In 1970 I was driving West in early June. It was afternoon and I had reached the narrow neck of Maryland where I-81 cuts across the state. The car I had then was a VW Beetle, and those who ever rode in one will recall the noise they made. Yet suddenly I heard a louder noise rising above the sound of the laboring engine, a buzzing roar that came from the woods on either side of the highway. I realized that I was hearing for the first (and so far last) time in my life the massed chorus of an emerged brood of the 17-Year Locust, better called the Periodical Cicada (Magicicada septendecim).

Throughout the East there are at least 15 separate “broods” of this insect, emerging in different places and in different years, either on a 17-year cycle or a 13-year one (Marshall, 2001). I had ear-witnessed the emergence of “Brood X,” one of the 17-year broods. On Long Island, we will have a minor emergence of that same brood this year, but must wait until 2008 for the more massive and widespread emergence of “Brood XIV.” Mark your calendars.

But in 1970, those Maryland woods would soon fall silent again as adults quickly mated, laid eggs, and died. The freshly-hatched next generation became subterranean sap-sippers at the roots of trees, maturing slowly year on year, waiting for a still mysterious internal clock to tell them that now the time has come to emerge as their parents had. Yet cicadas are not the only life that can lie hidden beneath our feet, waiting for a signal that will rouse them and bring them to the light, and to our eyes. Seeds lie everywhere around us slumbering in the soil.

Two years ago the torrent of development on Long Island surged over a site on Portion Road in Ronkonkoma that I had driven by nearly daily for over a quarter of a century. You think a spot will always be much the same—and then the machines move in. The hectare-plus site had been one mostly wooded, mature oaks with underbrush, plus a small, older house and a bit of lawn. The trees were quickly cut, the stumps jerked from the ground, and everything chipped and piled in heaps meters high. Once the chips were hauled away, earth-movers began their work. The topsoil on the site was scraped up, apparently with an eye to saving it for re-use, and this was all put in raw mounds along the Portion Road side of the development site.

This last summer, passing the site, I saw the emergence from the piles not insects, but plants. Over the entire surface of the two great mounds of topsoil a nearly pure monoculture of Pokeweed (Phytolacca americana) had erupted—hundreds of plants. I’ve noticed something like this from time to time, on a far smaller scale, in the woods of Long Island. Some forest trees,
Society News

Long Island Botanical Society Annual Members Night Program on January 13, featured excellent slide presentations by six society members: Donald House, Rich Kelly, John Potente, Bill Titus, Lois Lindberg and Peter Warny. Steve Clemants shared two 19th century bound herbaria, including a collection of algae specimens floated out on high quality paper, perfectly preserved.

Weed Watchers. Margaret Conover and Karen Blumer are among the Society members who have become “Weed Watchers” for The Nature Conservancy of Long Island. Every day invasive weeds overrun nearly 3,000 acres of land nationwide. Here on Long Island plants like purple loosestrife and oriental bittersweet are gobbling up precious land and choking out other plants. Weed Watchers of the Nature Conservancy of Long Island are doing something about it. The Weed Watchers are volunteers who have been trained to identify, report and remove populations of invasive weeds in natural landscapes and to speak to public groups about the problem of invasive species.

“No matter what skill level, anyone interested in plants and preserving our Long Island landscape can help with this project,” says Stacey Goldyn-Moller, volunteer coordinator at TNC. An orientation will be held on Saturday, April 17, from 9 a.m. to 11 a.m. at the Long Island Horticultural Research and Extension center in Riverhead. A second orientation and speaker’s training will be held on Wednesday, April 28 from 3 p.m. to 5 p.m. at Uplands Farm Nature Sanctuary in Cold Spring Harbor.

Weed Watchers is part of the Long Island Weed Management Area, a program that covers Suffolk, Nassau, Queens and Kings counties. To find out more or to volunteer, call Stacey Goldyn-Moller.

Earth Day in Northville. Society member Mary Laura Lamont alerted us to another opportunity. The Historic Farm Museum of Hallockville is sponsoring and coordinating a clean-up of the new State acquired land in Northville. This newest State Park is also known as the old Keyspan property and lies directly behind the Farm Museum.

The clean-up is scheduled for April 24, 2004, from 9 a.m. to 12 noon. Drinking water, clean-up bags and gloves will be provided. Transportation through the farm fields to the woods will also be provided. The targeted areas for clean-up will be the woods and dunes and beach front that borders Long Island Sound. Please email Richard Wines or phone Mary Laura Lamont for further information and to register.

American Chestnut Foundation. Society member John Potente has retired as director of the Long Island Chapter of the American Chestnut Foundation, after establishing the program here eight years ago. The directorship of Long Island has been passed on to Lenny Lampel of the Seatuck Environmental Association. If you know of any mature American chestnut trees on Long Island, please contact Lenny at (631) 581-6908, or e-mail to llampel@seatuck.org. John will still be involved, and is proud to announce that he has eight trees, obtained from the pollinated Long Island Chestnut trees, growing in the private Native America preserve in Hauppauge. They will continue to be used in the program.
(Continued from Page 9)

when falling over, will bring up soil as the roots tip up and tear out of the ground, and on this newly stirred soil heap I will often see, in the next year or so, a single vigorous Pokeweed crowning the pile. I’ve speculated that the seeds were left by passing birds, fond as they are of the fruits, but the Portion Road event, with so great a population, so abruptly present (and none on piles of subsoil heaped up separately), told me that incontinent birds were unlikely and that the seeds had been in the soil all along.

The existence of seed banks, and that many seeds have an extraordinary longevity in the soil, is not unknown to naturalists. One of the longest-running experiments on record is that of W. J. Beal, of the Agricultural College of Michigan (now Michigan State University, East Lansing), who carefully buried bottles filled with sand and a selection of weed seeds from about twenty species in 1879, then began to dig them up at intervals to check on their viability (Beal, 1905). The experiment continues to this day (Brown, 2001), and of the twenty species, buried nearly a century and a quarter, two or three remain viable, largely *Verbascum* spp. Some future investigator will, on the current planned schedule, dig up the last of the seeds in 2100. For those who would like more information on the Beal Botanical Garden and current Beal experiment investigator, their respective URLs are given in the Web References.

Unfortunately, the 20 weedy species that were buried by Beal did not include Pokeweed. Some research was called for. I found a variety of articles on seed longevity, but few that mentioned Pokeweed. A useful one was Hyatt (1996), but the one that provided the most general information was Sauer (1952). Pokeweed does, indeed, have great longevity in the soil, at least as long as 40 years, so the sudden emergence from the Portion Road soil mounds is perfectly consistent with the species’ life history and known responses to disturbance. At some distant time past the site had held a population of Pokeweed, and for a few years it flowered and seeded, adding to the seed bank of the soil... but the trees grew up, and as Sauer says:

Everywhere, even in the heart of its native range, poke is bound to disturbed sites and nowhere does it seem to belong to stable plant associations. (p. 123)

and:

Poke’s success as a weed of the cultural landscape appears to be based, not on evolution during human times, but on its previous adaptation as a pioneer species of naturally disturbed places. (p. 124)

This venturesome weed, having uniquely evolved the ability to leave the tropical home of its other relatives and become part of the temperate American flora, and once living mostly in the disturbed soils along river banks and in forest blowdowns, has clearly done far better since the advent of humanity in North America, taking advantage of the many disturbances we create as we everywhere tear at the landscape. Thus my encounter with the Portion Road Pokeweek was just one notable example of how evolution’s adaptations let species seize opportunities and solve the problems of survival and reproduction.

Unfortunately, as of this writing, the topsoil mounds are being leveled, and their hopeful Pokeweed population is destroyed as the roots of hundreds of young individuals are ground back into the soil and the development of the site (for a “Stop and Shop”) proceeds, with the topsoil now spread for future landscaping. The landscaper will not look favorably on any Pokeweed whose roots might survive and let fresh shoots emerge among the soon-to-be-planted lawns and shrubs, and will surely grub them out or “Roundup” them to oblivion. But I know that some of the Pokeweek on the mounds flowered last year, and under that future pampered landscaping there will be fresh Pokeweek seeds all through the soil. They can wait.

References
Once you know what woodpinking is all about, you will understand that the very name conjures up images of children gleefully, carelessly and joyfully romping through the old pristine forests of Long Island in search of woodpinks. You may recognize that old name, or perhaps you may know these delicate, little spring wildflowers as maypinks, mayflowers, or trailing arbutus.

The names woodpink and maypink are self-explanatory. But arbutus? Some say it derives its name from the European Strawberry Tree, also called Arbutus, because the flowers and leaves resemble it. (*Epigaea repens*) means “running on the earth,” alluding to its prostrate habit.

By whatever name you know them, they are one of the first flowers to lift their showy little heads up out from under the leaves, moss and earth.

Winter’s hold on the land may be slow to go but by late March, April and early May the little trailing arbutus brings forth from the leaf litter a lovely, delicately scented pink or white tubular shaped flower. Its leaves are green and brown and are rough to the touch, almost leathery, but they have survived the harsh cold, ice and snow of the winter season. Now, at the end of their stems unfurls the dainty and delicate pink blossoms to prove to the world that spring has arrived!

This once plentiful little imp of a flower used to scent the spring woods with its sweet perfume. Today one is hard pressed in any remaining woodlot to even find it let alone enjoy the scented air! If you do find it these days, it is usually just a small clump and you must get down on hand and knee and almost bury your nose in the earth to sniff its sweet fragrance.

Woodpinking is the art of searching for and finding them and in the old days, collecting them to give to special people. It is a word from the past. The old Floyd Estate in Mastic, Long Island, once covered over 4000 acres. The majority of the land was sandy oak and pitch pine barrens, a perfect haven for the shy little woodpinks. When I first came across references in Floyd writings to woodpinks I wasn’t quite sure to what flower they were referring. I quickly realized they were writing about trailing arbutus and the old rite of spring, woodpinking. It wasn’t Spring for the Floyd girls until they had set out on their ancestral home lands in search of the flower. They wrote about it and they even photographed themselves woodpinking in the pine forests.

Imagine the year is 1890 and as a rite of spring you are sent out into the “pathless woods” to find the harbinger of spring. You go with your sisters and friends and run and laugh and frolic as you go. You know your way in these woods and you find lots of arbutus. You pick as much as you can carry and when you get home you tie it into a bouquet and give it to someone who is very special to you. It is a time-honored thing to do. The children knew where to look for the deepest pink ones, and they even wrote about finding “rare veined” ones.

Woodpinking occurred in some areas into the 1930s. Long-time Botanical Society member Elsa L’Hommedieu, before she left for California, told me that as a child she too went woodpinking. She showed me where the spot was in St.
James where she would go and find an entire ravine and hillside filled with it! In April or early May she’d collect a bouquet of it and then give it to the lady who delivered her as a baby. Today, that certain hillside has dozens of houses on it. All over the Northeast this is one of the reasons why you can’t find arbutus anymore.

What also led to the decline of the wildflower was the fact that countless numbers of individuals were searching the woods looking for the plant. Entire populations of the plants were dug up, washed, tied in bundles, wrapped in boxes and then sent by train or horse cart to department stores in Boston and New York and other cities to be sold. Sometimes they were sold by street vendors. Many a city Victorian loved the flowers but never knew the sweet-scented and roadless woods from which they came.

I remember my first encounter with arbutus. It was in the morainal hills of Northport, on my father’s land. The top of the hill was covered with Chestnut and Scarlet Oaks and the understory was huckleberry. Moss occurred here and there among the gravelly soil. One day, while exploring the area I came upon a little patch of the trailing plant. I remember I had to part the old oak leaves to see the flowers. Through the years it expanded to become one of the largest stands of the plant I have ever seen on Long Island. I wonder if it’s still there to this day?

Little did the children of the old days ever realize that one day, in the not too distant future, the wood-pinks would vanish. All they knew was the unspoiled sweet scented wood and that there was hardly a care in the world. Today, trailing arbutus (Epigaea repens) is an uncommon wildflower and is on the State’s Protected List. You can still find this little treasure of the earth growing in secret pockets here and there. One has only to take the time to seek it out. When you find it, take the time to get down on hand and knee and bury your nose in its tiny flower. As you envision children running and laughing through a pristine wood, you will connect with Long Island’s past.

Mary Laura Lamont is the Education Chairperson of LIBS and is a Park Ranger at Fire Island National Seashore.

Dogbane, The Thread of Life
Callie Greene Velmachos

We have seen some mantles made of Turky feathers, so prettily wrought and woven with threads that nothing could be discerned but the feathers, that was exceeding warme and very handsome.

— Capt. John Smith in 1612 on the Virginia Indians

In the Breadzilla parking lot in Wainscott grows a bunch of leggy weeds with inconspicuous white flowers. Fresh green leaves, placed opposite each other on delicate, wine red stems, say “dogbane.” Tiny green flies and bees buzz through the foliage. A bigger fly, lifeless, less one wing, is wrapped tightly to a stem with snow-white spider thread.

Carolus Linnaeus, father of modern botany, chose Apocynum for this family of 2,000 species, and it’s not clear why the Greek words “away, dog” struck him as appropriate. The species at Breadzilla, Apocynum cannabinum, still called Indian Hemp in the field guides, seems more aptly named. Dogbane, with its cheerful tolerance of drought and wet, 10-foot-long taproot and traveling-man rhizomes, was one of the most valuable plants on the continent.

Three thousand years ago (and probably much longer ago than that) Americans, including the Shinnecock, wore sandals and belts woven of dogbane fibers. They wrapped newborns in soft, dogbane fiber blankets, and caught life-sustaining fish and small game in sturdy dogbane fiber nets and snares. Aristocracy wore cloaks of turkey feathers woven into a matrix of dogbane.

Colonists knew well the benefits of cordage made of dogbane. They paid a loaf of bread for 14 yards of it, according to Peter Kalm, globetrotting student of Linnaeus. A loaf of bread sounds like a cheap price for 14 yards of rope that was “finer than silk” and stronger than cotton, but making cordage was something anyone could do. Grandmothers babysitting, children restless for something to do when it was cold or raining outside, gardeners in the fields keeping crows, raccoons and deer away, all had time to twist many feet of string.

These days a skilled person can make 10 feet of crude cordage in an hour. Deciding to give it a try, I harvested some stems in early spring, not the best time. The beating of winter degrades the fibers, breaking them up, so they’re shorter than in the late fall. But even with that disadvantage, I managed to twist a length of cord to make a bracelet, and even though it’s been in dishwater, the shower, and snagged on my car shifter.

(Continued from Page 12)
countless times, the thing is as solid as when I made it three months ago.

In fact, one of dogbane fiber’s great advantages is that it doesn’t weaken when it gets wet. Traditional basket makers who want watertight baskets still mark patches of dogbane, and return after the first hard frost to harvest the dried, chest-high stalks.

While some feel it is not as attractive as our other native—Wandering Dogbane with its pink recurved flowers—Indian Hemp is the more valuable plant. Its fibers make stronger cordage, and its medicinal properties are myriad. The list of indications for use by Indians familiar with its effects covers everything from head colds to ear infections to heart attacks.

Mild teas from the leaves were given to infants and snuff was taken by adults to promote systemic detoxing. Many a sweat lodge reeked of the acrid steam of dogbane tea poured on hot stones. Poultices and rinses did everything from promoting hair growth and correcting dandruff to removing warts. President Benjamin Harrison was saved from a heart attack by an administration of dogbane root tea. In the first half of the 1900s, the plant was used as a diuretic and substitute for digitalis.

Dogbane is used in current homeopathic practice and modern research has proven it to have anti-tumor and anti-cancer properties. Up until 1952, the federal pharmaceutical reference listed dogbane, with its chemical cymarin, as a heart stimulant. Cymarin is still listed as a heart stimulant. Dogbane has been relegated to the poisonous plant bin. (It can still be bought from distributors of homeopathic remedies.)

Not only does the plant produce excellent fiber for cordage of any diameter and carry powerful healing properties, it also thrives almost everywhere, willing in all but the most rainless places. It grows in cloned stands, yielding dozens to hundreds of stalks in late fall. The dried stalks can be picked freely, since the plant itself is alive and well in its roots.

Can we imagine the luxury of using a resource that never dies? Every year, the stalks can be collected until the ground is bare, and every spring, miraculously, new ones appear, promising more fiber for more blankets, shoes, robes, laces, baskets, snare lines, and nets. There is nothing to cultivate, nothing to plant, or guard, or water.

In terms of survival importance, is it possible a mere weed was equal to the romantic and massive bison? Dogbane could be called even more important than the bison, because while it made food-gathering fishing nets and hunting snares trustworthy and reliable, provided clothing and containers, it also had (and still does have) significant medicinal uses in the hands of knowledgeable practitioners.

Today, dogbane has been retired to tree hugger lists and farmers’ pest wanted posters. Virtually every list that names plants to attract and sustain butterflies contains dogbane. While the nectar is in high demand, only a few caterpillars and beetles eat any part of the plant, since its bitter, milky sap is poisonous to most. It is said to taste absolutely awful, so it seems unlikely a creature would eat the necessary amount to kill itself. But when it is dried it loses its bitter taste. If it were accidentally mixed in with some hay, a cow or a horse might chow down enough to cause serious damage. The mere chance of such occurrence has earned dogbane a black mark in livestock circles, even though records show few poisonings of farm animals.

In all the literature on dogbane, there is little mention of the pods and seeds, beyond their descriptions. The healing properties come from the roots and leaves; the fibers come from the stalks. The graceful twin pods, enclosing seeds with silvery tufts of “hair” reminiscent of the milkweeds, seem almost an afterthought. Maybe we have not yet discovered their gift. If nothing else, they serve as flags in the dried fields, instant identifiers of a plant ever-willing to serve the tiniest pollinator and its arachnid predator, or the two-legged domin-ant species of the realm.
SATURDAY, APRIL 24TH, 9 A.M. TO 12 NOON
(RAIN DATE, SUNDAY, APRIL 25)
Arthur Kunz Park, San Remo, Suffolk County, New York
Trip Leader: Ray Welch

Arthur Kunz Park hugs the west side of the Nissequogue River in its lower stretches. The hike will have some good water views, and will pass through dry uplands, past freshwater seeps and pools, through some successing sites, by an abandoned summer campsite with some exotic escapes, by a few glacial erratics, and through a handsome tulip tree grove with a small brook. We will have access to salt marshes in a few places, and one of the largest Black Birches on L.I. is along the route. We should be early enough in spring before canopy closure to perhaps find some ephemerals in bloom. The hike is about two to three miles round trip, with some very mild hills. No wet feet unless you work at it.

Directions: Meet at 9 a.m. at the north end of the parking lot of the Smithtown Landing Country Club in San Remo, shown on any Hagstrom’s. The address is 495 Landing Avenue. The parking lot is reached at the end of a long drive that leads from the entrance of the golf course to the facility buildings near the river. For more information, call Ray.

SATURDAY, MAY 8, 2004, 10 A.M.
Caleb Smith State Park (North side), Smithtown, Suffolk County, New York
Trip Leaders: Skip Blanchard and Rich Kelly

Orchids, orchids everywhere...we hope. We will be following the Gate House Trail at Planting Fields Arboretum to search for Pink Lady Slippers and maybe the mysterious white ones. In addition to our orchid fest, we will look for the other spring ephemerals and shrubs that will be blooming at this time.

Directions: Take the LIE to Exit 41 N or Northern State Parkway to Exit 35 N. Proceed north on 106 towards Oyster Bay. Turn left onto 25A/Northern Blvd. Make the first right onto Mill River Road and follow green and white signs to the Arboretum on Planting Fields Road. There is a $6.00 parking fee to the Arboretum.

References

Callie Greene Velmachos is an amateur botanist and tracker, with a particular interest in the ordinary that is anything but.
SATURDAY, JUNE 5, 2004 9 A.M.
Sayville (F.A.A.) Grasslands, Sayville,
Suffolk County, New York
Trip Leader: Skip Blanchard

This site, which is not generally accessible to the public, hosts a variety of rare plant and animal species in a diversity of habitats ranging from oak-pine forest, to scrub oak openings, to managed grasslands. The walk will focus on both plants and butterflies. We may go past noon, so bring lunch or snacks if you like. We will not be far from our cars at any time during the walk.

Directions: From Sunrise Highway (Rte. 27) in Suffolk County, travel east past Oakdale and take Lakeland Avenue south toward Sayville. After about 1 mile, turn sharp right at a light onto Tariff St., and then take your fifth left onto Cherry Avenue. After a few hundred feet turn right through a gate at the south end of some playing fields (if you get to a RR crossing you have gone too far). Go straight up to a locked gate, which is access to the site.

Questions? Call Skip or e-mail.

SATURDAY, JUNE 26, 2004 10 A.M.
All-day trip to West Branch Nature Preserve and Bear Spring Mountain Wildlife Management Area in the northwestern Catskill Region, near Walton, New York
Trip Leaders: Al and Lois Lindberg

West Branch Preserve is a 440-acre Nature Conservancy site of fields and mature woods bordering the Delaware River. Bear Spring Mountain WMA consists of 7100 acres of woodlands, wet meadows, streams, and ponds. Good places for birding and butterflying, too.

Bring lunch and beverage, and insect repellent. Allow 3½ hours' travel time.

Questions? Call Al or Lois for directions and recommendations for overnight accommodations.

Libs Annual Membership
Renewals are due in April
$15 payable to:
Long Island Botanical Society

Mail your dues to:
Libs Treasurer
Carol Johnston

April 13, 2004* Tuesday, 7:30 p.m.
Mike Wasilco: “Forest Fragmentation and its Effect on Songbirds”
This talk will discuss how shrinking forest sizes impact on the breeding success of birds. Mike is a Songbird Biologist in the NYS DEC. He is the Bird Conservation Area Program Biologist for Long Island.

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

May 11, 2004* Tuesday, 7:30 p.m.
Steve Clemants: “Who Was John Torrey?” Find out why Torrey is considered the Father of Botany in the United States. Steve is Vice President of Science at the Brooklyn Botanic Garden and Chairperson of the LIBS Local Flora Committee.

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

June 8, 2004 Tuesday, 5:30 p.m.
Annual Barbecue Executive Board Meeting
(please note early start time for the barbecue)
The annual barbecue, featuring Chef Eric’s made-to-order hot dogs and hamburgers. He’ll even toast the bun if you ask nicely. The traditional location: on the green behind the Muttontown Preserve meeting house.

All members are invited to attend the Executive Board Meeting to be held before the feasting begins.

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

* Refreshments and informal talk begin at 7:30 p.m.
Formal meeting starts at 8:00 p.m.