

Coontie

Zamia integrifolia

(ZAY•mee•ah in•teg•rih•FOE•lee•uh)

This plant is often confused with a palm, as both of those families share similar characteristics. These look-a-likes are an example of convergent evolution, which is the independent development of similar characteristics by two unrelated or distant lineages due to similar environmental pressures. Cycads first came about 270 million years ago while palms, a flowering plant, showed up around 70 million years ago. Even with the long legacy of cycads, present day cycads evolved comparatively recently, 12 million years ago

Cycads can be found throughout the tropics and subtropics, but the coontie is the only cycad native to the United States. It can be found in Florida, portions of Georgia and the Caribbean. Throughout its range the coontie is a food source for numerous insects, birds and mammals. In south Florida it plays host plant for the Atala butterfly. As mentioned the coontie does not produce flowers, but instead cones similar to pine cones. These cones are dioecious (dy•ee•shuhs), that is, the cones are male and female. There are two different beetle species that are attracted to these cones and transfer the pollen from the male cones to the female cones.



Observations



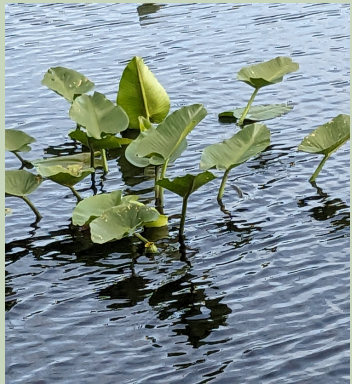
RiverWalk Field Guide



FLORIDA NATIVE PLANT SOCIETY

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This guide is not intended to provide a comprehensive catalog of all the plant species found along Sanford's RiverWalk. Instead, it serves as an introduction to a few examples of plant life, with the goal to spark your curiosity and encourage a deeper appreciation for these often overlooked wildlife. While there is much more to discover, let this guide serve as a starting point to inspire you to observe and explore plants more closely.



Spatterdock

Nuphar advena
(NUF•far ad•VEE•nuh)

Initially, spatterdock was viewed as a singular species with many subspecies in North America.

However, further research determined that these subspecies were actually distinct species, about 8 of them in all. Like its relatives, the Florida spatterdock species is an aquatic plant commonly found in lakes and slow-moving rivers. The submerged roots serve to anchor the plant, as well as provide habitat for fish and invertebrates. It is easy to spot on the surface from its wide, heart shaped leaves either floating on or held above the surface. From spring through summer the plant will produce globular flower buds that bloom into showy yellow flowers that attract bees and butterflies. In addition to reproducing through seeds, spatterdock will also propagate via a rhizome. This large, horizontal rootstalk sprouts additional stems and roots from its nodes, storing energy as starch and helping the plant spread.



Red Maple

Acer rubrum (AY•sur ROO•brum)

Also, referred to as the swamp or water maple, as it is often found in wetland habitats, particularly at the southern portion of its range. This tree isn't relegated to just swamps, however, and can be found in a wide variety of dry and moist soil types. It is this adaptability that made the red maple one of the most widespread trees in the eastern United States. Its range extends from Florida, north to New England, and to eastern Texas and Minnesota. Because of its fast growing, generalist life style, the red maple is popular as an ornamental tree. It's also one of the first tree species to dominate a young forest after natural or human disturbances.

In January the trees produce the iconic double samara shaped seeds. These are seeds with a fibrous "wing" or "blade." These aid in seed dispersal by causing them to spin and whirl in the wind. This in turn slows their descent, allowing the seeds to cover a wider area. The red maple first shows its adaptive behavior once the seed starts to grow. In drier habitats the plant will grow a long taproot (a dominant, central root from which the lateral roots grow) with shorter lateral roots. This adaptation is seen in dry habitat species as the deep taproot allows the plant to reach water stored further down in the soil. On wet sites, the red maple will develop a short taproot with longer lateral roots to absorb the surface water.

Carolina Willow

Salix caroliniana (SAY•liks kair•oh•lin•ee•AY•nah)

The Carolina, or Coastal Plain, willow can be found in the wetlands of the southeastern and mid Atlantic regions of the United States. In fact, the Carolina willow is an obligate wetland species. This means it is found almost exclusively in areas of standing water or seasonally saturated soils.

When the plant flowers in spring it will provide much needed pollen for numerous bees, butterflies, and moths, including the monarch look-a-like, the viceroy butterfly.



Dune Sunflower

Helianthus debilis (hee•lee•AN•thus de•BIL•is)

The dune sunflower is a native found along the Gulf and Atlantic coasts. It has adapted to thrive in sandy soils and endure salt exposure, making it well-suited for sand dune and beach habitats. The plant's extensive root system helps in stabilizing these coastal areas, preventing erosion. While the dune sunflower exhibits salt tolerance, it cannot withstand excessive water inundation or flooding by saltwater. However, its drought resistance



and the ease with which it reseeds make it an attractive choice for landscaping purposes, even in environments beyond its typical range.