



Corridors of Invasiveness: Early Detection of New Invasive Exotic Plants in Everglades National Park

2012

Importance

Invasive plants are one of the most serious threats to maintaining ecosystem integrity in South Florida parks. Once established, invasive exotic plant species can affect park natural resources by altering the natural landscape, reducing habitat for native plants and animals, and changing how the natural ecosystem functions, e.g., altering hydrology, fire patterns, etc. Detecting new exotic plant species with the potential to become invasive, while they are still in small controllable populations, is the most successful and cost effective strategy for preventing the establishment of exotic plant species.

Objectives and Approach

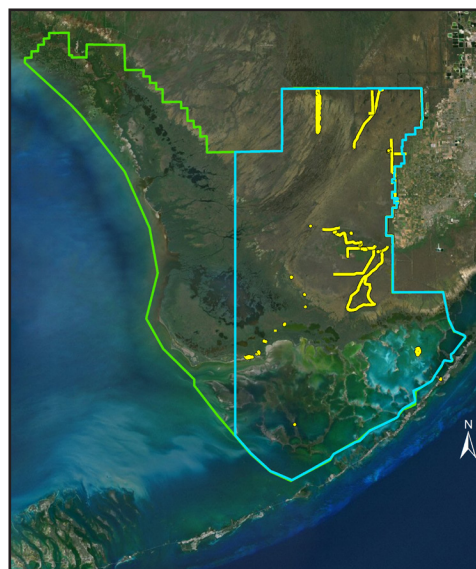
The objective is to detect newly emerging invasive plant species in the National Parks of South Florida along the most likely routes, or corridors, for infestations, e.g., trails, roadways, campgrounds, and boat launches. Surveys are conducted by an experienced SFCN botanist along with the assistance of an Exotic Plant Management Team (EPMT) member. Exotics are treated immediately when possible or are reported to park staff and through EDDMapS, a multi-agency web-based mapping system for invasive species.

Results

The 2012 survey was completed in the Eastern region of Everglades National Park (EVER) during the months of May-August 2012. A total of 317 km (197 miles) were surveyed, with a total of 51 exotic species encountered inside the survey field of view area. Of these 51 species, two (3.9%) were new records of exotics found in the park; the new species are *Indigofera suffruticosa* and *Ficus microcarpa*. There were 226 infestations found within the survey area. The total area surveyed, taking into account the field of view estimate, was 5,924,260 m² (464 acres). The total area infested within the field of view was 252,761 m² (63 acres). Therefore, about 4.26% of the total area surveyed was infested.



EPMT crew member treating Burma Reed (*Neyraudia reynaudiana*) in Flamingo.



Map of the areas surveyed within EVER in 2012. Only the Eastern region (blue line) of the park was surveyed this year. Areas are resurveyed on a 5 year rotation. The Western portion will be surveyed in 2014 and the Eastern portion will be resurveyed in 2017.

Survey Photos



Smutgrass (*Sporobolus indicus*) found in an unused area of Flamingo Campground.



Large Indian Laurel (*Ficus microcarpa*) on Causey's Island in Northern Shark Slough.



SFCN Botanist recording data at the Christian Point trailhead.

