

## Section 7: Sanibel Island and San Carlos Bay

A frigate bird soars above the J. N. "Ding" Darling National Wildlife Refuge on Sanibel Island. San Carlos Bay washes the shores of the refuge. Muggy and the school of mullet explore the shallow water where roseate spoonbills feed. Great blue herons wade in the water. Ibis sit on the prop roots of the mangroves.

Beneath another mangrove, Muggy looks up. He thinks he sees a cloud, but it's not a cloud. It's a snowy egret stabbing the water with its sharp bill. It grabs a fish near Muggy, and Muggy zips away.

The school of mullet passes the edge of Sanibel Island. A road, called a causeway, links Sanibel to the mainland. The causeway

includes three bridges and two islands. The islands were made by spoil from dredging. Before it was built, the water flowed easily through San Carlos Bay. Now the islands of the causeway block the flow and push a strong current under each of the bridges.

That strong current pulls the mullet toward the channel. A loud roar scares Muggy and the other mullet. Dredges are working along the causeway. Like vacuum cleaners, they suck up the sand from the boat channel. The sand, or spoil, is pumped out. The sand is sometimes used to build the islands between the bridges.

The school of mullet tries to circle around the dredge. But one mullet is too close, and the pipe swallows it. When it is dumped out with the sand, it is already dead. Many other animals and fish are also killed. The spoil smells like rotting fish for many days.

Some of the dead fish float out into the water. A blacktip shark is eating them. The school of mullet turns away, and the shark chases them. The school zigzags in the water. Because it is so big, the shark can't turn as quickly, and Muggy and the school escape.

An osprey soars above the school and dives toward the water. It grabs a mullet and flaps its wings. It flies to its nest carrying the heavy mullet. Muggy and the other mullet zip into the seagrass. They see several manatees. The manatees graze on the seagrass, and the mullet eat the tiny plants and small animals that live on or in the seagrass. The mullet and the manatees feed together.

### BARRIER ISLANDS

by Carol Mahler

Hickory Island, Lovers Key-Black Island, Estero Island, Sanibel Island, Captiva Island, North Captiva Island, Cayo Costa, Gasparilla Island, Little Gasparilla Island, Don Pedro Island and Manasota Key are all barrier islands. They are located between the estuary and the Gulf of Mexico, so they protect or shelter the estuarine waters. Gulf water washes the sloping beaches of the barrier islands. The shallow water keeps large waves from forming. With help from offshore breezes, the sloping shore also keeps sand from piling up in dunes. Although they look solid, barrier islands are unstable land masses. Waves, winds and rising sea levels change their shapes and locations in a process called littoral drift.

### FISHING

by Lisa Figueroa, Taylor Ranch School, Sarasota

The Charlotte Harbor estuary is home for many kinds of fish. They also thrive in freshwater lakes and streams. Many tourists and residents enjoy fishing. Fish eat plants and animals, and other fish and animals eat them. They are important to the food chain, so rules are made for fishermen about the size and number of fish they can keep. Other fishermen release their catch. Although some kinds of nets have been banned, commercial fishermen work in the estuary. Fish are not as plentiful as they were in the past. Some say the reason is too much fishing. Others blame pollution or the loss of habitat.

