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# just the **FACTs**

This fact sheet is provided as a reference to encourage a greater understanding of the various issues related to managing water in South Florida.

# Fighting Old World Climbing Fern

Controlling invasive Old World Climbing Fern in Arthur R. Marshall Loxahatchee National Wildlife Refuge crucial to Everglades restoration

Success with Everglades restoration depends on controlling invasive species that imperil Florida's native habitats and wildlife. Infestations can spread quickly, hampering restoration efforts and preventing hundreds of millions of public dollars used for restoration from providing the intended benefits. Lygodium microphyllum, also known as Old World climbing fern, needs immediate and ongoing funding to control. This invasive plant, in particular, is a threat to the forest wetlands of the Loxahatchee Refuge and elsewhere in the Everglades ecosystem.

### Old World Climbing Fern Infestation in Loxahatchee Refuge

- The Loxahatchee Refuge is the last remaining intact portion of the original northern Everglades. Located in western Palm Beach County, the Loxahatchee Refuge is severely impacted by the continued spread of Old World climbing fern.
- A survey in the summer of 2015 found that Old World climbing fern, first found here in 1989, has infested the majority of the tree islands in the Loxahatchee Refuge. Tree islands, a unique, elevated part of the Everglades wetland landscape, are centers of biological diversity and provide critical wildlife habitat.
- Despite management efforts, Old World climbing fern continues to aggressively colonize vast portions of the Loxahatchee Refuge.

## Loxahatchee National Wildlife Refuge Facts

- A 1951 agreement between the South Florida Water Management
  District (SFWMD) and U.S. Fish and Wildlife Service (USFWS), under
  the Migratory Bird Conservation Act, established the 143,954-acre
  Loxahatchee National Wildlife Refuge within Water Conservation Area
  1, the 216th refuge in the federal system.
- More than 300,000 annual visitors enjoy the natural habitat and wildlife that resides there, including alligators, deer, bobcats and river otters.

#### Treating Old World Climbing Fern in the Loxahatchee Refuge

- Treatment techniques, including herbicides and biological controls (such as moths), can be effective; however, the remoteness of the Refuge interior make controlling this plant an arduous and costly endeavor.
- Sufficient and ongoing use of these methods is needed to effectively control Old World climbing fern.

(more)



#### Inadequacy of Federal Funding for Exotic Plant Control in America's Refuge System

- Nationwide, U.S. Fish and Wildlife Service's (USFWS) performance goals for invasive plant control identifies that only 2.3 percent of the 2.2 million acres within the refuge system infested with invasive plant species are controlled. USFWS anticipates no improvement in 2016.
- The USFWS 2013-2014 fiscal year appropriations for the Wildlife and Habitat Management Program were \$229.8 million. The 2014-2015 fiscal year appropriations were \$230.4 million.
- The USFWS 2015- 2016 budget request was for \$249.8 million, representing an increase of \$19.4 million. Of the \$19.4 million requested increase, only \$1.4 million was allocated to Wildlife and Habitat Management for invasive species such as Asian carp, constrictor snakes, brown tree snakes, and cheat grass. There was no mention of Old World climbing fern.
- The USFWS 2015-2016 budget request and justification report to Congress, can be found at. http://www.fws.gov/budget/2015/FY2016\_FWS\_Greenbook.pdf.

#### Funding Needed to Treat Old World Climbing Fern in the Loxahatchee Refuge

- With deep concern for protecting this Florida resource, state agencies including Florida Fish and Wildlife Conservation Commission and the South Florida Water Management District (SFWMD) – have invested funds toward exotics treatment in the Loxahatchee Refuge.
- In 2014 and 2015, the SFWMD invested millions in treating 54,000 acres for Old World climbing fern throughout the region.
- Despite significant spread of Old World climbing fern in the Loxahatchee Refuge, dedicated annual federal funding from the USFWS for exotic plant management remains relatively unchanged, at approximately \$1 million.
- Science-based estimates indicate that at a minimum, an additional \$5 million per year is needed for the next five years, for a total of \$25 million, to complete the initial treatment of invasive plant infestations.
- After five years of intensive treatment, an estimated \$3–\$4 million per year will be needed to prevent invasive plants from reestablishing.
- With persistence, the cost of maintaining Old World climbing fern at low levels is expected to decrease annually.

#### Consequences of Inadequate Federal Funding in the Loxahatchee Refuge

- Across the Everglades Protection Area south of Lake Okeechobee, a recent aerial survey documented a 600-percent increase in the abundance of Old World climbing fern compared to 20 years ago. The large majority of this expansion occurred within the Loxahatchee Refuge.
- If there continues to be insufficient funding for much-needed treatment, the invasives will continue to expand, further degrading wildlife habitat and displacing native plant communities.