



WRAC Recreation Issues Workshop March 17, 2014

Exotic Ficus Tree Removal and Native Tree
Replacement at DuPuis Management Area

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Non-native Ficus Trees and Pollinator Wasps at DuPuis

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Banyans in Cambodia



100 year old *Ficus bengalensis* is valuable shade tree in Hawaii





Strangling Ficus





1.0 mm





Strangler fig
(*Ficus aurea*)

Florida native



Strangler Fig at DuPuis



Strangler fig – Note conspicuous pale side veins





Strangler fig

Fruit on platform
attached to stem



Strangler fig fruit

Pollinator wasp



The invasive laurel fig (*Ficus microcarpa*) grows so large that it could dominate natural areas, shading out native vegetation and reducing wildlife habitat.



(Port Jackson Fig)

Laurel Fig





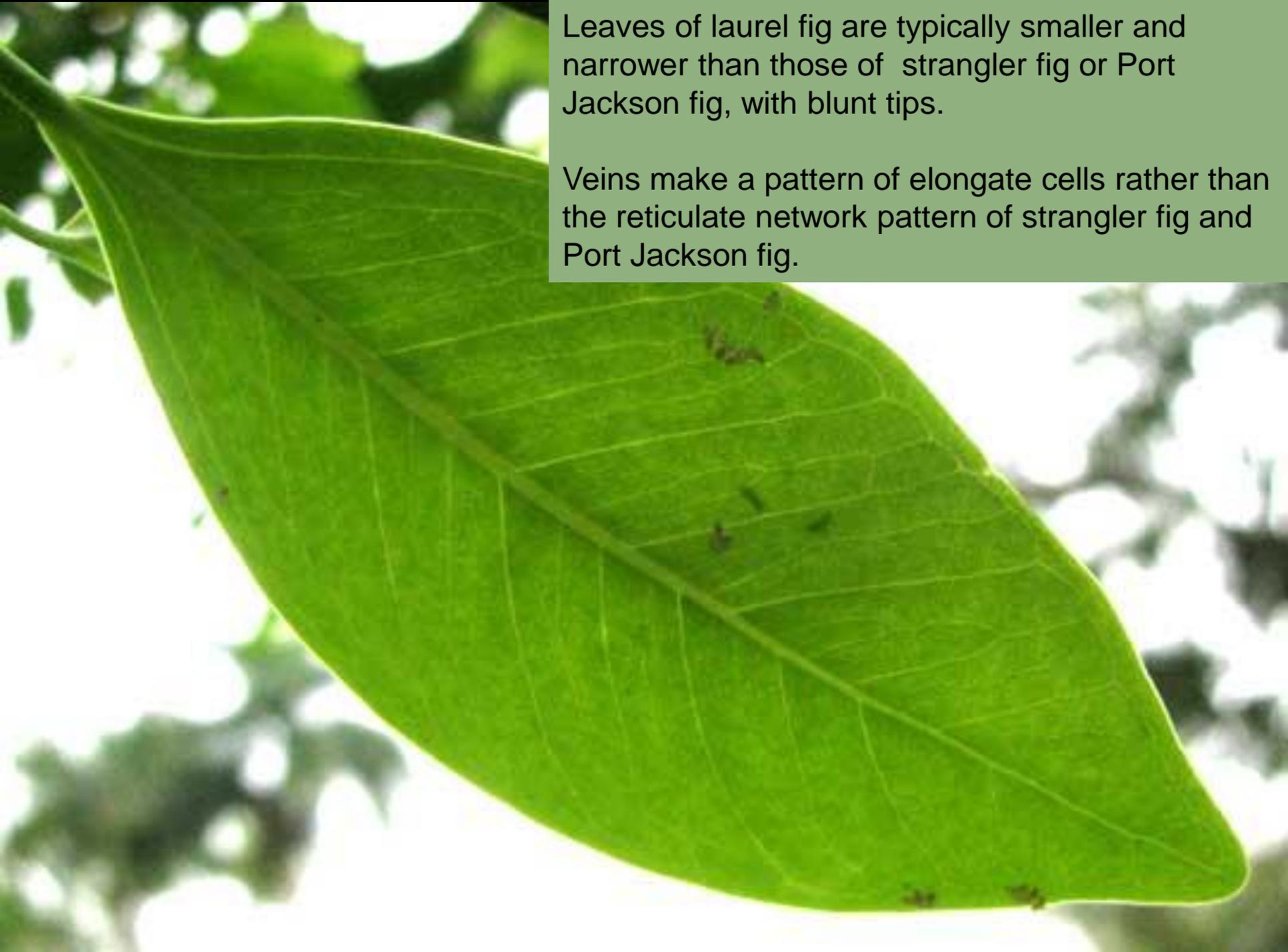
Fig Diseases

Blister leaf gall is caused by a micro-wasp that arrived in Florida in 2007. It affects only laurel fig

The invasive lobate lac scale is also a recent introduction.

It attacks a variety of plants including laurel fig and Port Jackson fig.





Leaves of laurel fig are typically smaller and narrower than those of strangler fig or Port Jackson fig, with blunt tips.

Veins make a pattern of elongate cells rather than the reticulate network pattern of strangler fig and Port Jackson fig.



The small fruit of laurel fig have very short stalks, or none.



SEWMD



Seedlings have been found up to 2 miles from the campground

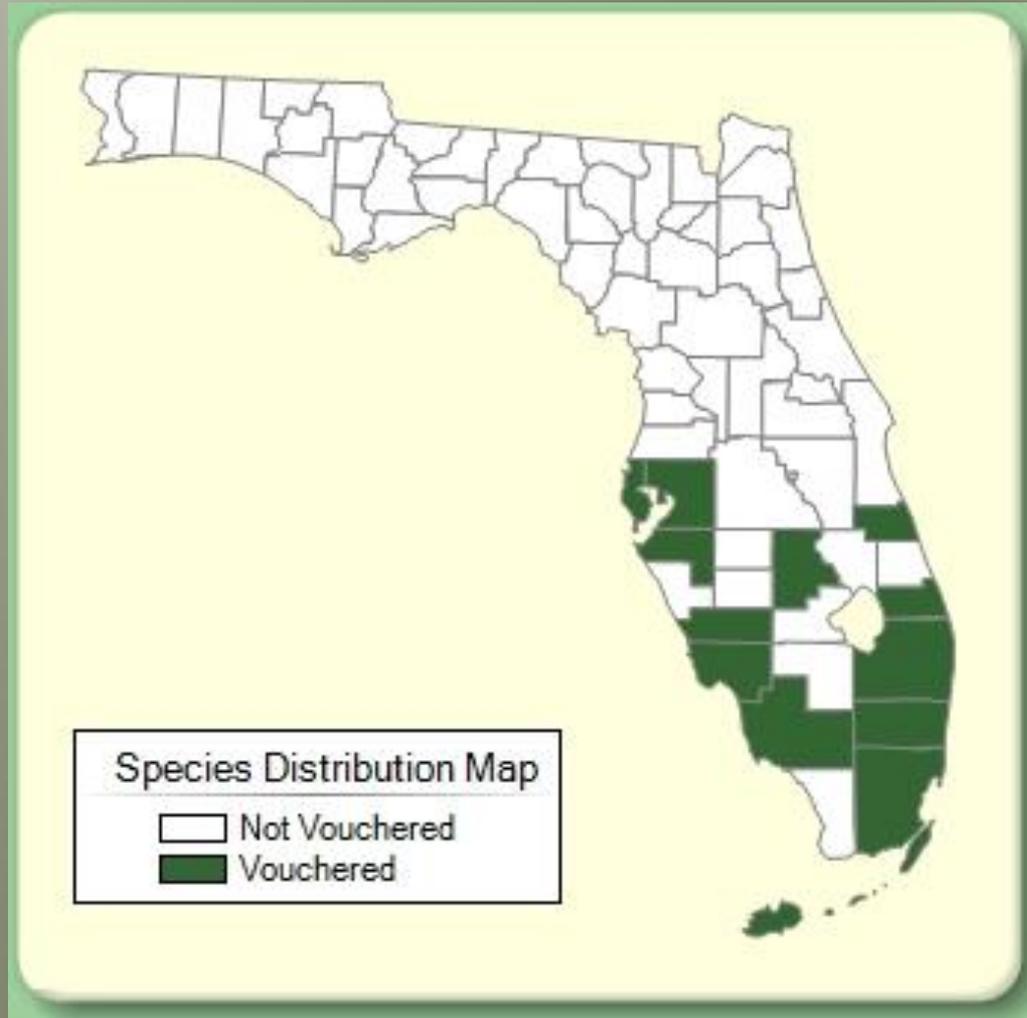


Laurel fig seedling

Note elongate leaf
Tips.



Range of *Ficus microcarpa*





“Invasive exotic plants are termed **Category I** invasives when they are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives.”

Species may be classified as Category I *“if ecological damage is demonstrated.”*

Florida Exotic Pest Plant Council



The Big Port Jackson Fig



The Port Jackson fig (*Ficus rubiginosa*)



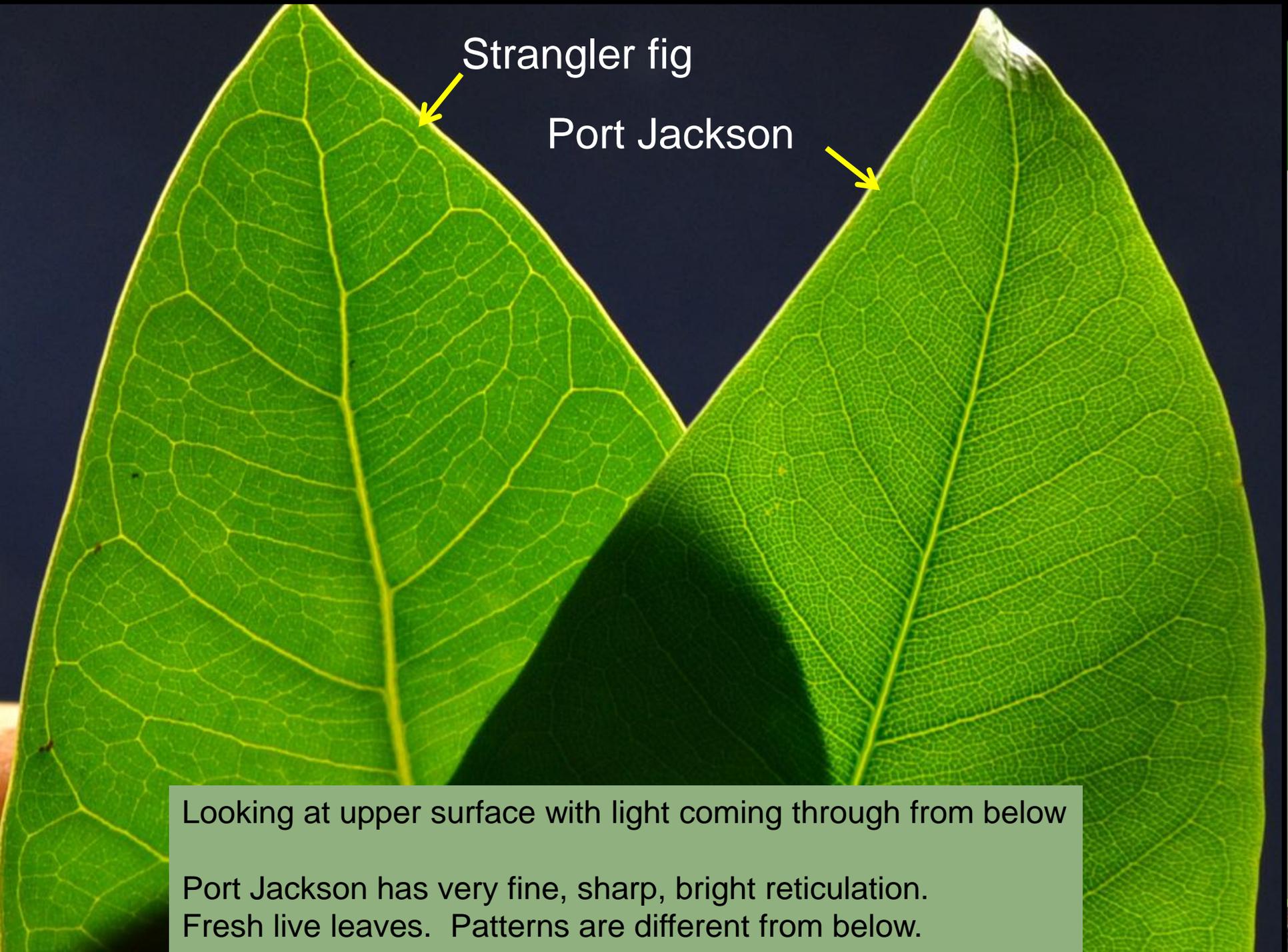


Port Jackson fig
seedling in DuPuis
near the mother tree.

The juvenile leaves
are narrower than
adult leaves.

Venation, dark color
long petioles, shiny
upper and lower
surfaces and other
characters confirm
identification.





Strangler fig

Port Jackson

Looking at upper surface with light coming through from below

Port Jackson has very fine, sharp, bright reticulation.
Fresh live leaves. Patterns are different from below.

Important differences between the Indian Laurel and the Port Jackson fig, with respect to environmental impacts:

Indian Laurel (*Ficus microcarpa*)

1. Many mature (flowering) trees at DuPuis
2. Ample opportunity for cross-pollination, expect high seed production
3. Known to aggressively invade natural communities in various parts of Florida
4. Seedlings have appeared in natural pineland community at DuPuis
5. FLEPPC listed as Category I

Port Jackson Fig (*Ficus rubiginosa*)

1. One mature (flowering) tree at DuPuis
2. Little opportunity for cross-pollination, expect very little seed production
3. No experience with how aggressive it is in invading FL natural communities
4. Seedlings at DuPuis restricted to disturbed areas and edges near the Equestrian Campground
5. Not FLEPPC listed

The mature Port Jackson fig tree is not a significant environmental threat as long as protective measures are taken to control propagation. The District proposes to keep this one specimen tree, and to implement an annual monitoring of the Equestrian Campground Area to be followed by removal of any Port Jackson fig seedlings detected.



Exotic Removal and Native Tree Plantings

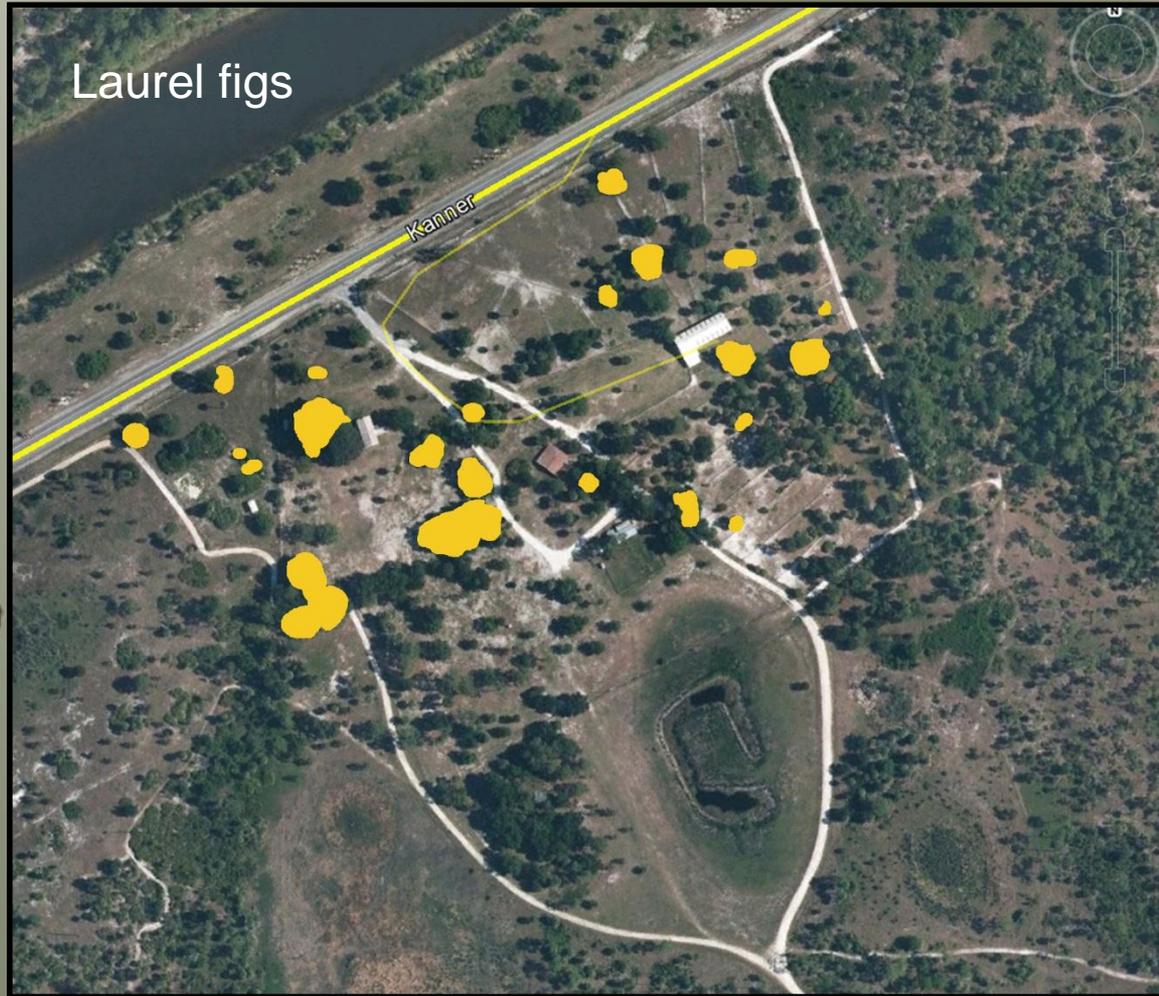
Bert Trammell, SFWMD



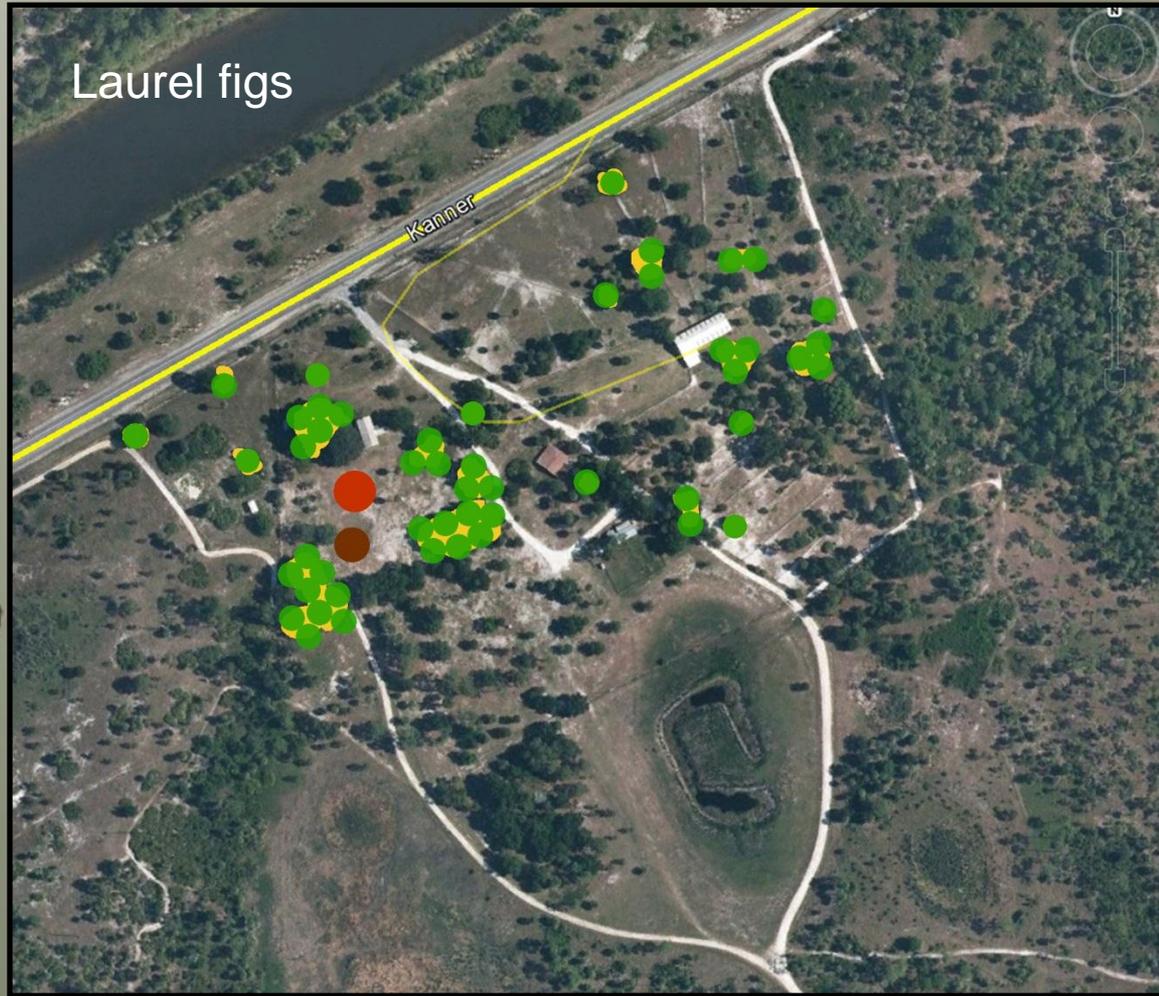
Equestrian Campground



Equestrian Campground



Equestrian Campground





End

