additional plants found.)

### What Happens Next is Important

Is all lost for Welwyn's relict forest? Lois stressed that "In the core, there's lots of ecological value. The stream is good.... tulip trees are declining but the oaks are rebounding." Barbara reflected that "The lovely part is still lovely. I don't know another woodland that has the same feeling." However, invasive species are spreading from the edges of the forest to the interior at a great pace. "The preserve seems worth saving but we need to figure out the whole knotty problem," said Allan. It needs attention, dedication, and public education. The preserve's visitors see green but many are blind to the specific plants, "They do not see how sick the forest really is," said Allan. While there may be a few deer, dogs are common; the worn-out prohibition sign at the entrance is no deterrent.

Forest succession is expected but, without management attention, the preserve will surely turn into an ecosystem dominated by invasive plants that become permanently established. This means that the forest as we know it will disappear, along with the insects and animals that depended upon the native plants. Welwyn's forest begs for advocates—to conduct an updated inventory of its flora, to map the distribution of the most egregious invasive species, to determine

best strategies for removing them, and to plant the best native species to support the forest's long-term stability and health.

**Table 2.**  
**Additional Plants of Welwyn Preserve**  
**for August 9, 2017**

*Acer pensylvanicum* (striped maple)  
*Acer rubrum* (red maple)  
*Aesculus glabra* (Ohio buckeye)  
*Aesculus flava* (yellow buckeye)  
*Alliaria petiolata* (garlic mustard)  
*Ampelopsis brevipedunculata* (porcelain berry)  
*Aucuba japonica* (gold dust shrub)  
*Betula alleghaniensis* (yellow birch)  
*Betula lenta* (sweet birch)  
*Betula populifolia* (gray birch)  
*Carpinus caroliniana* (American hornbeam)  
*Carya tomentosa* (mockernut hickory)  
*Celastrus orbiculatus* (Oriental bittersweet)  
*Cornus alternifolia* (pagoda dogwood)  
*Cornus kousa* (Kousa dogwood)  
*Fagus grandifolia* (American beech)  
*Fraxinus americana* (white ash)  
*Ligustrum vulgare* (European privet)  
*Nyssa sylvatica* (tupelo)  
*Prunus serotina* (wild black cherry)  
*Prunus virginiana* (chokecherry)  
*Quercus alba* (white oak)  
*Rhododendron maximum* (American rhododendron)  
*Rosa multiflora* (multiflora rose)  
*Staphylea trifolia* (bladdernut)  
*Thelypteris noveboracensis* (New York fern)  
*Tilia americana* (basswood)  
*Ulmus rubra* (slippery elm)

**Table 3.**  
**Additional Plants of Welwyn Preserve**  
**for September 23, 2017**

*Ailanthus altissima* (tree of heaven)  
*Aralia elata* (Japanese angelica tree)  
*Carya glabra* (pignut hickory)  
*Epifagus virginiana* (beechdrops)  
*Eurybia divaricata* (white wood aster)  
*Fagus sylvatica* (European beech)  
*Lamium galeobdolon* (yellow archangel)  
*Maianthemum racemosum* (Solomon's plume)  
*Polystichum acrostichoides* (Christmas fern)  
*Sassafras albidum* (sassafras)  
*Solidago caesia* (wreath goldenrod)  
*Viburnum acerifolium* (maple leaf viburnum)





Figure 3. One of the few regenerating tulip trees in Welwyn Preserve was found near a red oak nurse log supporting a sweet birch sapling.



Figure 4. The invasive creeping euonymus winds around a native sweet birch tree in Welwyn Preserve and will likely pull it over.

#### Acknowledgement:

Thank you to Members of the Board of the North Shore Audubon Society for providing access to their archival records.

#### Literature cited:

Conolly, B. 1972. Catalogue of some of the plants and animals at Welwyn, exclusive of the house area. Lyman Langdon Audubon Society, May 1972.

Kershner, B. and R.T. Leverett. 2004. The Sierra Club guide to the ancient forests of the Northeast. Sierra Club Books.

Lindberg, A. 1980. Large tree survey of Welwyn Preserve. Spring 1980.

Lindberg, L. 2013. The great chainsaw massacre of Nassau County. Quart. Newslett. Long Island Bot. Soc. 23(2): 13, 15.

## FIELD TRIPS

**January 10, 2018 (Wednesday) 9:30 AM**

*Oakland Lake Park, Queens Co., NY*

Trip Leader: Andrew Greller

E-mail: [agreller2@optonline.net](mailto:agreller2@optonline.net)

A joint trip with North Shore Audubon Society

We will walk around the lake to inspect and identify the large, old trees that cover the uplands. This is an area rich in hardwood species, such as oaks, maples, birch, hickories, ash, alder, willow and other species. If time and weather permit, we may later take a walk south along the Cross Island Parkway, to view the giant tuliptrees and beeches that line the trail. Meet at the lake, on 223rd St./Cloverdale Blvd., just S of Northern Blvd., in Bayside. Dress for the weather; waterproof footwear may be useful. Hand lens, camera and binoculars recommended. Bring a liquid and snack or sandwich, as desired.

**Directions:** Take Cross Island Parkway, and exit at Northern Boulevard, West. The lake is one block west of the Cross Island Parkway, so make the first left, at 223rd Street, and park on the street near the lake.

**April 7, 2018 (Saturday) 10 AM**

*Sagamore Hill National Historic Site, Oyster Bay, NY*

*Hunting for Marine Algae at Sagamore Hill National Historic Site*

Trip Leader: Andrew Greller

E-mail: [agreller2@optonline.net](mailto:agreller2@optonline.net)

We will hike down to the shore to identify the marine algae that wash up at high tide. Pick up a guide to *Marine Algae of the Northeastern Coast of North America*, and bring it along to help with identification. There may be spring wildflowers out and we will look for them, as well as for the remnants of plants of the coastal sands. Dress for the weather; rubber boots will be useful. Bring a liquid and snacks. Hand lens may be useful. Meet at the parking lot.

Extra 9AM attraction: Sagamore Hill is offering LIBS members an early-bird first floor walk-through of Theodore Roosevelt's home prior to the algae field trip. Entrance to the home is limited to 15 people, so if you are interested, please RSVP to Lois Lindberg, e-mail [lalindberg3@optonline.net](mailto:lalindberg3@optonline.net).

**Directions:** Take either the Northern State Parkway to Exit 35N or the Long Island Expressway (I-495) to Exit 41N. At those exits, take Route 106 North for approximately 6 miles to downtown Oyster Bay. Turn right onto East Main Street (at Nobman's Hardware Store) and travel 2 miles on East Main Street/Cove Road. Turn left onto Cove Neck Road and drive 1.5 miles to Sagamore Hill National Historic Site.

## UPCOMING PROGRAMS

**January and February: No meeting!**

**March 13, 2018\*                      Tuesday, 7:30 PM**

**Lois Lindberg: "Shu Swamp Preserve and the Beaver Brook Watershed."** Shu Swamp Preserve, officially the Charles T. Church Nature Sanctuary in Mill Neck, is a 60-acre jewel of the North Shore Wildlife Sanctuary system of preserves and is one component of the larger Beaver Brook Watershed. Acquisitions by Nassau County and the North Shore Land Alliance have added critical parcels that create a natural corridor to protect this valuable ecosystem. This program will explore the area's beauty and biodiversity, especially highlighting the wildflowers and other flora of this special place. Lois has been involved in nature, ecology, and outdoor education and interpretation for many years. She has a degree in Biology from Hofstra University, and is a past Curator of Natural Science for Nassau County Department of Parks, Recreation & Museums. She is currently the Membership Chair for the Long Island Botanical Society, and volunteers at Sagamore Hill National Historic Site in Oyster Bay as a naturalist/field trip leader.

Location: Bill Paterson Nature Center  
Muttontown Preserve, East Norwich

**April 10, 2018\*                      Tuesday, 7:30 PM**

**Lisa Synoradzki: "Welwyn Preserve's Forest: To Restore or Do Nothing."** Years ago, "ancient," "magnificent," and "spectacular" were used to describe the 40-acre woodland in Welwyn Preserve, known for its grove of enormous oak and tulip trees. Today, sadly, invasive species like creeping euonymus and Japanese knotweed are spreading unchecked from adjacent yards, threatening to give the forest habitat a new descriptor, "degraded," if nothing is done. Lisa will talk about her study of Welwyn's plants in the context of the ecological restoration debate. Lisa is Senior Development Officer at The New York Botanical Garden (NYBG). She has a Certificate in Botany from NYBG and is a certified NYBG Urban Naturalist.

Location: Bill Paterson Nature Center  
Muttontown Preserve, East Norwich

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\* 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