



Critters in Our Midst: Mangrove Forests

by Carol Ellis

Red mangrove shoreline at dusk. Seagrape trees often grow near red mangroves.

Happy Fall! It's finally arrived... if only on the calendar. There's been a small drop in temperature (80s instead of 90s) and the mosquito count is noticeably down. I don't want to jinx us, but we're two months shy of the end of 2024 Hurricane Season and we haven't had a powerful hurricane... yet. Hurricane destruction comes in waves; first from the wind and water, which results in power outages, broken infrastructure, roofs opened and, while mosquitos are eating you alive, the second wave of destruction which I fear most begins, when the unemployed surfers with chainsaws appear and start cutting down our mangrove shoreline to improve a view. The strongest hurricane winds do not uproot the



White mangrove seeds are pea-like.

mangroves, but can shake the trees so violently that the bark peels off, exposing the cambium layers to salt spray and waves, quickly killing the tree. Both dead and living mangroves are protected as outlined in the 1996 Mangrove Trimming and Preservation Act. There are very specific regulations and heavy fines for illegal mangrove trimming. Florida law allows property owners and/or professional trimmers to trim mangroves to improve their view or access navigable waterways. Visit <https://floridadep.gov> and



Red mangrove seeds develop on the tree and when they fall into the water they soon sprout roots along rocky coastlines.

search for Mangrove Trimming and Preservation Act to learn more. Always check with local environmental officials before trimming mangroves. The Keys have four tree species in their mangrove forests: the Red Mangrove (*Rhizophora mangle*) with its spider-like prop roots and cigar shaped seeds, the smaller White Mangrove (*Laguncularia racemosa*) with its pea like seeds, the dark barked Black Mangrove (*Avicennia germinans*) whose distinctive aerial roots stick up from the ground like thin fingers, and Green Buttonwood (*Conocarpus erectus*), the tree with the distinctive bark which looks as if it wants to come off.

All mangroves disperse their seeds by water. The red mangroves are particularly important because their high arching prop root systems entrap sediment and decayed organic materials, making them not only an essential habitat in the marine food chain, but also "land builders" which have formed over 200 islands in Florida Bay. Mangroves are cold-sensitive plants, that

range from the St. Johns River on the East Coast, down through the Florida Keys, and up Florida's west Coast to Cedar Key. North Key Largo is home to about 8,000 acres of mangroves.

Mangroves are the nursery for the oceans. When they are destroyed it upsets the ecosystem. Fishermen know that 75% of the game fish and 90% of the commercial species use mangrove roots and shallow waters to shelter from predators until they reach a size large enough to fend for themselves. Mullet, mangrove snapper, snook, tarpon, shrimp, sea trout and blue crab call the mangroves home. The American crocodile lives in the mangroves and the mangrove water snake hides out among the tangle of



A white ibis observes from a mangrove branch.



A roseate spoonbill probes for mollusks and other invertebrates in the sediment.

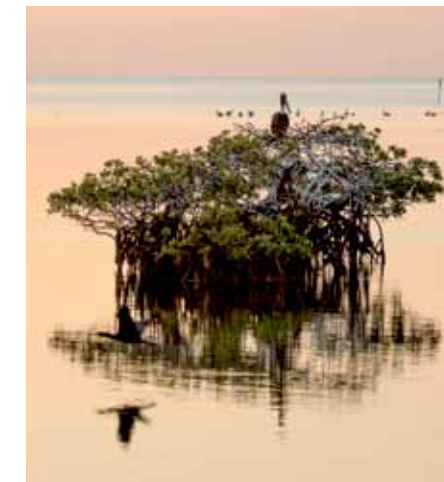
Mangroves... CONTINUED Photos by Carol Ellis except as noted.



A little green heron sits under cover of the mangroves.

prop roots and branches. Bottlenose dolphin feed on fishes associated with mangrove systems.

Manatees (*Trichechus manatus*) feed on seagrasses and other submerged aquatic plants and are frequently observed swimming in proximity to mangroves. On a visit to my favorite mangrove-lined canal, I sensed a photograph, however the water needed cleaning of a landscaper's errant grass clippings that littered the surface. As I skimmed the water with a net to catch the clippings, my splashing attracted a West Indian manatee. Next a small nurse shark



Pelican guano coats a small mangrove island.



The reclusive Mangrove Diamondback terrapin lives in the brackish waters of the Florida Keys and Everglades. Photo credit: Morgan Barnes.



Manatees are frequently observed swimming in proximity to mangroves.

swam by... the place was alive. I thought all I needed to complete the scene was a bird. As I positioned the camera to capture the photo, a green heron flew in and perched on one of the prop roots. At that moment I felt as if I were Dr. DoLittle on an animal adventure.

The rare and endangered Mangrove Diamondback (*Malaclemys terrapin*) only



CAROL ELLIS has lived in South Florida her entire life and Key Largo for 37 years. Currently a Master Gardener volunteer, Carol has a degree in Journalism from the University of Florida and is the resident photographer /artist at Ocean Reef Club.



Distinctive snorkel roots from the Black Mangrove stick out from the ground like fingers, and grow alongside Red Mangrove prop roots.

lives in the brackish back waters of the Florida Keys and Everglades. White Ibis (*Eudocimus albus*) feed on crabs and Roseate Spoonbill (*Ajaia ajaja*) prey on mollusks and other invertebrates living within the sediment. The entire Everglades population of the wood stork (*Mycteria americana*) nests only in mangroves.

The Red Mangrove, the "walking tree" found growing on the shorelines, is the basis for an impressive natural ocean filter system for litter dumped at sea, highlighting the importance of individual and organized coastal clean-up efforts. Back in the early 80s, my husband Ted and I would explore

the mangrove shoreline, and leave with treasures like old buoys and wormy driftwood. It was athletic work as we balanced on the giant prop roots and labored to free a piece of debris from the mangroves. We called the shoreline our "Overseas Lumber Company." Once home Ted would rip the driftwood into strips and make the most beautiful wormy frames for displaying my photographs.

As I sit musing about some of the best times of my life, Ted appears steadied by his walker. I greet him cheerily "Happy Fall!" He replies, "Trying not to."

All we need to do is understand some words and the context helps us out with the rest.