

Red Mangrove -(Rhizophora mangle L.), White Mangrove -(Laguncularia racemosa (L.) Gaertn. f), Black Mangrove -Avicennia germinans (L.) L.) (syn: A. nitida)

Mangrove forests are vital for healthy coastal ecosystems. The forest detritus, consisting mainly of fallen leaves and branches from the mangroves, provides nutrients for the marine environment and supports immense varieties of sea life in intricate food webs associated directly through detritus or indirectly through the planktonic and epiphytic algal food chains.



Red Mangrove saplings in Cherry Creek.

The shallow inter-tidal reaches that characterize the mangrove wetlands offer refuge and nursery grounds for juvenile fish, crabs, shrimps, and mollusks. Mangroves are also prime nesting and migratory sites for hundreds of bird species.

Mangroves are an integral part of estuarine food chains, producing eight metric tons per hectare (3.6 tons/acre) of leaf litter per year. As the leaves decompose into detritus and are flushed into the estuary, they become food for a wide variety of marine life. The food chain continues with these organisms serving as a valuable food source for economically important shrimp, crabs, and fish.

An estimated 75 percent of the game fish and 90 percent of the commercial species in South Florida depend on the mangrove system.

Mangroves are found on offshore islands and in tidal estuaries where freshwater from the land mixes with saltwater. Each mangrove species has a different level of salt tolerance, which in part determines its location in tidal zones.

Even activities in nearby uplands may cause changes in water runoff patterns which eventually alter the plant composition of the community. This affects us through coastal erosion and reduction of food at the base of the chain supporting commercial fisheries.

The economic value and life saving functions of coral reefs and mangroves are brought into sharp focus in a new report by the United Nations Environment Programme (UNEP). The report encourages decision makers to recognise this urgent situation, and protect coastal habitats of importance to humans. It underlines the vital role these natural features play in tourism, stemming coastal erosion and acting as nurseries for fish and other species.

*Excerpts from: University of Florida, Cooperative Extension Service -- Beverly E. Law is a former Extension Assistant and Nancy P. Arny is Associate Professor in Natural Resources Education*