



VIEW FROM THE MATANZAS DOCK

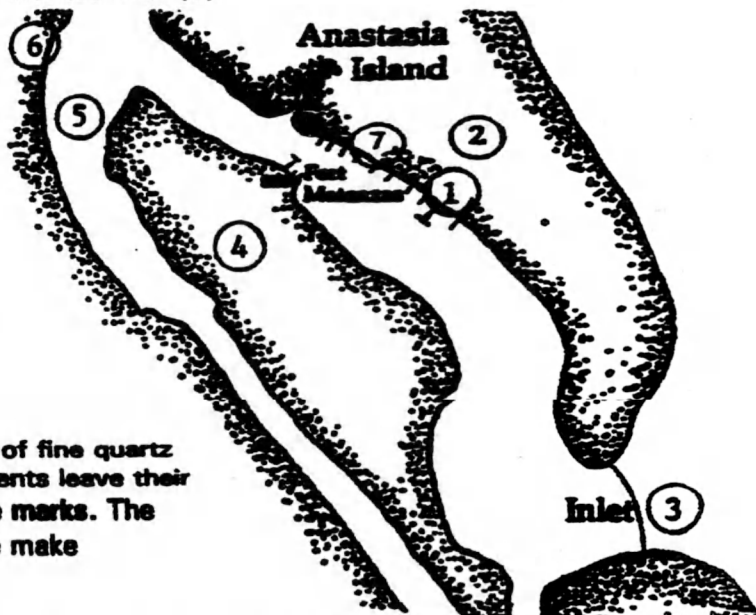


Overview from the Dock

The dock (1) is located on a barrier island (2). Along the east coast of Florida long, narrow barrier islands are common, often separated from the mainland by narrow lagoons that form part of the Intracoastal Waterway. These estuarine areas, where salt water meets with fresh water, join the sea through a series of inlets. The bridge spans the Matanzas Inlet (3).

Directly across from the dock is Rattlesnake Island (4) which forms the eastern shore of the Intracoastal Waterway (5). To the right of the fort and across the waterway, the pile of white sand is a spoil island (6) which was formed by the deposition of material as a result of dredging the Intracoastal Waterway.

The rows of rock piles along the shoreline are groynes (7) or small jetties, constructed to prevent beach erosion. They have become habitat for living things and provide excellent fishing.



The beach is composed of a mixture of fine quartz sand and shell fragments. Tidal currents leave their impression in the sand forming ripple marks. The marks which are exposed at low tide make beautiful patterns on the beach.

Waves and tides produce the most obvious local changes along the shoreline. Tides are produced by the gravitational attraction of the sun and the moon. Tides produce a twice-daily rhythmic rise and fall in the sea level locally, which can be accurately predicted for several years in advance. The Visitor Center has a daily announcement of the high and low tide predictions for the St. Augustine area.

ripple marks

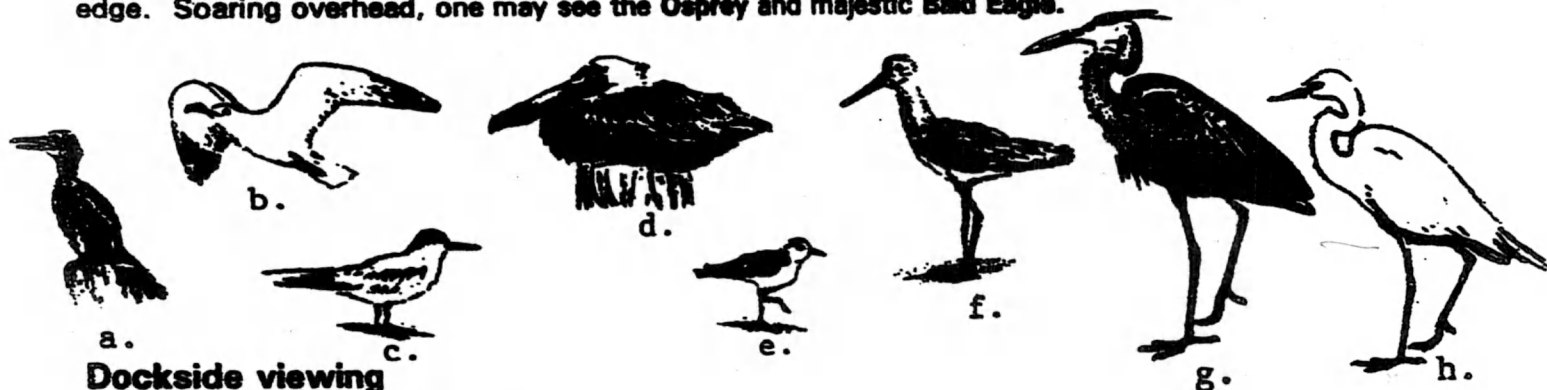
You may determine the direction of the tidal current. Face the water and observe the direction of the current. If it is moving to your left, the tide is going out, and if it is moving to the right, the tide is coming in. If the current does not appear to be moving at all it is in slack tide. During this time, the tide is changing from high to low tide or vice versa. Be observant though, as the water movement can be affected by swirling patterns caused by dock structures and surface wave action. See if you can detect the high tide mark on the beach by the rows of fine lines of sand left behind as the waves receded.

Marine mammals you may see from the dock

you see a dark dorsal fin protruding from the water do not be alarmed, as it probably is an Atlantic Bottlenose Dolphin. Dolphins will repeatedly arc their way "playfully" through the water which to the delight of our visitors. In contrast, sharks tend to slice through water at a more constant level. If you are lucky, you may sight the gentle West Indian Manatee around the dock during the summer months.

Shorebirds you may see from the dock

Many species of birds depend completely or partially upon the sea for food and play a role in the ecology of an estuarine ecosystem. Coastal birds may be divided into several groups based upon their method of hunting and capturing food. Diving birds float or swim on the water surface and chase down their prey by swimming underwater. The Double-crested Cormorant (a) is our most common diving bird. Aerial searchers include gulls (b), terns (c) and Brown Pelicans (d). The most "watchable" coastal birds are ones that forage and feed, using their bills to probe beneath the sand. Examples are the Sanderling (e) and Willet (f). Larger wading birds such as the Great Blue Heron (g) and smaller Great Egret (h) stalk about along the shore hunting for prey along the water's edge. Soaring overhead, one may see the Osprey and majestic Bald Eagle.



Dockside viewing

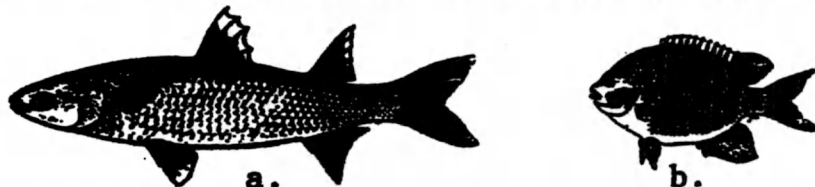
Take a good look on the shore near the dock and on the pilings under the dock. You might see something that appears to be rock formations. These are in fact living Oyster Beds. The outside of the shells are very sharp—so be careful if walking near them. These beds are continuously growing. The oyster young (called spat) float in the water for a short time before permanently attaching themselves to the adult oysters, pilings or other submerged objects. Oysters are filter feeders; they open up when underwater and filter out particles. We don't advise collecting or eating these oysters because the beds stabilize the beach and provide habitat for other organisms.

Watch carefully for tiny *fish* and small *crabs* seeking shelter among the oyster beds. Hermit Crabs are familiar shore animals easily recognized by their habit of carrying about a snail shell which they use as protection.



There are many other animals that can be found here, including; *urchins, brittle stars, conchs, sea anemones, clams, and shrimp* (but can be elusive to the dockside viewer).

Look under the dock. You are likely to see a school of Striped Mullet (a) and the smaller yellow and black striped Sergeant Major (b) swarming around the pilings. The estuary is excellent for sportfishing. A few of the popular species found here are Sheepshead, Flounder and Redfish.



After you have completed your "view from the dock," perhaps you will want to learn more about this dynamic ecosystem. As you discover our sea life, please remember not to disturb these animals, both for your protection and theirs. Thank you on behalf of the National Park Service.