

**Big Cypress National Preserve
Exotic Plant Management Program
FY2006, 1st Quarter Progress Report**

The intention of this report is to provide an update on ongoing exotic plant management projects in Big Cypress National Preserve. Activities conducted between October 1, 2005 and December 31, 2005 are covered.

Project: Task Order 10, Melaleuca retreatment, Turner River Unit
Task Order No.: T5120054144

Contractor: Applied Aquatic Management, Inc
PO Box 1469
Eagle Lake, FL 33839-1469

Contract No.: 5120036200

Funding Sources: National Park Service Challenge Funding

Related PMIS No.: 41189, Exotic Plant Control

Contributes to PMIS Goals: Ia1b- By September 30, 2005, 82,000 (50%) of the 164,000 acres of BICY lands known to be impacted by targeted exotic vegetation is contained. Need to update with 2006 PMIS goals.

Treatment Objectives and Methods

The objective of this project is to revisit sites in which *Melaleuca quinquenervia* was previously treated. These sites are located in the area roughly bounded by Burns Lake campground on the west and Monroe Station on the east and extending approximately 16 km to the north of Tamiami Trail (Figure 1). This area was chosen for retreatment because over three years had passed since the last treatment was conducted in the area. In addition, contracted crews and NPS staff observed many scattered trees when conducting other activities in the area. This area also ties in with a large area revisited in 2004.

Treatment history maps were prepared from data contained in the exotic treatment database maintained by Big Cypress Exotic Plant Management. All previously treated melaleuca sites within the work area were plotted on an aerial basemap. These maps and a list of UTM coordinates were provided to the contractor. The contractor then revisits each site and treats melaleuca trees found there. A cut stump treatment with an herbicide mixture containing 25% Arsenal and 25 % Glypro in water is used for saplings and trees. Seedlings are pulled up. Melaleuca trees encountered en route to retreatment sites are also treated. In addition, other exotic species found while carrying out this work are treated on a case by case basis and treated with approval from BICY Exotic Plant Management as described in the task order.

Results

During the first quarter of FY2006, Melaleuca trees were found at 205 sites and an estimated 60,718 stems were treated. Mature, seed producing trees were found at 157 of the 205 sites and an average of 296 stems was found at each site. The number of stems per site ranged from 1 to 5000. Approximately 14,000 acres were visited and total of 37.3 gallons of herbicide mix was applied to the treated area (0.00266qts active ingredient/acre). The total cost of this treatment was approximately \$29,809.41 or \$2.12/acre.

In addition to Melaleuca, several other exotic invasive species were treated during this quarter. These include Old World climbing fern (*Lygodium microphyllum*), java plum (*Syzygium cumini*), five finger (*Syngonium podophyllum*), sapodilla (*Manilkara zapota*), lead tree (*Leucaena leucocephala*), bishopwood (*Bischofia javanica*) and shoebutton ardisia (*Ardisia elliptica*). Finding shoebutton ardisia raises serious concerns. It has only been treated once before in BICY, near Monroe Station. The infestation treated during this quarter was associated with a trespass camp about 2 miles north of Monroe Station. Plants were found in disturbed soil associated with the camp and were also spreading into adjacent, undisturbed pinelands. This plant is a serious problem in parts of Everglades National Park and needs to be removed whenever encountered to prevent the same situation from occurring in BICY. Also of concern were two small Old World climbing fern infestations. As anticipated, gaps in the BICY distribution of this species continue to be filled. The infestations were eradicated in our efforts to prevent a much more serious problem from developing.

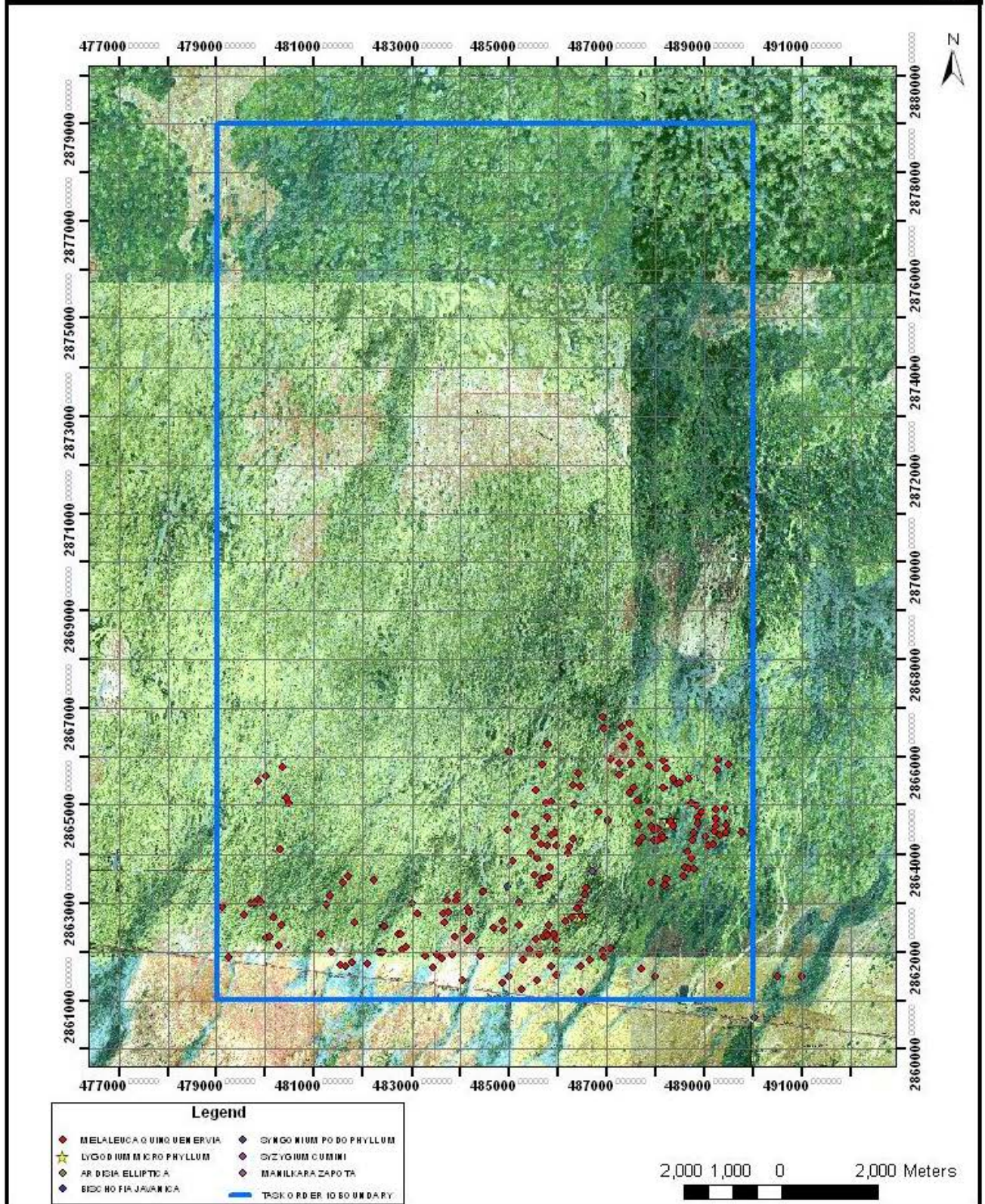


Figure 1. Exotic invasive plant site treated during the 1st quarter of FY2006.