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A Tour of the Islands of Pine Island Sound: A Geological, Archaeological, and Historical Perspective

Part 9: Patricio and Mondongo Islands

by Denége Patterson

Patricio Island is a vegetated sand dune surrounding a central lagoon. Located at the northern end of Pine Island Sound, its north side faces Charlotte Harbor. Its eastern side parallels a naturally deep channel that appears on a 1774 navigational chart drawn by the English explorer Bernard Romans. Patricio is distinguished within the Pine Island National Wildlife Refuge as being one of three uninhabited islands in the refuge with enough elevation to support upland habitat. It was not always unoccupied. Shallow shell middens exist on the higher portions. No systematic archaeological surveys have been conducted, but according to archaeologist John Worth, "They probably have Caloosahatchee-period occupation (500 BC – 1750 AD) and possibly earlier Archaic deposits. The Spanish name Patricio hints at the existence of a Cuban fishing rancho (1750-1835)." After 1911, Barron Collier established orchards and gardens on Patricio Island to feed his hotel guests on nearby Useppa Island. The 1935 census of Patricio lists the Nelson family: a farmer, a housewife, and their two grown daughters, a stenographer and a beautician. Local residents who grew up in the 1940s and 1950s speak of how their parents warned them not to set foot on Patricio because of numerous rattlesnakes.

Mondongo Island is one-fourth the size of Patricio, and is privately owned. The eastern portion has a main house, a caretaker's cottage, work sheds, and visitor cottages. Surrounded on three sides by shoals, the island lies within the Pine Island National Wildlife Refuge. In 1884 Dr. M. H. Simons, U.S.N., wrote for the Smithsonian Institution: "Mondongo Key, about two (nautical) miles southeast of Boca Grande, is covered to a depth of six to eight feet for half a mile in length and 100 yards in width; below the shells there is probably an equal depth of sand and clay; on its northeastern end there is a conical mound about ten feet in height which commands an extensive view." An earlier map based on survey data of 1859 shows one structure on what was labeled "Gondonga" Island.

Mondongo has a sand-dune core with shell midden deposits on portions of its surface. No archaeological exploration has been done, although a Cuban fishing rancho was likely there. Boats enter from the south by a single deep channel. Commercial and recreational fishermen state that the fishing in that channel is exceptional just after a high tide. East of the channel lies the

(Photo by J. Hopkins.)

treacherously shallow and beautiful Mondongo Rocks, an extensive, visually spectacular panorama of oyster bars and sand bars colonized by red mangroves. These formations take on an otherworldly appearance when rising from the mist.

In 1899 a renewed survey of the islands of Pine Island Sound attracted the attention of Albert W. Gilchrist. Trained in surveying at West Point, he is credited for conducting accurate surveys of Sanibel, Captiva, parts of Pine Island, and the smaller islands of Pine Island Sound. During his earlier military career he had served as a brigadier general of the Florida Militia and a captain in the U.S. Army during the Spanish-American War. By 1899 he was serving the first of two terms in the Florida House of Representatives, when he purchased Mondongo Island for $175. He sold it in 1901 for $1001. In 1909 he was elected the twentieth governor of Florida.

The 1937 owner of Mondongo Island, Murray Coggalshall, grew avocadoes and assisted Dr. Charles Breder with tarpon studies on Cabbage Key. Mrs. Coggalshall provided Christmas parties and gifts for the children who attended school on Punta Blanca Island, according to Kirk Walter in *Boat Goat*. From 1961 to the present, Mondongo Island has been owned by members of the same family, descendants of the late Chester Howell Ferguson, former Chairman of the Board of Directors and Chief Executive Officer of Lykes Brothers, Inc., which at that time was a major force in cattle shipping, meat packing, citrus, banking, utilities, electronics, and steel.

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Mondongo Island, looking north. (Photo by J. Hopkins.)

The origin of Mondongo's cryptic name offers a fascinating line of inquiry. In the Spanish language, *mondongo* is a stew of tripe or fish intestines, a spicy delicacy. Alternatively, "*Mondongo* is a common name found in the African groups imported into Cuba, the Caribbean, and Florida in the 18th century," according to Dr. Jane Landers, Vanderbilt University Professor of History (personal communication, 2014.) Her book entitled *Black Society* has a list of imported Africans from the 1750s including Mondongos. *Mondongo* has also been identified as the name of a Bantu language related to languages of the Congo Epena district, according to a study by William L. Gardener. Africans from the Congo have also been documented living in the same Cuban towns into which the Calusa Indians sought sanctuary from slavers in the 1700s. Regla and Guanabacoa, Cuba provided bases from which persons seeking avenues out of slavery were hired as fishing guides and deckhands by Cuban commercial fishing operators to Pine Island Sound from 1750-1835. As reported by Dr. John Worth in the September, 2006 issue of this newsletter, José María Caldéz, Cuban owner of a fishing rancho on Useppa Island, owned at least two enslaved Africans in 1824 in his hometown of Regla, Cuba. One of them, María de los Dolores Caldéz, was from the Congo. Her son, who was born on Useppa Island, was freed by José Caldéz in 1836 upon the occasion of his baptism in the cathedral at Regla, Cuba. While these specifics do not prove a direct connection to the naming of Mondongo, they provide compelling clues for continuing research.

Rise and Fall of Invasive Pests: Rugose Spiraling Whitefly and Croton Scale

(Modified from an article written for Pest Pro Florida, 2014)

by Catharine Mannion

Numerous new arthropods

show up in Florida every year with several of them becoming invasive pests that potentially threaten food crops, landscapes, and native habitats. For a new pest to thrive and establish, it needs suitable host(s) and environmental conditions. When these conditions are met, the pest population often explodes and the chance of spreading to new areas is almost automatic. This scenario is common and usually for the first several years pest populations can be devastating. The lack of competitors and natural enemies contribute to pest explosions. As a result the pest population increases rapidly but will also often decrease after several years as a natural balance of the pest is established for its optimal survival. A decrease in population can be associated with an increase in natural enemies and competitors as well as with other management strategies. However, it may not decrease to the point that no management is necessary.

The Rugose spiraling whitefly was first identified in Miami-Dade County in 2009 (Fig. 1) and was verified at the RRC's Calusa Heritage Trail in August 2011. It has since spread to numerous counties in south and central Florida; particularly up the coasts. This whitefly feeds on many native and non-native host plants. Those most significantly infested at the RRC were gumbo limbos and strangler figs. However, the female will lay eggs on most plants as well as walls or other structures. This whitefly can cause damage to plants, especially those experiencing other stressors such as drought or impacts from cold weather. One of the biggest issues is the excessive white wax it produces, the excessive honeydew it excretes, and the subsequent black sooty mold that grows on the honeydew.

Figure 1. Rugose spiraling whitefly (Photo by H. Glenn, UF/IFAS.)

Figure 2. *Encarsia noyesi*, a parasitoid that attacks Rugose spiraling whitefly (Photo by S. Taravati, UF/IFAS.)

Because the Calusa Heritage Trail offers a landscape of diverse insects and plants, a group of infested trees became part of a small study to compare pesticide treated trees to those with no treatment. The trees with no treatment were evaluated for the presence of natural enemies. And, in November 2011, a tiny predatory beetle, *Nephaspis occulatus,* and a parasitic wasp, *Encarsia guadeloupe,* were released.

There have been several natural enemies attacking the whitefly. It now appears that another parasitic wasp, *Encarsia noyesi* (Aphelinidae) (Fig. 2) seems to take over and have the greatest impact on the whitefly. This parasitic wasp is very tiny and will not sting people; in fact, you will likely never notice it is there. It was first collected in 2012 and appears to be following the whitefly population. In addition to its natural movement, the University of Florida has been collecting, rearing, and releasing it to new areas. Once the parasitic wasp is well established in an area, the population of whitefly drops dramatically. Currently in Monroe, Miami-Dade, Broward and Palm Beach Counties where whitefly infestations were extremely heavy, there is very little Rugose spiraling whitefly. And, as of this writing, the same is true at the Calusa Heritage Trail. No pesticide treatments are occurring and staff are keeping a close eye on the vitality of the trees. Some trees have been trimmed by an expert service to encourage new leaf and branch growth and discourage breakage of heavy older limbs.

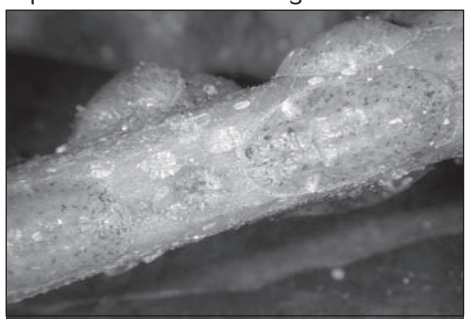

Figure 3. Croton scale (Photo by H. Glenn, UF/IFAS.)

The good news for the home or landowner with Rugose spiraling whitefly infestation is that you can likely expect to see a decline in this whitefly. It is even more important now that each infestation be evaluated to determine if a pesticide is necessary (i.e., is there sufficient whitefly) as well as to use the most appropriate products and methods to protect natural enemies. If you have been using pesticides on a regular schedule to control this whitefly, now is the time to evaluate whether continued pesticide application is the best approach. These pests, in general, do not go away completely but with the natural enemies can be maintained at very low populations that require little or no management.

Now, here is the bad news related to the decline in Rugose spiraling whitefly and specifically gumbo limbo trees. Before the whitefly became a problem, there was another pest, croton scale *(Phalacrococcus howertoni),* infesting

Figure 4. *Thalassa montezumae* larvae and one adult feeding on croton scale (the adult is small, black with two red spots; the large white individuals are the beetle larvae). (Photo by H. Glenn, UF/IFAS.)

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many gumbo limbo trees (Fig. 3). This scale insect can feed on numerous types of plants, but in the landscape is often on gumbo limbo trees and crotons. When the Rugose spiraling whitefly started infesting gumbo limbo trees, we began to see less croton scale. Now that we are seeing less whitefly, we are seeing more scale again. The croton scale is found on the stems and underside of the leaves. The adult female is oval, relatively flat, and greenish-yellow with some dark spots or striations. The immature stages are smaller, yellowish, and also oval and flat. Like the Rugose spiraling whitefly, the croton scale produces excessive honeydew. So the problems associated with honeydew such as the growth of sooty mold could still be happening on gumbo limbo trees due to a different insect.

In 2009, a ladybird beetle predator, *Thalassa montezumae,* was found feeding on the croton scale (Fig. 4). This was the first time this predator had been reported in Florida. It was likely introduced with the croton scale. The species is known from Mexico, Arizona, and Texas and appears not to feed on many other insects other than croton scale. The adult is small (less than 6 mm), a dull, metallic blue with two yellow or red spots. The larvae of this ladybird beetle resemble mealybugs because they are covered in a white, waxy substance. Often, until the excessive honeydew becomes a problem, the croton scale goes unnoticed because it blends well into the stems and leaves. By the time a problem is noticed, there are often predatory beetles already feeding on the scale. However, the adult is very small and also not very noticeable. The beetle larvae, on the other hand, are much more noticeable but are often mistaken as a pest. Treating these beetle adults and beetle larvae with care will allow them to be part of the arsenal to protect gumbo limbo trees from the croton scale (Figure 5).

Many invasive pest populations do ultimately decline, and although they do not go away completely, do not require constant and extensive management. The importance of natural enemies in this decline is vital, which is why it is extremely important to know them, conserve them and protect them.

Figure 5. Unabashed tree-hugger Cindy Bear poses with one of the RRC's much-loved gumbo limbo trees. (Photo by C. O'Connor.)

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Sincerely,

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The Archaeology of Pineland: A Coastal Southwest Florida Site Complex, A.D. 50-1710, edited by William Marquardt and Karen Walker, Monograph 4, hardcover, 935 pages, 408 figures, 231 tables, bibliographic references, $125.00		$
Sharks and Shark Products in Prehistoric South Florida by Laura Kozuch, Monograph 2, softcover, $5.00		$
The Archaeology of Useppa Island edited by William H. Marquardt, Monograph 3, hardcover $35.00, softcover $20.00		$
New Words, Old Songs: Understanding the Lives of Ancient Peoples in Southwest Florida Through Archaeology by Charles Blanchard, illustrated by Merald Clark, hardcover $19.95, softcover $9.95		$
Fisherfolk of Charlotte Harbor, Florida by Robert F. Edic, hardcover, $35.00		$
Edisonia Native Girl: The Life Story of Florence Keen Sansom by Denége Patterson, Peppertree Press, 2010, softcover, $39.95		$
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Song of the Tides by Tom Joseph, a historical novel about the Calusa, U. of Alabama Press, $19.95		$
Eyes of the Calusa by Holly Moulder, a historical novel for young readers, winner of the silver medal in young adult fiction from the Florida Publisher's Association, White Pelican Press, $8.95		$
The Crafts of Florida's First People by Robin Brown, a step-by-step guide to making Florida Indian tools and containers (for ages 10 and up), Pineapple Press, softcover, $9.95		$

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