Chapter 6:

OUR Newsday
OUR NATURAL
OUR NATURAL

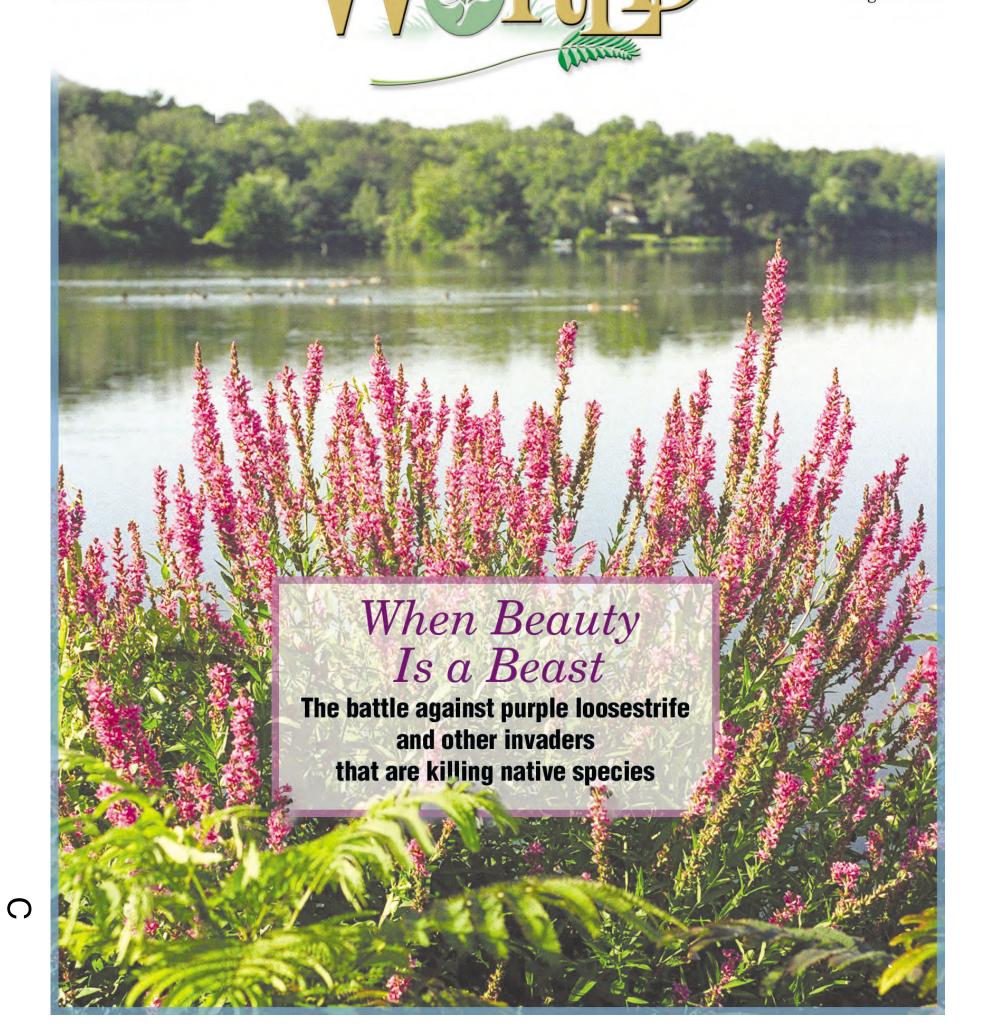
Carnivores
Dressed
In Leaves

August 2003

www.linature.com

The Plants

War Of







ong Island is a battlefield and the casualties mount as invading hordes sweep across our natural world. In this issue, the sixth of 13 sections of "Our Natural World," we offer a report from the front — the story of how invaders such as purple loosestrife and phragmites and mile-a-minute vine and even kudzu are endangering native plants and overwhelming ecosys tems. Stories and photos highlight the efforts humans are making to hold back the aliens. Along the way, the section covers features of our woods and wetlands and shorefronts, including carnivorous plants and wild orchids and mushrooms and native cactus. Plus how plants work and the secrets of the soil that nurtures them all.

ON THE COVER: Purple loosestrife, a colorful but harmful plant, in Mill Neck. Newsday photo by Bill Davis.

Inside Roadside raiders: Invasive plants

grow along public highways N5
Endangered plants: LI rarities N7
Homegrown: A photo gallery N8
Nature Journal: Irene Virag on
carnivorous plants and orchids ... N11
Pullout poster: Bold and beautiful:
carnivorous plants and orchids ... N12
Shore plants: Hardy survivors ... N15
Plant lives: How they grow N16
Poison ivy: Nutrient, scourge N17
Mushrooms: Fascinating fungi ... N18
Cheap asset: Soil's secrets N20
Cranberries: A forgotten crop ... N21
ALSO
Long Island the Beautiful N23
People of the Natural World N23

IN PRINT: Also see the Long Island: Our Natural World page each Sunday with events, nature profiles and outings. Look for it in Sunday's news section.

ON THE AIR: See previews of monthly chapters Saturdays on WPIX / 11's "News at Ten." Tune in to WKJY / 98.3 FM and WBZO / 103.1 FM on weekends for radio reports on "Our Natural World."

This month, www.linature.com, the "Our Natural World" Web site, has an interactive movie narrated by Newsday's Irene Virag on how plants reproduce. Plus: Nature Dad has more ideas for kids to learn about nature; download a computer screen saver of plant pictures by Newsday photographer Bill Davis, or find previous installments from the "Our Natural World" series.



Marilyn Jordan of The Nature Conservancy and Al Lindberg of the Muttontown Preserve, above, remove the invasive plant giant hogweed from

Silent Fields, Raging

By Irene Virag

STAFF WRITER

n the woodlands and wetlands and meadows and marshes of Long Island, there's a war going on. A war of invasion and oppression that scars the land and threatens entire species. And although it's not always easy to single out the enemy, much of the destruction takes place in plain sight.

place in plain sight.

Too often, the bad guys blend into the scenery and we don't notice the carnage until it's too late. Or they simply fool us with their good looks and we welcome them. It is a war of the world waged by plants.

Death and destruction seem far away at Shu Swamp in Mill Neck on a misty afternoon. Raindrops tickle the woodland pond where pink marsh roses and cattails sway in the breeze and a great blue heron crosses the steel-gray sky. The woods that frame the wetland drip with mosses and ferns and swamp azaleas. A sweet pepperbush on the verge of bloom hints at the perfume to come.

Naturalists worry that 'bully' plants will spoil ecosystems

But tall, willowy spikes strut their purple-pink finery across the pond like a swelling corps of dancers. Even on this drizzly summer day, the perennial known as purple loosestrife is undeniably beautiful.

That makes it even more dangerous. To environmentalists, *Lythrum salicaria* is "the purple plague." Biologist Marilyn Jordan of The Nature Conservancy's Long Island chapter calls it "the poster child for invasives."

Left to itself, purple loosestrife will take over a wetland, wiping out native species. A single plant can produce more than 2.5 million seeds a year. Under the right conditions, most of those dust-like seeds can germinate in three days. Or they can sink into mudflats and remain viable for years. Or travel through the countryside, carried by wind and water or wildlife or people.

The prospect of a magenta monocul-

ture is just the beginning of a botanical nightmare. Actually, purple loosestrife is just starting to colonize Long Island — other invaders are more established. For instance, the common reed phragmites now claims 335 of the 2,550 acres that make up Wertheim National Wildlife Refuge in Shirley.

Development paves the way for invaders of the natural world. "We cut and clear and strip the native soil and its seed bank, then import topsoil to replace it," says native plant expert Karen Blumer of Shoreham. "We build big houses and put in lawn grasses and

Go to www.linature.com for photos and a list compiled by the Invasive Plant Council of New York State.









Newsday Photos / Bill Davis

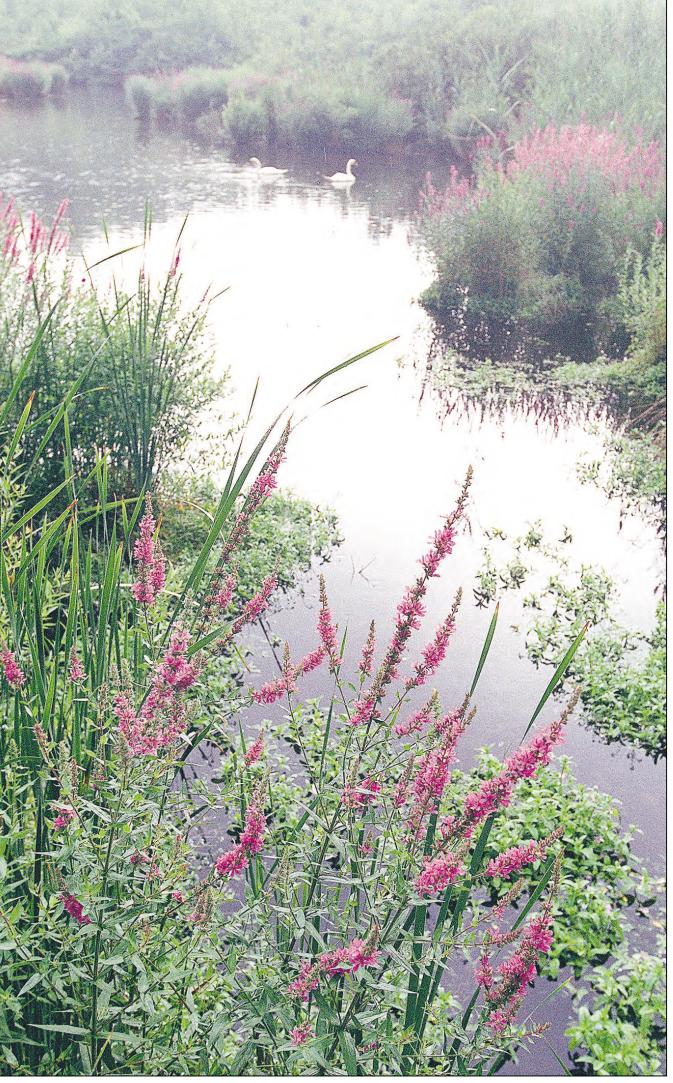
an open area at the preserve.

Battles

lollipop trees and pom-pom shrubs and it all looks very spiffy. But all we've really done is prepare the ground for invasives."

In some instances, Blumer says, unaware homeowners are exacerbating the invasion. "People love their Norway maples, but in the forest they're a disaster. If you live near a woodland and you plant Japanese barberry, forget about the woodland — the barberry spreads like wildfire. Of course if you don't mind a monoculture instead of a woodland of diversity — with lady ferns and trilliums and wood anemones and training arbutus — I guess you could say, 'Who cares? What's the difference?' "

Steve Young, a botanist with the New York Natural Heritage Program in Albany, has an answer. "Plant and animal diversity is a reflection of a healthy ecosystem. Everything is intertwined. Invaders displace natives and it has a cascading effect on the habitat—the insect that feeds on the native plant and the bird that eats the insect,



Invasive Plants

PLANTS from N2

all these other species can suffer."

Jordan expands the theme. "Biodiversity isn't optional. When you start losing native species, nature's checks and balances disappear. We're moving plants around the world in ways and at speeds that we never did before. We bring plants to new places where they didn't evolve, where perhaps their native predators don't exist. They develop an unfair advantage in compet-

ing for light and nutrients and water. They're the bullies in

the neighborhood."

The 'hood is the natural world and the bullies are ascendant. Even though only 30 of New York State's 1,115 nonnative plant species are considered by naturalists to be destructive invaders, the actual number of plants is countless and their virulence seems boundless.

Legions of Asiatic bittersweet swarm over shrubs and trees, their tendrils reaching out for new victims to strangle and smother. The bittersweet holds back sunlight and prevents photosynthesis. It even topples trees with the force of its weight.

Armies of autumn olive rampage over woodlands and parkway borders. Even its silver shimmer can't dispel the ugliness of a shrub that can reach 20 feet high. Impenetrable thickets keep anything else from taking root. Capable of drawing nitrogen from the air, autumn olive is able to conquer in almost any soil.

Marauding gangs of multiflora rose advance with seeds and with arching canes that root wherever they touch the ground. Its prickly stems discourage native birds from nest-

ing. Like purple loosestrife, it hides its venality with beauty — fragrant white flowers in June and bright red rose hips that linger through winter.

ll of these are old enemies that have been usurping native settlements for years. Others are newcomers — some under surveillance.

In recent years, kudzu — the vine that swallowed the South - has foraged in the North. Ironically, a stand grows not far from the Melville birthplace of Walt Whitman, who wrote of lilacs and leaves of grass. If he were here today wandering the woods and riverbanks of his beloved "Isle of sweet brooks of drinking water — of healthy air and soil," the poet of Paumanok surely might be dismayed by botanical bullies like garlic mustard and smooth buckthorn and porcelain berry and

In many cases, it seems that the bullies are picking on the rare, more delicate plants — the meek that once inherited the earth. If habitat destruction is the greatest threat to the natural landscape, invasive plants are a close second. A touching example flowers in the remnants of the 60,000-acre savannah of bird's-foot violet and little bluestem and broomsedge known as the Hempstead Plains. A place where heath hens nested and wolves howled and in late summer a flower called sandplain gerardia splashed pink across the flat, treeless prairie.

Now only about a dozen populations of the sandplain gerardia or Agalinis acuta are known to exist on the planet. Six grow on our island and the largest population endures in a padlocked 19-acre section surrounded by concrete-and-glass monuments to the progress that destroyed the prairie.

One day this summer a kestrel hovers in the cloudless sky above the green remnant owned by Nassau

Community College in Garden City. Cars whiz past on nearby Meadowbrook Parkway in the crescendo of the morning rush. And bands of mugwort and Chinese lespedeza and cypress spurge make war on history in the Island's only plant on the federal endangered list. The invaders claim spaces between clumps of native grasses like big and little bluestem. Once, these areas were the province of the

ther struggles take place elsewhere on the remains of the plains and provide an up-close look at human intervention and the complexities of the war of the flora.

Not all of the non-natives are bad guys. In the fenced-in preserve, Betsy

Gulotta, director of the nonprofit Friends of the Hempstead Plains, orm of a tiny pink flower that is Long which manages the area. The same holds true for black-eyed Susan and sandplain gerardia.

St. John's wort and mullein that pops up here and there. "More than half of the plant species here are not natives but they're not invasive. But we're plagued with a few non-natives that spread by seeds and underground runners and are horribly invasive.' As she walks, a woodcock takes off out of the brush and an eastern meadow-lark flies overhead. The sun pours down from a clear blue sky and despite the proximity of parking lots and parkway

Gulotta walks through a field of

chest-high mugwort and points to a yel-

low snapdragon-like flower called butter-and-eggs. "It's not native but

it's well-behaved and so pretty," says

traffic, the past seems closer. We're working to restore this part of the plains but we know we can't go back to the 1600s," Gulotta says. "Of course if the college hadn't preserved it 15 years ago, it would probably be an athletic field. The question is how to get rid of the invasives without harming the natives."

The group is experimenting with ways to wipe out mugwort without threatening the green milkweed and Indian grass and native goldenrod that mingle with it. "We don't want to mow or till the soil because that just opens up cracks for more seeds of more invasives." In one area, volunteers hand-pull mugwort, which can grow 6 feet tall and has roots that reach down 12 inches. They hope to replace it with native grasses and wildflowers.

Another area within the preserve is cordoned off with chicken wire to protect the sandplain gerardia from human disturbance. Cypress spurge creeps outside the wire. Here, the friends of the plains and The Nature Conservancy have unleashed a hit man — an iridescent orange beetle called Aphthona flava that is half the size of a ladybug. Not just one beetle but one thousand. The insects subsist on spurge — the

larvae eat the plant's roots and the adults consume its leaves. The experiment is still being monitored.

A different approach takes place a few miles away on another leftover of the plains. Along the rough of the Red Course at Eisenhower Park, Carole Ryder — a biologist with Nassau County parks — is overseeing a return of the natives. For the past several years, she says, "we had to take a step backward to take a step forward." Simply put, she let things grow. So along with predictable invasives like autumn olive, she watched the resurgence of native plants including staggerbush, goat's rue, wild indigo and fleabane. Not to mention carpets of birds-foot violet and yellow stargrass. 'Now we can take out the invasives and let the natives do their thing.

Other foes threaten other flora. Meet mile-a-minute vine, aka devil's tear-thumb, a fast-moving climber that has been spotted at several locations on the Island. One is the Old Bethpage Village Restoration, where a newly formed battalion of warriors



Volunteers calling themselves the Weed Watchers meet at Suffolk County's Warbler Woods in Yaphank to look for invasive plants. Bill Patterson, right center, of The Nature Conservancy speaks to the group.



Seven of the invasive plants: top, multiflora rose and bush clover; bottom from left, mugwort, Asiatic bittersweet, autumn olive, ailanthus and honeysuckle



Outcast Plants Hit the Road

By Irene Virag

ook at that," Carole Ryder says as she drives along a stretch of the Long Island Expressway in Nassau on a rainy summer day and glances at the passing greenery. "Ailanthus, ailanthus, ailanthus. It's called the tree of heaven, the tree that grew in Brooklyn. It'll grow anywhere. Look over there. It's growing out of the cement."

To biologist Ryder, the curator of the Tackapausha Museum and Preserve in Seaford, the tree of heaven is straight from hell. And the same holds true a few minutes later for a silvery-looking shrub that has crowded out almost everything else in its vicinity. "Autumn olive," Ryder says. "Piles of it."

For motorists caught in the interminable traffic of the LIE, the borders on each side may seem like public greenbelts. To most naturalists, however, the greenery is no garden — the expressway and other major routes are teeming with invasive plants.

With garden escapees such as English ivy and wisteria and mimosa trees. With tenacious aliens including Asiatic bittersweet, whose vining tendrils envelop trees with sci-fi intensity. With Norway maples and Japanese barberry. With weedy invaders such as mugwort and multiflora rose. With ailanthus.

These armies of the unwanted are crowding out what native vegetation was left after road construction disturbed the terrain. And similar peril holds true for recent landscaping by the state.

"Natural selection points to non-native vegetation," Ryder says as she passes a section of the Wantagh Parkway just before it intersects the Southern State. Bare branches of dead shrubbery poke out from beneath bittersweet vines. "There's nothing you can do. Over time, whatever gets planted will be replaced by autumn olive and mugwort."

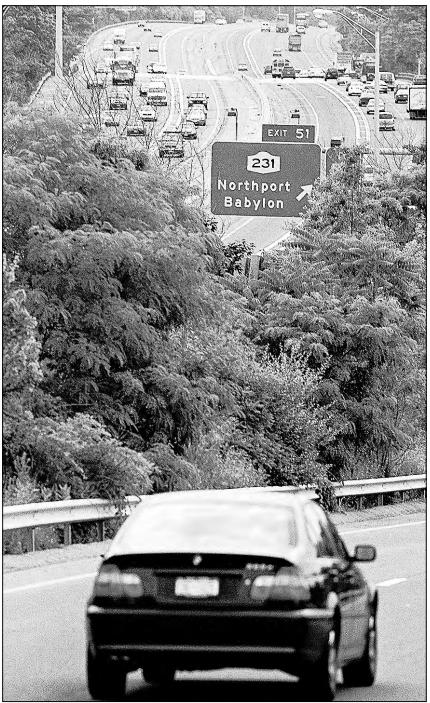
Later, she points to mass plantings of buddleia bushes and juniper. "I'm not dissing the state," she says, "but these borders are not botanical gardens. Eventually invasives will take over."

Chris Cotter, a senior landscape architect with the state Department of Transportation, isn't throwing in the trowel. He admits the roadway borders are a harsh environment but says the DOT tries to maintain aesthetically pleasing buffers with plantings such as oaks, maples, privets, and native viburnums.

For a year or two, new residents are watered about 14 times between April and October and dead plants are replaced. "We haven't identified any specific invasive that we chase after," Cotter says. "We remove ailanthus trees when they pose a safety hazard or crowd out something we want."

Ryder's tour indicates that ailanthus and its co-conspirators have already done their crowding. The invaders are most pervasive along the narrow borders of the LIE in Nassau and western Suffolk. Blame what naturalists call "the edge effect." Invasive plants get a roothold when the edge of a woodland is disturbed. The narrower the border, the more chance they have to run amok. Along the eastbound Northern State Parkway in Melville, Ryder finds naturally wooded borders as much as 200 feet deep, with native mosses and huckleberry and low-bush blueberry and mountain laurel. The rain stops and sun dapples through white oaks and beech trees.

"It's not the forest primeval, but it's a deeper buffer that hasn't been disturbed as much," she says. "Compare this to areas where there's almost no buffer. Where's the beauty in miles and miles of ailanthus? Oh well, it's green. Most people don't know the difference."



Tewsday Photo / Bill Davis

Locust, mugwort, ailanthus and other plants thrive along the Long Island Expressway near Deer Park Road. Invasive plants often grow in soil that has been disturbed.

gathers to do hand-to-vine combat. Known as Weed Watchers, the volunteers — part of an inter-agency group started by The Nature Conservancy called the Long Island Weed Management Area — are trained to search out and destroy invasive plants.

"We have alien invaders on Long Island," Bill Jacobs, the conservancy's conservation director in charge of its team on invasive plants, told the volunteers at their first session. "They're not from outer space but they're scary and pose an insidious threat to our world. They're quiet killers. They're a top threat to biodiversity on Long Island and in the world."

Now at Old Bethpage, squad leader Marilyn Jordan points to the green vine with hooked barbs and funnel-shaped leaves scrambling through a stand of white pines and red cedars and wild cherries. "Take a good long look," she says. "This is the enemy."

The dozen or so volunteers converge on a plant known for its speedy growth. Although it's not as fast as its name implies, it does grow 6 inches a day to as much as 30 feet in a growing season.

"See this saucer or cup-shaped structure around the petiole?" Jordan asks. "This is what I was hoping not to see — a seed turning ripe. Whatever you do, don't drop the seeds. Put the pieces of

vines with purple seeds in a garbage bag to be destroyed. You can't just throw these things in the back forty." The Weed Watchers fill a dump truck with their captives. Mile-a-minute vine is meeting its match.

"You have to find invasives, identify them and nip them in the bud before they get really out of hand," Jordan says. "Some plants are well behaved for decades, then you start noticing them getting a little aggressive. Then they explode."

Giant hogweed is a case in point. The biennial herb, a bad seed of the carrot and parsley family, grows 14 feet tall and looks like Queen Anne's lace on steroids. Its milky sap can produce

oozing, itchy welts and has been known to cause blindness in unsuspecting children who play with the hollow stems as peashooters or telescopes.

aturalists have been watching a few plants in a remote area of Muttontown Preserve in East Norwich. Last month, noticing signs of belligerence, they pulled on their rubber gloves and got rid of about seven flowering plants and maybe another dozen first-year plants that would have bloomed next summer.

Ironically, giant hogweed came to the United States from Eastern Eu-

Invasive **Plants**

PLANTS from N4

rope with the best of references. It was introduced to botanical society in the early 1900s as a landscape ornamental. The same holds true for other invaders. Burning bush and privet are still popular in suburban yards even though they escape cultivated landscapes and invade the natural world. Ditto for wisteria and English ivy and Japanese honeysuckle. Many plants were once admired for the very qualities that turn them into bullies — tenacious growth, drought-tolerance, adaptability. They were touted as good highway plants or street trees. That's how autumn olive and multiflora rose and Norway maples got their start.

Other plants — garlic mustard, for one — were brought here as food or medicine. And invaders like Japanese stilt grass are what Jordan calls hitchhikers. "Dried stilt grass was used as packing material for imports from Japan," she explains. "It actually makes nitrogen that favors other invaders. With stilt grass, a lot more nitrogen is in nitrate form versus the ammonium form, which our natives are adapted to use."

And phragmites is so prevalent in Long Island's wetlands that many people take it for granted as part of the natural scene. It isn't. The tall, feathery

phragmites that have a chokehold on our ponds and streams and rivers and marshes belong to an aggressive European strain thought to have hitchhiked into North America in the early 19th century. The invader lost no time growing into a scourge — crowding out cattails and rare rushes and sedges and even wiping out a native genotype of phragmites that flourished along the East Coast as long as 3,000 years ago.

Tow humans are taking on the mighty phragmites in fragile ▲ **¬** and pristine preserves including Long Pond Greenbelt, a 6.2-mile chain of coastal plain ponds and wetlands that stretches across the South Fork from Sag Harbor to the Atlantic Ocean. It is a wild refuge for rare plants like rose coreopsis and creeping St. John's wort and long-beaked baldrush. But phragmites, introduced about 15 years ago as a camouflage for duck blinds, has infiltrated six patches along the 77-acre pond that gives the sanctuary its name. In one season, phragmites can put out stout, scalv 25-foot-long underground runners that produce hundreds more reeds, forming dense stands and preventing other plants from growing. Attempts to cut the reeds, which can reach 10 feet high, were unsuccessful. And digging them up was out of the question. "The last thing we wanted to do was disturb the seed bank of rare native plants," explained Bruce Horwith, a conservation biologist with The Nature Conservancy's South Fork-Shelter Island chapter who is Long Pond site director. Instead, a five-year pilot project is

See PLANTS on N8



Invasive Plants

PLANTS from N7

under way using an herbicide called Rodeo that, according to the Environmental Protection Agency, does not threaten other organisms. Last October, the herbicide was applied to two of the more tenacious patches of phragmites. It looks as if it's working, as reeds die back and thin. A second application is scheduled for the fall.

At the Wertheim National Wildlife Refuge, Mark Maghini of the U.S. Fish and Wildlife Service is trying to drown the stuff. Aerial photographs showed that by the year 2000, the stiff-stemmed reeds had swallowed

one-quarter of the preserve's wetlands. "We knew phragmites was a problem but to find out the magnitude of the issue was frightening," Maghini says. "Native irises and cattails and swamp roses were being crowded out right in front of our eyes."

The preserve is dotted with more than 50 ditches dug in the 1920s and '30s to control mosquitoes by draining the wetlands. These ditches are still maintained, although Maghini points out that science and technology now offer more enlightened ways to keep wetlands healthy while controlling pests. "By reducing the standing water in the marsh and lowering the salinity, it actually encouraged phragmites"

it actually encouraged phragmites."
So Maghini plugged the 200-footlong ditches with plywood and marsh muck, creating mini dams that flood the wetlands and create a less hospitable home for the phragmites. Once there were fields of phragmites that even Michael Jordan couldn't peer over. Now there are fewer, smaller,

and even dead plants.

But Maghini didn't stop there. In a 45-acre freshwater pond that was almost half phragmites he launched a two-pronged attack. In the fall of 2001, the reeds were sprayed with Rodeo. The following spring, the new growth plus the rank dead vegetation of the previous year were burned. Suddenly, native sedges and bulrush and smartweed and fleabane were popping up again. He's repeated the one-two punch ever since.

he phragmites wars have produced a symbol of hope at Tiffany Creek Preserve in Oyster Bay Cove, where Al Lindberg, now director of Muttontown Preserve, undertook a program of mowing and cutting. He not only fought off the phragmites but four years ago, he discovered exotic leaves struggling beneath the reeds. When the plants bloomed, he realized that he had found Northern tubercled orchids — unseen on the Island since 1927, when nat-

uralist Roy Latham collected the secretive grass-green blossoms at Montauk. Now there are 300 orchids flowering at the preserve and phragmites is a shadow of its former self.

Anti-invasive strategies are in progress elsewhere. Botanists and conservationists and volunteers gather at The Nature Conservancy headquarters in Cold Spring Harbor to learn about aquatic marauders like curly pondweed and Carolina fanwort and European frog-bit. Already in our waters, they clog streams and affect oxygen levels. Hydrilla, which could well be called Godzilla as far as researchers are concerned, came to the United States from Africa as an aquarium plant. It has long-branching stems that fragment into large floating mats. Able to survive drought and cold winters, it is yet to be seen in New York State but has already shown up in New Jersey and Connecticut.

But the invasion continues as new troops take the field — Chinese silver

Home Grown

A gallery of lovely wild plants native to Long Island



Butterfly weed adds a burst of sunshine to Jamaica Bay. The plant also colors grasslands across Nassau and Suffolk, changing from yellow to red. Butterflies love it.



High-bush blueberries ripen at Caleb Smith State Park in Smithtown. They're great in pancakes.



grass and Japanese knotweed and black swallow-wort and jetbead and spotted knapweed. But purple loosestrife may well be the most insidious as it pours out of the homefront into the wetlands. In Cold Spring Harbor and Northport and Fort Salonga, it brightens yards and gardens not far from ponds and harbors. In the Hamptons, it sways along golf courses and shorefronts. It highlights the designed landscapes and grassy borders of corporate headquarters and churches.

"The number one reason purple loosestrife is so popular is that it's a great midsummer bloomer," says Vinnie Drzewucki, president of the New York State Nursery and Landscape Association as well as vice president of its Long Island counterpart. "It's long-lived, tolerates drought and adapts to all kinds of conditions. Of course, that's the problem. When you realize what it is and what the plant is doing — it's actually choking the wetlands — it's scary. The roots are so

dense I've heard you can actually build a house on it."

eetles may be coming to the rescue. Bernd Blossey, assistant professor in the Department of Natural Resources at Cornell University, has identified insects that take down purple loosestrife — two lythrum-eating beetles that munch the leaves and two weevils that attack the roots and flowers without damaging other plants. In the past several years, thousands of the European beetles and weevils have been released in 35 states, including New York, and Blossey says the results show "substantial success." Still, he cautions that "there are millions and millions of plants out there." The insects have been turned loose in Queens but he is not aware that they have been used on Long Island.

"At first, purple loosestrife looks benign, but in a couple of years it takes over," Blossey says. "Unless you eradicate the first two or three plants that

show up, it's a losing battle. I know some people say it's sterile, it's sterile. Well, I have two letters to put to that — B.S. People don't want to hear it or they just don't want to know. It's already illegal in 20 states. No purple loosestrife should be sold or grown anywhere."

Drzewucki, the horticulture and marketing specialist at Hicks Nurseries in Westbury, says that at the moment on Long Island "it's a voluntary thing not to encourage the use of plants identified as invasives. I don't know of any nursery on Long Island that has voluntarily stopped selling purple loosestrife. I'll inform customers that it's a potential problem in the natural environment and they should stay away from it. They seem surprised. If you walked up to any customer and said, 'Name one invasive plant.' Most of them would say, What's an invasive plant? If gardeners boycotted purple loosestrife, purple loosestrife would disappear from nurseries. Sure it's a beautiful plant with good commercial qualities, but when you see how it affects the native flora and fauna, you realize it's a time bomb."

The clock ticks at Shu Swamp, where ephemeral flowers like red trilliums and yellow trout lilies welcome the spring and great blue herons fly and the woods drip with mosses and ferns. And where purple invaders hide behind their beauty.

"There's a struggle going on in these tranquil woods," says botanist Barbara Conolly, who lives near the preserve. "There's more and more purple loosestrife every year. It's beautiful but it's a beast. It escaped from someone's garden. Just like the wisteria and ivy and burning bush that now grow in the woods. Sometimes, I long to get away to someplace where no one has planted anything that could go wild and be destructive. Between the purple loosestrife and the phragmites, who knows what the future holds?"

In the meantime, the war of the flora goes on.









A wild leek, above, grows at the tranquil Shu Swamp in Mill Neck. The plant's leaves smell like onions and wither after the flowers appear.

A grape fern, left, grows in moist woodlands. Low lying, it is one of the Island's rarer ferns.

Newsday Photos By Bill Davis

