Our 50th Issue!

Celebrating the History of New York's Plant Societies

New York has a rich botanical history and the state’s plant organizations have been instrumental in the gathering of information and dissemination of knowledge about our flora. We devote most of this issue to the history of how these important groups of plant enthusiasts began.

Origins of the New York Flora Association

By Richard Mitchell, State Botanist, Emeritus

In 1988, Richard Mitchell, the State Botanist, was approached by Norton Miller, who was his supervisor at the time and asked if he had an interest in starting an organization for New York field botanists. Dr. Miller even suggested a name: “New York Flora Association,” for such an organization. Later that year, Dr. Mitchell contacted Dr. Robert Zaremba and asked if he would like to co-chair such an organization. Zaremba agreed that this would be a good way to combine the efforts of private and public organizations to serve the field botanists of the State. Mitchell then held a meeting in Albany for all who were interested in the flora. It was heavily attended (over 150 people) and covered two main issues, which were the continuation of the flora project and organization of a group like NYFA where professional botanists could promote the study of native plants. The group was polled both verbally and by ballot about these issues, and very strong support was rallied for both projects, including an enthusiastic, spontaneous speech by Dr. Arthur Cronquist. In 1989, Mitchell and Zaremba founded the New York Flora Association as a not-for-profit subunit of the New York State Museum Institute. The two botanists founded NYFA under charter in 1990 and served as both co-chairmen and co-editors of the NYFA Newsletter for many years (from January 1990 to Oct 1995). From 1996 until 2002, at the time of his retirement, Mitchell served as editor and publisher of the quarterly publication whose editorship was then taken up by Stephen Young and Laura Lehtonen. Bob Zaremba served as coordinator of the field trips until Troy Weldy took over these duties after Bob moved to Massachusetts. Around the turn of the century, Troy Weldy and Robert Ingalls took a strong interest in the development of NYFA. They have developed a widely-used internet website and are accomplishing a massive re-edit of the state plant distribution atlas. During its 14 years, NYFA has maintained an enthusiastic membership of over 300 members, conducted a large number of successful field trips and given a voice to field botanists interested in New York.

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No one knows exactly when the Torrey Botanical Society (then known as the Torrey Botanical Club) began. The origins were so gradual that it is hard to tell. Some say that it began when John Torrey began a series of informal seminars in his home in the 1840s that gradually developed into a club.

George Thurber said in his presidential address vol. no 8 August 1873:26-39 that he thought that Dr. T. F. Allen was the one who suggested meeting at stated times. "Our beginning was such a gradual accretion that those of us who were among the original members can hardly tell how it came to be called even a 'Club.'" C. C. Parry wrote that he had attended some early meetings of the TBC and said, "My recollections are that the early meetings were quite informal and of a social character."

In 1858 the idea of field trips occurred to John Torrey. Gathering local flora, Dr. T. F. Allen discovered a locality for *Clematis ochroleuca* and brought it in to John Torrey to look at. From that time forward, the group started field trips. Among the members of the group were Dr. T. F. Allen, Mr. W. H. Leggett, Mr. F. J. Bumstead, Mr. James Hogg, Dr. Hyatt, and D. C. Eaton (later a professor of botany at Yale).

The excursions of 1858 went as far as the Poconos of Pennsylvania, the far reaches of Long Island, and the Pine Barrens in southern New Jersey. They said that the lists of plants noted during these field days were held in the Club's minutes "for use toward a permanent catalogue of plants."

Torrey had transferred his herbarium to Columbia College and the College in turn made him the curator of the collection. Columbia College also provided a house for Torrey. The budding TBC met at the Herbarium of Columbia College. The land was on the site of David Hosack's Elgin Botanical Garden.

The official date accepted by the membership is 1867. This is amazing considering that in Philadelphia, the traditional home of American botanical studies, Dr. J. Bernard Brinton did not found the Philadelphia Botanical Club until almost 1893 (actually established December 1891).

John H. Redfield in a letter to Arthur Hollick (TBC archives, January 8, 1886) recalled the early meetings. Calling on a friend, Robert H. Browne, who invited Redfield to a TBC meeting, Redfield remembered: "I found the doctor -- lovely and cordial as ever -- surrounded by a circle of 8 or 10, mostly young men, who without the slightest formality, were quietly chatting with him about various plants, just as school boys would flock around a teacher." He also mentioned that it became the custom that Dr. Torrey's family would bring in coffee and biscuits at 10 p.m. He also added about the founding of the group: "I doubt whether it came by any election -- but rather by elective affinity."

The exhibition and discussion of new or unusual species of plants as well as showing recently published books formed a principal part of the "social and cheerful meetings."

Early in the informal existence of the Club it was proposed to make a catalogue of the plants of New York and its vicinity. Back in 1817 Dr. Torrey presented to the New York Lyceum of Natural History "A Catalogue of the Plants growing spontaneously within 30 miles of the city of New York" and it was thought that a catalogue embracing the same territory would be useful to botanists, and show interesting changes in our local flora, in the obliteration of some species, and the introduction of others.

Working on the catalogue gave the group a common purpose and the association assumed a stability that it did not before possess and increased in numbers.

On December 20, 1867 TBC members were involved in the Torrey semi-centennial celebration at the anniversary of 50 years since Torrey in 1817 had presented his findings about local vegetation to the New York Lyceum. This semi-centennial of December 20th, 1867, still further united the members, and the present organization was effected (Dec 1870 Bulletin of the TBC informally called The Club). They met at the Astor House on one of the most furious of snowstorm days. The club then had no officers. George Thurber presided at the table and made an address. It was the first public demonstration on the part of the Club, and one that, as the proceedings of the evening were published in the American Naturalist, first made the existence of the Club generally known.

As materials for the new catalogue accumulated and new helpers came into the field, it became necessary to have a medium through which the colleagues could communicate and it was proposed to establish a monthly Bulletin. The first number of the Bulletin appeared in January 1870. Primarily devoted to matters relating to the catalogue, it has also given many botanical items of general interest. They started out with a budding journal
At about the time the Bulletin was proposed, it was thought best the Club should adopt a distinctive name; that of the Torrey Botanical Club seemed the most fitting (Presidential address). They came out with a charter on April 21, 1871 for what was called the New York Botanical Club. In 1872 they changed the name to Torrey Botanical Club.

In 1870 the group was simply known as "the Club." In that year the Club first published a list of its officers with the commencement of the publication of the monthly Bulletin of the Club (first published in January of 1870). Dr. Torrey was the first president (then simply known as chairman). His herbarium curator P.V. LeRoy was named secretary. The group membership listed thirty members (actually 29 since one member was deceased by time of publication).

Just as the organization of TBC was being perfected, Torrey died. He had presided over the Torrey meeting on January 29, 1873. But the next day he was taken with pleurisy. On March 10, 1873 Torrey died in his sleep in his home.

With the death of John Torrey, Dr. George Thurber became the president of TBC. Thurber was an authority on grasses and erstwhile associate on the Mexican Boundary Survey. He presided in this office for seven years.

The final organization of the Club was on April 29, 1873.

In 1875 on a trip to Apalachicola, Florida, Dr. and Mrs. Asa Gray, guided by a local young man found a stand of Torreya. He took a branch large enough to make an official baton for the presidency of the Torrey Botanical

The Long Island Botanical Society
by Eric Lamont, President

From the late 1800s to the 1920s field botany on Long Island flourished. Thousands of collections and observations were made and published by well-known botanists such as George Hulst, William Leggett, William Ferguson and Roy Latham. Field botany on Long Island began to decline in the mid-1920s, and from 1930 to 1970 only sporadic collections were made. Roy Latham continued to collect plants of "special interest," but his major collecting years were past. For a period of about 50 years (1925 to 1975), few plants were collected throughout the Island. But then, during the mid-1970s, several botanists began to independently relocate historical plant populations and once again document the flora of Long Island. For the most part there was little communication among this new generation of botanists. By the mid-1980s a number of botanists had migrated to Long Island and a renewed interest in field botany was revitalized. Recognizing the need to meet and share interests and concerns Robert Zaremba and Margaret Conover organized a group of about 24 botanists and naturalists who would formally establish the Long Island Botanical Society in 1986. The Society was officially incorporated in 1989.

Initially, the small group was held together by a common interest in field botany. Local field trips and monthly programs were usually presented by members of the Society. It soon became apparent however, that the group desired to be more than friends sharing a common interest; an urgent need to contribute to the botany of Long Island was expressed. The Society established a local flora committee dedicated to the production of a new Flora of Long Island. The committee first prepared a checklist of Long Island vascular plants, past and present. The list consisted of approximately 1800 species. Monthly flora meetings began in 1990 and the current status of each plant species was discussed and recorded on data sheets and distribution maps. Just this past May (2003) the committee finished compiling data on all of the Island’s plant species, and has produced a draft atlas of the flora.

The Society continues to be field-oriented. About 6 to 8 local field trips are sponsored by the Society each year. Plant identification workshops are occasionally presented and the indoor study of plants is reinforced with a field trip. Monthly meetings are commonly centered around current research projects on Long Island botany. The education committee promotes the Society's activities to the general public. The Society's NEWSLETTER has attracted many members during the past few years. It attempts to reach a wide audience of readers. Some articles are technical, but also included are interesting notes on a local flora, conservation, announcements of new publications, Society news, and upcoming events.

What has Long Island’s botanical community learned in the past 25 years? For one thing, the island still supports a rich diversity of plants. It has the greatest concentration of rare plants in New York and large areas of high-quality habitat still exist that support many diverse plant communities. On the other hand, Long Island has irrevocably lost some of its botanical heritage. The goal of the Long Island Botanical Society is to help preserve what remains of this heritage through the promotion of a greater understanding of the plants that grow wild on Long Island.
It was almost 30 years ago that the Botanical Society was just an idea in the minds of eight concerned amateur naturalists. They had come together that spring of 1983 as a class on "Flowering Plant Identification," given at the Buffalo Museum of Science by Richard Zander, curator of botany. Several field trips of this class gave those attending an exchange of botanical knowledge that groups like this can provide. Five people from the group, Jim Battaglia, Shaun Hardy, Colette Sangster, Patricia Eckel, and Richard Zander, questioned, "Was there any club or organization of amateur botanists in western New York in which we could participate?" Zander stated that there had been in the twenties and thirties a rather active Botanical Section of the Buffalo Society of Natural Sciences that seemed to peter out after World War II. The original question could not be answered.

It was another month before some of the original five got together and finally decided to begin to put thoughts down on paper. An organized group was necessary! Steps were discussed, characteristics of such a group were defined, and names were debated. Buffalo Botanical Society was decided upon because the name carried both geographic information and proper connotation on study. The Statement of Purpose set forth at that time remains unchanged today: to promote the study, appreciation and conservation of plant life in western New York and adjacent Canada, with emphasis on field botany. In addition, the activities of the Buffalo Botanical Society will include field trips, study groups, publications, and scientific study in conjunction with the Clinton Herbarium.

The date of October 18, 1983 was set for the first public meeting. An agenda was worked on and an interest questionnaire was developed. Temporary officers were established: Jim Battaglia as president, Richard Zander as newsletter editor/study group chairman, Pat Eckel as treasurer/publicity and art chairman, and Shaun Hardy as vice president/field trip chairman. Meetings of the four officers continued weekly as more organizational questions arose and preliminary budgets were needed.

October 18, 1983 finally arrived, and with it an enthusiastic crowd of 101 were in attendance at the first meeting of the newly formed Buffalo Botanical Society. Amateur and professional botanists from across the Niagara Frontier crowded into the museum rooms. Jim Battaglia, with the other temporary officers, outlined the groundwork done over the past five months and invited those attending to share their goals. Thirty-five charter members enrolled that evening and in a month’s time there were nearly 70 members. The renaissance of amateur botany in Buffalo could begin!

During the following year the Society continued to survive and make noteworthy progress. Dr. V. Ray Frederick ably took the leadership after Jim Battaglia’s term ended. Under his direction the Society acquired its own constitution and bylaws, moved to change its name to the "Niagara Frontier Botanical Society," organized its first election, and adopted a logo. The newsletter, under the professional editorship of Richard Zander, is the single most mentioned object of praise.

The logo, seen on the cover of each edition of the newsletter, was chosen by the membership from a field of several excellent designs. It was created by Shaun Hardy and features the corn lily, *Clintonia borealis*. Late in 1985 the Niagara Frontier Botanical Society newsletter was given a new name, *Clintonia*, in honor of the founder of the Clinton Herbarium. We owe much to George W. Clinton. Not only was he the first president of the Buffalo Society of Natural Sciences but also an avid botanist. He remained as president of the Society for 20 successive years before leaving the Niagara Frontier in 1882 for service to the State of New York to edit the Clinton Papers. Richard Zander remained as editor of the newsletter until he turned over those duties to Irene Wingerter in 1991. In keeping up its professional status *Clintonia* will continue to recognize and published submitted articles of botanical nature, especially those that contribute to understanding the local flora and ecology.

Years of dedicated officers of the Society, busy committee members, monthly meetings with excellent speakers and workshops, steady membership, local field trips within the Niagara Frontier area and those farther afield, and the annual dinner all demonstrate how successful the Niagara Frontier Botanical Society has become. The aims of its beginnings are being carried out and will continue to be achieved in its future successes.

www.acsu.buffalo.edu/~insrisg/botany/
The Olive Natural Heritage Society, Inc. [ONHS] was founded in March of 1992 for the purpose of inventorying the plants, animals, and habitats of the Town of Olive. The project was completed in 1994 with the publication of *The Ashokan Catskills: A Natural History* (Purple Mountain Press, Fleischmanns, NY). Since that time the ONHS has expanded its area of interest to include environmental research in the five county Catskill region and beyond. We are presently engaged in several long-term studies:

**CATSKILL FLORA PROJECT**
- Document the vascular flora of the Catskills.
- Develop a geo-referenced relational database of modern and historical records of Catskill plants.
- Develop a geographical information system with appropriate data layers to analyze the geographic distribution of plant species and communities.
- Publish a *Catskill Flora*.
- Monitor invasive plants at the interface between strongly human impacted sites and protected forest in the Catskills in cooperation with The Nature Conservancy – Catskill Office.

We maintain a herbarium of voucher specimens, many determined by recognized authorities. We are interested in exchange.

**HEALTH OF THE HEMLOCK FOREST**
- Hemlock Woolly Adelgid – Map the spread of this introduced insect pest in the Catskills
- Ectomycorrhizal fungi – Monitor species composition and abundance of macrofungi associated with hemlock.

**NORTHERN MONKSHOOD [FEDERALLY LISTED]**
- Monitor Catskill populations
- Nursery propagation
- Reintroduction into sites of local extirpation or severely depleted populations.

**ABRUPT CLIMATE CHANGE**
- Ecology of the assemblage of plants and animals typical of exposed high altitude ridges in the Catskills. We hypothesize that abrupt climate change may be observed first in harsh environments where plants and animals are stressed. We have called this “The Search for Criticality”.

The ONHS also maintains an archive of publications and research materials relating to the Catskills natural environment. The ONHS sponsored the **Catskill Institute for the Environment**, a consortium of regional colleges and institutions conducting environmental studies in the Catskills. The ONHS has initiated a project to produce a *List of the Insects of New York* sponsored by the NYS Biodiversity Research Institute. The ONHS is also studying the metapopulation dynamics of a suite of Carabid [Ground] beetles living in the riparian zone of headwater streams in the Catskills.
The Finger Lakes Native Plant Society
By David Werier, Treasurer and Newsletter Editor

The Finger Lakes Native Plant Society (FLNPS), which is based out of the Ithaca NY area, was founded in 1997. The mission of the organization is to provide its members with an enjoyable means of learning about the native plant heritage of the area; to provide the public with information about this heritage; to identify, map, and monitor the remaining good native plant sites in the area; to work for the preservation of these sites; and to encourage the use of nursery propagated natives in private and public landscapes.

FLNPS began with an organizational meeting on September 30, 1997. The initial name of the organization was the Finger Lakes Native Plant Society of Ithaca. Connie Strang, the Horticulture Program Manager of Cornell Cooperative Extension, called the meeting with the help of Elizabeth Mulholland of the Six Mile Creek Advisory Committee. The initial organizational meeting called together local botanists and horticulturists. Other people involved in starting the organization included Krissy Faust, Alice Grow, Mark Inglis, Rosemarie Parker, David Werier, and Robert Wesley.

Over the past 6 years FLNPS has presented hundreds of field trips and field-oriented educational programs focusing on teaching about the local flora and natural history. The first program, which was led by Robert Wesley, occurred on February 1, 1998 and focused on woody plant identification. FLNPS has also offered dozens of indoor evening presentations focusing on everything from plant conservation to native plant propagation to butterflies and goldenrods. Richard Uva presented the first indoor program. It occurred in November of 1997 and focused on the weeds of Ithaca. FLNPS also produces a newsletter four times a year called SOLIDAGO. The newsletter is named after the genus for goldenrods, which is a group of plants that decorate the Finger Lakes region with astonishing beauty. The first newsletter was published in October of 2000.

Various other activities FLNPS has taken on include distributing a list of invasive plants of Tompkins County (prepared by Robert Wesley); publishing a native plant "source" list for nursery propagated native plants; attending various events to educate the public about the local flora; collecting and propagating locally collected seeds; and hosting an annual native plant seed exchange.

For information about FLNPS please contact Rosemarie Parker (rparker@bigbro.biophys.cornell.edu), Krissy Faust (kbf3@cornell.edu), or David Werier (nakita@lightlink.com).
The Native Plant Collection of the Landis Arboretum
By Ed Miller, Arboretum Volunteer

The George Landis Arboretum is located about 20 miles southwest of Schenectady, just off NY 20, in the town of Esperance. Its horticultural collections and gardens are well known. Their Lilac, Crabapple and Oak collections are justifiably famous. Recently, in support of the Arboretum’s educational objectives, a native plant initiative has begun, with the objective of having most of New York State’s native woody plants growing in family groups along a half mile of trail. As of June 2003, 137 species have been planted, labeled and we hope protected against browsing. Two dozen additional species are either on order or are in holding beds waiting planting. Sufficient specimens of each of the dioecious species will be planted so that hopefully each sex will be represented when the plants mature. Family groups of Anacardiaceae, Cornaceae, Fagaceae, Caprifoliaceae, Oleaceae, Betulaceae, Juglandaceae, Rosaceae, Salicaceae, Aceraceae, Pinaceae, and Ulmaceae are arranged in that order. Not for taxonomic reasons but to help match local soil, sun and water conditions to the plants requirements. In addition three locations were set aside for family groups that have few species or that have very diverse site requirements. One is a wet, another dry, and a third is an understory location. Some species have specimens with their close relatives and also in a habitat where they would more naturally grow. For instance *Rosa palustris* is planted with other native roses but is also planted in the wet area. A feature of the Landis native plant collection is a bog garden where we have planted a dozen woody bog plants and another dozen grasses and forbs. The rarest plant of this garden is *Rhododendron canadensis*, a gift from a friend in Vermont. It survived the winter and bloomed liberally this spring. The success of this garden, in an area lacking natural bogs, is attributed to its unique design. A log raft covered with peat moss floats in a 300 gallon stock tank. The tank was filled in the spring of 2002 with well water. All subsequent additions came as rain or snow. During last summer’s dry spell the raft sank more than six inches below the rim but the plants were happy as they maintained their same position relative to the water level. Early on the bog was not sufficiently acid but the current health of the black spruce, the rhodora, and other bog plants, indicate that bog conditions have now been established. Come and visit our collection. Road signs on Route 20 at Esperance, will direct you to the Arboretum. At the entrance kiosk, a loan copy of a plant locater list is available. Right now the plants are small, perhaps too small for their intended purpose of displaying plants in direct comparison with their close relatives. But plants grow fast and not all of them are too small. Most of our native woody plants do not have showy flowers so there is no rush to get to see them in the early spring. Late summer or fall is a good time for your visit. And in a few years a winter visit to compare bud shapes and leaf scars as you walk the native plant trail on snowshoes should make for a great day. The Landis Arboretum phone number is 518-875-6935. To see a complete list of the plants presently in their collection visit their website at:

www.landisarboretum.org
This book represents the second in Dr. Cox’s *An Ecology for Eastern North America Series*. It serves as an introductory guide to the major seashore communities in the eastern United States.

The book is divided into nine chapters. In Chapter One (The Ocean and the Seashore), such weighty topics as the origin of the oceans and the origin of life are addressed. In this chapter, the oceans as they are today and the seashore community are also discussed. In Chapter Two (Types of Plants), an overview of the major taxonomic groups of plants (ferns, gymnosperms, angiosperms), as well as organisms that were once classified as plants (algae, fungi) is provided. Various adaptations of plants are addressed in Chapter Four (Adaptations for Survival), including modes of reproductions, pollination, and seed dispersal. In Chapters Four (Sand Dunes and Beaches) and Five (Salt Marshes) the main seashore communities are discussed, with an emphasis on the common plants of these communities, such as beach grass (*Ammophila breviligulata*), sea oats (*Uniola paniculata*), seaside spurge (*Euphorbia polygonifolia*), salt meadow grass (*Spartina patens*), samphire (*Salicornia europaea*), and seaside goldenrod (*Solidago sempervirens*). Flowering phenology is the topic of Chapter Six (Throughout the Year) and the various plants that can be found blooming for each month (April-August) in the various habitats are identified. In Chapter Seven (Plants of Special Interest), poisonous, allergenic, medicinal, and edible plants are discussed. In Chapters Eight (Naming, Collecting, and Preserving Plants) and Nine (Activities and Investigations), an overview on plant taxonomy and tutorials on how to collect plants as well as various activities (e.g., photography) that can be conducted are discussed.

Throughout the book are excellent line drawings of many of the plants that are discussed. There is also a glossary of 93 terms and a bibliography with 95 entries.

This book is not a technical manual, such as M. L. Fernald’s *Gray’s Manual of Botany*, nor is it a nontechnical field guide, such as the Audubon and Peterson field guide series. Rather than a taxonomic group, this guide focuses on a physiographic region – the seashore of the eastern United States.

Such an approach is probably the simplest way to get a non-specialist to learn all the common plants of a region. For example, a non-specialist who wants to identify a grass on the beach will most likely not be able to key to it using a technical manual, since he will get lost in all the technical discussion of lemmas, glumes, paleas, and ligules. The field guides probably also will not be useful since grasses usually are not covered. However, using Cox’s guide the non-specialist can readily determine based on the information and illustrations whether the grass he is looking at is beach grass (*Ammophila breviligulata*) or sea-oats (*Uniola paniculata*), two common large grasses that are found on the dunes of the eastern U.S. This approach is not foolproof, since other grasses found on the dunes (e.g., *Panicum amarulum, P. virgatum*) are not included in the book.

I question the layout of the book in a number of places. I believe the book would read better if Chapter Two (Types of Plants) preceded Chapter One (The Ocean and the Seashore), since many types of plants (e.g., algae, eelgrass) are discussed in the first chapter. Also in Chapter One, the discussion on mangrove swamps would perhaps better be incorporated into another chapter. Perhaps Chapter Five (Salt Marshes) could have been “Salt Marshes and Mangrove Swamps” or the mangroves could have been given their own chapter. The phenology information in Chapter Six (Throughout the Year) could have been included as a table in an Appendix and the information on the various plants discussed could have been included elsewhere, probably in Chapters Four (Sand Dunes and Beaches) or Five. The information provided on the Pacific seashore communities could have been safely omitted, since this is a book that focuses on the eastern U.S.

Being a taxonomist, it is only natural that I quibble about the section on taxonomy. In Chapter Two (Types of Plants) the author addresses the following major groups of plants: Algae, Fungi, Lichens, Ferns, Gymnosperms, and Flowering Plants. The author does a good job of explaining that blue-green algae are now classed with bacteria in the kingdom Monera. However, I don’t like the following statement that appears on p. 28: “Newer systems of classification reflect these similarities by classifying bacteria and blue-green algae as cyanobacteria….” Only the blue-green algae (and not bacteria in general) are regarded as cyanobacteria. There is no discussion of the bryophytes (mosses, liverworts, and hornworts). Like the fungi, lichens and ferns, they are not common components of the seashore communities but they do occur (e.g., the moss genus *Fontinalis* occurs in brackish waters).

I would have also included a discussion of the adder’s tongue fern (*Ophioglossum*), the only fern genus that I associate with dune communities. Readers also might have enjoyed reading about the federally endangered sea-beach amaranth (*Amaranthus pumilus*) that occurs on the beaches from Massachusetts to South Carolina.

I am pleased that the author included a section on collecting plants. Many environmental students today rarely make collections, even though this is one of the best ways to learn plants. Many seem to fear that some ecological calamity will result should they pick a sprig of saltwort (*Salicornia*) or a blade of *Spartina* grass. They rightly should fear running afoul of the law, and the author does a good job of instructing readers that they must always secure permission before collecting.

This book will make a fine introductory guide for those who want a basic overview of the plant communities associated with the seashore. The background information on the development of the oceans, plant taxonomy and plant ecology will be most useful for students.
Doodletown Ciphers: Botanical Musings on a Ghost Town
by Richard S. Mitchell, State Botanist, Emeritus

Doodletown, or Montville, as it was later called, is now part of Bear Mountain State Park, having ceased to be a place of human dwelling in 1965. It is still a favorite visit for me, since two and a half centuries of habitation left a unique human and botanical legacy there. Doodletown Creek crosses the historic 1777 Trail where fighters in the American Revolution, led by their famous fife and drum corps, made a march in which the citizen army fought and delayed British forces intended to participate in the battle of Saratoga to the north. Your can still feel the energy of something momentous in the valley air and in the rush of the stream down toward the Hudson River’s lazy Iona Marshes. Upslope from the trail, I once found a crude pit fronted by a small stone wall with what looked like a gun slot, but it may have been wishful-thinking; it probably wasn’t a revolutionary turret.

No buildings stand at Doodletown, but the foundations are many and obvious. For instance, an exact outline of the former school is represented by a stand of sycamores, whose fruits apparently found the rocky, moisture-retaining substrate of its basement a fine place to germinate. Old landscape plantings and gardens abound in the community, especially near house-places on the two main routes leading to town. A memorable location, some distance up the south trail, is the site we call “Mrs. Robinson’s Garden.” The steps of the house remain, with nearby large, Spanish chestnuts (Castanea sativa Mill.) seeding out into adjacent open woodlands. Also spreading from cultivation into clearings, ditches and woodlands are: blackberry lily [Belamcanda chinensis (L.) L.]; Deutzia (Deutzia scabra Thunb.); European mock-orange (Philadelphus coronarius L); orange daylily [Hemerocallis fulva (L.) L.]; and, there is a most interesting shrub, whose warty, okra-like fruits no one could identify when I first collected them. Norton Miller was finally able to solve the mystery for us, since he had seen the rare plant in cultivation at Harvard. It is fertile forsythia (Forsythia viridissima Lindl.), which none of us had seen in fruit, since only sterile clones have been spread by gardeners and the horticultural industry for more than a century. I first sat alone, on that 95 degree day in June, where a family named June laid their loved ones to rest as early as 1762. Now a forested tangle, the site could still be easily imagined as a peaceful, sunny, southern slope, where virgin forest had recently been cut – providing a fine view of Dunderburg Mountain off to the southeast, but with the steep rocky descent just below richly forested by giant American chestnuts and oaks. A short walk upslope brought me to the remnants of an abandoned tree nursery, where I not only saw expected, exotic gymno-

sperms but was surprised by the medicinal herb, purple foxglove (Digitalis purpurea L.), with some plants up to eight feet tall, bearing spikes of spectacular purple and white flowers as long as your thumb. Nearby, I was further shocked to find a good sized tree (perhaps 30 ft tall) of American holly (Ilex opaca Soland. ex Ait.). These were such monster herbs and holiday decorations for me to have missed them when I was within a hundred yards of the site several times before. It showed me, once again, that botanical exploration of even the smallest area should never be considered complete.

On Doodletown Creek, I remembered encountering an almost unbelievable example of the encroachment of alien fauna back in 1993. “Wormsoil,” we called it – a slimy, creekbank substrate on which you couldn’t stand up, due to the high content of earthworms. I remembered our antics, as we tried to stay vertical on what amounted to a jelly surface on a 40 degree slope. Now, as the day progressed, I began to notice that the flora of Doodletown also had an inordinately Eurasian flavor, due to the aggressive invasion of weedy, mostly Asiatic plants. Chinese wisteria [Wisteria sinensis (Sims) Sweet] and Oriental bitter-sweet (Celastrus orbiculata Thunb.) had taken over forest borders at many locations, such that there was a significant dieback in the forest canopy and understory. Tree-of-heaven [Ailanthus altissima (Mill.) Swingle], winged spindle-tree [Euonymus alata (Thunb.) Sieb.]; Japanese knotweed (Polygonum cuspidatum Sieb. & Zucc.), multiflora rose (Rosa multiflora Thunb. ex Murr.) and Japanese barberry (Berberis thunbergii DC.) were ubiquitous. There were a large number of subshrubs, like lespedeza species, and even an annual herb, Japanese stilt grass [Microstegium vimineum (Trin.) Camus] occurring in great abundance.

The end of my solitary day found me resting under a healthy hemlock tree full of cones, overlooking a small, artificial lake that now graces greater metropolitan Doodletown. The young hemlock was one of the very few healthy trees of the species that I had seen all day – all others being variously grayed and eaten away by fungal diseases and other attackers – particularly insects known as woolly adelgids. In the year 2003, I sat and wondered if a man with a name like “Joshua June” had once rested at that spot, perhaps under a chestnut tree in 1903, unaware that his descendants would never have the privilege of doing the same. I wondered, too, who might sit there in 2103, and whether they would recognize a hemlock if they saw one.
Some lichens from “The Ledges” in Morrisville (Madison County) by Scott LaGrec, Harvard Univ. Herbaria

In August, 2002, I traveled home to Syracuse and decided to explore a place I had once noticed on my “New York State Atlas and Gazetteer”, and had always been curious about: The Ledges. This siltstone ridge is located on a steep incline in a dry deciduous forest just outside Morrisville (Madison County). It extends northward along the east side of Swamp Road, above the Morrisville Swamp.

Since the greater Syracuse area is famous for its limestone, I was expecting that these outcrops were calcareous. However, a spot-test with 10% HCl produced a negative reaction. Dr. Carl Francis (Harvard Museum of Natural History) identified the rocks as siltstone, in which numerous fossil invertebrates are embedded.

I collected the following lichens at this site:

Acarospora fuscata (Schrader) Arnold—LaGrec 904 (FH)  
Amandinea punctata (Hoffm.) Coppins—LaGrec 906 (FH)  
Caloplaca sp.—LaGrec 907 (SALG)  
Diplotomma alboatrum (Hoffm.) Flotow—LaGrec 900 (FH, SALG)  
Peltigera elisabethae Gyelnik—LaGrec 910 (FH, SALG)  
Peltigera evansiana Gyelnik—LaGrec 909 (FH)  
Phaeophyscia adiastola (Essl.) Essl.—LaGrec 899 (FH)  
Phlyctis cf. argena (Spreng.) Flotow—LaGrec 901 (FH, NY, SALG)  
Scoliciosporum umbrinum (Ach.) Arnold—LaGrec 905 (FH)  
Xanthoparmelia plittii (Gyelnik) Hale—LaGrec 902 (FH, SALG)

The acronym indicates the herbarium in which these specimens are deposited ( “SALG” for my personal herbarium).

Most of these lichens are quite common and widespread in the northeast. At this particular site, Phaeophyscia adiastola is remarkably abundant, growing on mosses over the rocks.

One of the more interesting finds was Diplotomma alboatrum. This was the first time I had encountered this lichen. A quick perusal of the Farlow Herbarium at Harvard suggests that this species prefers tree bark; however, it is profuse on the rocks at The Ledges. Another noteworthy collection is the Phlyctis, which was identified by Dick Harris at NYBG. Dick told me that “It is close to P. argena (Spreng.) Flotow. The saxicolous [form] is always sterile. I am tentatively considering it as an undescribed species. It is rather weedy on damp acid/neutral rock faces in [the] eastern U.S.”

Florida Report with Many Thanks to NYFA by Richard Mitchell

Here I am enduring another perfect day in paradise, but thinking nostalgic thoughts about New York botany again. First, I want to send my profound thanks, especially to Troy Wedly and Steve Young, for my send-off at the time of my retirement in December. The luncheon was great, and yes, I am using the two fine volumes on Florida flora that NYFA gave me. Please accept my appreciation, all of you, for the many thoughtful letters and comments.

The books have refreshed my memory on a few things that I’d like to share with you. The Bidens with white rays that sends me scurrying to the herbicide counter is B. pilosa L., called Spanish-needles; the saucer-sized leaves that dry crisp and rattle around on my front porch at night are seagrape Cocoloba uvifera (L.) L. (but we already knew that), and the Dioidia teres Walt. that I got so excited about finding in Sterling Forest (Orange County, NY) is a miserable pest in my lawn.

Each morning at 5:30, I rise and walk/jog 3.2 miles on the beach, which is only a block away. Indian Rocks Beach is very wide, and a full 200 feet of the sand nearest the sea wall is a jungle of sea oats Uniola paniculata L. This beautiful head-high grass has been propagated in great quantity by one of our city council member (with some help) for 30 miles up and down the shore. Among its giant clumps grow the bayhops or beach morning glory: Ipomoea pes-caprae (L.) R.Br. and dune or beach sunflower, Helianthus debilis Nutt. Closer to the sea wall are red mangrove and Iva.

Suddenly, in early June, I was sick of “beach” flowers and felt the real need to see some beech bark. I drove up to the Hudson Highlands and spent a wonderful 20 days straight botanizing with Spider Barbour, David Werier, Jack Foch and even Ken Dean. Staying at a cabin on Tiorati Lake, I got into the field nearly every day (forget the three in which it was 38-50 degrees with torrential rain). I saw two new sites where more serpentary (Aristolochia serpentaria) had been found, along with rare sedges, and I climbed Schunnemunk alone one day. It was glorious, and brought back a decade of good memories. Among other things, I found black spruce at Schunnemunk, Digitalis and Ilex opaca at Bear Mountain Park where I thought we had exhausted all possibilities. I returned about the 20th of August and saw many of you on the excellent Sterling Forest NYFA field trip September 6. Thanks to all and have a happy fall. Just remember: retirement is hard. Ricardo de la Playa
Coming in December . . .

2003 Field Trip Summaries

Adirondack Bryophyte Workshop  Jorelamon Woods
Spring Pond Bog  Gadway Preserve  Hudson Highlands