

## UNITED STATES OF AMERICA DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE ENDANGERED SPECIES PROGRAM

## **TELEPHONIC INTERVIEW TIME (05:37)**

## MIAMI BLUE BUTTERFLY (HOST – MEAGAN RACEY WITH MARK SALVATO)

This transcript was produced from audio provided by FWS Endangered Species Program

PROCEEDINGS

(Music plays.)

MS. RACEY: Hi there. This is Meagan Racey with the U.S. Fish and Wildlife Service. Today Mark Salvato, biologist with the Service's South Florida office has joined me on the phone to chat about the Miami blue butterfly, a small butterfly found on Florida's coast. Hi, Mark.

MR. SALVATO: Hey. Pleasure talking to you.

MS. RACEY: Thanks for joining us. Now, I understand that this endangered butterfly was once thought to be extinct.

MR. SALVATO: Yes. The Miami blue population in Biscayne National Park and other parts of the Florida Keys was not observed again after Hurricane Andrew in 1992. Only one small population was believed to exist on Northern Key Largo until about 1996. After that no one recorded another sighting for years until a photographer in 1999, discovered some in the Bahia Honda State Park in the lower Florida Keys.

That population was stressed extirpation from more extreme weather patterns, which included drought and cold snaps and from exotic green iguanas eating the leaves where Miami blues lay their eggs. Now the butterfly occurs only on a handful of small islands within the Marquesas Keys, which is in Key West National Wildlife Refuge. This area is located about 50 miles due west of Key West and the main island chain of the Florida Keys.

MS. RACEY: That's an interesting tale for this rare butterfly. How did it reach such a sensitive status?

MR. SALVATO: The Miami blue, which doesn't migrate was once found in hardwood hammocks, pinelands and scrub all along our Florida coast from Dry Tortugas northward to St. Petersburg and Daytona Beach. Coastal development and toxic chemicals were the earlier threats to the butterfly when we determined in the 1980s that it was a candidate for protection under the Endangered Species Act.

MS. RACEY: Okay. And now it is protected under the Endangered Species Act?

MR. SALVATO: Yes. Because we believe it needed immediate attention and protection. The Service emergency listed the butterfly in August 2011, for 240 days and it finalized protection under the ESA this year in April. We estimate there are only a few hundred individuals remaining and we are currently surveying the population within Key West National Wildlife Refuge in order to learn more about the Miami blue's current status.

MS. RACEY: So, are development and chemicals still causing this butterfly's continuing decline?

MR. SALVATO: Actually we listed the Miami blue because it met a number of factors that we evaluate for each species. It faces compounded threats from urban sprawl, loss of its host plants, which are eaten by iguanas, accidental harm from humans. Because of its small population size and restricted range, loss of necessary genetic diversity, collection by humans and the potential for large catastrophic environmental – the potential for large catastrophic environmental event could severely impact the Miami blue.

MS. RACEY: So it sounds like we could be really close to losing this butterfly. What's being done to save it?

MR. SALVATO: The Service is working with the State National Park Service, the University of Florida, North Carolina State University and a number of other partners on initiatives for Miami blue. We tried to introduce the butterfly to start new populations, but that has been unsuccessful to date. We are accessing the extent of occupancy and the size of remaining populations and we're looking at options for controlling and reducing other threats such as invasive iguanas. Partners are also looking out for additional populations but none have been detected to date.

MS. RACEY: This is a fairly small butterfly, right? And we've got many others that are flying around as well. How would you spot it while looking for these new populations?

MR. SALVATO: Well, it's only about the size of a quarter, which does make it hard to find. On top of that, adults are believed to have a very short lifespan living for just a few days. Males are bright metallic blue above, while females are less vivid, primarily dark gray with blue scaling toward the wing bases and orange-capped black eye spots on each hind wing. In order to find Miami blues we examine areas with large concentrations of larval host plants, which include black bead, nickerbean and balloonvine.

MS. RACEY: This sounds like pretty intensive work to find an insect. Why do we do it?

MR. SALVATO: There are a number of reasons. Florida supports an amazing number of different types of native butterflies, many of these, including the Miami blue are unique to this area and occur nowhere else. Habitats with rich abundance of Lepidoptera often support a variety of other important insects.

Together these pollinate our flowers and our crops, they help to naturally control pests and they're important prey for other animals. Beyond that they're quiet, attractive members of our outdoors that many people appreciate.

MS. RACEY: I know I certainly enjoy them. Well, Mark, would you like to mention anything else today?

MR. SALVATO: Actually I would. People often ask if protecting a certain animal in the ESA will affect them. In this situation the Service protects the cassius blue butterfly, the ceraunus blue butterfly and the nickerbean blue butterfly as threatened due to their similarity of appearance to the Miami blue.

There are prohibitions on collections and commercial trade of these species both within the United States and into and out of the U.S. Otherwise lawful activities that may impact these similar butterflies, like legal use of pesticides, mowing, vehicle use are now prohibited. This has been important to provide the much needed protection for the Miami blue.

MS. RACEY: That is important information to know. Thank you. It was a pleasure having you on. For U.S. Fish and Wildlife Service, this is Meagan Racey. Thanks for listening.