

# Nature Notes

...from Sharon

## PLANT COMMUNITIES

Established in 1990, Barefoot Beach Preserve is one of the few remaining stretches of an undeveloped portion of a barrier island on the southwest coast of Florida. Barefoot Beach Preserve has 186 acres owned by Collier County and 156 acres owned by the state of Florida, for a total of 342 acres managed by the department of Collier County Parks and Recreation. Barefoot Beach Preserve is on Little Hickory Island—a barrier island, an island in motion, made of sand and shaped by the wind, tides, waves, and currents. This narrow strip of land acts as a barrier, protecting the mainland from coastal storm wind and water. There are over 150 documented species of plants in the five distinct plant communities at Barefoot Beach Preserve:

- 1) **Pioneer zone:** The wave-deposited upper beach area is sparsely populated with pioneer species. This pioneer zone is created from sand piled up by the winds and waves. This area helps protect our fragile island while providing important habitat for many shorebirds and other creatures. Plants in this area must tolerate high concentrations of salt air, salt water over-wash, and strong winds. Here you will find vegetation such as railroad vine, inkberry, seaoats, seashore dropseed, and sandspurs.
- 2) **Foredune:** East of the pioneer zone starts the foredune community where you find low bushes emerging such as beech creeper and beach ambrosia; vines like bay bean; and the start of sea grapes. Seaoats form distinctive clusters or a band along the upper portion of the foredune. Plants in this area must tolerate high concentrations of salt air and winds.
- 3) **Coastal Strand:** Behind the foredune lies the coastal strand, a shrub community that includes plants such as lantana, prickly pear cactus, necklace pod, and sea grapes. The sandy, well-drained soils provide an ideal habitat for the protected Gopher tortoise. Plants in this area must be drought tolerant, like to live in sandy areas with little nutrition in the soil, and tolerate some salt air and winds.
- 4) **Maritime Hammock:** The most diverse vegetative community in the Preserve is the maritime hammock, located in the zone between the coastal strand and the tidal swamp. Here you will find plants such as sabal palms, gumbo limbo, myrsine, snowberry, Florida privet, and a continuation of sea grapes. You will also see vines such as poison ivy and green brier and air plants like ball moss. Plants in this area must be drought tolerant and like sandy soils with little nutrition. They may be somewhat tolerate of some salt air, however, are protected from much of the salt air by the coastal strand.
- 5) **Tidal Swamp (Estuarine Mangrove Forest):** Separating this barrier island from the mainland is the tidal swamp/estuarine mangrove forest. Estuaries, where fresh and salt water meet and mix, are some of the most productive communities on earth—called “Cradle of the Sea.” The tidal swamp is a basin forest, dominated by three species of mangroves: red mangrove, black mangrove, and white mangrove. Due to the tidal fluctuations, plants found here must have a high tolerance of salt water. This community is the dominant vegetation in the eastern two thirds of the Preserve.

