

# Florida's Estuarine Surveillance Protects Fisheries

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A major portion of Florida's coastline has been altered substantially by development. This development has resulted in numerous dredge and fill projects and pollution, which together have substantially lessened the productivity of the water bottoms and degraded the marine water quality. It is estimated that approximately 20% of the estuaries have been changed to the extent that they no longer produce the marine life so important in maintaining the inshore fisheries. Many of the marshes and shallow grass beds that were so vital in the food chain of the marine fishes have been filled and the coastline no longer has the capacity to sustain the fish and shellfish population that existed in former years.

Commercial fishermen have been blamed for the decline in the coastal fisheries but ironically the rural areas that have been fished commercially for many years and the urban areas that have prohibitive netting laws produce very little. The basic life sustaining habitat is gone from the latter areas and so have most of the inshore fish populations. Therefore, it is essential that the various agencies that have responsibilities in the field of conservation, land management, or pollution control coordinate their efforts in order to provide the maximum amount of protection to the remaining estuaries, marshes, and marine grass beds that provide the essential habitat for the inshore recreational and sport fisheries.

Knowing that no one agency has sufficient authority to control or manage all the factors that lead to environmental degradation, Harmon W. Shields, then Director of the Division of Marine Resources, took action several years ago to aggressively enforce all the laws within the Department's jurisdiction and to pass on to other state agencies information relating to mutual areas of concern for their information and action.

The 150 officers of the Florida Marine Patrol have approximately 8,000 miles of coastline to patrol and each was assigned a section of coast in which to report all shoreline alterations. Special report forms were designed with which to record the who, what, when, and where of each development and its legality. The report also shows the criteria used to determine legality, arrests made, or to what agency the information was relayed if the development action did not fall within the jurisdiction of the Marine Division. Many illegal projects were halted, many arrests were made and much valuable relative information was passed on to other environmentally responsible agencies for their disposition.

But stopping shoreline degradation is not enough, and it was realized that something should be done to rebuild some of the natural habitat that had been destroyed. Mr. Shields reassigned laboratory staff to compose a booklet in layman's language showing the importance of the major dune, marsh and submerged vegetation

and how these could be replanted in devastated areas. The booklet will relate to the importance and replanting of sea oats, sea grapes, running beach grass, and other plants, in the dunes; spartina, needlerush mangroves, in the marshes; and turtle grass, shoal weed, on the submerged bottoms. It will also point out the benefits of artificial fishing reefs and tell about their construction and the permitting procedures necessary for their approval and construction. There will be a bibliography of relative scientific publications enclosed and the booklet will be available to contractors, real estate developers, public and private agencies and citizens groups. It is our hope to have an ecologist available to meet with groups, inspect the locations of proposed revegetation, advise of the practicality aspects, and aid in getting the stock for the replanting. Since Harmon Shields' appointment as Executive Director of the Florida Department of Natural Resources, I have taken his place as Director for the Division of Marine Resources. We feel that much can be done in some areas to help nature restore what man has destroyed. If harmful shoreline development can be stopped or minimized, the water quality improved, and devastated areas replanted, the populations of Florida fin and shell fish can be substantially increased. Toward this goal we are working.