

# ECOQUEST

November 2020

## GO FIG or GO HOME



Just south of the historic Selby House is the iconic banyan grove. Pictured here is *Ficus macrophylla*, planted in 1939 by Grover Yancy, a beloved gardener of Marie Selby.

Sarasota-Manatee EcoFlora's November EcoQuest is **Go Fig or Go Home!** One of the most tropical sights that Florida has to offer is that of a banyan, the common name for *Ficus* trees which produce aerial roots. There are only two species of *Ficus* native to North America, and they are both native to Florida; *Ficus aurea*, the Florida strangler fig, and the lesser-known *Ficus citrifolia*. The trees provide habitat, food, and shelter for birds, mammals, reptiles, and invertebrates. Sarasota and Manatee counties also have many beautiful and large, non-native banyan trees, some of which have become invasive.

*Ficus* have incredibly close relationships with their pollinators. Most fig species have only one species of wasp able to pollinate it, and that wasp can only survive on that one species of fig. In order to retain and nourish their pollinating wasps, the trees must constantly bloom. This means that they are very often in fruit, which is the easiest way to tell the two native species of *Ficus* apart! *Ficus aurea*, which also usually has larger leaves, has yellow fruits when ripe that are borne close to the stem. *Ficus citrifolia*, which has smaller leaves and finer leaf venation, has red fruits when ripe that are borne on slender stalks.

### WHAT IS AN ECOQUEST?

EcoQuests, part of the [Sarasota-Manatee EcoFlora Project](#), challenge Floridians to become engaged citizens in the observation, study, appreciation, and conservation of the native flora and fauna of Florida, and understand the impacts to it by exotic species.

### HOW DO I GET STARTED?

1. Download the easy-to-use iNaturalist app on your mobile device, or visit [iNaturalist.org](https://www.inaturalist.org) on your computer.
2. Set up a user account or sign in to join projects and submit observations.
3. Visit the [Sarasota-Manatee EcoFlora Flora Go Fig or Go Home page](#) and click "join" on the upper right.
4. Photograph plants anywhere in Sarasota and Manatee Counties. Take multiple photos to show important features for identification (overall plant, leaves, flowers, fruit, stem).
5. Post your observations to iNaturalist.
6. Check out [your ranking](#) on this month's challenge online!

### WHAT IS THE GOAL?

Help us document as many fig trees as possible in November! We are especially interested in documenting invasive figs, like the Laurel fig (*Ficus microcarpa*) and the False banyan (*Ficus altissima*). Remember that any observation still contributes to the Sarasota-Manatee EcoFlora Project, even if it's not featured in our monthly challenge.

### WHERE SHOULD I LOOK?

Our native figs are found in coastal hammocks and the borders of mangrove swamps. When searching for strangler figs, pay close attention to cabbage palm trunks.

**Did you know** that the Selby Gardens Downtown Sarasota campus has more than a dozen species of fig trees? Come check them all out while you **Go Fig or Go Home!**



# FLORIDA'S NATIVE FIGS

Strangler Fig, *Ficus aurea*



Shortleaf Fig, *Ficus citrifolia*



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## Fig Life

Both the strangler and shortleaf fig trees start their lives as epiphytes. A fruit is eaten by a bird and soon thereafter the seeds are “deposited.” In Florida, they are often deposited in the boot of a cabbage palm or on a branch of a massive cypress tree. After the seed germinates, the plant puts out long tender roots which hang toward the ground. Once the roots touch the ground, they grow thick and strong. At this point the fig tree grows faster, drawing nutrients and water from the soil for the first time. No longer an epiphyte, the banyan begins to surround the host tree and also may “walk,” growing lateral limbs far from its main trunk which drop their own aerial roots, and on and on, occasionally eventually occupying hundreds and hundreds of square feet. Palm trees can often survive a banyan's presence until they become so shaded out they can no longer produce food through photosynthesis. In the case of cypress trees, the banyans may eventually strangle and kill the tree.

## Pollination

Like all figs, the strangler fig and shortleaf fig have an obligate mutualism with fig wasps, meaning one organism cannot survive without the other. Figs are only pollinated by fig wasps, and fig wasps can only reproduce in fig flowers. The strangler fig is pollinated by *Pegoscapus mexicanus* and the shortleaf fig by *Pegoscapus tonduzi*. For even more information, check out the [USDA's webpage](#) on fig wasps.

## Significance

A keystone species, strangler figs are a favorite of squirrels, birds, and insects, including the ruddy daggerwing (*Marpesia petreus*), which relies on figs as a host plant. The fruit of *Ficus aurea* is edible and was used for food by the indigenous people and early settlers in Florida. The fruit was also used to make a rose-colored dye. The latex was used to make a chewing gum, and aerial roots may have been used to make lashings, arrows, bowstrings and fishing lines.



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Ruddy Daggerwing  
(*Marpesia petreus*)



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