



STACEY WESCOTT/CHICAGO TRIBUNE PHOTOS

Doug Taron, left, chief curator of the Chicago Academy of Sciences, and Allen Lawrence, academy associate curator of entomology, paper-clip a leaf containing several dozen Baltimore checkerspot larvae in the Bluff Spring Fen in Elgin on Friday.

Plight of the BUTTERFLIES

Notebaert Nature Museum tries repopulating a habitat, one larva at a time

BY STEVE JOHNSON
 Chicago Tribune

It should not count in any way as a bad omen that to get to the site of the butterfly release, the one aiming to repopulate a former habitat with a threatened species, you had to go through a cemetery.

Nor should an observer get too hung up on the word "release": The big moment of freedom for the creatures in question involved a leaf, a paper clip and, if you squinted really hard, a little bit of crawling around on said leaf, newly attached to a native plant like an executive review list to a draft report.

This was, in other words, not a butterfly story in the sense that you might imagine butterfly stories: Glorious, winged creatures fluttering amid the foliage, the near-psychadelic patterns on their wings shimmering in the afternoon light.

Yet even without stunning visuals or aerial drama, it was a productive way to spend an afternoon. Scientists from Chicago's Peggy Notebaert Nature Museum transplanted approximately



This silvery checkerspot is a relative of the threatened Baltimore checkerspot.

200 Baltimore checkerspot larvae to Elgin's Bluff Spring Fen, an extraordinary-in-Illinois nature preserve you enter via the historic, even idyllic, Bluff City Cemetery.

One of us in the party, the one who had neglected to put on Off, gave copious amounts of blood to a different local insect. Another, our photographer, was very excited when she spotted actual adult butterflies on the pathways to the clip zones.

But we were the amateurs in the

group. The lead here was Doug Taron, and, short of hiding a pair of patterned wings beneath his Nature Museum field shirt, he had impeccable credentials for the job.

Taron is chief curator of the Chicago Academy of Sciences, the museum's parent. He helped found and directs the Illinois Butterfly Monitoring Network, which uses citizen science to keep tabs on the bellwether insect. And

Turn to Butterflies, Page 3

Butterfly experts release larvae of threatened species

Butterflies, from Page 1

he is president and co-steward of Friends of Bluff Spring Fen, a citizen group that works to preserve and restore the Cook County Forest Preserve District wetland.

Indeed, Taron moved to Elgin to be close to the fen, according to a 2013 Tribune story on the preserve.

"The butterfly monitor at Bluff Spring Fen since 1987, (he) has counted 63 species of butterflies here, including the imperiled Baltimore checkerspot," reporter Barbara Brotman wrote.

The butterfly, a mid-sized species with the black and orange coloring of the family herald of the British Lords Baltimore was more than imperiled in that location, it turned out. 2012 was the last year Baltimore checkerspots were spotted there, Taron said last week.

The cause of their local demise was some combination of unusual weather patterns and a habitat burn, he said.

So the goal on this outing was to give the animal a head start on "overwintering" the process that lets summer's caterpillars become next spring's butterflies and, it is hoped, the basis of a stable population going forward.

Back at the museum in Lincoln Park — which maintains an expansive indoor butterfly garden attraction — Taron and colleagues had been tending some 750 Baltimore checkerspot larvae, the result of harvesting a handful of females from a DuPage County site a few miles away from Bluff Spring, where they remain plentiful.

The majority of the caterpillars will stay at the museum, which will attempt to bring them through chrysalis stage into butterfly-dom there.

"We're hedging our bets here," Taron said.

On the hike to the first wintering site, easily a half mile in, we surprised a group of a different species, silvery checkerspots, who flitted away in what looked like a group tizzy but was probably perfectly rational butterfly behavior.

When they gather like that, "the males are imbibing salts out of the moist mud here," said Allen Lawrance, the academy's associate curator of entomology. "It's called 'puddling.' And whenever there's a big group like that, it's a 'puddle club.'"

"That would qualify," said Taron, who was holding the precious cargo, four paper cups containing leaves and larvae inside an ordinary clear plastic box.

"It's not very high-tech," Lawrance said.

Our path wasn't a walkway so much as a slightly less overgrown area through the coneflowers and the cylindric blazing stars, the grasses, the wicket sedges. And soon enough, we plunged off the path and toward a spot Taron and Lawrance had already chosen, very near to the marshy area that gives the preserve its name.

"When the adults come out, they'll just be able to fly right over to the wetland," said Taron.

"They're wetland specialists. They require these rare remnant



Doug Taron pounds a stake into the ground to install a protective box for the Baltimore checkerspot larvae in Bluff Spring Fen.



Taron thinks the 2-mm larvae will grow to inch-and-a-half caterpillars soon. "We're hedging our bets here," he said.



Resplendent monarchs like this one can be spotted flitting through Elgin's Bluff Spring Fen nature preserve.



Four paper cups contain 200 tiny Baltimore checkerspot caterpillars, which conservationists hope will thrive in the fen.



Taron uses part of a leaf to scoop up larvae. The larvae are being placed on native plant leaves and released into the preserve.

habitats."

The two took turns hammering lengths of rebar into the soil, then slipped the four corners of a pop-up mesh enclosure around the rods.

Taron leaned into the enclosure's open side, pulled a leaf bearing larvae out of one of the cups and paper-clipped it to a roughly 2-foot-high plant. About 2 millimeters long now, the caterpillars will get to an inch-and-a-half pretty quickly, he said.

"They will crawl onto this and

they will set up shop there," Taron said, and they will begin spinning protective cocoons around themselves in preparation for wintering in pupa form toward the plant's base. "The idea here is we want them to do the work. We want them to decide where to settle down."

He reached out to Lawrance for another paper clip, like a surgeon calling for a medical instrument, attached the last leaf in the first batch, and then zipped the enclosure shut for protection

from predators.

"Ta da!" he said.

At the second site, the process was similar, but even quicker because they had already put the mesh prophylactic in place. Lawrance used his phone to mark the GPS coordinates, and they gathered up their supplies and we hiked back into the cemetery, where the cars were parked.

They will keep feeding the caterpillars in the lab, which the scientists also want to introduce into the fen as adults.

"We're not wanting all of our eggs in one basket," Taron said.

As for the new Bluff Spring Fen denizens, he'll visit probably a couple of times before winter to make sure everything seems to be doing OK, Taron explained. But the process should pretty much take care of itself.

"We're kind of stepping back and letting them do their thing," he said.

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