

**National Park Service
Florida/Caribbean EPMT
Project Application**

Name of Project: FL DEP Partnership to Remove Brazilian Pepper from BICY

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Address:

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Project Size: 1000 Ac.

Habitat Description and Related Information:

This project will occur in the northern part of Big Cypress National Preserve (BICY), north of I-75. Much of this area was acquired within the past several years and is referenced as 'Addition Lands'. This part of BICY is more elevated than the southern area, and therefore is more mesic. Biological communities in this area are more commonly pine and palmetto flatwoods, or hardwood and sabal palm hammocks with hydric communities common throughout. Substrates are mostly sandy and often scarified.

Much of the mesic area north of I-75 has been altered by minor hydrologic change and recreation activities; this has promoted subsequent colonization by exotic plants. Activities associated with range management and transportation corridors contributed to disturbance and concomitant exotic invasion. The degree of alteration varies from relatively minor change in range land to severe alteration in intensively farmed areas.

Exotic Plants Present:

Disturbance in these mesic communities has allowed many non-native plants to become established. Probably the most significant in this area is Brazilian pepper (*Schinus therbinthifolius*). Nearly monocultural stands have developed in areas with much disturbance, and areas with less disturbance have significant populations of this plant. Other exotics, such as *Urena lobata*, *Syzygium cuminii*, *Solanum viarum*, are common

here, and will be removed as appropriate; however removal of Schinus will be the focus of the work cited here.

Targeted Area:

Work will occur primarily in disturbed upland communities in the Addition Lands north of I-75.

Scope of Work:

Now BICY attempts to control all known 125 exotic plant species in the preserve, focusing treatment on the most invasive plants (Melaleuca, Brazilian pepper, Old World Climbing Fern, and Australian Pine). This project aims to restore natural systems and native plant communities (oak scrub, subtropical hammocks, marshes and swamps) within BICY by removing Brazilian pepper.

Big Cypress National Preserve has many exotic plants that require management, and the preserve and its partners do not have sufficient funds to cover all project needs. CCI funds would be matched with those provided by the Florida Department of Environmental Protection (FLDEP). The FL/Caribbean Exotic Plant Management Team (EPMT) is also willing to provide matching funds, but EPMT funds are not eligible for the CCI match. All work will be done through contractual agreements for the control of exotic vegetation as laid out in the State's DEP Upland Invasive Plant Management Program. Contractors have proven safety and performance records and are required to achieve 95% control of exotics in treatment areas.

FLDEP has offered to provide matching funds for this project because:

- 1- NPS's long-term commitment to rid BICY of Brazilian pepper;
- 2- NPS past funding of exotic plant management programs in this and other Florida NPS units; and,
- 3- The availability of CCI funds for matching.

Brazilian pepper trees will receive basal bark treatments with 10% Garlon 4 mix in vegetable oil vehicle. Where possible and practical, dead trees will be mechanically broken at the substrate surface, piled and burned. This removal will be supplemented where possible with Gyrotrack mechanical clearing equipment, subsequent burning, and chemical treatments. Prescribed fires will be considered for all treatment areas, and burns that can help reduce re-growth of exotics will be coordinated with BICY Fire Management.

Project Goals: The goal of this and subsequent projects is to bring Brazilian pepper in areas north of I-75 to a maintenance level. This will help maintain the integrity of native plant communities and increase the amount of useable wildlife habitat by eliminating Brazilian pepper and will help prevent it from re-establishing within BICY which, if allowed to happen, would negate past efforts.

Benefits of the project include:

- 1- Native plant communities and more natural fire regimes will be restored;
- 2- Controlling Brazilian pepper will enhance plant diversities and help insure the integrity of native plant communities, thus increasing useable wildlife habitat;
- 3- Enhancement of wildlife habitat in this and surrounding areas will support the recovery of the endangered Florida Panther (*Felis concolor-coreyi*), red-cockaded woodpecker (*Picoides borealis*), wood stork (*Mycteria americana*), and the Endangered everglades kite (*Rosterhamus sociabilis*);
- 4- This is all provided through a cost-effective approach, using the most current control methods;
- 5- Funding allows restoring twice the acreage originally planned.

NPS Estimates:

Project	Acres	% cover	Exotic Acres	Cost/Acre	Total Cost
BICY Schinus	1000	20	200	\$1500	\$300,000

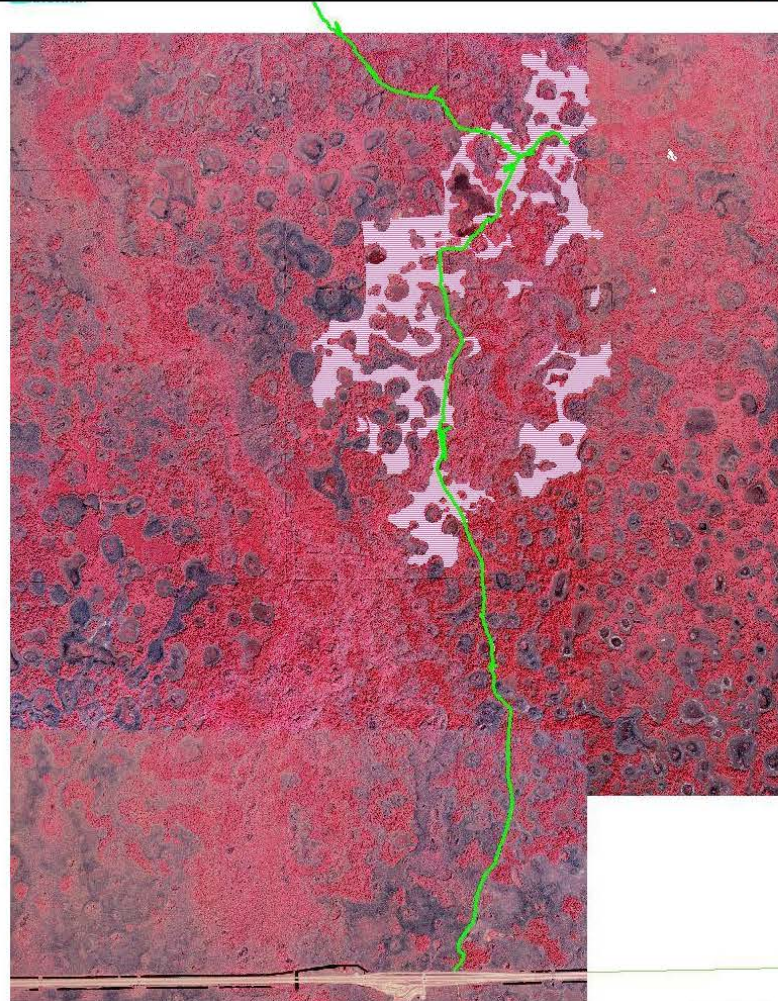
Federal Cooperative Conservation Initiative (CCI) funds: \$150,000 = (50%)

Florida Department of Environmental Protection (Matching) funds:
\$150,000 = (50%)

Ratio of CCI to Partner funding: 1:1



Schinus Dominated Communities Near Nobles Grade



0 0.5 1 1.5 2 Miles

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