

IN THE FIELD

HE LI LIFE

Tending an underwater garden

BY JENNIFER SMITH

jennifer.smith@newsday.com

Moles and groundhogs be-devil terrestrial gardeners.

Underwater, it's a different story.

Sharp-clawed spider crabs and other burrowing crustaceans are among the nuisances that plague researchers who tend five acres of eelgrass on the sandy bay bottoms off eastern Long Island.

"How does it look?" Chris Pickerell, a habitat restoration specialist with the Cornell Cooperative Extension of Suffolk County marine program, asked his dive team last week as they checked plantings.

"Some good, some bad," came the answer from marine botanist Steve Schott, surfacing midway through the first scuba survey since January off Shelter Island's Cornelius Point. "Lots of crab damage."

Planted over the past three years by the Extension service with the help of local and federal funds, the eelgrass beds represent the hope of resurrecting a marine plant in decline.

"Historically, we had these thousands of acres of eelgrass stretching from here to Manhattan," Pickerell said.

But in the 1930s, black spots began to appear on the leaves — the first signs of an affliction then called "the wasting disease," which researchers think was probably a slime mold — and the beds began to die. Eroding

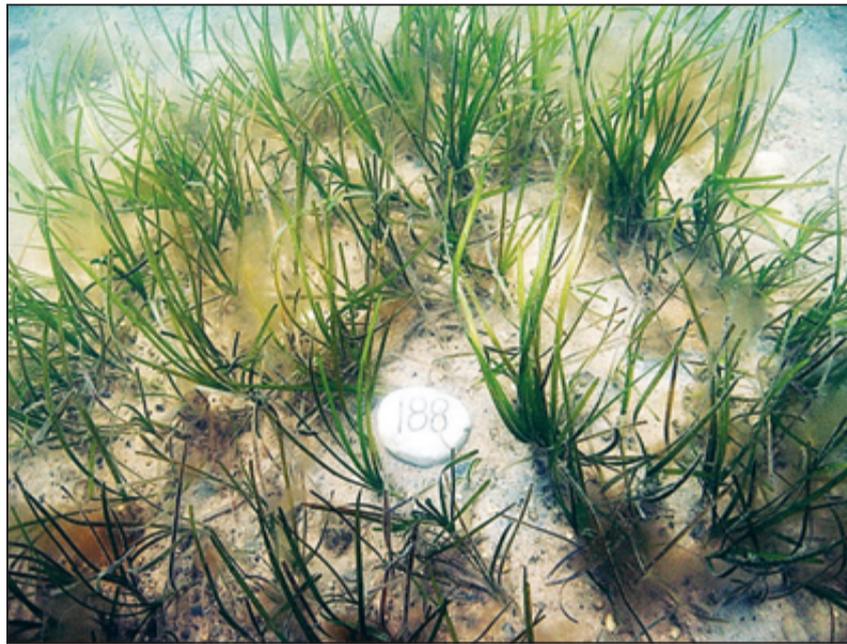


PHOTO BY CHRIS PICKERELL

Eelgrass at a restoration site off Shelter Island. Botanists hope to bring back the grass, which gives cover to young fish and stabilizes bay bottoms.

water quality over the past century and the appearance of "brown tide" algal blooms are thought to have made further inroads on local eelgrass.

Efforts to monitor eelgrass began only in the mid 1990s, so it is hard to know exactly how much has disappeared. But scientists and researchers using historic aerial photographs believe that much has been lost.

That decline matters because eelgrass provides habitat and nourishment for plants, animals and other marine life. In

the past, waving meadows of eelgrass provided cover and nursery grounds for juvenile fish and shellfish such as the now vastly diminished bay scallops. Its roots stabilized the bottom, while its slender green blades diffused the power of waves.

"It's the settling point for shellfish that you eat, and it helps protect the shoreline from erosion," Pickerell said.

Researchers have found it isn't easy to nurture delicate plants sown in the aquatic ver-

sion of an empty lot — a vast sandy space whose lack of vegetation leaves new plants vulnerable to the unbroken force of waves. From St. Thomas Point off East Marion to Moriches Bay, each of the half dozen or so eelgrass restoration sites has its own challenges — different water temperatures, different depths, different currents.

Then there are the spider crabs. With carapaces that can measure 4 inches across and a leg span up to 1 foot, the crabs rip apart eelgrass and damage

its roots as they burrow into the bay floor. "Half the time I'll tap what I think is a rock, and claws will come up out of the sand," Schott said. "When we plant stuff, everything starts to show up," including whelks and moonsnails, both of which plow up the bay floor in search of food.

While some of the eelgrass beds planted here sustained damage during the winter, others appear to be thriving and have reached 8 to 10 inches in height. They'll be even taller when they flower, growing a wiry pale stem that eventually will scatter its seeds into the water.

That is if they get a chance to flower.

Some early blossoms have sustained damage, again from crabs.

So like any gardeners worth their salt, Extension researchers are mulling preventive action. One thought is a fence to guard the circular plots.

The crabs cut the grass, snipping their claws across the blades at a 30- or 45-degree angle, Pickerell said. "We don't know why they cut it, but they do."

Still, researchers are pleased with the results so far at this spot and say they'll plant more eelgrass this fall. Eelgrass technician Kim Petersen smiled during a break from the scuba survey. "We're just really excited that there's still grass," she said.



THE MONTH OF JUNE

You can see

There's a tall woodpile in my yard. Over the years, it's become a kind of rustic high-rise for a little creature that comes out to survey its world every year about this time. In spite of an old dog who can no longer catch his tail and my daughter's sluggish cat, who fancies himself a mighty hunter.

It's a chipmunk, a small, reddish-brown rodent related to the squirrel. Its belly is white and, on each side, its back sports a white stripe bordered by two black ones. Its name comes from the chattering calls it makes to communicate with other chipmunks, a chip-chip-chip and a lower-toned chuck-chuck-chuck. It can make quite a racket. There is just one species of Eastern chipmunk and more than 20 of the Western variety. The Eastern is the bigger of the two, reportedly reaching as much as 11 inches in length from tail-tip to nose, though I've never seen one that large. The one I know is no more than 8 inches long.

My chipmunk has been wintering in a nest it constructed from grass and twigs among the logs. Not strictly hibernating, just spending the winter, sleeping most of the time in its comfortable spot — not unlike those people



NEWSDAY PHOTO/BILL DAVIS, 2003

A chipmunk has a tell-tale white stripe on each side of its back.

who reappear on Long Island sporting Florida license plates when the weather warms up. Late last July, the chipmunk started fattening up for winter and storing nuts and seeds and berries, food for the cold season.

When deep winter set in, the chipmunk took up residence in its nest and went into a torpor. Its heart and breathing slowed down. It woke up every few weeks to eat.

Now, it's mating season and, after a month of pregnancy, a female will bear a litter of four or five babies, which will leave their mothers after eight weeks.

— BILL MCTERNAN

Out and about

MUCK CHARM. Explore the critters that live under the muck in a pond using dip nets and hand lenses, 10:30 a.m. to noon Sunday, June 3, Brookwood Hall, Islip. Free. For reservations, call Seatuck Environmental Association, 631-356-3681.

WOODS WALKS. Explore the beech woods of Stony Hill and the oaks of Jacob Farm on a 6-mile hike, then lunch at the leader's house nearby. Meet at 10 a.m. Sunday, June 3, on the east side of Abraham's Path, 1/4 mile north of Town Lane in Amagansett. Free. Sponsored by East Hampton Trails Preservation Society; leader: Rick Whalen. 631-267-6608.

BYOP. As in, bring your own poem, written by you or someone else, as this hike will halt twice for poetry readings. Yes, you can come sans verse, if you must be that way. Meet at 10 a.m. June 9 at the end of Sammy's Beach Road (a right turn off Old House Landing Road) via Alewife Brook Road in East Hampton. Free. Sponsored by East Hampton Trails Preservation Society; leaders: Leeanne Domash and Laurie Adler. 631-329-2617.

TEN MILES. Loop circuit through Northwest Woods begins at 9 a.m.

June 9. We will lunch on the beach at Alewife Brook Landing and after that it's all downhill. Bring lunch, snacks and plenty of water. Meet at Chatsfield Hole Preserve on Two Holes of Water Road about 1.4 miles west of Stephens Hand Path in East Hampton. Free. Sponsored by East Hampton Trails Preservation Society; leader: Cliff Bekkedahl. 631-267-7646.

A FATHER'S DAY HIKE. A leisurely interpretive trek from 10 a.m. to noon June 17 at Blydenburgh County Park, Smithtown, led by Eric Powers. Bring a father. Free. Reservations, 631-356-3681.

CHATSFIELD'S HOLE. Named after an early East Hampton settler, this is a glacial kettle hole surrounded by pines. Meet at 10 a.m. June 23 at the kiosk parking area on Route 114 at the intersection of Edward's Hole Road (2 miles north of Stephen Hands Path). Free. Sponsored by the East Hampton Trails Preservation Society; leader: Gene Makl. 631-324-8662.

DRAGONFLIES. With nets and jars, seek out local dragonflies and learn facts and myths about these insects with Seatuck Environmental Association's Peter Walsh, 10 to 11 a.m. June 30. Free. South Shore Nature Center, East Islip. For reservations, 631-356-3681. — LAURA MANN