

One hundred years ago the Xerces Blue butterfly flew among the sand dunes of the Sunset District. But this iridescent blue, inch-wide insect was last seen in the early 1940's, and it is believed to be the first butterfly in North America to become extinct as a result of urban development. Now, the green hairstreak butterfly is in danger of sharing the same fate.

"It's unbelievable that San Francisco is famous for making this beautiful butterfly extinct. I can't just sit back and click another one off," said Liam O'Brian, a lepidopterist with Nature in the City, an organization dedicated to preserving and appreciating nature in San Francisco.

The green hairstreak, a kelly green, nickel-sized butterfly, was once abundant in San Francisco, but it is currently found in only three locations in the City; along the coastal bluffs in the Presidio and on the rocky hillsides at Hawk Hill, on 15th Avenue and Rivera Street, and at Rocky Outcrop, on 14th Avenue and Ortega Street. The two populations in Golden Gate Heights are separated by only four blocks, but the houses and streets on these blocks form a barrier that prevents the butterflies from flying between the two locations.

In small populations like these, the females do not have many males to choose from when mating, leading to inbreeding and an increased chance of extinction. To make matters more complicated, the female green hairstreak lays her eggs on only two types of plant, coastal buckwheat and deerwheat. If the female does not find those plants, the eggs are lost.

"These isolated populations will ultimately implode," O'Brian said

About 2 years ago, O'Brian's imagination was sparked by the possibility of connecting the two populations in Golden Gate Heights by planting coastal buckwheat, deerwheat and other native plants along the four-block corridor. The idea is to encourage females to fly down the corridor and breed with males from the other group.

O'Brian approached Nature in the City with his idea, and the green hairstreak Project has been operating for one and a half years now.

"The Green Hairstreak Project is a wonderful project that integrates everything we want to do at Nature in the City," said Peter Brastow, founder of the organization. "It's about restoring nature and connecting people with nature. It's a mutually advantageous relationship."

The Department of Public Works has given permission to Nature in the City to cultivate unused pieces of land along the corridor specifically for this project. Some neighbors have become site stewards who manage these small areas. Others have started planting coastal buckwheat and deerwheat in their yards.

"You don't need a large area of land, just a little bit," said Mike Belchor, a neighbor and steward who manages a small triangle of land close to Rocky Outcrop.

On a recent walk along the green hairstreak corridor, none of the small butterflies were seen at Hawk Hill, but the first sighting of one at Rocky Outcrop brought all the participants into an excited huddle around the light purple Pompom flower that it was seated on. Fifteen minutes later, there was even more enthusiasm when a mating couple was spotted perched on another flower.

“This is something so rare that you’ve just seen,” O’Brian said with a huge a smile.

O’Brian will consider the project to be successful when green hairstreaks are seen on the newly planted areas along the corridor. But this could take some time. Belchor estimates that it might take about 2 years before the native plants fill in his little plot.

Even though green hairstreak butterflies are common throughout Europe and Asia, their fate in San Francisco can be viewed as a barometer of how good our local ecology is doing, according to O’Brian. By his count, there were 32 species of butterflies in the City in 2007. One hundred years earlier, there were 54.

“I want to be part of a group of people that tries. It might be too late, no doubt, but I’ll do the best that I can,” O’Brian said.

The next green hairstreak butterfly walk will take place on Sunday, May 9 at 11:00 AM. For more information visit the Web site at www.natureinthcity.com.