

## Observations on the Orchidaceae of La Isla De San Marco (Marco Island).

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### ABSTRACT

The Orchidaceae that occurred on Marco Island in the late 1960's before the development of the island are enumerated. Additionally, a photographic record of the property of Ernie Otter in 1968 is presented.

In the mid 1500's while Spain was exploring Florida, the Spaniards discovered a large island that contained two artesian springs of fresh water at what is now known as Caxambas Pass (Naples Daily News, 2012). They became stopping points to fill casks with fresh water for their trips back to Spain. The island became known as La Isla de San Marco (the island of Saint Mark), named for Saint Mark, the Christian evangelist and traditional author of the second gospel in the bible. Eventually the island became known as San Marco Island and finally Marco Island (Naples Daily News, 2012).

Marco Island was originally two islands; between which there was a waterway into the Gulf of Mexico. Eventually land building mangroves joined them resulting in a mangrove swamp between the islands. The Calusa Indians had built each of the islands up with oyster and clamshells over the centuries. In the early 1960's the island had several tropical hardwood hammocks, which supported orchid populations. Access to the island was by a small wooden swing bridge built in 1938 near Goodland on the southeast side of the island (Dunn, 1960).

Behind the mangroves, along Caxambas Pass, just above the remains of the Burnham Clam Cannery which operated from 1903 until 1929 and the Doxsee Clam Cannery which operated from 1911 to 1947 (Naples Daily News, 2012) were the ruins of what appeared to be a shell faced mound composed of steps with faces of whelk shells. On the side facing Caxambas pass from the highest point of the shell-faced mound there was an approach platform paved with clamshells sloping down to the water. Cushing (1896) describes almost identical structures on the crowning terrace of the Great Mound or Pyramid on Demorey's Key, Pine Island Sound. Cushing (1896) in his description of the mounds on Demorey's Key refers to the whelk shell facing of the steps and the top of the lesser step and the approaches to either side of it, paved with very large, uniform-sized clamshells, laid convex sides upward and as closely and regularly as tile. He also states that the apices of many of the whelk shells in the facing of the terrace are crushed in. The whorls of each shell all turned one way and finally all were hammered into place more firmly, until the whole facing was thereby made even. He further states that he later learned that this mode of building was resorted to not only in the facings of the heights, but also in the laying of the foundations of the keys on the submerged reefs. The pictures of some of the shell faces and steps on the Otter property show the same characteristics described by Cushing; the straight facing of the steps, the whorls of each shell turned one way and the apices of many of the shells crushed in. Additionally, a clamshell-paved approach to the mound could still be found in places. This would indicate that there was a mound similar to the one on Demorey's Key present on the Otter property.

At the highest point of the mound, Ernie Otter a professional fishing guide had his home. Ernie would take clients fishing in an old leaky wooden boat with a single cylinder engine that smoked for \$10 a day. His knowledge of the area always guaranteed a spectacular day of fishing.

A tropical hardwood hammock surrounded his home where he had several species of orchids attached to the trees, which he rescued from the clearing of vegetation by Deltonia Development Corporation for home sites.

Ernie knew several locations where orchids could be found on the north end of the island. There were large oak trees with orchids on the upper limbs. *Encyclia tampensis* (Lindl.) Small was the most common species on the island because of its ability to adapt to different habitats. It could be found growing on the ground in the more xeric habitats, on the oak trees in the hardwood hammocks and on the mangroves. *Vanilla barbellata* Rchb. f. was the second most common species growing in several locations on the mangroves around the island. *Vanilla barbellata* also occurred on several of the adjacent islands. In the hardwood hammocks on the north side of the island several plants of *Vanilla planifolia* Jacks. ex Andrews were observed hanging. *Vanilla planifolia* is believed to be originally from Southeast Mexico. The Totonaco Indians first used it. The Aztecs acquired it when they conquered the Totonaco Indians. Hernán Cortés in 1518 before conquering the Aztecs, witnessed the Aztec emperor, Montezuma, drinking ‘Chocolatl’ made from cocoa and flavored with ‘Tlilxochitl’, the Aztec name for cured vanilla beans (Vanilla, 2008). In many mound sites and ‘kitchen midden’ sites in South Florida where Tequesta or Calusa inhabited, *V. planifolia* could be found. In the Fakahatachee strand there are several mound sites where *V. planifolia* is plentiful. It always appears to be associated with sites that were inhabited by the Calusa or Tequesta.

Plants of *Polystachya concreta* (Jacq.) Garay & Sweet, *Anacheilium cochleatum* var. *triandrum* (Ames) Saulea, Wunderlin & Hansen, *Epidendrum rigidum* Jacq., *Epidendrum nocturnum* Jacq. and *Epidendrum anceps* Jacq. could be observed in the hardwood forests and on the mangroves in the more quiet coves. Also a plant of *Cyrtopodium punctatum* (L.) Lindl. was observed growing on a mangrove. Two terrestrials were observed, *Calopogon tuberosus* (L.) Britton, Sterns & Poggenberg and *Eulophia alba* (L.) Fawc. & Rendle, both in a grassy marsh where fresh water deposited on the north end of the island. The *E. alba* flower fascinated Ernie Otter because it reminded him of a donkey. To the south of Marco Island, in the Everglades National Park are recorded populations of 47 species of orchids, probably the source of the orchid species on Marco Island. Additional information on the Orchidaceae can be found in a video called History of Marco Island at marconaples.com in the videos section.

The property surrounding the Otter home had been the home in the early 1900’s for early settlers in the Caxambas Village who worked in the Marco Island clamming industry. It was a bustling community that was owned by Charles and Tommie Barfield until about 1919. About that time, the Griner family sold it to Ernest and Gladys Otter who then began to live on the site. By the late 1960’s most of the homes in Caxambas Village had been abandoned except for a few that were still being used by fishing guides and their clients.

During several fishing trips with Ernie Otter, he would tell the story that the ‘temple mound’, as he called it, was collapsed in many places and that he spent years rebuilding it. He added, that in some places he could not rebuild the walls as high as they were originally because of the erosion that had occurred.

Prior to the purchase by Deltona Development Corporation, Melvin Fin, a Miami attorney tried to get several organizations to raise funds to purchase the island in order to preserve the flora and the historical importance of the island. However, the funds were not raised in time. In addition, Melvin Fin had tried to raise funds to purchase the Fakahatachee Strand from the Turner Lumber Company, also without success.

The mound where the Otter house was is at 1831 Addison Court, Marco Island. In March of 2007 the Otter Mound Park was established to preserve what is left of the site and the hardwood hammock. The preserve is 2.45 acres, maintained by Collier County.

Fortunately, a written record was made of the orchids observed and a photographic record was made of the Otter property on January 20, 1968 and April 7, 1968, by the author is here presented.



Front porch of Ernie Otter's house, April 7, 1968.



Back left side of Ernie Otter's property with shell walls rebuilt to original height (April 7, 1968).





Backside of Ernie Otter's property with shell walls partially rebuilt (April 7, 1968).



View looking west from Ernie Otter's porch showing another rebuilt shell wall (April 7, 1968). These walls were rebuilt to original height. (Melvin Finn's car and author's van in picture.)





Crowning Terrace of the Great Mound or Pyramid on Demorey's Key, showing Platform and Conch-shell Facing.

Original shell wall found on the crowning terrace of the Great Mound or Pyramid on Demorey's Key, Pine Island Sound (Cushing, 1986). Shell walls are similar to the shell walls on the Otter property.



Clam factory cement slab with part of paved ramp rising from Caxambas Pass (April 7, 1968).





View of location of clam factory from Caxambas Pass (April 7, 1968).



Ernie Otter with oyster basket on original paved path leading to Caxambas Pass (April 7, 1968).





Mouth of Caxambas Pass (April 7, 1968).



Ernie Otter with Paul and Virginia Ledford on January 20, 1968.



Day's catch with Paul Ledford, author and Ernie Otter on January 20, 1968.



Ernie Otter cleaning boat after a day of fishing. Paul Ledford cleaning day's catch and author on dock (April 7, 1968).



Ernie Otter fishing with Paul and Virginia Ledford (April 7, 1968).





Ernie Otter's boat and dock at sunset on Caxambas Pass (April 7, 1968).



View looking west at the mangrove forest from Ernie Otter's front porch (April 7, 1968).



*Encyclia tampensis* (Lindl.) Small



*Epidendrum anceps* Jacq.



*Epidendrum rigidum* Jacq.





*Anacheilium cochleatum* var. *triandrum* (Ames)  
Saulea, Wunderlin & Hansen



*Epidendrum nocturnum* Jacq.



*Cyrtopodium punctatum* (L.) Lindl.



*Polystachya concreta* (Jacq.) Garay & Sweet



*Eulophia alta* (L.) Fawc. & Rendle

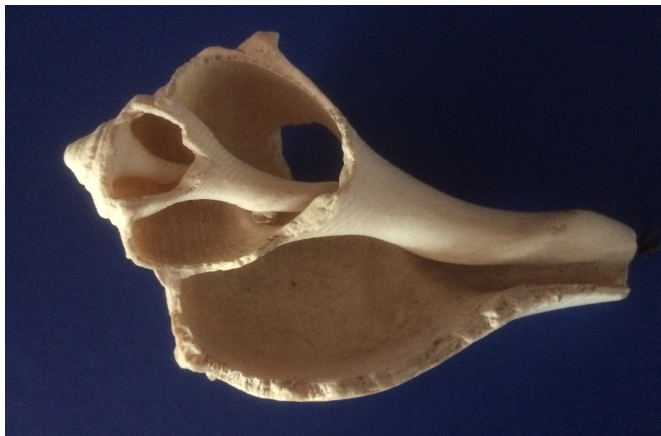
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Shell tool from Ernie Otter's collection.