



Critters in our Midst: Tree Snails

by Carol Ellis

Orthalicus reses Stock Island Tree Snail on Gumbo Limbo Tree. Photo by Carol Ellis.

The range of the Florida tree snail (*Genus Liguus*) once extended from Pompano Beach to Key West and across the Everglades to Marco Island. It is hard to imagine a time when tropical forest trees were covered by their glistening shells. A tree snail was like an exquisite jewel.

In Miami circa 1870, a hundred collectors specialized in tree snails from the Keys and Everglades. They held meetings to share their findings, and trade amongst their close-knit community. Relentless shell collectors, burned entire hammock areas, after collecting all the snails, and exterminating a rare variant, to ensure



Colorful Tree snail. Photo by Carol Ellis

high prices for their collection.

Charles Torrey Simpson wrote, " Long before I began to collect (1882) man had wrought great destruction to the hammocks in which they live... they are on the verge of extinction. Great forrest areas have been cut."

Construction of the canals in Fort Lauderdale began in 1920 by clearing the mangroves and creating the first "finger islands" that became the trademark of Fort Lauderdale, "The Venice of America." It was a model repeated by developers along the coasts, who were in the business of "selling mangroves" as they dredged and filled the wet lands and leveled the hardwood hammocks.

On December 6th, 1947, the government set aside 1.5 million acres of protected land as Everglades National Park (ENP), one place where the bulldozers could not come.

Post WWII, a new generation of homeowners were on their way to South Florida. Common were sales pitches, like this one in 1952, describing the proposed development of Key Largo Beach: "Slumbering,



Orthalicus reses Stock Island Tree Snail on the Move. Photo by Carol Ellis. Federally designated threatened Stock Island tree snails were moved to North Key Largo Hammocks as a part of mitigation for developers.

bands and color variations based on their diet and conditions in their particular hammock. Conservationists were particularly worried about snails in the Keys, where U.S. 1 gave collectors easy access to the hammocks that were home to the snails. Collectors proposed that they transplant threatened snails to suitable hammocks in ENP. From the 1950's thru the mid 1960's, some 52 color varieties were relocated to 224 hammocks within the park.

In 1998, coinciding with the commemoration of the 50th anniversary of the founding of ENP, I presented a black and white photography exhibition, "The Hammocks of North Key Largo", to showcase the beauty of the subtropical forest of our local conservation lands. Though inspired by the pristine landscapes by Ansel Adams, my photographs within the hardwood hammocks and along our mangrove lined shores were about a habitat in recovery, My mantra for the show was "It's what I don't understand, which keeps me coming back."

awaiting the advent of fresh water and the mechanical work of modern machinery to restore this natural setting for the comfort and enjoyment of man today, this great flat rock key, high above the sea, on which great trees have survived for centuries, and thick with vegetation, lies basking in the sun with its frost free climate but tempered by the ocean breezes is this potential paradise."

Originally, every tree island, every plot of land had a different variety of *liguus* tree snail, with different

Tree Snails CONTINUED



Tree snail. Photo by Carol Ellis. *Liguus* comes from a word meaning banded. Bands that range from solid to variations. Originally, every tree island, every plot of land had a different variety of *liguus* tree snail.

"Build it and they will come," an adage true, more now than ever before. Not long ago in Key Largo, there were still pockets of forest, and undeveloped waterfront; little by little all are being developed. There are regulatory things that have to be done when developers want to develop areas, especially concerning the federally designated, threatened Stock Island tree snails. Mitigation goes on where park rangers have to go out and remove the snails, then the developers have to pay money and the question is what to do with the tree snails? They get put in suitable conservation lands in the refuges in North Key Largo. This usually happened without many people's knowledge.

A photograph from my 1998 exhibit was a retirement gift for a park ranger who spent a great deal of his employment transferring Stock Island tree snails for mitigation. The photograph was of a group of tree snails estivating in a crevice on a giant mastic tree. Estivating is how tree snails wait out the dry season. They emit a gummy substance which hardens and attaches their shell firmly to the tree, where they remain until it rains.

At the time, I did not understand the significance of what I was photographing. The accepted notion of moving and collecting has made science pause. Does conservation mean we must allocate a species to an area they were not native to, to forsake the environment of their origin?

Our nature is a consequence of man's actions. It would have been more interesting to know the Keys before people did what they did.



Adult and Baby Tree snails. Photo by Carol Ellis

CAROL ELLIS has lived in South Florida her entire life and Key Largo for 37 years.

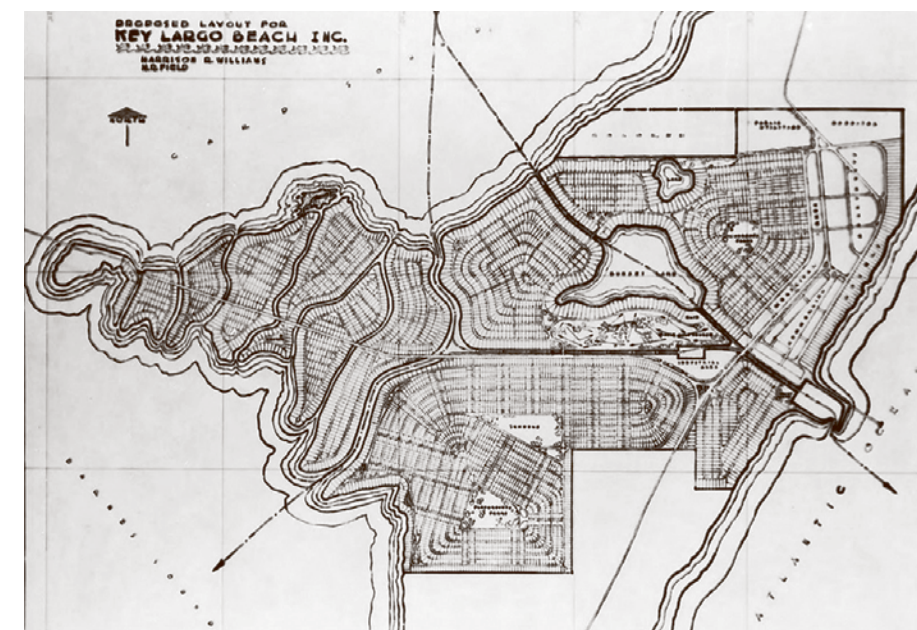
Currently a Master Gardener volunteer, Carol has a degree in Journalism from the University of Florida and is the resident photographer /artist at Ocean Reef Club.



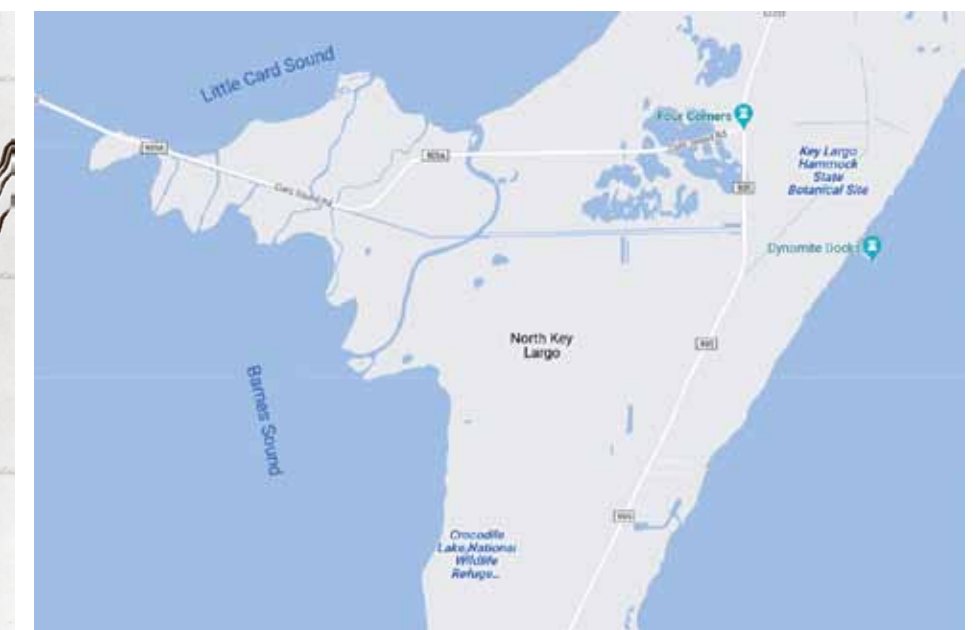
1998 Tree snails estivating. Photo by Carol Ellis. Estivating is how tree snails wait out the dry season

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The non-profit Florida Keys Wildlife Society mission is to support the Florida Keys National Wildlife Refuges. Learn more about their work, volunteer, join or make a contribution by visiting their website at floridakeyswildlifesociety.org.



Development Plan Key Largo Beach. Archive Photo.



Conservation Land N. Key Largo. Google Map.

Key Largo Beach city fathers predicted in 1969 the town would grow to 5000 by 1974 and 100,000 by 1990. Side-by-side maps showing proposed development, and today's current designation of the area as botanical and wildlife refuges.