Program Name: Exotic Management
Project Name: **Biscayne National Park Schaus swallowtail butterfly (*Heraclides aristodemus ponceanus*) Habitat Enhancement**
Project ID: 2800
Lead Agency: National Park Service

Strategy and Biennial Report Objective Addressed: 2-B.4
Invasive Species Strategic Action Framework Goal: 4

Measurable Output(s): By planting torchwood (*Amyris elemifera*) and wild lime *Zanthoxylum fagara)*, we hope to be able to observe an increase in the Schaus swallowtail butterfly (*Heraclides aristodemus ponceanus*) and a decrease in exotic plants

Project Synopsis:
The SFCN, Florida and Caribbean Exotic Plant Management Team (FLACO EPMT), and Biscayne National Park (BISC) were awarded a grant from the U.S. Fish and Wildlife Coastal Program to fund habitat enhancement for the federally endangered Schaus swallowtail butterfly (*Heraclides aristodemus ponceanus*). The project goal is to restore its critical habitat by removing invasive plants and planting host and nectar plants on Elliott Key and Adam's Key in BISC. We collected seeds of two species of Schaus swallowtail host plants: torchwood (*Amyris elemifera*) and wild lime (*Zanthoxylum fagara*), and reared them in a nursery. The goal is to plant 5,000 seedlings in FY12 through FY14. SFCN and other NPS staff and volunteers spent 2,115 field hours working on this project in FY13.

This project has an educational component to increase public awareness and instill the stewardship ethic through interpretive signage, volunteering, and outreach. Educational/outreach presentations have been given at conferences, seminars, lectures, and science symposia. Articles featuring this project were published in The Miami Herald, The Tropical Garden, and newsletters for the Florida Native Plant Society and the North American Butterfly Association. A podcast filmed by BISC features this project. Volunteer work days were done with the Sierra Club, Florida International University, Doral High School, and alternative spring breakers from Martins Ferry High School in Ohio. An educational sign has been created for the restoration areas, and shirts have been designed and are given out to reward volunteers and raise public awareness. This project is part of a school yard butterfly program which has established 7 butterfly gardens in local schools and comes with lesson plans and presentation.

This project could be aggressively expanded by increasing the number of locations where restoration/planting occur and expanding the number of school-based butterfly garden partnerships that are involved. Enhancements of up to $100,000 per year could be applied to this project.

Current Status: To date, we have planted 2,007 torchwood, 445 wild lime, and 96 nectar plants, for a grand total of 2,548 plants. Plantings took place at Elliott Key in the main breezeway restoration area, and Spite Highway restoration area. Additional plantings took place in Adam's Key in the main restoration area and the breezeway restoration area. Constant maintenance has been done in these areas including herbicide application, removal of noxious weeds, and watering of seedlings. This is necessary as plants are not yet mature enough to shade out understory and prevent weed growth. There is currently ongoing monitoring and removal of exotics species on the project site.

Project Schedule:
Start Date: 2011
Finish Date: ongoing

Detailed Project Budget Information

	2014	2015	2016	2017	2018	Balance to Complete	Total
Federal	N/A	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$20,000.00	$20,000.00
SFWMD*	$52,000.00*	N/A	N/A	N/A	N/A	N/A	$52,000.00
Local	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	$52,000.00	$5,000.00	$5,000.00	$5,000.00	$5,000.00	$20,000.00	$72,000.00

*Funds provided by U.S. Fish and Wildlife Coastal Program

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Pictures:

Map of Area:

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