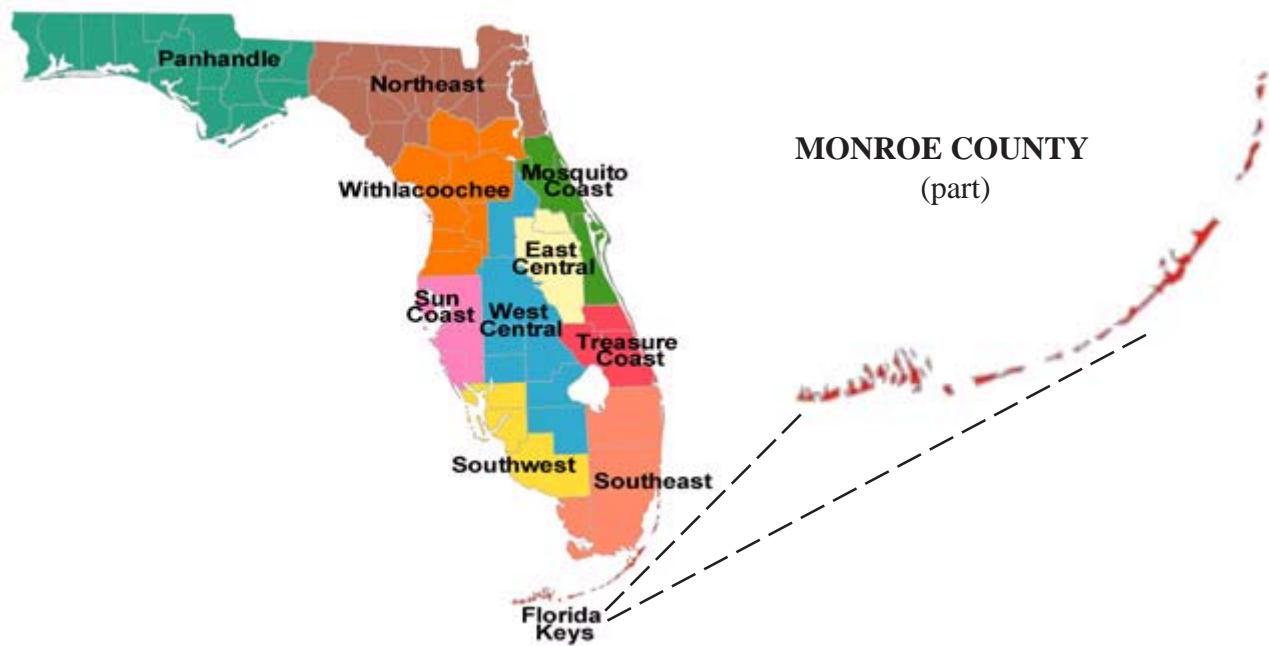


Florida Keys Regional Working Group



The Florida Keys Regional Working Group liaison is Alison Higgins, The Nature Conservancy, P.O. Box 420237, Summerland Key, Florida, 33042, phone: 305-745-8402, fax: 305-745-8399, e-mail: ahiggins@tnc.org

Key West Naval Air Station

County: Monroe

PCL Size: 6,323

Project ID: FK-046 18.65 acres \$73,177.76

Project ID: FK-053 45.00 acres \$24,691.15

Project Manager: U.S. Navy

Edward Barham, Natural Resources Manager

Post Office Box 9007, Key West, Florida 33040-9007

Phone: 305-293-2911, Fax: 305-293-2542

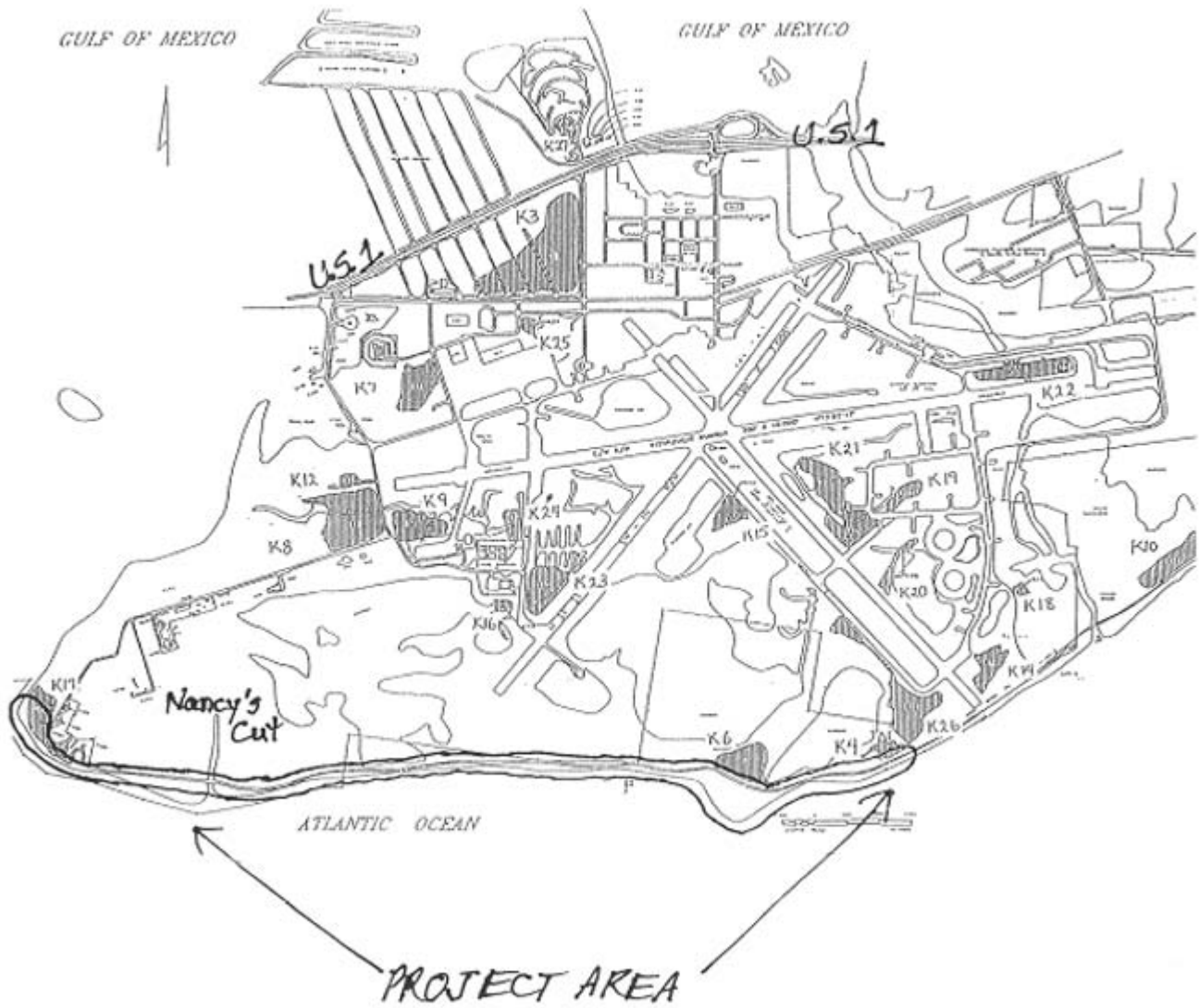
E-mail: barhamed@naskw.navy.mil

Two projects occurred at Key West NAS; one for initial control and one for maintenance control. Initial control conducted on Big Coppitt Key and Geiger Key targeted Australian pine. Big Coppitt Key is a filled, scarified area within the Key West NAS Fish and Wildlife Management Area MU-5. The site is approximately 0.65 acres and is adjacent to mangrove wetlands and open water. Geiger Key is a former “Hawk Missile Site” and comprises approximately 18 acres.

The second project area encompassed a natural beach berm along the Atlantic Ocean located on Key West NAS property on Boca Chica and Geiger Keys. This area is habitat for wildlife, including the endangered Lower Keys marsh rabbit (*Sylvilagus palustris hefneri*). Rapidly expanding populations of invasive exotic plant species infested the beach berm. The two primary invaders were lather leaf and Brazilian pepper. Also present, to a much lesser extent, were Australian pine and seaside mahoe. About 12.4 acres of the project area was west of an old tidal creek called Nancy’s Cut, with the remaining 32.6 acres east of the cut. The exotics were largely concentrated along the berm top and road edges. This project involved maintenance control of the FY03 project area.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Casuarina equisetifolia</i>	Australian pine	Category I	basal	Garlon 4
<i>Colubrina asiatica</i>	lather leaf	Category I	cut stump	Garlon 4
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	basal/cut stump	Garlon 4
<i>Thespesia populnea</i>	seaside mahoe	Category I	cut stump	Garlon 4
<i>Scaevola sericea</i>	beach naupaka	Category I	cut stump	Garlon 4
<i>Hibiscus tiliaceus</i>	mahoe	Category II	cut stump	Garlon 4
<i>Leucaena leucocephala</i>	lead tree	Category II	cut stump	Garlon 4

**Boca Chica Beach Exotics
Project Map**



Florida Keys Refuges Invasive Exotic Plant Control Technicians

County: Monroe

PCL Name	PCL Size (ac)	Project Area (ac)	
National Key Deer Refuge	9,367.94	760	
Great White Heron NWR	192,787.63	983	
Key West NWR	208,308.17	1,434	
Crocodile Lake NWR	6,688.04	1,197	
Florida Keys WEA	2,344.00	1,493	
Project ID: FK-044	Total Project Size:	5,867 acres	\$77,616.00

Project Manager: U.S. Fish and Wildlife Service

William G. Miller

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E-mail: william_g_miller@fws.gov

The Florida Keys National Wildlife Refuges (NWR), including the Key Deer, Great White Heron, Key West, and Crocodile Lake National Wildlife Refuges, and the Florida Keys Wildlife and Environmental Area (WEA) include land on Key Largo, Big Pine Key, No Name Key, the back country islands of the Great White Heron NWR, and several other keys in the Lower Florida Keys. Natural communities within the NWR/WEA include tropical hardwood hammock, pine rocklands, freshwater wetlands, and mangrove swamp. These lands are home to a number of rare plants and animals, five of which occur nowhere else in the world. Rapidly expanding populations of Brazilian pepper, Australian pine, and latherleaf infest the native habitats of the NWR/WEA. This project targeted these three species and other invasive plants on Key Largo, Big Pine, No Name, Big and Little Torch, Summerland, Cudjoe, Sugarloaf, and Boca Chica Keys, and the backcountry islands of the Lower Keys.

Public conservation lands extend throughout the Keys and include individual lots ranging from 5,000 square feet to parcels several hundred acres in size. These properties are owned by the United States of America, State of Florida, South Florida Water Management District, and Monroe County. All lands are publicly owned and managed by the NWR/WEA for conservation of rare plant and animal species, including the Key deer. A team of plant control technicians funded by BIPM performed the work. USFWS provided matching costs for herbicide, vehicles, crew equipment, and mechanical equipment with a total value of \$70,400.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Casuarina equisetifolia</i>	Australian pine	Category I	basal	Garlon 4
<i>Colubrina asiatica</i>	lather leaf	Category I	cut stump	Garlon 4
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	basal/cut stump	Garlon 4
<i>Thespesia populnea</i>	seaside mahoe	Category I	cut stump	Garlon 4
<i>Scaevola sericea</i>	beach naupaka	Category I	cut stump	Garlon 4
<i>Hibiscus tiliaceus</i>	mahoe	Category II	cut stump	Garlon 4
<i>Leucaena leucocephala</i>	lead tree	Category II	cut stump	Garlon 4

Figure 1. Location of exotic plant control units on Big Pine and No Name Keys.

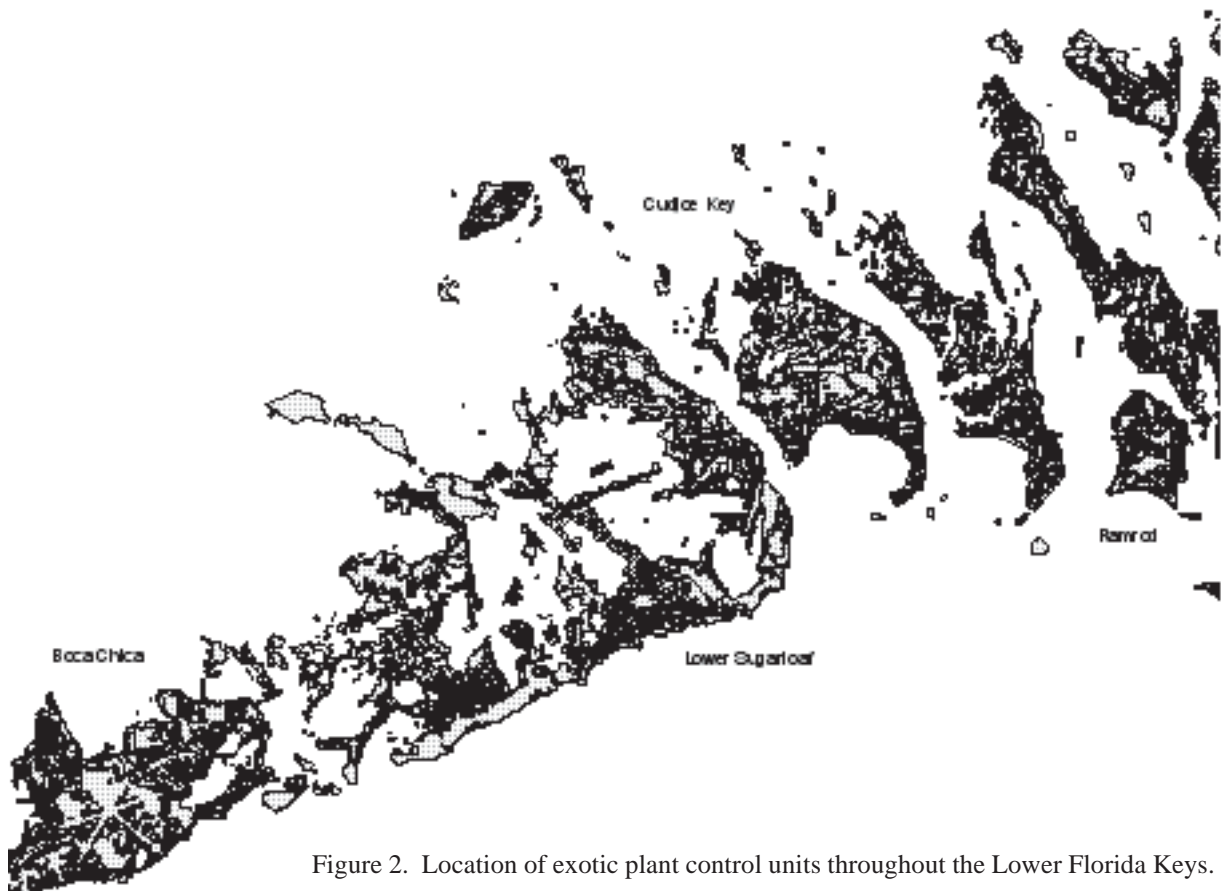
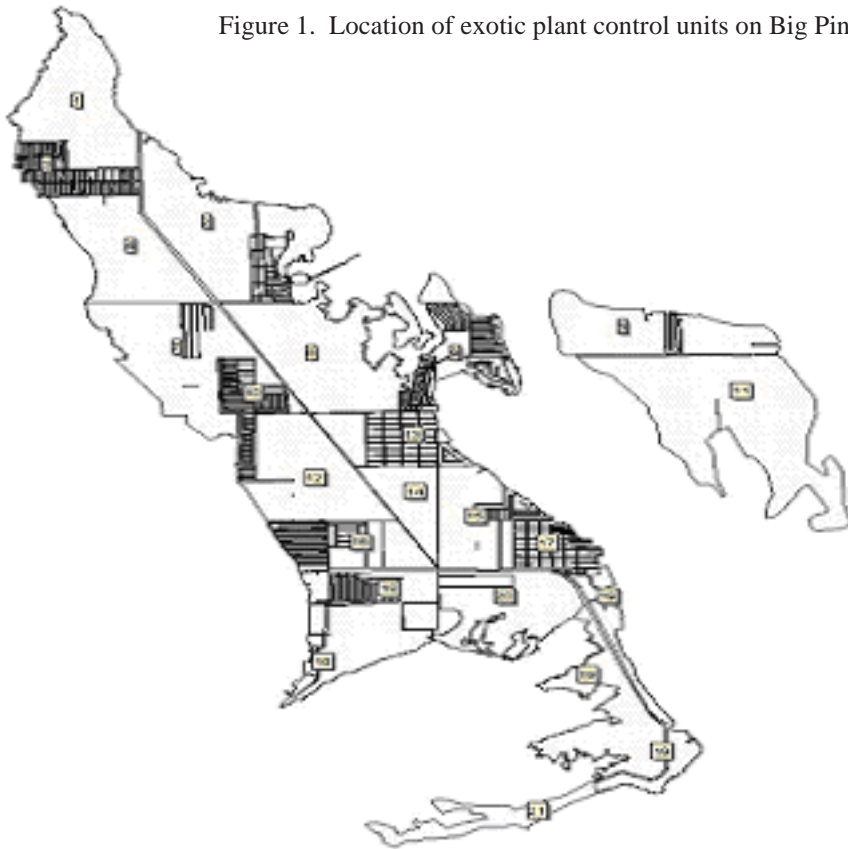


Figure 2. Location of exotic plant control units throughout the Lower Florida Keys.

Key West Tropical Forest and Botanical Garden

County: Monroe

PCL Size: 11 acres

Project ID: FK-049 6.25 acres \$12,600

Project Manager: Key West Botanical Garden Society

Carolann Sharkey, President

PO Box 2436, Key West, Florida 33045

Phone: 305-296-1504, Fax: 305-296-2242

E-mail: kwbgs@bellsouth.net

The Key West Tropical Forest and Botanical Garden on Stock Island is owned by the City of Key West and managed by the Key West Botanical Garden Society, a 501(c)3 non-profit environmental education organization. The Federal Emergency Relief Administration initially set the property aside in 1934. The Society works in partnership with Duke University and several other entities to enhance its conservation and environmental education goals, and receives technical assistance from the U.S. Fish and Wildlife Service regarding those goals and other specific factors such as the federally listed Stock Island tree snail. The Society has contacted adjacent landowners to promote collaboration on invasive plant control.

The project area consisted of three sites predominantly within an upland hardwood hammock. This hammock is the only remaining conservation land that holds the Stock Island tree snail within its native range. The hammock also provides a significant migratory stop for neotropical migrant birds, as well as habitat for many resident birds such as the white-crowned pigeon. Over 20 varieties of butterflies are recorded on the property thus far, and it is home to over 38 state threatened or endangered species of flora and fauna.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Albizia lebbbeck</i>	woman's tongue	Category I	cut stump	Garlon 4
<i>Asparagus densiflorus</i>	Asparagus-fern	Category I	foliar	Glypro
<i>Casuarina equisetifolia</i>	Australian pine	Category I	cut stump	Garlon 4
<i>Colubrina asiatica</i>	lather leaf	Category I	cut stump	Garlon 4
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	cut stump	Garlon 4
<i>Thespesia populnea</i>	seaside mahoe	Category I	cut stump	Garlon 4
<i>Leucaena leucocephala</i>	lead tree	Category II	cut stump	Garlon 4
<i>Sansevieria hyacinthoides</i>	bowstring hemp	Category II	cut stump	Garlon 4
<i>Stenotaphrum secundatum</i>	St. Augustine grass	n/a	foliar	Glypro

Dagny Johnson Key Largo Hammocks Botanical State Park

County: Monroe

PCL Size: 2,415 acres

Project ID: FK-045 5 acres \$42,500

Project Manager: Florida Park Service (DEP)

Eric Kiefer, Park Manager

P. O. Box 487, Key Largo, Florida 33037

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E-mail: eric.kiefer@dep.state.fl.us

Public conservation lands comprise a significant amount of Key Largo. The native vegetation of Key Largo derives primarily from West Indian and Caribbean origin. This project included two sites in John D. Pennekamp Coral Reef State Park. The first site lay in the ecotone between hammock and mangroves near (North) Sound Point on El Radabob Key, and the second site was adjacent to the campground at the park's land base. The Florida Park Service manages the land as part of Dagny Johnson Key Largo Hammock Botanical State Park.

Portia, lather leaf, and Brazilian pepper overran the first site, affecting three imperiled natural communities: coastal rock barren, coastal berm, and rockland hammock. The second site, adjacent to the park's campground, is highly disturbed and consists of two to three acres of dredge spoil over a filled wetland. Mahoe heavily infested the site. Also present in smaller numbers were Queensland umbrella tree, Brazilian pepper, and braceletwood. Water flowing from an artesian well through the site carried mahoe seed capsules into a nearby tidal creek.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Colubrina asiatica</i>	lather leaf	Category I	cut stump	Garlon 3A
<i>Schefflera actinophylla</i>	Queensland umbrella tree	Category I	cut stump	Garlon 3A
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	cut stump	Garlon 3A
<i>Thespesia populnea</i>	portia	Category I	cut stump	Garlon 3A
<i>Hibiscus tiliaceus</i>	mahoe	Category II	cut stump	Garlon 3A
<i>Jacquinia arborea</i>	braceletwood	n/a	cut stump	Garlon 3A

Curry Hammock State Park

County: Monroe

PCL Size: 665 acres

Project ID: FK-052 31 acres \$10,525.62

Project Manager: Florida Park Service (DEP)

Steve Eibl, Park Manager

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Phone: 305-451-3005, Fax: 305-853-3553

E-mail: steven.eibl@dep.state.fl.us

The project sites were Long Point Key and Fat Deer Key, located within Curry Hammock State Park. Curry Hammock is the largest uninhabited terrestrial parcel between Key Largo and Big Pine Key, and the most complete remaining example of the natural heritage of the Middle Florida Keys. Natural communities in the project area included coastal berm, beach dune, tidal mangrove swamp, and tropical hammock. Brazilian pepper, seaside mahoe, and latherleaf were the primary targets of follow-up work.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	cut stump	Garlon 4+Stalker
<i>Thespesia populnea</i>	seaside mahoe	Category I	cut stump	Garlon 4+Stalker

Florida Keys State Parks Invasive Exotic Plant Control Technicians

County: Monroe

John Pennekamp Coral Reef SP	PCL Size: 63,643.7 acres
Key Largo Hammocks SP	PCL Size: 2,420.6 acres
Lignumvitae Botanical SP	PCL Size: 10,659.1 acres
Windley Key Geologic SP	PCL Size: 31.9 acres
Indian Key Historic SP	PCL Size: 110.5 acres
Long Key SP	PCL Size: 979.9 acres
Curry Hammock SP	PCL Size: 970.2 acres
Project ID: FK-047	216.82 acres \$62,263

Project Manager: Florida Park Service (DEP)

Eric Kiefer, Park Manager

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The Florida Keys State Parks include Dagny R Johnson Key Largo Hammocks (KLHSP), John Pennekamp Coral Reef (JPSP), Lignumvitae Botanical, Windley Key Geologic, Indian Key Historic, Long Key, and Curry Hammock State Parks. Natural communities within the state parks include tropical hardwood hammock, pine rocklands, freshwater wetlands, and mangrove swamp. These lands are home to a number of rare plants and animals, some of which occur nowhere else in the world. Rapidly expanding populations of Brazilian pepper, Australian pine, and latherleaf infested the native habitats of the parks. This project targeted these three species and other invasive plants found on the state parks.

Public conservation lands extend throughout the Keys and include individual lots ranging from 5,000 square feet to parcels several hundred acres in size. Public landowners include the federal government, State of Florida, South Florida Water Management District, and Monroe County. All publicly owned lands are managed for conservation of rare plant and animal species. A team of two plant control technicians funded by BIPM performed the work. The technicians worked primarily at KLHSP and JPSP, while also assisting with maintenance work at the other state parks and on cooperative exotic removal work days with other agencies in the Keys. Treated areas on the parks varied from one-tenth acre to over one hundred acres. FPS provided matching costs for herbicide, vehicles, and crew equipment with a total value of \$10,000.

Target Plants	Common Name	FLEPPC Rank	Treatment	Herbicide
<i>Casuarina</i> spp.	Australian pine	Category I	basal	Garlon 4
<i>Colubrina asiatica</i>	lather leaf	Category I	basal	Garlon 4
<i>Schinus terebinthifolius</i>	Brazilian pepper	Category I	basal	Garlon 4