

Fish at Canaveral

Canaveral National Seashore (CANA) contains a diverse and unique assemblage of fish species. Many of these are important recreationally and commercially. Mosquito Lagoon is the only known estuary where red drum (*Sciaenops ocellatus*) and weakfish (*Cynoscion regalis*) spend their entire life cycles. It is also one of only two known locations where red drum, weakfish, spotted sea trout (*Cynoscion nebulosus*), black drum (*Pogonias cromis*) and silver perch (*Bairdiella chrysoura*) all spawn. Important prey species include the tiny bay anchovy (*Anchoa mitchilli*), the most abundant fish in lagoon, striped mullet (*Mugil cephalus*) and silver mullet (*Mugil curema*). Mosquito Lagoon has gained particular acclaim nationally as a place to fly fish for red drum. This species does particularly well in these waters, potentially due to the high salinity of the lagoon. Other species sought by anglers are the common snook (*Centropomus undecimalis*) and sheepshead (*Archosargus probatocephalus*). Over 50 business permits were issued in 2002 to fishing guides to work in the park and adjacent wildlife refuge.

Recreational fishing pressure in Mosquito Lagoon has increased dramatically in recent years. Flats boats now regularly run into shallow seagrass areas, which were formerly inaccessible, in an attempt to flush out schools of fish, particularly red drum. This may be disturbing critical spawning and juvenile nursery areas for a number of species. Studies are in progress to identify such areas and patterns of boating activity to determine if additional protective measures are needed to maintain the outstanding fisheries in Mosquito Lagoon.

The park is also involved in a joint effort with several federal, state and local agencies to improve fish habitat in the lagoon. In the 1960's and 70's, prior to creation of the park, much of the saltmarsh areas along the edge of the lagoon were impounded with earthen dikes and flooded for mosquito control. This covered the mud flats needed by female mosquitos to lay their eggs. However, it also cut off the tidal flow of water into the marshes, eliminating export of food materials into the lagoon and barring small fish, prey for larger fish, from valuable foraging areas. The vegetation in these areas was drastically changed as well. Today, the agencies are reconnecting the impounded areas to the lagoon by breaching the dikes in some impoundments and completely removing them in others. Since 1993, over 4,400 areas of impoundments have been reconnected or restored.

CANA's ocean surf also offers excellent fishing. Common species include the highly desired Florida pompano (*Trachinotus carolinus*), whiting (*Menticirrhus* spp.), the voracious bluefish (*Pomatomus saltatrix*), red drum and occasionally Spanish mackerel (*Scomberomorus maculatus*). Although not fish, several shark species are also taken, including the blacktip (*Carcharhinus limbatus*), sharpnose (*Rhizoprionodon terraenovae*), blacknose (*Carcharhinus carbonous*), spinner (*C. brevipinna*) and hammerhead (*Sphyrna* spp). Trawling is conducted three times a year at stations just

offshore as a part of the National Marine Fisheries Service long-term monitoring program for fish populations along the southeastern coast of the United States.