

Long Island Botanical Society

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Women Naturalists of Theodore Roosevelt's Time

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The Victorian-era interest in natural history produced quite a few female amateur scientists (Fig. 1); “amateur” was not a reflection of their scientific accuracy, but the fact that a formal scientific education was essentially unavailable to women, and membership in scientific organizations was usually reserved for men. Natural history became big business at the turn of the century. Museums collected barrels and boxcars of specimens from around the world, and relied on cheap labor to process the abundance of material. Women museum assistants provided that labor: routine, messy, and tedious sorting, labeling, and organizing of specimens (Fig. 2).

The late 1800s saw more women naturalists than in the past, but they were still working in a man's world. The acceptable outlet for their talents often became observation and writing general interest books. This article will focus on some of Theodore Roosevelt's contemporaries at the onset of the 20th Century. This research was originally prepared for a slide lecture at Sagamore Hill National Historic Site in March 2020, in honor of Women's History Month, which was canceled due to the COVID-19 lockdowns.

Elizabeth Gertrude Britton (1858–1934; Fig. 1) The name of Nathaniel Lord Britton is quite familiar in botany, and his wife Elizabeth was equally gifted in the study of bryology and



Figure 1. Elizabeth Gertrude Britton (1858–1934) was an American botanist, bryologist, scholar, explorer, conservationist, and educator. Image from The New York Botanical Garden Archives and Manuscripts Collection. Elizabeth Gertrude Knight Britton Records.

wildflowers. In 1879 Elizabeth joined the Torrey Botanical Society and began publishing papers in the Society's *Bulletin*. By 1883, she was a known bryologist, specializing in mosses. During the years with the Torrey Botanical Society, Elizabeth met and later married Nathaniel Lord Britton. Working together, the Brittons helped gather support for the creation of The New York Botanical Garden (NYBG), and Nathaniel served as the first director. Elizabeth became the Honorary Curator of Mosses, and oversaw the move of the botanical collection of Columbia College to NYBG, including the mosses she had carefully collected (she was not paid a salary by NYBG). She helped establish the Wild Flower Preservation Society of America, which worked to protect endangered wildflowers and educate the public. In 1893, Elizabeth Britton was the only woman among the 25 charter members of the Botanical Society of America.

Anna Botsford Comstock (1854–1930) Anyone who enjoyed taking field trips in school should be indebted to Anna Botsford Comstock. She may be known for her nature illustrations, but Comstock also promoted outdoor education in New York public schools. She was the first female professor at Cornell University, and as part of the Department of Nature Study at Cornell, wrote curricula for education of the surrounding natural world. Despite a lack

of education of the surrounding natural world. Despite a lack

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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
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(*Women Naturalists, continued from cover page*)

of formal training as an artist, Comstock learned wood engraving and began her career by drawing studies of insects for her husband, entomologist John Henry Comstock. She published several successful books, including the *Handbook of Nature Study*, which had more than 20 printings.

Florence Merriam Bailey (1863-1948)

was a nature writer and one of the earliest advocates for the protection of wildlife. In the late 19th and early 20th century, Bailey studied birds in nature, focusing on their behaviors rather than strictly on colors and feather patterns. She was also involved in the Audubon Society, organizing new chapters wherever she went. Bailey supported the study of live birds and pioneered the use of binoculars for birding. At the age of 26, she wrote *Birds through an Opera-Glass*, one of the original field guides for birdwatching. The book was published in 1889 under her own name, which was also unusual for women at the time. Florence Bailey was the first woman associate member of the American Ornithologists' Union in 1885, its first woman fellow in 1929, and the first woman recipient of its Brewster Medal in 1931, awarded for her book *Birds of New Mexico*.

Genevieve Jones (1847-1879) saw Audubon's paintings in *Birds of America* on display in 1876. His artwork inspired her to produce a lithographed book



Figure 2. Newport Marine Laboratory, RI, 1878. In 19th-century natural history museums, well-trained male curators supervised collections. Janitors, taxidermists, and women specimen sorters were at the bottom of the pyramid. These low-skilled poorly paying jobs followed the stereotypes of the time, which relegated essential cleaning chores to women.

preparation, and am pleased that what promises to be one of the great illustrated works on North American Ornithology should be prepared by women.

The overwhelming response nearly doubled the number of subscribers — among them a young Harvard student named Theodore Roosevelt and his friend and fellow birder Henry Minot. But a month after the first part was mailed, Genevieve died suddenly from typhoid fever, and her family took up the monumental task of completing the book's production in her memory. Because of the intensive labor and expense that the project required, only 90 copies of the book were ever published and TR's copy is now in the Cleveland Museum of Natural History.



Figure 3. *Robin's Nest and Eggs* by Genevieve Jones. In a story common to many of these women, young "Gennie" found a bird nest that she couldn't identify, and no book existed to help. At age 30, she began to draw detailed illustrations of nests in wax pencil on lithographic stones, which were then brought to a printing company. Her family and friends supported her, both emotionally and financially, continuing the project even after her untimely death two years later.

of the birds' nests and eggs that Audubon neglected to include (Fig. 3). Called *Illustrations of the Nests and Eggs of Birds of Ohio*, she and her family began to sell the book by subscription, \$5 for the hand-painted version and \$2 for the uncolored version. The first twenty subscribers were secured, including some of the country's most important ornithologists. Elliott Coues (author of *Key to North American Birds*) wrote:

I had no idea that so sumptuous and elegant a publication was in

Beatrix Potter (1866-1943) — Yes, the British author of *Tales of Peter Rabbit*

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was also a noted mycologist. Her interest went beyond the art form of mushrooms (Fig. 4) - she studied their taxonomy, taught herself techniques for botanical illustration, and finally was introduced to a famous mycologist Charles McIntosh. With his encouragement, she advanced her microscopic observations, studying how mushrooms reproduced, something not well understood at the time. And yet her paper, "On the Germination of the Spores of Agaricineae by Miss Helen B. Potter," presented to the Linnean Society, never even got to the point of peer-review. It was made clear that she was not a peer and not worthy of consideration. A century later in 1997, the Linnean Society issued an apology of sorts, making note of the sexism shown in the handling of her research.

Mabel Osgood Wright (1859–1934) was an early leader in the Audubon movement. Wright released *Birdcraft: A Field Book of Two Hundred Song, Game, and Water Birds* in



Figure 4. *Flammulina velutipes* by Beatrix Potter (Armitt Museum & Library). In her early 20s, Beatrix Potter began producing intricate drawings and watercolors of mushrooms, attracted by their variety and beauty. She collected specimens to observe under a microscope as her interest turned to more technical aspects. But after being rejected by the scientific community, she went on to become one of the most famous children's book authors.

1895. *Birdcraft* featured color reproductions from John James Audubon and other artists to illustrate commonly seen species. A later edition credits Louis Agassiz Fuertes as a contributing artist. Frank M. Chapman described it as "one of the first and most successful bird manuals." Two years later, Wright collaborated with Elliott Coues on *Citizen Bird: Scenes from Bird-life in Plain English for Beginners*. She also wrote books on American mammals and flowers.

Among these remarkable women were three naturalists who had a local connection to Long Island and/or Theodore Roosevelt.

Fanny A. Mulford (1855-1939)

Little information is readily available about the life of Fanny Mulford, a botanist from Hempstead, Long Island, NY. In the Winter 2016 issue of the Long Island Botanical Society *Newsletter*, Eric Lamont published an extensive article on Fanny Mulford's considerable accomplishments, some of which are included here.

Fanny Mulford was an amateur botanist, and from 1895 to 1918, she collected approximately 4000 vouchers of vascular plants from western Long Island, including orchids, violets, ferns, and many species of rare plants. For over 30 years, she was affiliated with The New York Botanical Garden, the Brooklyn Botanic Garden, and the Torrey Botanical Club. Although Fanny did not publish in scientific journals, she collaborated with distinguished botanists of her time. Fanny was also a charter member of the Wild Flower Preservation Society of America and became friends with its founder Elizabeth Britton. In May 1906, she co-led a field trip with Elizabeth Britton to Hempstead for the Torrey Club (Fig. 5). Her specimens were carefully selected and preserved with standardized herbarium labels. Fan-

The Decoration Day excursion, May 30, was to Hempstead, Long Island. Miss Fanny Mulford and Mrs. N. L. Britton were the guides, and fifteen others were present. The first station visited was a *Sphagnum* bog between the kennels of the Meadow Brook Hunt Club and the estate of Mrs. O. H. P. Belmont, where fine specimens of *Drosera rotundifolia*, *Arethusa bulbosa*, *Andromeda Mariana* and *Viola notabilis* were secured. Luncheon was served near Place's Pond where the whorled *Pogonia*, *Isetria verticillata* was found in abundance and fine specimens of *Arisaema pusillum*. In a white cedar swamp near Merrick, *Dryopteris simulata* and *Woodwardia arcolata* and *W. virginica* were found in abundance, also fruiting specimens of *Mnium hornum*.

Figure 5. Torrey Botanical Club field trip report by Percy Wilson, 1906; published in the journal *Torrey*, vol. 6.

ny donated her personal herbarium to the Brooklyn Botanic Garden in 1919.

Among Fanny's many collections from the Hempstead Plains was an unusual violet first collected in May 1902. The specimen was sent to the Smithsonian Institution for identification, and botanist Charles Pollard described it as a new species named in her honor: *Viola mulfordae*.

Fanny's last known plant collection (1918) was of the small whorled pogonia (*Isotria medeoloides*) often considered to be the rarest orchid east of the Mississippi River and north of Florida. This species was one of the first orchids listed by the federal government under the Endangered Species Act.

Fanny Mulford's interest in the flora of Long Island coincided with the work of botanist Norman Taylor at The New York Botanical Garden and at the Brooklyn Botanic Garden. Almost half of her collections were from the Hempstead Plains and Hempstead Reservoir. She rarely collected outside of Nassau County but did make a few trips for noteworthy species. One such excursion occurred in July 1903, to Delaware County, NY in the western Catskills. On that occasion, she collected the first known specimens of musk-root (*Adoxa moschatellina*) in New York State (Figs. 6 and 7). She made additional collections of the species in June 1912 and May 1915. Although a few other populations have been documented in New York, it is still only found on cool talus slopes in Delaware and Greene counties. The New York Flora Association has made several field trips in recent years to observe one population on Pakatakan Mountain near Margaretville, NY. The species is currently listed as NYS Endangered and ranked as State S1 according to the New York Flora Atlas.

Neltje Blanchan (1865–1918)

Neltje Blanchan DeGraff Doubleday was a scientific historian and nature writer who published eleven books on wildflowers and birds under the pen name Neltje Blanchan. Neltje DeGraff married book publisher Frank Nelson Doubleday in 1886, and they had homes in both New York City and Oyster Bay, Long Island. Frank Doubleday was close friends with British author Rudyard Kipling, who used Doubleday's initials, F. N. D., to form a nickname, Effendi, Turkish for chief. The Doubledays' estate in Mill Neck was called Effendi Farm.

(continued on next page)

A PLANT NEW TO THE STATE OF NEW YORK AND THE LOCAL FLORA RANGE.—It is here worthy of record that Miss F. A. Mulford collected in July, 1903, at Arkville, Delaware Co., N. Y., specimens of the musk-root *Adoxa Moschatellina* L. This is the first record of this plant's occurrence either in New York State or the local flora range. The nearest previous stations for this species are in Arctic America and Iowa. The discovery of this rare plant at an elevation of about 1,400 ft. in the Catskills is a noteworthy addition to the list of local flora plants. Specimens of this plant from Arkville are in the herbarium of the Brooklyn Botanic Garden and in Miss Mulford's herbarium.

NORMAN TAYLOR

Figure 6. Torrey Botanical Club field trip report by Norman Taylor, 1913; published in the journal *Torrey*, vol. 13.



Figure 7. Musk-root (*Adoxa moschatellina*), a member of the Moschatel Family (Adoxaceae), is a small perennial herbaceous plant, flowering early in the spring and dying down to ground level in summer immediately after the berries are mature. The New York Flora Association held a joint field trip with the Catskill Native Plant Society on May 30, 2015, to view a population of this inconspicuous species. Leader Michael Kudish located several plants on Pakatakan Mountain near Margaretville, NY. Image from Otto Wilhelm Thomé (1840–1925), *Flora von Deutschland, Österreich und der Schweiz* (1885).

(*Women Naturalists, continued from page 5*)

Blanchan's first book, *Bird Neighbors* (1897; Fig. 8) discussed bird habitats and seasonal migration, but it did not group birds by the scientifically accepted system of classification. Instead, it listed them by size and color. Although her husband's publishing firm undoubtedly aided her efforts, *Bird Neighbors* was a huge commercial hit, selling more than 250,000 copies, making her the best-selling female nature writer of her time. In the early 20th century, she followed up with several books about birds and plants, which were included in *The New Nature Library* series of 15 volumes, first published by Doubleday, Page & Co. (The books on mushrooms, trees, frogs, shells, mosses, and grasses were also written by woman scientists.)

Blanchan's works are known for their blend of technical interest with poetic phrasing, but sometimes are more melodramatic than scientific. In *Nature's Garden* (1900), round-leaved sundew is described as follows (also see Addendum):

Drosera rotundifolia

Flowers--Small, white, growing in a 1-sided, curved raceme of buds chiefly. Calyx usually 5-parted; usually 5 petals, and as many stamens as petals; usually 3 styles, but 2-cleft, thus appearing to be twice as many. **Scope:** 4 to 10 in. high. **Leaves:**

Growing in an open rosette on the ground; round or broader, clothed with reddish bristly hairs tipped with purple glands, and narrowed into long, flat, hairy petioles; young leaves curled like fern fronds.

Preferred Habitat--Bogs, sandy and sunny marshes.

Here is a bloodthirsty little miscreant that lives by reversing the natural order of higher forms of life preying upon lower ones ... When we go to some sunny cranberry bog to look for these sundews, nothing could be more innocent looking than this tiny plant...A little fly or gnat, attracted by the bright jewels, alights on a leaf only to find that the clear drops, more sticky than honey, instantly glue his feet, that the pretty reddish hairs about him act like tentacles, reaching inward to imprison him within their slowly closing embrace....

the cruel hairs bind, the glue suffocates and holds him fast. Death alone releases him. And now the leaf's orgy begins: moistening the fly with a fresh peptic fluid, which helps in the assimilation, the plant proceeds to digest its food.

Would TR have approved of her descriptive narratives? He was not impressed by some of the anthropomorphized animal stories of the time (see Addendum) – he and naturalist John Burroughs came out publicly against what they termed the



Figure 8. *Bird Neighbors* by Neltje Blanchan, title page and illustration. This was the first nature book written by Neltje Blanchan Doubleday. Intended for a broad audience, with color illustrations and clear language, it was immensely popular. Her other books include *Birds that Hunt and Are Hunted*, *Nature's Garden*, and *The American Flower Garden*.

Fig. 9. *How to Know the Wildflowers* by Mrs. William Starr Dana, book cover. As was the custom for female authors of her day, Frances Theodora Dana Parsons used her husband's name for her first three books. *How to Know the Wildflowers* is presumed to be the first of the modern field guides. Although it is out of copyright and free online, reprint copies are still available.

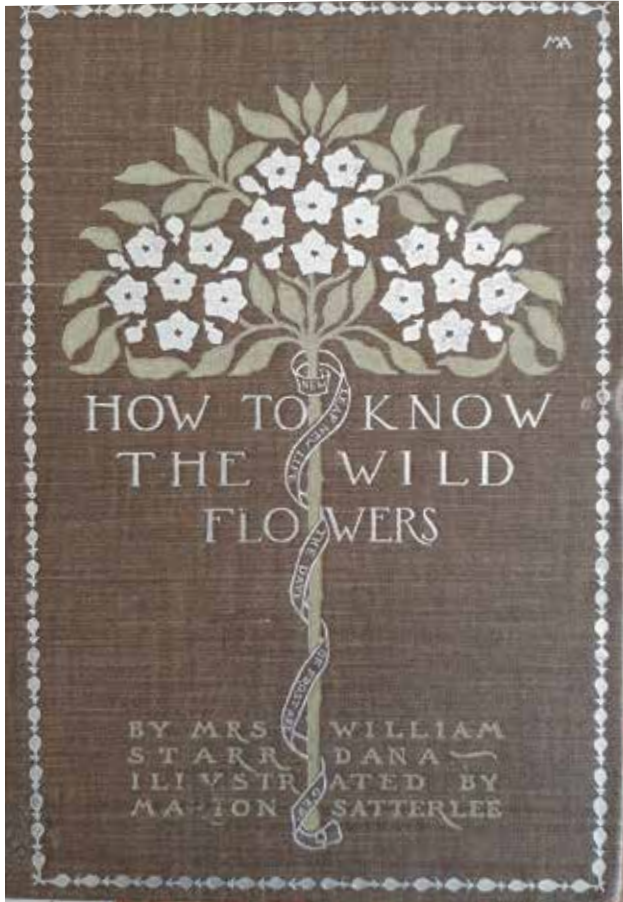
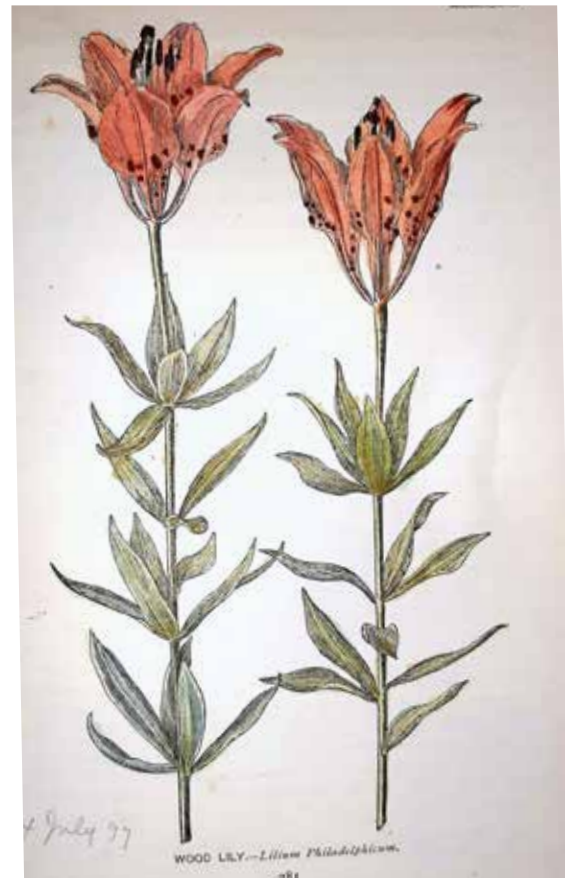


Figure 10. Illustration of wood lily (*Lilium philadelphicum*) by Marion Satterlee. After Fanny Dana Parsons' first husband William died, it was her artist friend Marion Satterlee who encouraged her to rekindle her love of nature. At Parsons' insistence, Satterlee illustrated both *How to Know the Wildflowers* and a sequel, *How to Know the Ferns*. Parsons' other two nature books were also illustrated by women artists.



“nature fakirs.” But from transcripts of his letters, we do know of his friendship with the Doubledays. In 1910 Theodore Roosevelt laid the cornerstone for the Country Life Press facility in Garden City, Long Island, NY, which boasted two miles of trails through a miniature arboretum.

And it was Doubleday's publication of Upton Sinclair's expose of the Chicago Stock Yards in *The Jungle* that led to new food and drug laws. After others turned away, Frank Doubleday ordered an investigation of the meat-packing industry and brought the evidence to President Roosevelt.

Neltje Doubleday was one of the founders of the North Country Garden Club, along with Mrs. J. West Roosevelt (TR's cousin) and other prominent Long Islanders. She also did volunteer work for the American Red Cross, and died suddenly of a cerebral hemorrhage in 1918 at the age of 52, during an official trip to Canton, China. She is bur-

ied in the Locust Valley (Long Island, NY) Cemetery along with other members of the Doubleday family.

The closest association to Theodore Roosevelt was **Frances Theodora Smith Parsons (Mrs. Wm. Starr Dana) (1861-1952)**

A botanist and author during the late 19th and early 20th centuries, Frances Theodora Smith Dana Parsons wrote four popular nature books. Her earliest works were published under her married name “Mrs. William Starr Dana.” Fanny Smith was a close personal friend to the Roosevelt family from the time they were children. Born in New York City, she was educated at the exclusive Miss Comstock's School for Girls on the Upper East Side, attending during the same time as Edith Carow, future wife of Theodore Roosevelt. Being the same age as Edith and TR's younger sister Corinne,

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(*Women Naturalists, continued from page 7*)

the three girls became good friends. The group took part in the city's winter social life and outings on Long Island. Theodore joined in many of their activities, encouraging their interests in history and literature. Fanny developed a lifelong love of nature and wildflowers during summers spent at her grandparents' home near Newburgh, New York.

In 1884, Fanny married William Starr Dana, a Commander in the U.S. Navy, but William Dana died in a flu epidemic in 1890. During her mourning period, her friend, illustrator Marion Satterlee, encouraged Fanny to take long walks through the countryside, which rekindled her love of wildflowers. Fanny also enrolled in some courses at Barnard College, one of which was botany. This prompted her into writing a book she had long considered, inspired by an essay in which a frustrated John Burroughs wished for a simple alternative to technical botany manuals.

One of these days some one will give us a hand-book of our wild flowers, by the aid of which we shall all be able to name those we gather in our walks without the trouble of analyzing them. In this book we shall have a list of all our flowers arranged according to color, as white flowers, blue flowers, yellow flowers, pink flowers, etc., with place of growth and time of blooming.

She wrote it on the condition that Satterlee herself provide the illustrations, resulting in her most popular book,

How to Know the Wildflowers (1893), considered the first field guide to North American wildflowers (Figs. 9 and 10). When she began to work, Fanny found it difficult to get people to take her seriously. Corrine Roosevelt Robinson understood her friend's determination, and gave her a quiet room in the Robinson's country home and guarded her from interruption. The book was a best-seller, with the first printing selling out in five

days. Theodore Roosevelt declared, "Your book has really scored the hit of the season; I see and hear about it everywhere" (Fig. 11). Another endorsement came from Rudyard Kipling, then living in Vermont, who told her that the book was exactly what he needed to learn more about the wildflowers around his home. The book was followed the next year by *According to Season*, subtitled "Talks about the Flowers in the Order of Their Appearance in the Woods and Fields." *Flowers and Their Children*, a botany book for young people appeared two years later.

In 1896, Fanny married her second husband, James Russell Parsons, a New York State politician and later a diplomat under President Theodore Roosevelt. The only book Frances Parsons wrote during her second marriage was *How to Know the Ferns*, published in 1899. On summer vacations she had become fascinated with ferns and was unable to find a usable field guide, but she was also prompted by financial considerations.

In addition to her writing, Fanny was quite involved in the politics of her era. She was a strong advocate for women's suffrage and active in the Republican Party, but of course supported Theodore Roosevelt and his Progressive "Bull Moose" Party. Fanny also worked tirelessly for wounded veterans, New York City public schools, and the protection of Central Park.

Frances Theodora Parsons did not write any other books until 1951, when she privately published her memoir, *Perchance Some Day*. She died the next year on June 10 at her home in Katonah, NY at age 90.

These stories reveal only a few of the women scientists of the day, women whose achievements weren't limited by the time in which they lived. One tepid review of

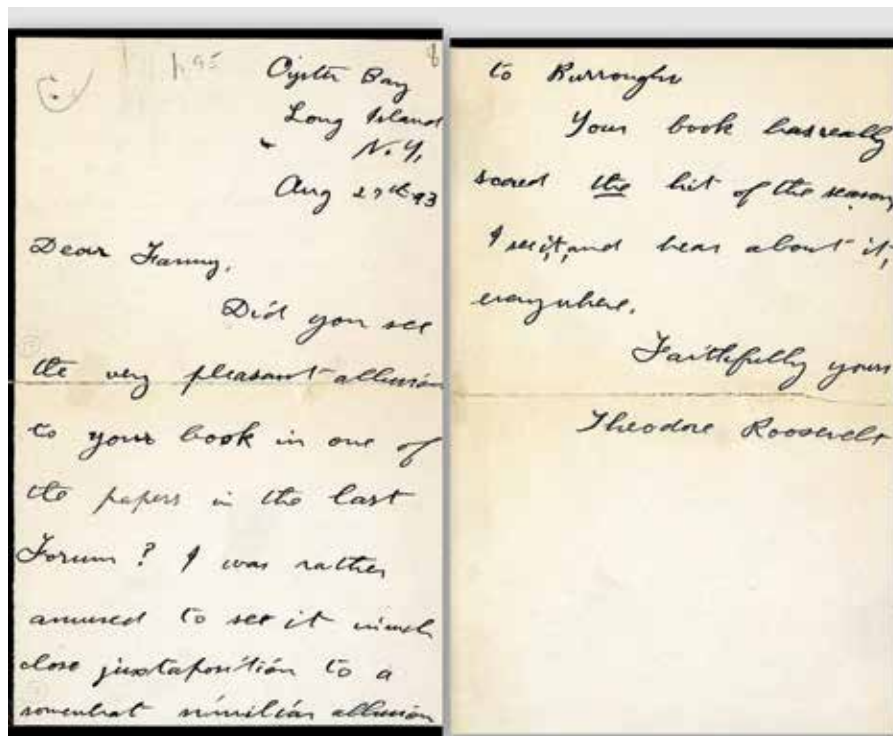


Figure 11. Letter from Theodore Roosevelt to Frances Theodora Dana (August 27, 1893). Theodore Roosevelt Digital Library. Dickinson State University.

Neltje Blanchan's works said "although of limited scientific value, [they] helped make the conservation movement a respectable force in American life." The statement about limited scientific value may be questioned, but the success of these women is remarkable. The break from a technical approach

to natural science, and the books' appeal to a wider audience, provided the basis for all of our modern field guides in use today. These women certainly motivated future scientists, but even if they "only" promoted an appreciation for nature, they helped inspire others to protect our environment.

References

- ADDISONIA (an illustrated journal covering botanical and horticultural subjects). 1916. Colored Illustrations and Popular Descriptions of Plants. p. 41, Plate 21.
- BLANCHAN, NELTJE. 1922. Nature's Garden. Doubleday, Page & Co. Garden City, NY. 192-3.
- DANA, MRS. WILLIAM STARR. 1893. How to Know the Wildflowers: A Guide to the Names, Haunts, and Habits of Our Common Wild Flowers. Charles Scribner's Sons, NY.
- FIND A GRAVE. www.findagrave.com/memorial/23523361/neltje-blanchan-doubleday
- KISER, JOY M. 2012. America's Other Audubon. Princeton Architectural Press, Hudson, NY. http://americasotheraudubon.com/index_files/Page1448.htm
- KNIGHT, FRANK. 2015. John Burroughs: Father of American Wildflower Guide. New York Flora Association Newsletter 26(2): 1-5.
- KUDISH, MICHAEL. 2015. The Two OXes of Pakatakan Mountain: AdOXa and OXalis. New York Flora Association Newsletter 26(4): 1-3.
- LAMONT, ERIC, E. 1995. Fanny Mulford's Orchid Collections from the Late 1890s. Long Island Botanical Society Newsletter 5: 7-9.
- LAMONT, ERIC, E. 2016. The Botanical Works of Fanny Mulford on Western Long Island, New York. Long Island Botanical Society Newsletter 26: 1, 3-10.
- LEAR, LINDA. 2016. Beatrix Potter: A Life in Nature. St. Martin's Griffin, NY. Reprint edition.
- LETTER FROM THEODORE ROOSEVELT TO FRANCES THEODORA DANA. Theodore Roosevelt Collection. MS Am 1454.41 (17). Harvard College Library. <https://www.theodorerooseveltcenter.org/Research/Digital-Library/Record?libID=o287297>. Theodore Roosevelt Digital Library. Dickinson State University.
- MORRISON, ELTING E. 1951. Letters of Theodore Roosevelt. Harvard University Press, Cambridge, MA. Internet Archive: <https://archive.org/details/lettersoftheodo006691mbp/page/n9/mode/2up>
- NAYLOR, NATALIE A. 2012. Women in Long Island's Past: A history of Eminent Ladies and Everyday Lives. History Press, Charleston, SC.
- NAYLOR, NATALIE A. 2016. Long Island Women Preserving Nature and the Environment. Long Island History Journal, vol. 25-2. https://lihj.cc.stonybrook.edu/2016/articles/long-island-women-preserving-nature-and-the-environment/#_edn25
- PUTNAM, CARLETON. 1958. Theodore Roosevelt: The Formative Years, 1858-1886. Charles Scribner's Sons, NY.
- TAYLOR, NORMAN. 1913. A plant new to the state of New York and the Local Flora Range. Torreyia 13: 78.
- WILSON, PERCY (Field Committee Chair, Torrey Botanical Club). 1906. Field meetings of the Club [including a field trip to Hempstead, Long Island, guided by F.A. Mulford and E.G. Britton]. Torreyia 6: 130.

Addendum



Figure 12. During Theodore Roosevelt's time, natural history books often romanticized and exalted nature, but sometimes plants and animals were portrayed as menacing or threatening in a sinister way. Image from Bing.com/images.



Figure 13. As noted on page 6 of this article, Neltje Blanchan described round-leaved sundew (*Drosera rotundifolia*) as "a bloodthirsty little miscreant" with "tentacles, reaching inward to imprison [its prey] within their slowly closing embrace. Death alone releases him." Images from Bing.com/images.

Dormant sedge seeds and white cedar stumps at West Brook, Oakdale, Long Island, NY

Eric Lamont

President, Long Island Botanical Society

During the past two years, LIBS members and staff from Seatuck Environmental Association have been monitoring changes in the flora at West Brook after the collapse of a dam in early 2019. For more than 100 years before the dam failed, the brook and its surroundings had been submerged under a shallow, large pond (West Brook Pond). For background information on the site and a photo of the current landscape see John Turner's 2019 article in volume 29 of the LIBS *Newsletter*.

The following discussion is based on three surveys of the site conducted on August 30, 2019, September 26, 2019, and August 3, 2020. Steve Young and David Werier participated in two of the surveys and identified many of the

sedges, grasses, and other difficult taxa. The first survey revealed 46 species of vascular plants growing at the site, the second survey added 24 species, and the third survey added an additional 45 species. In total, 115 species have been identified, revealing the site's high biodiversity. Several rare plants have been found including yellow flat sedge (*Cyperus flavescens*, Fig. 1) and Atlantic white cedar (*Chamaecyparis thyoides*).

Yellow flat sedge is very rare in New York (state rank: S1); currently, only seven populations are known in the state, six of them from Long Island. For more than 100 years before the dam failed, *C. flavescens* survived as dormant seeds embedded in the saturated, mucky sediments under West Brook Pond. The seeds are tiny, only 1 mm wide, black (when dried), and shaped like a lentil (round and convex on both sides). When ripe, the seeds are covered with a white "incrustation" (Fernald 1950). How many years can these seeds remain dormant and viable? A cursory search of the literature revealed no answer. At least we now know the seeds can remain dormant and viable in saturated sediments for at least 100 years.



Figure 1. Yellow flat sedge (*Cyperus flavescens*); a. Inflorescence, b. Close up of inflorescence and seed. Photos © Josef Hlasek.

Could the seeds have been brought to West Brook from another locality by waterfowl in the spring of 2019? Yes, it's possible, but in my opinion highly unlikely. First, there is a very sparse seed source on and to the north of Long Island. *Cyperus flavescens* is near the northeastern limit of its range on Long Island where it is very rare; the species is not known from upstate New York and in New England it is known only from Cape Cod. Yes, seeds could have been transported from a southern source by waterfowl. But

how many seeds of *C. flavescens* would likely be introduced to West Brook by waterfowl during just one season (spring of 2019)? And how many of those seeds would successfully germinate and grow into mature individuals? Additionally, if seeds arrived in the spring of 2019, the population would be

relatively small and restricted to a limited area in August 2019. However, during the August and September 2019 surveys, more than 100 individuals of *C. flavescens* were observed scattered throughout the West Brook marshland.

Pale, ghostly tree stumps border parts of West Brook as it meanders through the marshland and mud flats. The stumps rise knee high out of the saturated muck bordering the brook. For more than 100 years before the dam failed, the stumps stood underwater without decaying and today the wood is still hard as rock. The stumps, in my opinion, are the remains of a population of Atlantic white cedar reported from the vicinity of West Brook by John Torrey in 1843. Torrey reported an extensive population of *C. thyoides* from the Connetquot River watershed, including West Brook. The population was largely destroyed by human activities but a few, small colonies of live trees persist. One such colony is located along the border of the West Brook marshland, a few hundred feet from the stumps. What other Long Island tree grows in swamps and can remain underwater without decaying for more than 100 years? Ideally, a sample of wood will be collected from a stump and sent to an authority for identification.

FIELD TRIPS CONTINUED

ern Blvd (25A) for one block to Muttontown Lane. Turn left (south), the road ends at the Nature Center Parking Area.

May 22, 2021 (Saturday) 10:00 AM

Brentwood Campus the Sisters of St. Joseph, Suffolk County NY
Trip Leaders: Amanda Furcall, Bill Jacobs, and Lindsay Charlop
email furcall@csjbrentwood.org To contact Amanda the day of the trip call 631-320- 8240.

On the 212-acre Brentwood campus, the Sisters of St. Joseph endeavor to be a model of ecological sustainability by using solar energy and converting lawns into meadows, farmland and rain gardens. Join us for a tranquil walk through the Pitch Pine-Oak-Heath woodlands, a rare quality habitat in Western Suffolk County.

Directions: Meet at Thera Farm Stand, 1705 Brentwood Rd, NY 11717 at the corner of Brentwood Rd. and Commack Rd. Park in the farm stand gravel parking lot.

From the Southern State Parkway, take exit 43N, go north on Commack Rd, at the end make the right onto Brentwood Rd. and the entrance will be immediately on your right.

From the Expressway take exit 55 to Fulton St, follow it to the end and make the right onto Suffolk Ave. In one mile turn left onto Brentwood Rd, in less than a mile you'll see the large entrance gates on your left.

June 5, 2021 (Saturday) 9:00 AM

Forest Park, Queens County, NY
Trip Leader: Michael Feder
email mdfeder2001@yahoo.com

Designed by Frederick Olmsted in the 1890s, Forest Park is the third largest park in Queens. We will visit some oddball plant populations as we walk through the Northeast section of this park. The walk will last approximately 3 hours.

Directions will be provided upon registration.

SAVE THE DATE

Thursday, September 9, 2021, 11:00 AM

Montauk, Suffolk County, NY
Trip Leader: Vicki Bustamante
email vickibustamante@gmail.com

Safety Protocols for field trips:

- Register for the trip. Registration will be limited, so don't assume there is room for you unless the trip leader tells you. If you register and become unable to attend, please cancel so someone else can take your place.
- Wear a face covering for the duration of the trip.
- Try to "socially distance" yourself from other trip participants.

RICH KELLY DAY AT CAUMSETT

June 17-24, 2021

(date to be determined; a warm, sunny day)

12 Noon

**Caumsett State Historic Park,
Lloyd Neck, Suffolk County**

We will gather in memory of Rich Kelly and count butterflies.

If you are interested in attending this special event please email Sue Feustel (suefeustel@optonline.net) and you will receive more details.

For background info, see

- 1) the web page: caumsettprojects.org (it includes information/photos on the Baltimore Checkerspot population at Caumsett) and
- 2) Volume 30, p. 10 of the LIBS *Newsletter* (2020): "Rich Kelly and the Baltimore Checkerspot Success Story" by Sue and Ken Feustel.



Baltimore Checkerspot at Caumsett. Photo by Ken Feustel.

FIELD TRIPS

(Note: Due to Covid-19 protocols, registration is limited and required on all trips; please contact the Trip Leader for information and to pre-register)

April 24, 2021 (Saturday) 10:00 AM

Muttontown Preserve North, Nassau County, NY

"The Seven Ponds Woods"

Trip Leader: Al Lindberg

email: alindberg@optonline.net

At the center of Muttontown Preserve North, the Seven Ponds Woods are the last remnants of pro-glacial "Lake Muttontown" which was locked between the Harbor Hill Terminal Moraine and the retreating Harbor Hill ice sheet. Once part of the H.I. Hudson Estate, this area has been recognized as a significant wetlands since 1916. While exploring the woodlands, we

will view one of Muttontown Preserve's two persimmon (*Diospyros virginiana*) populations, and look for Hophornbeam (*Ostrya virginiana*), and whatever else we find along the way. We will meet at The Bill Paterson Nature Center. Dress for the weather, waterproof footwear may be useful. Hand lens, camera and binoculars are recommended. Bring a liquid and snack or sandwich, as desired.

Directions: The Bill Paterson Nature Center is located at the end of Muttontown Lane south of Northern Blvd. (Rte 25A) in East Norwich. From the Long Island Expressway take Exit 41 North (Rte 106) to East Norwich, make a left on North-
(continued inside on page 11)



UPCOMING PROGRAMS

Due to Covid-19 restrictions, monthly meetings at Muttontown Preserve are postponed until further notice.