



Long Island Botanical Society

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Searching for Long Island's Wild Orchids Tom Nelson

I was born in Logan Utah and was lucky enough to have parents who nurtured my interest in nature and the out of doors from an early age. National Forest land was within easy walking distance of our home, and my friends and I spent many pleasurable hours in the foothills and mountains of the Bear River Range, forging a deep bond with the natural world that has lasted into adulthood.

As young teenagers, my friends and I managed to somehow find the Intermountain Herbarium at Utah State and make the acquaintance of Professor Arthur Holmgren (the curator) and Ms. Berniece Andersen (the assistant curator). To say that they mentored me would be an understatement; Art took me along on many field trips with his classes, and they both gave freely of their time—my friends and I would often wander in unannounced after school and ‘hang out’ in the herbarium—not your typical teenagers.

At this point the outcome of the story seems easy to guess; the reader is certain that after being awarded advanced degrees in botany, I am now comfortably ensconced at a university or botanical garden teaching or doing research. It was not to be. My parents are both musicians and fostered a love of music in all their children. Even though I initially resisted—I much preferred catching snakes as a youth—the music bug bit me at age fifteen when I decided to learn to play jazz piano. Fast-forward 33 years and I can be found living in the wooded section (Inwood) of far northern Manhattan—as close to the edge of the city as it is possible to be without actually leaving it—with my wife Jackie and daughters Johanna (age 9) and Christina (age 5). After receiving advanced degrees in music performance and composition, my career as a free-lance musician is flourishing.

I never lost my love for plants through the years and as I have traveled to different parts of the country and world I have always been excited to see what new species I would find. Orchidaceae has always been of special interest, and in

1999 while at the New York Botanical Garden Bookstore I came across a very intriguing book: *Wild Orchids of the Northeastern United States* (1st edition) by Paul Martin Brown and Stan N. Folsom. Up to that point I had met with only limited success in finding wild orchid populations, but it is a hard go without specific site information. However, everything changed in early 2007 when I actually met Mr. Brown (who is also the founding editor of the *North American Native Orchid Journal*) and became a full-fledged orchidophile. Paul helped us plan a very successful family trip to Newfoundland, where we found 30 species of orchids, and he sent us to several other breathtaking orchid sites in Vermont and upstate New York.

An orchid-hunting foray to the eastern end of Long Island was Paul's suggestion for early August of 2007. Following is an account of the adventures that resulted from that suggestion.



Orchid hunting can be a family affair. Here, daughter Johanna, age 9, poses with pink lady's-slipper (*Cypripedium acaule*).

Photo by Tom Nelson

8/4/07: After visiting two amazing sites for orange fringed orchis (*Platanthera ciliaris*) in coastal Connecticut, we took the ferry to the North Fork and headed to Greenport, where our adventures would continue in the morning. Our goal was to locate the elusive crane-fly orchis (*Tipularia discolor*) at its only current location on Long Island.

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Long Island Botanical Society

Founded: 1986
Incorporated: 1989

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

Visit the Society's Web site
www.libotanical.org

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In Memoriam

LIBS members mourn the untimely passing of our friend and colleague Steve Clemants on November 2, 2008. Steve's many contributions to LIBS and to Long Island botany are remembered here.

Eric Lamont writes, "The mid-1980s was an exciting time for Long Island botanists, largely due to an organized resurgence of field botany spearheaded by the newly formed New York Natural Heritage Program (NYNHP) headquartered in Albany. Steve Clemants was hired by NYNHP in 1985 as the state's first Heritage Botanist. During the following three years, Steve spent countless hours in major herbaria of the Northeast tediously recording label data from rare plant collections; although his responsibilities included the entire Empire State, his major focus was on the rare plants of Long Island. He then fed this information to field botanists who had the fun job of relocating the historical populations of New York's rarest plants. Steve largely worked behind the scenes and often was not recognized or credited with the significant contributions he was providing."

In 1989, Steve accepted a position as a research taxonomist at Brooklyn Botanic Garden, where he later served as Director of Science; Vice President of Science, Publications, and Library; and Senior Research Scientist. Eric recalls that shortly after Steve and his wife Grace moved to Long Island, he "began attending meetings of the Long Island Botanical Society and it wasn't long before he became very involved in the Society.



"From 1992 to 1995 Steve served as the first official editor of the LIBS Newsletter which at that time came out bi-monthly. From 1994 to 1995 Steve served as Vice President of LIBS and during those years he established his reputation as an engaging speaker.

(continued next page)

(In Memoriam, continued)

During “Member’s Night” meetings, Steve would often “show-and-tell” weird fruits from around the world or exhibit rare plant and seaweed collections or books from 100 years ago.

“From 1996 to 1997 Steve co-chaired the Program Committee, and from 1996 until the time of his death he chaired the Flora Committee. His contributions to the creation and printing of the “*Draft Atlas of the Vascular Plants of Long Island, New York*” in 2005 were significant. For 10 years, Steve would travel monthly from BBG to Planting Fields Arboretum to work with a small dedicated group of field botanists late into the night. Steve would enter data onto his laptop computer (a new phenomenon in the early 1990s) from sources that included the BBG, PFA, and C.W. Post herbaria as well as personal collections and observations from other committee members. When LIBS initially received the grant to produce the Draft Atlas, Steve digitally created the master distribution maps of Long Island and coordinated the entry of data. It was a monumental task.”

Other LIBS members including Al Lindberg, Margaret Conover, Bill Titus, and Marilyn Jordan recall Steve’s thoughtful participation and leadership during the recent and ongoing meetings of the Scientific Review Committee of the Long Island Invasive Species Committee.

Andy Greller describes his relationship with Steve that began when Steve was a graduate student at CUNY/NYBG in the early 1980’s and continued through various joint projects and committees. Andy says, “We collaborated on a few papers dealing with local flora. He always managed to find the most obscure, but ultimately important references. Those proved vital for the discussion section. . . I shall miss him more than I can say.”

Barbara Conolly fondly recalls Steve’s participation in LIBS field trips and contributed the photo reproduced here.

From the Brooklyn Botanic Garden: “During his time at BBG, Steve published dozens of research papers. In 2006 he coauthored *Wildflowers in the Field and Forest: A Field Guide to the Northeastern United States* (Oxford University Press) with New York Botanical Garden researcher and photographer Carol Gracie. This book has become one of most popular field guides for the Northeast.” The Brooklyn Botanic Garden has published a press release detailing Steve’s professional accomplishments and contributions. This is available at www.bbg.org

The Dr. Steven Clemants Wildflower Fund has been established to honor our late colleague and friend. Steve’s widow, Grace Markman, is working with the Greenbelt Native Plant Center to plan a living memorial that will foster the planting of native wildflower species in New York City parks. Donations in his memory should be made out to “City Parks Foundation, Dr. Steven Clemants Wildflower Fund,” and mailed to City Parks Foundation, c/o Greenbelt Native Plant Center, 3808 Victory Blvd., Staten Island, NY 10314.

(Orchids, Cont. from Pg. 1)

8/5/07: After dropping Jackie and the kids off at the playground, I headed over to Moore’s Woods to search. And search, and search. . . . *Tipularia discolor* has an interesting life cycle. A single hibernal leaf sprouts in the fall and stays green through the winter, dying away in the spring. The flower spike—which can reach 50+ cm—appears in mid-summer; its coloration makes it very hard to spot against the dead leaves of the forest floor.

I searched for over two hours before taking a break and then enlisted Jackie and Johanna in the futile quest. I even tried the intrepid orchid hunter’s most useful stance; down on hands and knees for a ‘worm’s-eye’ view of the forest. It was all to no avail, the crane-fly orchis would remain elusive. To me the thrill is always in the search and even though we came up empty-handed, Moore’s Woods is a beautiful place and the kids enjoyed picking and eating the plentiful wineberries (*Rubus phoenicolasius*) and being in the woods, surrounded by the beauty of nature.

We then boarded the ferry for the pleasant drive across Shelter Island. It was our first time in this area, and we thoroughly enjoyed it. One of the great fringe benefits of having an orchid habit is that one ends up in places that one probably would never have visited; the orchid sites are almost always located in very scenic areas and are often within nature preserves or state and national parks.

Our next stop was a roadside location south of Sag Harbor for orange crested orchis (*Platanthera cristata*). This species is impossible to miss, and there were about a dozen plants in prime bloom, their brilliant orange blossoms blazing in the sun like lit torches, a few feet from where I parked. I busied myself photographing while the ladies waited in the air-conditioned car, as the temperature was hovering in the mid-nineties. The orchids were growing in dry sandy conditions on the edge of a pitch pine (*Pinus rigida*) forest and were 10-20 cm. tall, with compact blossom spikes that were crowded with flowers. We looked carefully a little further down the road for northern white fringed orchis (*Platanthera blephariglottis*) and Canby’s hybrid fringed orchis (*Platanthera xcanbyi*) a cross between *P. blephariglottis* and *P. cristata* - both of which had been seen here in previous years—but came up empty-handed.

High summer is the time to revel in fringed orchids and our next quarry was the biggest prize of all: the pale fringed orchis (*Platanthera pallida*) a species endemic to eastern Long Island. We headed south to East Hampton and then turned east towards Montauk to an area near the town of Promised Land. I had made a feeble attempt in 2005 to locate these orchids based on vague information in Philip E. Keenan’s excellent book *Wild Orchids Across North America* (1998), but had only ended up getting stuck in the sand at Napeague State Park.

After wrestling with the directions a bit, we finally arrived at the prescribed area: a Nature Conservancy preserve located behind a trailer park. We had lost a lot of time at Moore's Woods and were all a little tired, so Johanna and I headed out to find the orchids, while Jackie and Christina waited in the car. After a short search amidst the ubiquitous sandy pitch pine habitat that makes up much of eastern Long Island, we came upon an incredible spectacle: a thriving population of more than two hundred pale fringed orchids! This population has been known for many years. Latham collected specimens at Promised Land and near Montauk in 1928 and 1929 (Lamont, 1996) but it was considered to be a color form of *P. cristata* until Paul Martin Brown separated it into a species, *P. pallida*, in 1992. The flowers, apart from their different coloration, have descending, recurved lips and very short spurs (Brown, 2007). Even though the habitat is nearly xeric, the orchids formed thick stands, with some specimens reaching 60 cm in height, and the beautiful creamy ivory-colored racemes created a gorgeous sight as the late afternoon sun illuminated the forest.

We retrieved Jackie and Christina—they couldn't miss this botanical pageant—and the kids played in the sand dunes while I photographed and Jackie shooed the abundant mosquitoes away. Finally finding the pale fringed orchid was a great way to finish off an exciting day; totally exhausted, we headed for our motel in Montauk and after a delicious seafood dinner, went straight to bed.

8/6/07: After a leisurely morning at the motel pool and then the beach—this was technically a vacation—we set out to visit two more orchid sites on the way back to Manhattan. The first stop was along Barnes Hole Road, where we found three *Platanthera ciliaris* growing in a fenced-off Nature Conservancy property. A small population compared to what we had seen in Connecticut two days ago; this is a very rare plant on Long Island and we were heartened to see these few individuals.

We had a 3 o'clock appointment at Connetquot River State Park Preserve (near Oakdale) with Gary Lawton, the environmental manager for Long Island Parks (and a good botanist as well) to see a population of orange crested orchis (*Platanthera cristata*). As can be expected, the traffic through the Hamptons was very bad. We didn't arrive until around 4:30.... Luckily, Gary lives at the park, and kindly waited for our tardy arrival. Once again a beautiful place that we never would have visited, had it not been for orchid hunting. Originally a private hunting preserve and a favorite haunt of the Vanderbilts in the late 1800's, it became a state park in the 1970's and gives

one a pretty good idea of how primordial Long Island appeared before it was settled.

Jackie had not surprisingly developed a headache from the traffic, so she and Christina waited at park headquarters while Johanna and I headed out in Gary's jeep to see the orchids. Every orchid hunter should be lucky enough to have such an understanding wife. At over 3500 acres the preserve is massive, and we were glad to have a ride to the other side where the orchids were.

After about twenty minutes we arrived at a grassy roadside area where there were about a dozen plants in prime bloom. These plants were much shorter, and I immediately noticed that the coloration was creamy white instead of orange, this being the pale yellow-flowered form of the orange crested orchis (*Platanthera cristata* forma *straminea*). This is a very rare plant in our area, and its presence at Connetquot makes one appreciate the visionaries who preserved this huge area right in the middle of suburban Long Island, saving its treasures for future generations.

We then walked down a nearby dirt track—spotting a few more *P. cristata* (all forma *straminea*) along the way—to a wetter area where there were two beautiful white fringed orchids (*Platanthera blephariglottis*) in full bloom. Few sights are more beautiful than the soft feathery plumes of snow-white blossoms atop a tall stem that characterize this species. Gary said that the ubiquitous deer eat most of these and the pink lady's-slippers (*Cypripedium acaule*) as soon as they bloom. I guess we lucked out!



Southern twayblade (*Listera australis*)

Photo by Tom Nelson

During our time together Gary had mentioned that there was a large extant population of the hard-to-find southern twayblade (*Listera australis*) in the park and that he would be glad to show it to me next spring. What an invitation! We thanked him and said our goodbyes, with a "see you in May" rounding out the conversation. It was a fitting end to a whirlwind three-day introduction to the botanical wonders of Long Island.

11/24/07: After hearing about our difficulties at Moore's Woods, Paul suggested that I contact his friend Eric Lamont, an excellent field botanist who knows all of the orchid sites on Long Island and could help us locate *Tipularia*. So on this cold Saturday after Thanksgiving, Johanna and I found ourselves back in Moore's Woods with Eric, who was not only our guide, but was quickly becoming a good friend as well. We were searching for the *Tipularia* leaves that are so easy to spot in the autumn and Eric knew exactly where to go. We found almost 50 leaves, most of them concentrated in an area near a distinctive fallen-

down tree that would be easy to relocate next August. Eric said that the *Tipularia* population at Moore's Woods seems to be declining—for unknown reasons—and that he was very glad to see so many leaves. It was fun to be out in the woods with someone that shares my enthusiasm for nature and we agreed to speak in the spring to make plans to visit more orchid sites together.

5/17/08: I had contacted Gary Lawton and he agreed to meet me early on this spring Saturday to show me the population of southern twayblade (*Listera australis*). He guided me to a sphagnum bog with a large population of skunk cabbage (*Symplocarpus foetidus*) that upon close inspection was teeming with twayblades. It was only 9:15 AM—an ungodly hour for a musician—but the sun was shining brightly, the birds were singing and even though I had worked late the night before, I felt great. Gary discovered this population years ago while leading a class trip. He spotted an unusual plant that he thought looked like an orchid and without drawing anyone's attention to it—in order to protect it—he made a note to check it out later. It turned out to be a significant population of southern twayblade.

Gary had a busy day ahead of him, so he got me started by pointing out a few plants, and then left me on my own to photograph. The southern twayblade is small and grows right in the sphagnum, making it very difficult to spot. The morning light was incredible and I spent over two hours exploring the bog, finding 41 plants, including three “giants” that were at least 30 cm. tall. It is a unique and beautiful plant, with its sturdy stem and up-curving polished leaves supporting a spike of purplish long-pronged flowers. The flowers are small—about 1/3 in. long—and are best viewed through a hand lens. Morris and Eames wrote in 1929 that it was their favorite of all the twayblades and that *the lips have a richness of color that is hard to beat. When the sun shines on them no garnet or ruby could surpass their crimson glow.* A lot of the plants were past bloom and hard to see; Gary tells me that some years he has counted over a thousand in bloom! This was an incredible orchid site that I plan to revisit.

5/31/08: It was overcast Saturday morning and Johanna—my orchid buddy—and I were headed to a site for large whorled pogonia (*Isotria verticillata*) in West Hills County Park near Melville. Eric was unable to join us, but had generously given me very detailed directions to the site, and I was excited to see this species for the first time. There was very little traffic, and we reached exit 40 on the Northern State Parkway in about 40 minutes.

After parking in a church parking lot that abuts the park, I climbed up an embankment to make a pit-stop in the thick oak (*Quercus* spp.) woods. Paul tells me that many great orchid discoveries have been made in this fashion; and there, spread out in the woods before my eyes, were dozens of stately pink lady's-slippers. A fairly common species on Long Island, it is one of my favorites and it was great to find a large colony so close to home. Also known as the moccasin flower, the delicate pink “moccasins” are overlaid with a network of rich rose-red veins complemented by

bronze petals and green or reddish-brown sepals. These plants were among the largest I have ever seen; standing almost 2 ft. high, with leaves bigger than my hand and pouches 4-5 in. long, they were truly giants.

We walked into the park, following what appeared to be a bridle path and soon came upon the *Isotria* site right by the side of the trail. Unfortunately, they were all past bloom by a few days, with wilted blossoms clinging to the plants that fell off when touched. I was disappointed, but glad to have found the site; next year we will come earlier and enjoy the feast of orchids growing here. The colony is thriving: I counted 140 plants growing in the sandy loam under the oaks.

A rainstorm had been brewing all morning, but luckily for us, it was only when we reached the car—after paying homage to the moccasin flowers one last time—that drops of rain started to fall. As we started the drive home, the skies opened up and a torrential rain fell. Good timing!

8/4/08: We found ourselves in Moore's Woods once again, but this time was different; Eric had emailed me earlier in the week and informed me that he had found one blooming crane-fly orchid near the fallen-down tree, and that we should hurry out to see it. He warned me that it was hard to spot, and he was right.

Carefully keeping everyone away from the area to avoid stepping on it, I searched for about twenty minutes, meeting with no success. I sat down on the ground and dejectedly exclaimed “we're not going to find it!” Jackie came over to give me sympathy and as I turned to talk to her, the well-camouflaged orchid suddenly materialized right before my eyes, about five feet behind her! The plant was about a foot high and very beautiful. I was mesmerized by the translucency of the delicate blossoms, which shone incandescently whenever a shaft of sunlight would penetrate the thick beech (*Fagus grandifolia*) woods.

The *Tipularia* at Moore's Woods have a distinctive reddish hue to the flowers, a striking contrast to a specimen Eric and I were shown a few weeks later during a field trip to the Pine Barrens of New Jersey. The flowers on that plant were green and brown; seemingly two different color forms.



Crane-fly orchid (*Tipularia discolor*)

Photo by Tom Nelson

Successfully locating an elusive orchid always leaves us in high spirits, so we left Moore's Woods in a jubilant mood. I

really wanted to look for more *Tipularia*—which I'm sure were there—but the plan was to revisit several of the sites from a year ago as a day trip, so we had to keep moving.

To our surprise, there were no *Platanthera cristata* south of Sag Harbor. Eric said that July had been very dry, and that he had been unable to find any, so they must have gone dormant. We felt very lucky to have seen them the year before. There was further evidence of a drought at the *Platanthera pallida* site. There were fewer plants, and most of them were small and stunted, with only a few robust specimens. Once again it was late afternoon and the painterly light was a photographer's dream. Something about the way the sun illuminates the pine forest and lights up the pale orchids against the sand is truly unique to this spot, and will keep us coming back for years.

After a visit to the beach and dinner in Montauk, we drove home, arriving well after dark. A great day!

As the reader can see, Paul Martin Brown's wonderful suggestion to visit orchid sites on Long Island led to many exciting adventures and great friendships. Eric Lamont has become a close family friend. We met up with him during spring break for botanizing in Great Smoky Mountains Na-

tional Park; he and I attended the Native Orchid Conference in West Virginia together in July 2008, and have gone on several other orchid-hunting expeditions as well. I'm sure next year will be even better!

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Tom Nelson is a professional jazz pianist who lives in Manhattan. He is a member of the Native Orchid Conference, Native Orchid Conservation Inc. and has written for the *North American Native Orchid Journal*. His online gallery of orchid photos is available at www.pbase.com/tomdean/nativeorchids

An Additional report of Pitcher Plants from eastern Long Island

October 2, 2008

Dear Eric,

Enjoyed your article in this month's Long Island Botanical Society Newsletter concerning pitcher plants and wanted to touch base with you about a location that might have been overlooked.

To get to it you take the East Moriches Riverhead Road and drive until you have left all houses behind which is only about 1000 feet or so then you come to the Pine Barrens--Cranberry Bog area that once had a big red barn close to the road.

If you got out and walked westward into the Cranberry Bog you would come upon a collection of 30 or 40 pitcher plants that thrilled me to no end. This was around 1970 I believe.

The last time I visited the location every one of the plants had been dug up, leaving their empty graves as evidence of what once was the highest concentration of pitcher plants I had ever seen.

Just thought I'd let you know about this location and perhaps someone else could vouch for it also but then time takes over and it's hard to find old timers any more.

Keep up the good work. If I can be of any help let me know.

Sincerely,
Paul Stoutenburgh
Cutchogue, NY

A Tale of Two Moonworts

Carol Johnston

Many years ago, 1985 to be exact, Barbara Conolly, Betty Lotowycz and I were hiking on Mt. Aeolus, a limestone mountain in the Taconic Range near Dorset, Vermont. Barbara knows the area well, and wanted to show us some yellow lady's-slipper orchids (*Cypripedium parviflorum*), in a wet quarry. Lower down on the mountain we investigated another quarry, the Folsom Quarry. There, two different grape ferns (*Botrychium* sp.) caught my attention, and I collected a sample of each for the herbarium at Planting Fields Arboretum. (In *Botrychium*, each plant has next year's pre-formed buds already present, so removing the above ground part of the plant would not affect next year's growth.) One was *Botrychium matricariaefolium*, the daisy-leaved grape fern, which is common in the Northeastern United States. The other plant somewhat resembled *B. lunaria* (common moonwort), but that didn't seem quite right. I spent a long time trying to identify, agonizing over it. Finally, I photocopied the specimen and sent it to Warren H. ("Herb") Wagner, an acknowledged expert on *Botrychium*. He tentatively identified it as *B. minganense*, the Mingan moonwort, which ranges widely across the north from Labrador and New England westward to Alaska and south, in mountains. There the matter rested, as far as I knew.

Art Gilman, a Vermont botanist, was a good friend of Herb Wagner's, and had taken several "moonwort trips" with him around the Great Lakes, Montana, Washington and Alaska. A number of years later, having seen the photocopy of my mystery moonwort, Art decided to investigate the Folsom Quarry. By that time maple trees had grown up inside the quarry creating dense shade. Art and another fern enthusiast, Mike Rosenthal, looked for the *Botrychium* populations we had found there, but with no success. Barbara Conolly had also made annual pilgrimages after 1985 to see the two moonworts, but after several years they succumbed to the increasing shade and were not found again.

This, however, is not the end of the story. This spring, 23 years later, Mike contacted Art Gilman about a trip he was going to lead for the Delaware Valley Fern Society. In Art's words "I rather off-handedly suggested that he look again for the moonwort. – Bingo!"

Although Mike was looking for the moonwort I had found (now confirmed to be *B. minganense*), what he found was a much rarer plant, *Botrychium ascendens* (triangular-lobed moonwort or upswept moonwort). *Botrychium ascendens* is a western plant, native from California to Alaska. It is a yellowish-green plant with strongly ascending, upwardly-angled pinnae. The pinnae margins are dentate or even cleft into lobes. (The pinnae in *B. minganense* are less dentate though

sometimes lobed and not as stiffly upright). There are 3 reports of *B. ascendens* in the East: the Mingan Islands (North shore of the St. Lawrence River), Fogo Island off the Northeast coast of Newfoundland, and a very old record from Bonaventure on the Gaspé Peninsula in Quebec. But never in the Eastern United States!



Botrychium ascendens
Trianglelobe Moonwort
© 2005 Steve Matson

Mike found a population of around 55 plants of *B. ascendens*, but they were not growing in the shady quarry (not surprising because *B. ascendens* is primarily a plant of open habitats). They are on a level area outside the entrance to the quarry, to the left of a large fire-ring and lightly shaded by some small trees. This flat area has a magnificent view of the Dorset Valley and across to the Green Mountains. It is fortunate these tiny plants are protected by the small trees or I am sure they would be trampled by the many hikers who pause to rest here. Barbara Conolly tells me she thinks she has sat very close to the area, while resting her back against an aspen trunk and admiring the view. I revisited the quarry on July 28th of this year, and indeed saw 40 to 50 plants of *Botrychium ascendens*, in all sizes from 1/2" to about 6" tall. Some were flattened or bowed over by recent heavy rainstorms.

Mike collected a few to send to Don Farrar at Iowa State University, who is now the acknowledged *Botrychium* expert. He was one of Herb Wagner's students, and he has taken over the moonwort investigations on a continent-wide basis, using isozymes. He has confirmed that they are *B. ascendens*, but has not yet run the isozyme gels. I asked John Mickel (former Curator of Ferns at NYBG) about isozymes. They are a class of compounds that sort out on a thin gel, with each species having its own components so that you can compare them and see what matches up (sort of like DNA). Don hopes he will get to this step this fall. Since there are the three recorded sites for this fern in Eastern Canada, and because fern spores are so light they are carried in the jet-stream, perhaps more populations in the United States will be discovered.

Thus, this is a tale of two moonworts: my find of so many years ago which turned out to be notable; but even better, it led directly to this new and very exciting discovery!

Carol Johnston was a Botany major at Wellesley, and for 27 years was on the staff of Planting Fields Arboretum. She is a member of the American Fern Society, and a trustee of the North Shore Wildlife Sanctuary. She was a founding member of LIBS and currently serves as Treasurer.

UPCOMING PROGRAMS

January and February: No meetings!

March 10, 2009* Tuesday, 7:30 PM

Members Night: Members are welcome to bring slides, stories, specimens, and tales of peculiar sightings of favorite plants. A great opportunity to show what you have found while exploring on Long Island or elsewhere. Please call Rich Kelly (516-354-6506) in advance to advise as to the approximate number of slides/images that you would like to show and preferred medium of presentation. Thanks.

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

April 14, 2009* Tuesday, 6:00 PM

Special Herbarium Workshop: Members are invited to spend an hour perusing and annotating some of the several thousand herbarium specimens in the collection of the Museum of Long Island Natural Sciences at Stony Brook University. The entomology collection will also be made available. Pizza will be served to those staying to attend the meeting and program which follow.

*Reserve by phone 631-357-3065
or email mcon@optonline.net*

April 14, 2009* Tuesday, 7:30 PM
Sarah Gray: "More Than Just an Ant Trap: Dynamics of the Pitcher Plant, *Sarracenia purpurea*, and the Food Web Inhabiting its Leaves."

In order for the Pitcher Plant to receive its much needed nutrients, it must rely on the interactions within the microbial aquatic food web that resides inside its leaves. This talk will describe the essential interaction between this carnivorous plant and its food web, and experiments that are being done using this food web to ask fundamental questions about species interactions. Sarah is a Ph.D Candidate in the Department of Ecology and Evolution at Stony Brook University. She is interested in how different biotic and abiotic factors affect the dynamics within a community through time. She is also using molecular techniques to determine the bacterial diversity of the food web and how it may affect both the plant and the remaining members of the food web.

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

* Refreshments and informal talk begin at 7:30.
Formal meeting starts at 8:00 PM.
Directions: 516-354-6506