

FIELD GUIDE

THE MANGROVE FRINGE

OVERVIEW

The word “mangrove” basically describes a group of salt-tolerant shrubs or trees that live in coastal or intertidal areas. There are about 80 species around the world, all living in tropical or subtropical climates, and they aren’t necessarily closely related. South Florida has 4 species of mangrove trees.

Everglades National Park holds the largest contiguous forest of mangrove trees on this half of the planet, which is pretty mind-blowing. World-wide, coastal mangroves are being cut down to make room for human development, which is a shame. Above the water, these trees are critical habitat for nesting birds, reptiles, all sorts of creatures. Below the water, mangrove roots become essential nursery grounds for many species of fish and provide scaffolding for barnacles, sea anemones, sponges and other colorful invertebrates.

PLANTS

RED MANGROVE- one of the most common mangrove trees, the red mangrove is found around the world’s tropical and subtropical belt.

The iconic **prop roots** of the red mangrove allow it to thrive in shallow coastal waters. These roots also help stabilize the soils, protecting coastlines from tropical storms and erosion. This tree also, technically, gives live-birth!



BLACK MANGROVE- while this tree is very salt tolerant, black mangroves generally grow on higher, drier ground.

One interesting adaptation of the black mangrove are its **pneumatophores**. These straw-like root structures act like snorkels, helping the tree with oxygen exchange in the salty, muddy habitat that it often grows in.



WHITE MANGROVE- this is the most tropical of Florida's mangroves and is really limited to the southern part of the state.

The white mangrove has much more ordinary roots than the red or black mangroves, with no prop roots or pneumatophores, and typically grows on higher elevations than either the red or the black.



BUTTONWOOD- like the white mangrove, the buttonwood isn't a fan of cold weather and is limited to South Florida.

These trees also grow in higher, transitional zones. They can be identified by their rough bark and the small, button-like flower clusters. It's not uncommon to find all 4 species of Florida's mangroves growing in the same forest community.



ANIMALS

MANGROVE TREE CRAB- this small species is found throughout the Americas, from Florida to Brazil.

Although the mangrove tree crab prefers to dine on flesh, like aquatic worms, about 90% of its diet consists of mangrove leaves. That's probably because the small crab is more likely to be snapped up by a snapper if it ventures below water.



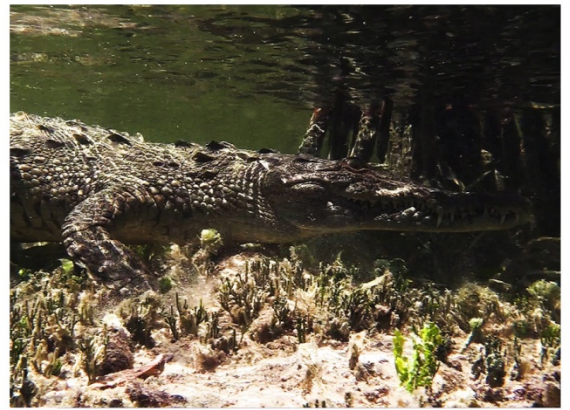
MANGROVE SNAPPER- also called the grey snapper, this is a common fish in coastal waters.

Though called the mangrove snapper, this species can be found in grass flats, coral reefs and the open ocean. Still, the submerged prop roots of red mangroves are often packed with schools of mangrove snapper.



AMERICAN CROCODILE- though relatively common in parts of the Caribbean, Central and South America, this toothy predator is quite rare in the U.S. In fact, the American Crocodile is only found in South Florida.

The American crocodile is sometimes confused with its cousin, the American alligator. The coastal Everglades is the only place in the world you might see both species in the same body of water.



ROSEATTE SPOONBILL- this is Florida's other pink bird. In my opinion, it's the coolest because it also has a spoon-shaped bill, useful for swishing side to side in the water to snatch small fish and crustaceans.

Roseatte spoonbills often nest in large colonies in mangrove trees, and feed in shallow mangrove estuaries.



COOL FEATURES

PROP ROOTS- prop roots are support structures that keep the trunk, branches and leaves of the red mangrove tree «propped up» and above water.

Red mangrove prop roots are also covered with pores called **lenticils** which essentially help the tree breathe.



PROPAGULE- a propagule is essentially an embryonic, pre-packaged mangrove tree.

With the red, white and black mangroves, the seed germinates while still attached to the parent tree. The propagule emerges from the seed, growing until it is mature enough to fall into the soil or water below. The propagule will float around until it finds good soil to root into. (Pictured: red mangrove propagule)

