Long Island Botanical Society

Vol. 33 No. 1 | The Quarterly Newsletter | Winter 2023

Forest Types of the Manetto Hills, Plainview, Nassau County, Long Island, NY

Andrew M. Greller

Professor Emeritus, Biology Department, Queens College, CUNY, Flushing, NY 11367

Introduction

To my knowledge, there have been no published descriptions of the low, oak-dominated forests of the Manetto Hills. These forests are fragmented, and occur in sections along Northern Parkway; a large section occurs east of Washington Avenue (Manetto Hills Park), extending to Round Swamp Road and east beyond that, connecting to the West Hills in Suffolk County. Such forests are typical of the middle portion of northern Long Island, where they occur on soils of the gravelly Ronkonkoma moraine and associated landforms. The Scarlet Oak-Black Oak type with an Ericaceae (heath) understory is the most common forest type; it occurs as well on moist soils in the Pine Barrens region of Long Island, where it was described by Reiners (1965, 1967). The other forest types are less common, mostly appearing where soils are moist, as in depressions, or where intermittent streams occur. It is assumed that where the Oak-Pitch Pine type occurs the soils are better drained than typical. The oak forests have been heavily cut for planting crops, for timber and fuel wood, beginning in colonial days, through the War for Independence (by the British occupiers), and for the construction of New York City. Nevertheless, with increasing use of petroleum for heating after oil was discovered and refined in the late 1800's, the forests have been recovering. This treatment surveys the forest types of the Manetto Hills, based on about two dozen field trips of a few miles each. All of the sections have been visited and revisited over two years, and photographed throughout the growing season. No quantitative data were recorded; this is a preliminary assessment of tree composition diversity in the Manetto Hills. An on-going floristic study of the Manetto Hills has revealed 238 species of vascular plants; a remarkable number of native plants have survived the centuries of clearing and re-growth.

Geography, Geology and Soils

I. Geography

According to Mills (2015), "The Manetto Hills, Dix Hills and Half Hollow Hills (MDH Hills) straddle the Nassau/Suffolk County line in central Long Island. They form some of the highest elevations on Long Island including Jayne's Hill (located in West Hills County Park in South Huntington), the highest point on the island at 400 feet [122 m] above MSL. The north/south trending MDH Hills are topographic anomalies when compared to the east/west trending end moraines that dominate Long Island's topography from Brooklyn to the 'Twin Forks'. This is clearly evident on a digital elevation map of the island where the northern ends of the MDH Hills are seen merging with the Ronkonkoma Moraine while the central and southern portions extend several miles to the south."

For the purpose of the present study, we recognize the Manetto Hills as the region around Manetto Hill, Plainview (elev. 85 m, 278.9 ft asl). The study is confined in the west to the area immediately adjacent to the Sunnyside Blvd extension in Woodbury (junction of LIE/Northern Parkway). One northern trail reaches eastward to Round Swamp Road, which is east of the border of Nassau County and Suffolk County. In the north there are trail connections to Woodbury Road; further east, Northern Parkway forms a border. In the south, we include Bethpage State Park in our study area <Plainview topographic map, elevation, relief (topographic-map.com>.

II. Geology

Mills (2015) reports, "Numerous well-logs plus outcrops in sand mines and road cuts show that the MDH Hills,

(continued on page 3)

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

Society News

LIBS acknowledges new Life Members. The spirit and strength of LIBS lies in its members who share a passion for nature and the outdoors. LIBS acknowledges and sincerely appreciates the following individuals who recently became Life Members:

Susan Avery, Regina Conlon, Ann Johnson, Guy Tudor, David Werier, Elettra Wiedemann, Stephen Young

LIBS urges NYS Governor Kathy Hochul to pass the "Birds and Bees Protection Act," a bill to eliminate unnecessary and harmful uses of neurotoxic neonicotinoid pesticides ("neonics"). The letter was signed by a large contingent of New York's health, farming, and environmental organizations, businesses, municipalities, and their tens of thousands of New York members. Excerpts from the letter:

With evidence that widespread neonic contamination is only continuing to worsen in New York, the state must act against the considerable threat that it poses to New York's pollinators, ecosystems, and people—especially children.

Designed to permeate plants— making their fruit, nectar, pollen, leaves, and other tissues poisonous to insects—neonics persist in soils for years, move easily in rain and irrigation water, and are widely used.

Neonics devastate the bees, birds, and other pollinators critical to New York's food security, agricultural economy, and environment. Just last year, the average New York beekeeper lost over 45% of their honey bee colonies—one of the worst years on record.

Neonics pose hazards to New Yorkers' health, especially that of children. Neonics are neurotoxic, targeting nerve receptors prevalent in sensitive areas of our brain and central nervous system that play a critical role in early growth and development.

Neonics appear in roughly 30% of Long Island groundwater samples at levels expected to cause "ecosystem-wide damage" —ravaging aquatic insect populations that birds, fish, amphibians, and other wildlife depend upon for food.

LIBS MEMBERSHIP RENEWALS FOR 2023 ARE DUE

Mail your dues ($25 individual, $30 family) to:

Kathy Gaffney, LIBS Treasurer
590 Concord Avenue
Williston Park, NY 11596

Thank you for promptly renewing your membership

(Forest Types of the Manetto Hills, continued from front cover)

and the Wheatley Hills to the west in Old Westbury, all are underlain by Cretaceous sediments that, in these areas, vary in elevation from 100 to over 200 feet above mean sea level. The frigid, periglacial environment near the margin of the Laurentide ice sheet would have formed a deep permafrost in these otherwise unconsolidated sediments. The frozen hills would have tended to impede the advancing margin of a glacier that was reaching its southern limit due to warmer temperatures in the lower latitudes. As advance and melting reached equilibrium, the ice margin established a stationary front banked up against the northern slopes of the MDH Hills. Th[e] stationary front remained at… or near … this position for an extended period of time (hundreds of years?)[,] based on the extensive accumulation of stratified drift that makes up the Ronkonkoma terminal moraine. Sand and gravel, in the form of large, coalescing kames, was deposited along the Ronkonkoma ice margin as well as on the broad outwash plain south of the moraine. Discontinuous patches of till are found in the moraine and boulders occur on the surface, but they are smaller and much less abundant than those found on the Harbor Hill end and ground moraine on Long Island's north shore."

III. Soils

Wulforst (1987) maps the Manetto Hills, as defined above, as Category 3, Riverhead-Enfield-Urban Land. He describes this soil complex as "Dominantly nearly level to strongly sloping, well drained, moderately coarse textured and medium textured soils and Urban land; on low hills and ridges… This general soil map unit consists of very deep soils. The nearly level areas are on broad ridgecrests and hilltops, and the steeper parts are along hillsides or the sides of drainageways. A few intermittent streams drain some areas… This unit makes up about 10 percent of [Nassau County]. The unit is about 50 percent Riverhead soils, 18 percent Enfield soils… The Riverhead soils are nearly level to moderately steep. They have a surface layer of brown sandy loam… [with] small stones and strong acidity. The subsoil is strong brown or yellowish brown sandy loam. The substratum [Cretaceous deposits] is light yellowish brown very gravelly sand. Most of this unit is in woodland, mostly oaks …"

Forest Types (Illustrated with composition)

Forest canopies are about 20 m tall (Fig. 1). They are dominated by three trees: *Quercus coccinea* (scarlet oak), *Quercus velutina* (black oak), and *Quercus alba* (white oak). Better drained sites are dominated by scarlet oak and moist sites by white oak. Many other forest trees are represented, but they rarely reach the canopy. The understory may have as many as five layers: sub-canopy trees, tall shrubs, tall herbs and vines, low shrubs and the ground layer. The understory layers vary widely in distribution; rarely are all understory layers present. Most often, the canopy layer has only a single layer beneath; usually low shrubs of the Ericaceae family (*Vaccinium, Gaylussacia, Lyonia*). Mountain laurel (*Kalmia latifolia*) locally forms a tall understory; it has a sparse herb layer. Forests with a greenbrier (*Smilax*) understory are also local in distribution; where they are present they are impenetrable.

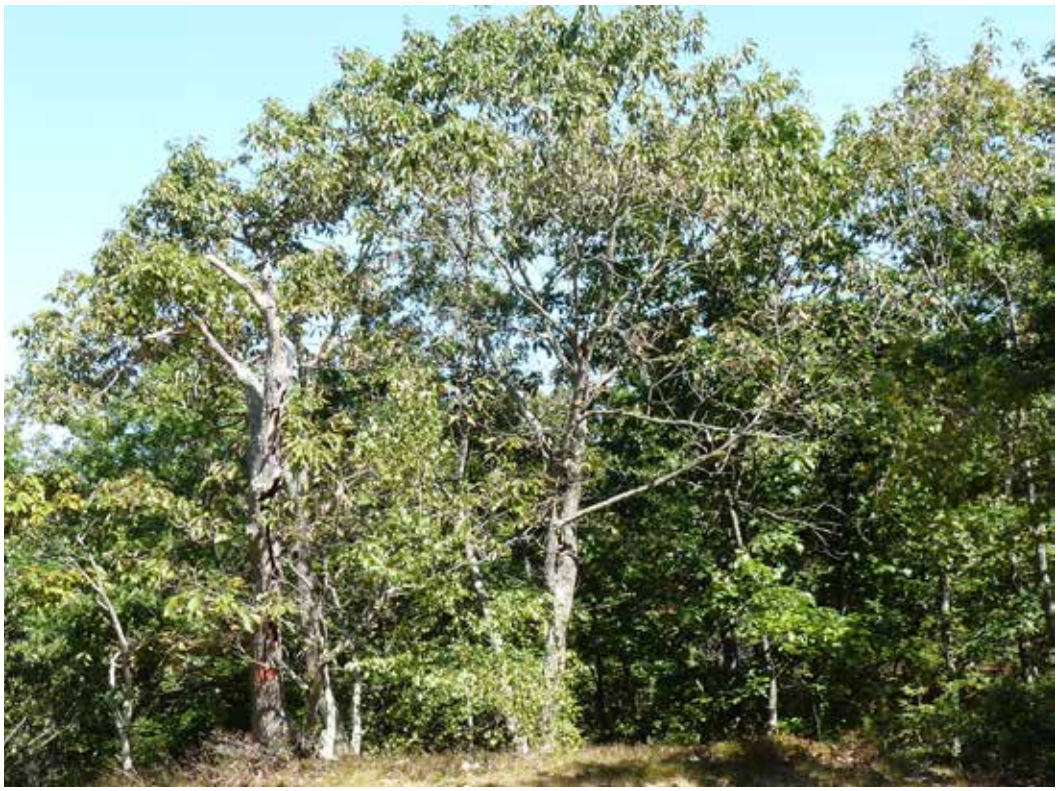


Fig.1. Mixed Oak Forest in Bethpage State Park, Nassau Co., N.Y

(continued on next page)

(Forest Types of the Manetto Hills continued from page 3)

I. White Oak-Black Oak-Hickory/Dogwood

White Oak-Black Oak-Hickory/Dogwood is an uncommon forest type in the Manetto Hills, occurring mostly on the edges, where upland soil conditions are more moist than typical for the Manetto Hills in general. It was observed immediately west of Sunnyside Blvd where is crosses Northern Parkway; in Bethpage State Park; and at the northeast, near Round Swamp Road.

Composition of the White Oak-Black Oak-Hickory/Dogwood Forest:

Canopy: *Quercus alba, Quercus velutina, Carya glabra, Carya tomentosa,;* sometimes including *Betula lenta, Prunus serotina, Sassafras albidum* and *Acer rubrum*. Woody vines often reach the canopy, including *Vitis aestivalis, Parthenocissus quinquefolia,* and *Toxicodendron radicans*.

Sub-canopy: saplings of the above trees, and often *Castanea dentata.*

Shrubs and vines: *Rubus allegheniensis, Viburnum acerifolium, Vaccinium pallidum, Smilax glauca, Toxicodendron radicans, Vitis aestivalis.*

Herbs: *Euyrbia divaricata, Circaea quadrisulcata, Nabalus trifoliata, Maianthemum canadense, M. racemosa, Solidago* spp.

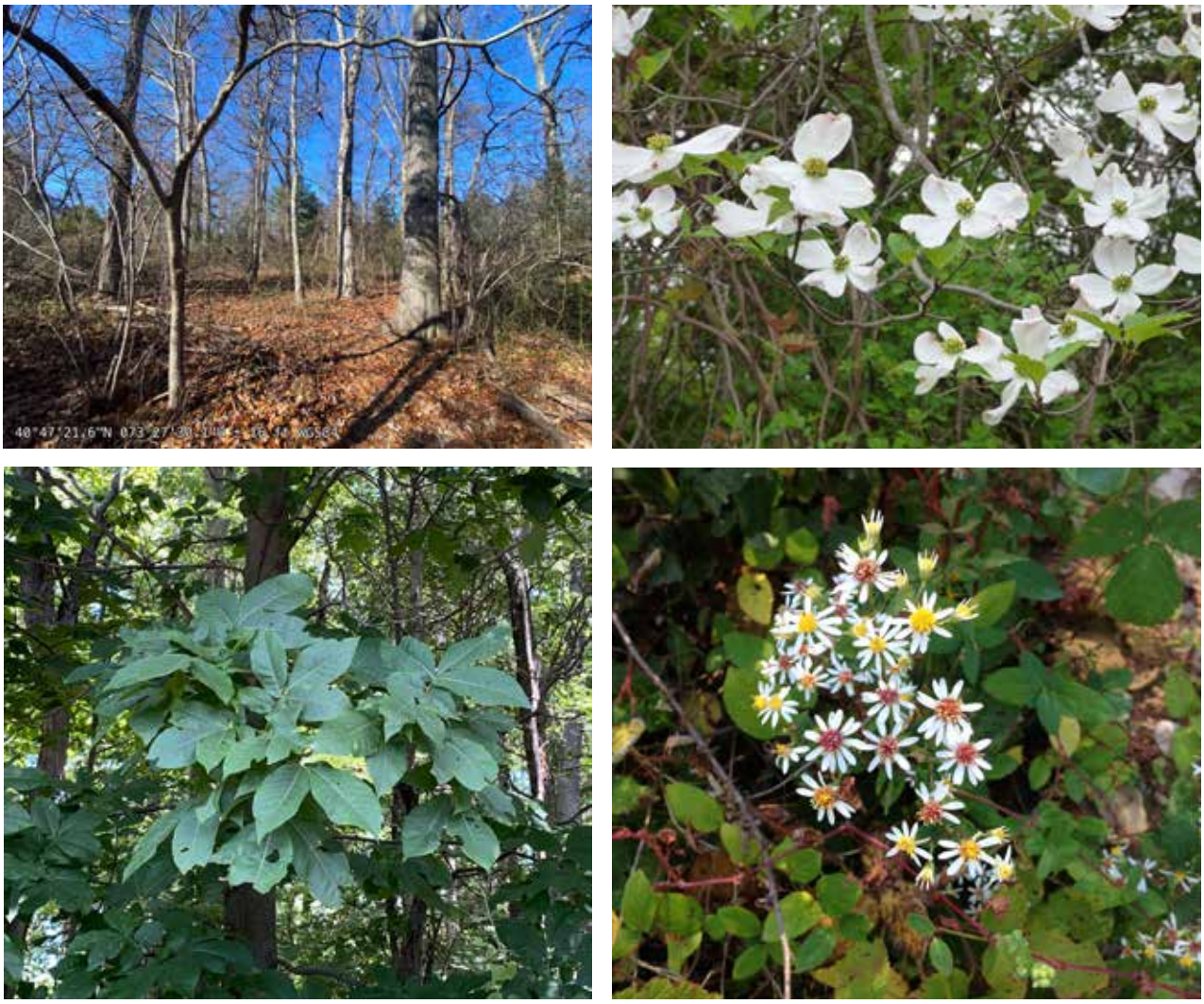


Figure 2a, 2b. 2c, 2d. Top Left: Oak-Hickory/Dogwood Forest interior; Top Right: *Cornus florida inflorescences*; Bottom Left: *Carya ovalis* leaves on branch; Bottom Right: *Eurybia divaricata.*

II. Scarlet-, Black-, White Oaks Forest

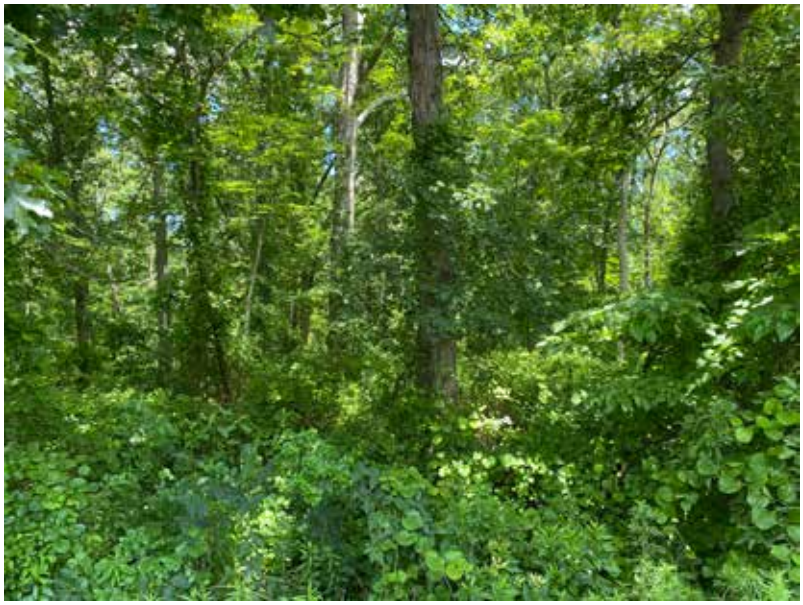
A. Scarlet-, Black-, White Oak/Saplings (Red Maple, Sassafras, Wild Black Cherry)/Mixed shrubs, vines and herbs

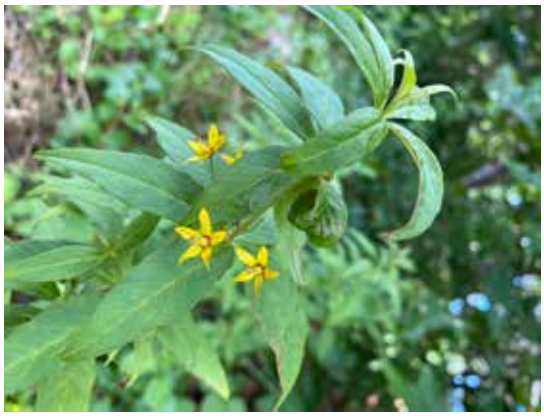
Canopy: *Quercus alba, Quercus velutina, Quercus coccinea;* rarely *Pinus strobus*

Sub-canopy: saplings of *Prunus serotina, Sassafras albidum* and *Acer rubrum,* and often *Carya* spp. and *Castanea dentata*.

Shrubs and vines: *Viburnum acerifolium, Vaccinium pallidum, Aronia melanocarpa, Smilax rotundifolia,* and *Toxicodendron radicans.*

Herbs: *Maianthemum canadense, Solidago* spp., *Potentilla canadense, Aralia nudicaulis, Dennstaedtia punctilobula, Thelypteris noveboracensis, Gaylussacia frondosa, Geum canadense, Lysimachia quadrifolia;* Poaceae.





Figures 3a, 3b, 3c, 3d. Top: 3a. Open Mixed Oaks Forest; Middle right: 3b. Mixed Oaks Forest with dense understory; Middle Left: 3c. *Dennstaedtia punctilobula* with *Smilax* vines; Bottom Left: 3d. *Lysimachia quadrifolia*.

(continued on next page)

(Forest Types of the Manetto Hills, continued from page 5)

II. Scarlet-, Black-, White Oaks Forest (continued)

B. Scarlet-, Black-, White Oak/Maple-leaved Viburnum/ Vines, Mesic Herbs

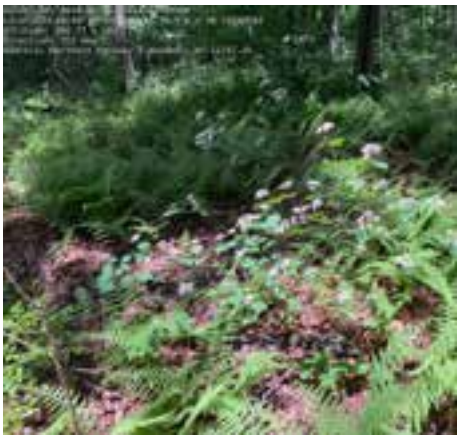
Canopy: *Quercus coccinea, Quercus velutina, Quercus alba;*

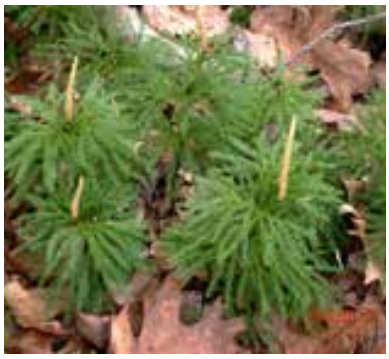
Sub-canopy: saplings of *Prunus serotina, Sassafras albidum* and *Acer rubrum,* and often *Castanea dentata.*

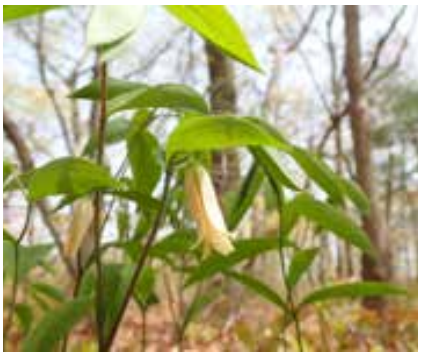
Shrubs and vines: *Viburnum acerifolium, Vaccinium pallidum, Aronia melanocarpa, Smilax rotundifolia,* and *Toxicodendron radicans.*

Herbs: *Uvularia sesilifolia, Maianthemum canadense, Solidago* spp., *Potentilla canadense, Aralia nudicaulis, Dennstaedtia punctilobula, Thelypteris noveboracensis, Lysimachia quadrifolia, Polygonatum biflorum, Geum canadense, Vaccinium corymbosum, Luzula multiflora, Ranunculus abortivus, Hypoxis hirsuta, Dendrolycopodium obscurum.*

Figure 4 (a-i) Top: View of Oak/maple-leaved viburnum forest; herbaceous understory plants.







II. Scarlet-, Black-, White Oak Forest (continued)

C. Scarlet Oak-Black Oak/Mountain Laurel

Canopy: *Quercus coccinea;* other *Quercus* species occur occasionally

Tall Shrub layer: *Kalmia latifolia.*

Herb layer: scattered, with *Pyrola americana, Chimaphila maculata, Cypripedium acaule.*

Ground layer: leaf litter; mosses *(Leucobryum glaucum* and *Polytrichum commune)*.

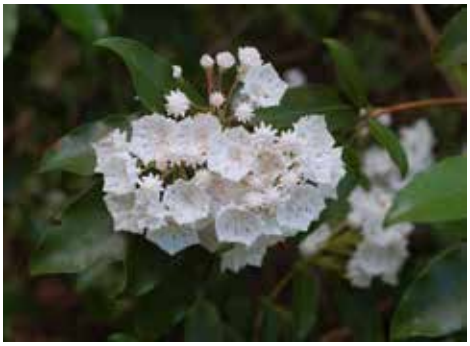


Figure 5a, 5b. Left: Mountain Laurel in flower; Right: Scarlet Oak above a layer of mountain laurel shrubs.

II. Scarlet-, Black-, White Oak Forest (continued)

D. Scarlet-, Black-, White Oak/Greenbrier.

Canopy: *Quercus coccinea.*

Understory vine: *Smilax rotundifolia.*

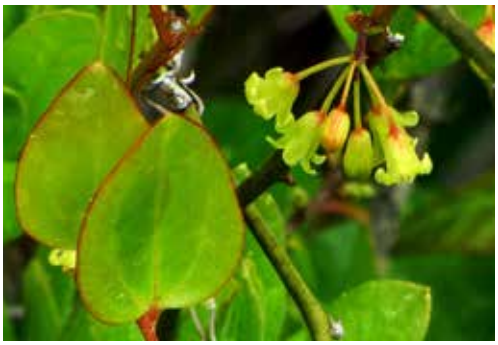


Figure 6a, 6b. Scarlet Oak forest with greenbrier understory (Left: Forest profile; Right: *Smilax rotundifolia* in flower and with emerging leaves).

(continued on next page)

(Forest Types of the Manetto Hills, continued from page 7)

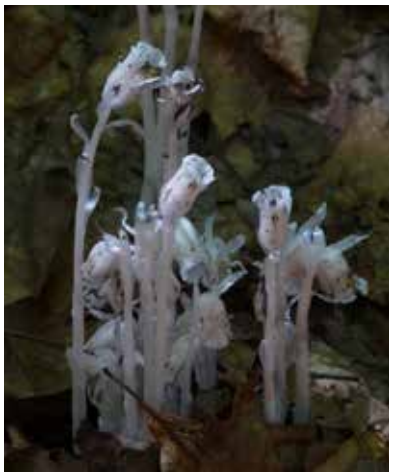
II. Scarlet-, Black-, White Oak Forest (continued)

E. Scarlet-, Black-, White Oak/Heath Shrubs

Canopy: *Quercus coccinea, Quercus velutina, Quercus alba.*

Understory shrubs (low) *Gaylussacia baccata, Vaccinium pallidum, Vaccinium angustifolia, Lyonia mariana, Epigaea repens, Rubus enslenii.*

Herbs: *Aralia nudicaulis, Uvularia sessilifolia, Chimaphila maculata, Pyrola americana, Mitchella repens, Melampyrum lineare, Isotria verticillata, Cypripedium acaule, Monotropa uniflora.*



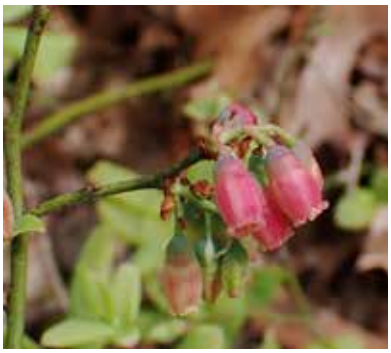
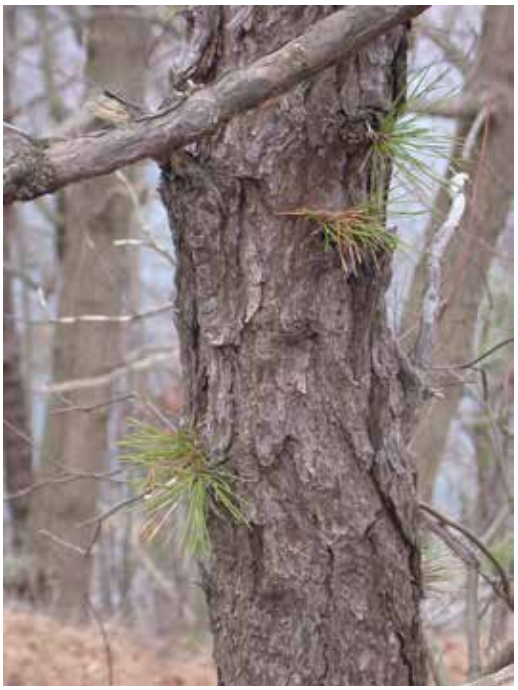


Figure 7a, b, c, d. (Top: *Monotropa uniflora;* Center, Forest profile; Bottom left *Vaccinium pallidum* in flower; Bottom right: *Gaylussacia baccata* in flower).

III. Scarlet Oak-Pitch Pine Forest



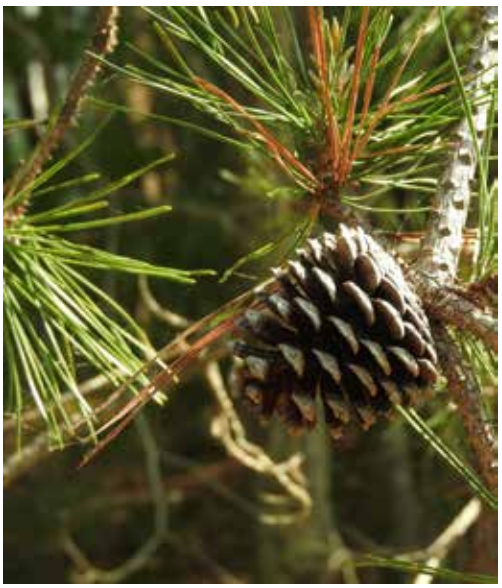


Figure 8a, b, c. (Top: View into forest, with *Pinus rigida* trunks prominent, and *Quercus coccinea*; Bottom: views of *Pinus rigida* trunk with needles; and a single female cone).

(continued on next page)

(Forest Types of the Manetto Hills, continued from page 9)

Discussion

Three forest types can be distinguished in the Manetto Hills:

I. Mixed Oaks-Hickory/Dogwood, which has *Carya* species reaching the canopy and a discontinuous sub-canopy tree layer of *Cornus florida*, with saplings of *Sassafras, Prunus serotina* and *Acer rubrum*. The lower layers contain a diverse flora of tree seedlings, shrubs, vines and herbs. This is a rare type in the Manetto Hills, and is found only at the western and eastern margins of the region.

II. Mixed Oaks, which has only *Quercus* species in the canopy. These species are usually represented by *Quercus coccinea, Q. velutina* and *Q. alba.* Other taxa are confined to the sub-canopy, including *Carya* spp., *Sassafras, Prunus serotina, Acer rubrum* and *Betula lenta*. The lower layers contain a diversity of tree seedlings, shrubs, vines and herbs, but less diverse than the Oak-Hickory / Dogwood type. The Ericaceae are especially important in this forest type and are represented by *Vaccinium* spp., *Gaylussacia* spp., *Lyonia mariana*, and *Kalmia latifolia*. Pyrolaceae are also abundant here (*Pyrola americana* and *Chimaphila maculata*). Two orchids occur in the greatest density of populations on Long Island, *Cypripedium acaule* and *Isotria verticillata*. The understory varies widely with topography and soils, and five subtypes can be recognized by nearly complete sub-canopy cover of a few taxa or life-forms: (tree saplings: (*Sassafras, Quercus* spp., *Acer rubrum, Carya* spp., and *Prunus serotina*; shrubs: *Viburnum acerifolium*, *Kalmia latifolia, Vaccinium, Gaylussacia*, and *Lyonia*; vine: *Smilax rotundifolia*; in addition, a few herbs can dominate locally under the *Viburnum acerifolium* shrub layer: *Aralia nudicaulis, Dennstaedtia* and *Uvularia sessilifolia*.

III. Scarlet Oak, Black Oak – Pitch Pine, has a very limited distribution, having been found only in the southern portion, in Bethpage State Park. The Ericaceae are especially important in this forest type and are represented by *Vaccinium* spp., *Gaylussacia* spp., *Lyonia mariana,* and *Kalmia latifolia.* Pyrolaceae are also abundant here (*Pyrola americana* and *Chimaphila maculata*). The orchid *Cypripedium acaule* is common in the herb layer. Bryophytes are important at the soil level, especially *Leucobryum glaucum, Polytrichum commune,* and *P. juniperinum*.

Forests of the Manetto Hills are fragmented, and occur in sections along Northern Parkway and the Long Island Expressway. Such forests are typical of the middle portion of Long Island, where they occur on soils of the gravelly Ronkonkoma moraine. As suggested by Mills (2015), the Dix Hills, Half Hollow Hills, and Wheatley Hills should also be included as exhibiting this forest type. Urbanization has taken a large portion for light industry and suburban housing developments (including Manetto Hill itself). Perhaps the largest section of the Manetto Hills occurs east of Washington Avenue (i.e., Manetto Hills Park). There is a trail that extends in a narrow corridor to Round Swamp Road. And east beyond that, a trail connects to the West Hills, in Suffolk County. A long, narrow trail (Trailview Park Trail) from the area around Manetto Hill Park goes south, through abandoned farmland, and connects to Bethpage State Park.

Conclusions

To my knowledge, there have been no published descriptions of the low, oak-dominated forests of the Manetto Hills. These forests are fragmented, and occur in sections along Northern Parkway and the Long Island Expressway; a large section occurs east of Washington Avenue (Manetto Hills Park), extending to Round Swamp Road and east beyond that, connecting to the West Hills in Suffolk County. Such forests are typical of the middle portion of Long Island, where they occur on soils of the gravelly Ronkonkoma moraine.

The most common forest type, occupying perhaps 90 percent of the forested landscape, is the Mixed Oaks type, which has only *Quercus* species in the canopy. These species are usually represented by *Quercus coccinea, Q. velutina* and *Q. alba.* Other taxa are confined to the sub-canopy, including *Carya* spp., *Sassafras, Prunus serotina, Acer rubrum* and *Betula lenta*. The lower layers contain a diversity of tree seedlings, shrubs, vines and herbs, but less diverse than the Oak-Hickory /Dogwood type. The Ericaceae are especially important in this forest type and are represented by *Vaccinium* spp., *Gaylussacia* spp., *Lyonia mariana,* and *Kalmia latifolia*. Pyrolaceae are also abundant here (*Pyrola americana* and *Chimaphila maculata*). Two orchids occur in the greatest density of populations on Long Island, *Cypripedium acaule* and *Isotria verticillata*. The understory varies widely with topography and soils, and five subtypes can be recognized by nearly complete sub-canopy cover of a few taxa or life-forms: (tree saplings: (*Sassafras, Quercus* spp., *Acer rubrum, Carya* spp., and *Prunus serotina*; shrubs: *Viburnum acerifolium; Kalmia latifolia; Vaccinium, Gaylussacia,* and *Lyonia*; vine: *Smilax rotundifolia*; in addition, a few herbs can dominate locally under the *Viburnum acerifolium* shrub layer: *Aralia nudicaulis, Dennstaedtia* and *Uvularia sessilifolia.*

Quantitative studies of forest composition and relative dominance, related to topography, would be a welcome next research aim. Soil studies related to the occurrence of particular taxa, such as *Cypripedium a., Isotria v., Uvularia s., Dendrolycopodium* and *Lycopodium complanatum* should also be undertaken, as these taxa have limited distribution on Long Island.

Literature Cited

Mills, H.C. 2015. [Power Point Presentation] Ice flow in the vicinity of the Manetto Hills, Dix Hills and Half Hollow Hills in central Long Island. <https://pbisotopes.ess.sunysb.edu/lig/Conferences/abstracts14/mills/Ice%20flow%20in%20the%20vicinity%20of%20the%20Manetto%20Hills.pdf>

Reiners, W.A. 1965. Ecology of a heath-shrub synusia in the pine barrens of central Long Island. Bull. Torrey Bot. Soc. 92: 448-464.

Reiners, W.A. 1967. Relationship between vegetational strata in the pine barrens of central Long Island. Bull. Torrey Bot. Soc. 94: 87-99.

Wulforst, J.P. 1987. Soil Survey of Nassau County, New York. U.S. Dept. of Agriculture, Soil Conservation Service, Vol.26.

Additions to the flora of Long Island since 1990-1: aggressive colonizers

Eric Lamont, LIBS President

During the last three decades many plant species new to the flora of Long Island have been found by local botanists and documented with voucher collections. The following account is the first installment of a series of reports on these species; nomenclature and native status follows David Werier's (2017) *Catalogue of the Vascular Plants of New York State*. Recent additions to Long Island's flora include both native and non-native species. Some additions are represented by a single, persistent population while others are invasive and have rapidly colonized much of the island. The following 12 species first colonized Long Island during the 1990s and 2000s and have reputations as aggressive invaders of new territory.

1. ***Arthraxon hispidus* var. *hispidus*,** basket grass, joint-head grass, small carpet grass, small carpet weed (Poaceae, the Grass Family), non-native. First collected on Long Island in 2015 by Victoria Bustamante from Montauk, Suffolk Co. Not reported elsewhere on the island but expected to spread. [voucher: NY]

2. ***Cardamine impatiens*,** bushy bitter cress (Brassicaceae, the Mustard Family), non-native. First collected on Long Island in 2006 by Andrew Greller from the Hope Goddard Iselin Nature Preserve, Nassau Co. Unvouchered reports in 1995 and 2003 of this species from northern Oyster Bay Township. First Suffolk Co. collection in 2007 from Lloyd Harbor by Bennett; reported east to Smithtown Township. [voucher: BKL]

3. ***Carex kobomugi*,** Asian sand sedge (Cyperaceae, the Sedge Family), non-native. First collected on Long Island in 2012 by Heather Liljengren from Rockaway Beach, Queens Co. In 2013 collected by Steve Young from near the Fire Island Lighthouse, Suffolk Co. and observed further east on Fire Island at Old Inlet (east of Watch Hill) by Steve Young and Eric Lamont. [voucher: NYS]

4. ***Eragrostis curvula*,** weeping love grass, African love grass (Poaceae, the Grass Family), non-native. First collected on Long Island in the late 1980s and early 1990s from Kings and Suffolk counties by various collectors. Since then it has aggressively colonized much of the island, especially Suffolk Co. [vouchers: BKL, NYS]

5. ***Eupatorium serotinum*,** late thoroughwort (Asteraceae, the Aster Family) unknown native status. First collected on Long Island in 1988 by C. Lumer from Kings Co. Collected in 1992 by Andrew Greller from Suffolk Co. Currently common throughout western Long Island east to Brookhaven Township, Suffolk Co. Rare on the North and South Forks. [vouchers: BKL]

6. ***Gamochaeta pensylvanica*,** Pennsylvania cudweed (Asteraceae, the Aster Family) non-native. Thomas Delendick collected this species four times from 1989 to 1992 in Kings Co. (East Flatbush, Flatlands, Park Slope). From 2007 to 2009 Michael Feder reported it from at least 30 separate localities in Queens Co. In 2008 Rich Kelly located *G. pensylvanica* in New Hyde Park, Nassau Co. and in 2020 Victoria Bustamante collected it in Southampton, Suffolk Co. [vouchers: NY, BKL]

7. ***Juncus diffusissimus*,** slim-fruited rush (Juncaceae, the Rush Family), unknown native status. First collected on Long Island in 2004 by Steve Young and Eric Lamont from the Township of Islip, Suffolk Co. In 2012 and 2013 David Werier found two additional populations in the Township of Islip at Edgewood Oak Brush Plains Preserve and Timberline Park; the Edgewood population was extensive and comprised hundreds to thousands of individuals. [vouchers: BH, NY, NYS]

8. ***Microstegium vimineum*,** Japanese stilt grass (Poaceae, the Grass Family), non-native. First collected on Long Island in 1991 by Steven Clemants from West Hills County Park, Suffolk Co. Since then it has aggressively colonized much of the island. [voucher: BKL]

9. ***Persicaria perfoliata*,** mile-a-minute weed (Polygonaceae, the Smartweed Family), non-native. First collected on Long Island in 1998 by Eric Lamont from the Bethpage Bikeway in Old Bethpage, Nassau Co. In 2000 Steven Glenn collected it from Orient, Suffolk Co. Since then it has aggressively colonized much of the island. [vouchers: NY, BKL]

10. ***Pueraria montana* var. *lobata*,** Kudzu (Fabaceae, the Legume Family), non-native. In 1989 Ed Frankel reported in the *Bulletin of the Torrey Botanical Club* a total of eight populations of Kudzu on Long Island, mostly concentrated in Kings, Queens, and Nassau counties with only one occurrence in Suffolk Co. In 2001 LIBS members verified 28 populations on the island including 13 from Suffolk Co. Although Kudzu is now established on Long Island it is not aggressively invasive at this time.

11. ***Pyrus calleryana*,** Bradford pear, Callery pear (Rosaceae, the Rose Family), non-native. First collected on Long Island in 2002 by Steven Glenn from Moriches, Suffolk Co. Since then it has aggressively colonized much of the island. [voucher: BKL]

12. ***Trapa natans*,** water chestnut (Lythraceae, the Loosestrife Family), non-native. First collected on Long Island in 2004 by Scott Kishbaugh from Mill Pond in Wantagh, Nassau Co. After several eradication efforts, *T. natans* remains established in Mill Pond and has been reported from another nearby pond in Nassau Co. It has not been reported elsewhere on the island but is expected to spread.

Long Island Botanical Society
PO Box 507
Aquebogue, NY 11931

Upcoming Events

May 20, 2023 (Saturday) 10am
Field Trip to Manetto Hills Park, Plainview, Nassau Co.
Trip Leader: Andy Greller
Limited to 10 participants. Register with Bob Chapman (bob.chapman516@icloud.com) and more details about the trip and directions to the meeting place will be sent.

June 13, 2023 (Tuesday) 5pm
Annual Barbecue: Meet at the Seatuck Environmental Center (Scully Estate), Islip, Suffolk Co. Salads, deviled eggs, desserts, etc. gladly accepted. Register with Eric Lamont (elamont@optonline.net).

June 17, 2023 (Saturday) 10am
Field Trip to Muttontown Pinetum, Nassau Co.
Trip Leaders: Al and Lois Lindberg
Register with Bob Chapman (bob.chapman516@icloud.com) and more details about the trip and directions to the meeting place will be sent.

August 5, 2023 (Saturday) 10am
Field trip to Hallock State Park Preserve, Northville, Suffolk Co.
Trip Leader: MaryLaura Lamont
A joint field trip with the North Shore Land Allience. Register with MaryLaura Lamont (marylaura.lamont@parks.ny.gov) and more details about the trip and directions to the meeting place will be sent.

September 23, 2023 (Saturday) 10am
Field Trip to Oyster Pond, a coastal salt pond community, Montauk Point State Park, Suffolk Co.
Trip Leader: Victoria Bustamante
A joint field trip with the New York Flora Association. Register with Vicki Bustamante (vickibustamante@gmail.com) and more details about the trip and directions to the meeting place will be sent.