

A PLEA FOR THE DEVELOPMENT AND PROTECTION OF FLORIDA FISH AND FISHERIES.

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The principal fishing industries of Florida are prosecuted on the Gulf coast, at Pensacola, Tampa, Punta Gorda, and Key West. The shad fishery of the St. Johns River is also very important, and considerable business in this direction is done at various places on the east coast. At Pensacola the principal fish product is the red snapper, a fish of good size and with firm flesh of fine quality, which bears transportation well. It is taken with hook and line on the snapper banks in from 10 to 50 fathoms and from 10 to 50 miles offshore. At Cedar Key, Tampa, and Punta Gorda the bay and brackish-water fishes are taken by haul seines on the shores of the bays and inlets; the varieties mostly handled are mullet, redfish, or "bass," as it is known commercially, sea trout, pompano (the best of all fishes for the table), Spanish mackerel, jackfish, etc. The mullet is, perhaps, the most important, as it is shipped fresh, on ice, while large quantities are cured by salt.

At Key West many of the fishes are entirely different from those of the other waters of the State, and belong rather to the West Indian fauna. They comprise the coral fishes, salt-water fishes par excellence. All are taken with hook and line, as the various seines and nets can not be utilized owing to the ragged coral formation of the shores and reefs. The principal fish are kingfish, mackerel, groupers, snappers, grunts, jewfish, etc., which exist in great variety. The catch is almost entirely consumed at Key West. Formerly a fleet of smacks carried live fish in wells to Havana until a prohibitory import duty was imposed by the captain-general upon fishermen from the United States, which compelled the abandonment of the industry and the sale of the smacks to Spanish fishermen, who, besides taking fish contrary to law in Florida waters, carry on a nefarious trade in smuggling vile rum and poor cigars.

The Gulf coast line of Florida, Alabama, Mississippi, Louisiana, and Texas is more than 6,000 miles in length, being about 1,000 miles longer than that of the Middle Atlantic States. Of this extent Florida has nearly 3,000 miles, or about one-half. A statistical review of the U. S. Fish Commission, published some ten years ago, says:

The Gulf States occupy a favorable location for supplying a large part of the country with marine products. A dozen or more States in the Lower Mississippi Valley have their nearest coastal connections through these States, and it will probably be in response to this section's demand for marine food products that the Gulf fisheries will reach their highest development.

The fulfillment of this prediction has been realized, for at present a large demand exists for the food-fishes of Florida in all the South Atlantic States, while the choicer varieties, as red snapper, pompano, Spanish mackerel, etc., are shipped to all the principal northern cities. The same report says:

This region is favored with many highly esteemed food-fishes, which occur here in greater abundance than elsewhere on the coasts of the United States. The undeveloped resources of the Gulf States invite outside attention and afford a promising outlook for future increase. The possibilities of the region in the matter of oyster production and cultivation are believed to be great.

Few sections of the United States are better supplied with desirable and important marine-fishery products, including fish, reptiles, and invertebrates, than the Gulf States. Among the invertebrates the oyster ranks first in commercial importance. It is extremely abundant throughout the entire section and constitutes the most prominent fishery product. No other mollusks have as yet attained economic prominence, though in Florida the round clam or quahog is taken in small quantities, and the meat of the conch is used for bait and eaten locally. A number of species and varieties of sponge occur off the Florida coast, and are objects of an important fishery, the only one of the kind prosecuted from the United States. Among crustaceans the shrimp is the most prominent. Crabs are abundant in this region; in addition to the common blue crab of the Atlantic coast, there occur the shore crab, the lady or sand crab, and others of less importance. The stone crab, which reaches a large size and is very palatable, is probably most abundant on the coast of Florida.

The economic value of the reptiles inhabiting the Gulf States is greater than in any other section. Foremost among them is the alligator. There are at least five species of terrapins in this section which are valuable as food. Four of these occur in fresh water. The salt-water or diamond-back terrapin is also found in the salt marshes from Florida to Texas, and is a valuable article of fishery. This region is included within the range of three soft-shell tortoises. Two species of snapping turtle also inhabit the fresh waters of these States. Three important marine turtles frequent the Gulf of Mexico and are sought by the fishermen; these are the green turtle, the loggerhead, and the hawksbill or tortoise-shell turtle.

From the foregoing brief account of the fishery resources and kindred industries of Florida, it is evident that the present active demand for fish, oysters, etc., will be largely augmented in the future, especially in view of the fact that there is a material decrease in the supply of these products in northern waters; indeed, there are already many northern fishing smacks in Florida waters every winter, and lately there have been oyster-grounds located and taken up by northern parties with a view to an increased cultivation of oysters. The granting of these privileges should be paid for by the parties interested and made a permanent source of revenue to the State, the same as is done in the States of Virginia, Maryland, New Jersey, New York, etc. This is very important and should be attended to before the best grounds are disposed of gratuitously. A State fish commission could be supported by the revenue derived from the rental of oyster-grounds alone, and there should be an intelligent supervision of this branch of the fisheries, in order that those interested may keep pace with the improvements and discoveries that are yearly being made in the cultivation of oysters and be better enabled to foster this important industry.

The same necessity exists for an able and competent supervision of the sponge interests, in which Florida alone is concerned, for in the waters of that State are the only sponge-beds in the United States. It is of vital importance, then, that those beds should be properly protected, the taking of the sponges subjected to wise and judicious surveillance, and their cultivation prosecuted with vigor and intelligence in order that the supply may be maintained and increased, and the revenue to the State consequently enhanced.

The shad fishery of the St. Johns River constitutes one of the most important branches of Florida fishing industries, as the first shad of the season are shipped thence to northern markets at a time when they command the highest price. As the supply has lately been seriously decreasing, it is of paramount importance that the yield should be increased by artificial means. The artificial propagation of shad has been attended by more pronounced success, perhaps, than that of any other fish, a most convincing example being that inaugurated by the United States Fish Commission in California, where, by the planting of less than a million shad fry in the Sacramento River a few years ago, shad have become so numerous that they are now sold for a less price than in eastern markets. When it is considered that prior to

this experiment there were no shad whatever on the Pacific coast, the argument in favor of the artificial culture of the shad is incontrovertible.

The State of Florida should have at least one hatchery on the St. Johns River, and as the shad-hatching season lasts but a couple of months, the expense is trifling, while the results are all important, far-reaching, and most bountiful.

There has been also a considerable decrease in some of the coast fishes, while a complaint of the scarcity of the best food-fishes in the inland waters of the State is universal. Now is the time to do something toward a restoration of the fish supply to these waters, or at least to prevent a further depletion by the proper and fostering care of a competent fish commission—one that is able to cope with the situation and to apply the proper remedy, whether it be by artificial cultivation or by increased protection, and by so doing to increase the food supply of the people.

In the Northern States the fishes of many of the interior streams have either been totally destroyed or very materially decreased by the pollution of the streams through the refuse and offal from manufacturing establishments. It would be the part of wisdom for the Florida authorities to be forehanded in this matter, on the principle that "an ounce of prevention is worth a pound of cure," and to enact such laws as will prevent a like decrease of the fish supply from similar causes.

The United States Fish Commission has done considerable work in Florida, and will do a great deal more; and it is also contemplated to establish a station for the cultivation of fish, oysters, sponges, etc., at no distant day. In view of such an event, therefore, it is all the more important that good protective laws and their effective enforcement by a competent State fish commission should be provided for, otherwise the work of the National Commission would be to a great extent rendered useless.

It will be readily seen, from what has been said, that it is of the utmost importance that the fishery industries of the State should be looked after by an efficient and competent commission. It has been thoroughly demonstrated in the many States, and particularly in Florida, that the plan of a complimentary fish commission, composed of several persons who receive no compensation, has not worked advantageously, although liberal appropriations were annually made in the older States. Too often such commissions degenerate into mere political machines for the securing of votes, while the legitimate work of the commission is neglected or frustrated. It can not be expected that men will give much time or attention to duties for which they receive no compensation, so it follows, as a matter of course, that if they can not command dollars they will command votes, if possible.

The fish commission of Florida is virtually obsolete at present, for, notwithstanding the appointment of three commissioners several years ago, as provided by law, I have learned on good authority that nothing has been done by them and that to all intents and purposes the commission has ceased to exist.

What is needed is the enactment of a law that provides for the appointment of a single commissioner of fish and fisheries at a fair salary, one who has a scientific and practical knowledge of fish and fisheries and is fully competent to deal with the subject in all of its bearings. Such a person would be able to materially augment the revenue of the State by an increased development and a more abundant yield of the various fisheries. If thought best, he might also have supervision of the game birds and mammals and see that the laws for their protection were enforced.

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