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Miami Blue Butterfly Gets New Lease On Life

The critically endangered Miami Blue butterfly, one of the rarest insects in North America, returned to South Florida in May when University of Florida researchers released several hundred butterflies that had been bred in captivity.

“Last year, the entire Miami Blue population was down to about 50 adults, and their habitat was restricted to Bahia Honda State Park in the Florida Keys,” said Thomas Emmel, director of UF’s McGuire Center for Lepidoptera and Environmental Research in Gainesville. “We hope the release will establish a new, self-sustaining colony that will eventually increase in number and repopulate other areas of South Florida.”

Several hundred mature caterpillars or larvae were released in Everglades National Park and emerged as butterflies in 10 to 15 days. The adult insects, and their offspring, are being monitored closely to see how well they are reproducing.

At one time, the Miami Blue butterfly was common in the coastal areas of South Florida. Beginning in the 1970s, coastal development and activities such as mosquito spraying caused the population to drop to critically low levels. After Hurricane Andrew swept through the area in 1992, Emmel and other researchers thought the Miami Blue was extinct.

Emmel was surprised to find a colony of Miami Blue butterflies in the Florida Keys in 1999.

To raise the butterflies in captivity, Jaret Daniels, director of the project, harvested 100 pinhead-sized butterfly eggs from nickerbean plants in Bahia Honda State Park. The Miami Blues were then reared in UF’s new lepidoptera research facility at the Florida Museum of Natural History in Gainesville.



Josh Wicksman



Jaret Daniels

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— Jaret Daniels

Jaret Daniels, director of the Miami Blue butterfly research project at UF’s McGuire Center for Lepidoptera and Environmental Research, releases mature caterpillars in Everglades National Park.

“In the wild, anywhere from 1 percent to 5 percent of butterfly eggs result in a reproducing adult,” Daniels said. “In our captive propagation program, that number is closer to 70 percent.”

Emmel and Daniels have raised 13 generations of Miami Blues over the past 15 months, resulting in more than 9,000 individuals.

Federal and state fish and wildlife agencies have provided funding for the

UF research project. Additional cooperation has come from the Florida Parks Department and the National Park Service.

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