

Corridor Establishment for an Endangered South Florida Butterfly

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Objectives:

1. Restore and improve the remaining tropical hardwood hammock habitat surrounding the Ocean Reef Golf Course by reintroducing native adult nectar sources and larval host plants in order to create significant natural habitat suitable to maintain and nourish transient adult butterflies and allow for the establishment of new breeding colonies on the northern end of Key Largo.
2. Establish a viable corridor for adult movement and regular gene flow between already existing Schaus Swallowtail butterfly colonies within Biscayne National Park and those present on Key Largo.

Start Date: 1999

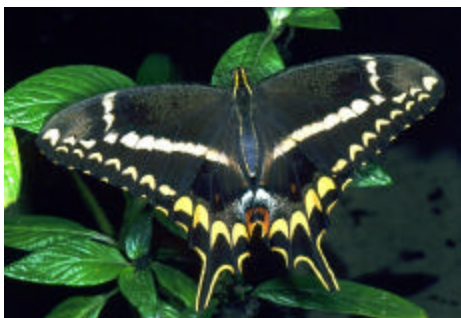
Project Duration: 3 years

Total Funding: \$55,000

The ultimate goal of this research project is to accomplish the successful reintroduction, growth and survival of native Schaus Swallowtail adult nectar and larval host plants on the grounds of golf course properties in the Florida Keys. Starting with the Cheeca Lodge and Sombrero Country Club golf courses, these demonstration projects will represent a significant increased chance for the long-term survival and viability of this endangered species.

In particular, the enhancement of habitat on these golf courses previously unavailable to this endangered butterfly will provide a clear corridor for adult movement and gene flow between native tropical hardwood hammock populations of the species to the north and south of each golf course.

We have negotiated a Safe Harbor Agreement with the U.S. Fish and Wildlife Service for each golf course. This is necessary in order to relieve the golf course of any responsibility for death or injury of an individual butterfly that may take up either transient or permanent residence in these newly designated habitat areas.



The Schaus Swallowtail butterfly.

Since there are no native populations of this endangered species in either of the initial two golf courses at this time, the agreements simply state that any accidental loss would be "incidental take" loss and not injurious to the ultimate success or extirpation of the species. Hence there is no liability risk to the golf course from the project's activities focused on attracting these butterflies.

We have bought for Cheeca Lodge 150 firebud nectar sources and more than 300 pentas plants to start establishing nectar sources for the Schaus Swallowtail butterfly along the golf course greens. We have placed an order for a large number of wild lime tree seedlings with a native plant nursery in central Florida. These will be grown to minimum 12 inches in plastic bags this winter. We will transplant these "liners" to 3-gallon pots here at Gainesville and place them in our main culture facilities for rapid growth to young tree size. They will be planted late in the second and third years of the project.

We have been preparing the text and photos for the public information displays that will be set up at each golf course. These displays will not only briefly summarize the biology of this large and conspicuous butterfly species, but also describe some of the interesting environmental facts.

These displays will also explain the reasons it is important to conserve endangered species, why this golf course is cooperating with the effort, and how the U.S. Fish and Wildlife Service and U.S.



Researchers at the University of Florida discuss how special vegetation can be planted on golf courses throughout the Florida Keys to provide habitat for the Schaus swallowtail butterfly.

Golf Association are working to better the environment for wildlife through their Wildlife Links Program.

We will continue planting and will be monitoring the golf course areas transient Schaus Swallowtail adults or newly resident immature stages within the reintroduction sites. We expect to find greatly enhanced butterfly activity of a number of species besides the Schaus Swallowtail along the golf courses.

Summary Points

- Safe Harbor Agreement was negotiated with the U.S. Fish and Wildlife Service for each golf course.
- Nectar source plants have been purchased for the golf courses and planting is planned after transplants have reached acceptable size.
- Public displays are being prepared regarding the need for the project, a description of the endangered Schaus Swallowtail, and the Wildlife Links Program.
- Schaus Swallowtail monitoring will continue in years two and three of the project.