

# Tampa Bay Mangroves

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I have hiked in the Florida Panhandle, slogged through the marshes of the state's northeast coast near St. Augustine, enjoyed bracingly cold swims in springs and rivers in the state's heart, baked in the humid cypress domes of the Everglades, and snorkeled for delicious lobster in the Keys. The Sunshine State is rich in natural wonders, but my favorite Florida place is just minutes from downtown St. Petersburg: the mangroves of Tampa Bay.

Mangrove is a term used to describe a collection of salt-tolerant trees and shrubs that live in the intertidal zone of tropical and subtropical waters. To be certain, Tampa Bay's mangroves are not unique in terms of size or diversity; they are middling in height and host the same three tree species (*Rhizophora mangle* (Figure 1), *Avicennia germinans*, and *Laguncularia racemosa*) found elsewhere along the Florida peninsula. However, as an ecologist, I find their resilience as a vestige of "wild" and simple beauty in the face of many decades of intense urbanization reason to mark them as extraordinary.



Figure 1. View from a mangrove understory near Bishop Harbor revealing the many prop and aerial roots of *Rhizophora mangle*, a mangrove seemingly conceived in the imagination of Dr. Seuss.

Photo by author.

For many years now, I've kept a canoe or kayak atop my car/truck in order to easily drop a boat in Tampa Bay wherever and whenever. As it happens, there are isolated, and sometimes extensive, mangroves all around the Bay. Each seems a sort of “secret”, hidden in plain sight, amongst residential neighborhoods, adjacent to industrial ports, or hugging the shoulder of roadways. They all have in common a patchwork of mangrove-covered islands and mainland, interspersed with shallow, calm, sandy bottomed waterways. The moment you enter the mangroves, it is possible to forget that you are still in a region populated by three million people. The cacophony of traffic and the blight of strip malls disappears as one enters a landscape reminiscent of mangrove systems in faraway places such as Madagascar and Brazil. Although urban sprawl is so close by, the whisper of a kayak paddle trailing through the water behind your boat may be the loudest sound you hear.

This is not to say that you will be alone. The mangroves of Tampa Bay are home to a rich community of animals. Massive schools of cownose rays (*Rhinoptera bonasus*) may wing by just under the water's surface. Seemingly awkward, but gorgeous, roseate spoonbills (*Platalea ajaja*) may watch from their perch in the mangroves. The shallows periodically erupt as a snook (*Centropomus undecimalis*) ambushes one of countless baitfish for its next meal. Oysters (*Crassostrea virginica*) are there in plenty, forming reefs and a patina over and around the edges of mangrove forests, supporting a myriad of invertebrates including crabs, snails, mussels, and sponges.

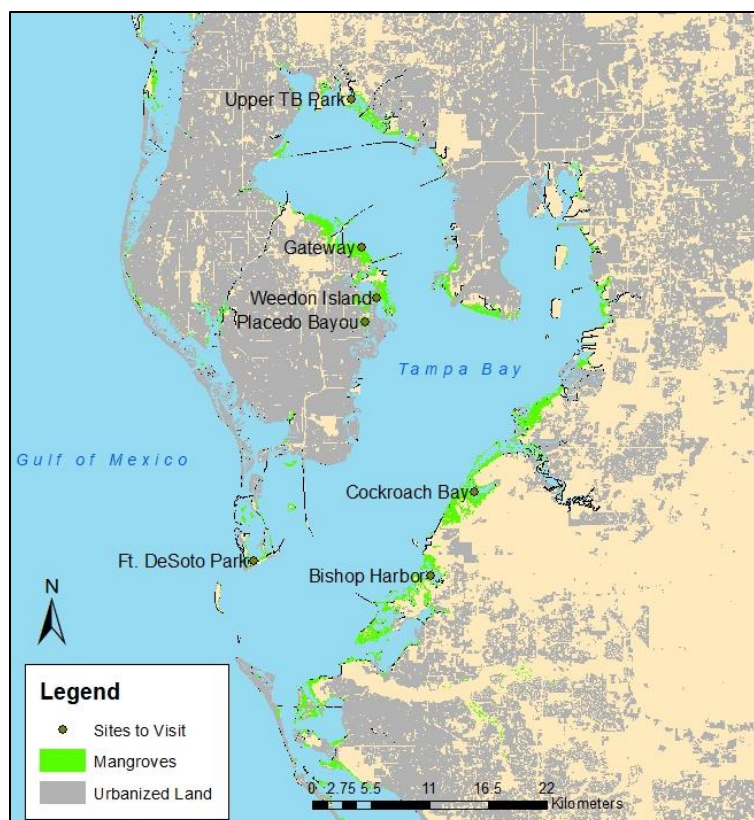


Figure 2. Mangroves and urbanized land in the Tampa Bay Area. Several notable mangrove locations are indicated by points. Layers derived from open data provided by the Southwest Florida Water Management District and Florida Fish and Wildlife Conservation Commission.



Although they share much in common, mangroves around Tampa Bay display interesting idiosyncrasies (Figure 2). A quick survey of examples from densely populated Pinellas County illustrate the point. For example, Weedon Island Preserve best embodies the juxtaposition of anthropogenic influence and the stubborn vitality of Tampa Bay mangrove systems. The park is adjacent to historically severe dredge and fill activity where many mangroves were cut down and covered with dredged material, building the foundation of lucrative finger canal real estate (Figure 3). To protect the new human residents from mosquitos, the preserve's mangroves were furrowed by scores of crisscrossing ditches that today serve as one of the most breathtaking kayaking trails in coastal Florida. Fort DeSoto Park, guarding the mouth of Tampa Bay, hosts mangroves that were used as targets for bombing practice during World War II. Now, in more peaceful times, the forests are home to more Gulf-influenced fauna than any other in mangroves in Tampa Bay. Meanwhile, St. Petersburg's Placido Bayou (just a few miles north of downtown) seemingly defies logic. Completely surrounded by residential development, and receiving runoff from many square kilometers of streets, this mangrove oasis of less than one square kilometer is home to countless birds, fish, and tiny mangrove crabs.



Figure 3. Kayaker amidst Weedon Island Preserve mangroves. Note the adjacent residential properties and the skyline of St. Petersburg in the background. Photo by author.

Tampa Bay's wonderful mangroves have expanded due to legal protections, climate change, and habitat alteration. With continued protection, they will remain a refuge for their magnificent flora and fauna, but also for those weary of city life in an increasingly urbanized Florida.