

**119.—FLUCTUATIONS IN THE FISHERIES OF THE GULF OF MEXICO
AND THE PROPOSED INVESTIGATION OF THEM.**

By SILAS STEARNS.

[From a letter to Prof. S. F. Baird.]

As to the best time of year for the Albatross to visit the Gulf, I would say that I think that much more could be accomplished in summer than in winter. For in winter the cold "northerners" drive the most of the animal life from the shores and shoaler waters to deep waters, or in the case of surface swimmers, large and small, to the lower parts of the Gulf, perhaps even beyond Cuba. This movement takes place more or less with all of our food-fishes. The summer time is the general spawning season. West Indian forms are present, and all kinds of delicate invertebrates are more easily secured. I would say that from June until the mullet-spawning season, in September, your expedition would do better than at any other time. Most persons do not find the climate on the Gulf at all unpleasant in summer, and then the moderate winds and calm sea are most favorable for collecting. I am pleased to know that you are contemplating this exploration, and trust that the plan may be carried out, for it seems time that we were better acquainted with our food-fishes, which appear to be more easily used up or driven away than they are in more northern latitudes.

I am aware that fishermen are apt to fancy that fish are becoming scarce whenever they have been unusually unsuccessful for a season, remembering only the good catches of the past, but it is quite evident that their complaints are well founded in this case. For the past five years the daily catch of the shore seine-boats from the Mississippi River to a point 50 miles east of Pensacola has been gradually reduced, so that now it is very small. To get even half a supply there are many more boats and vessels, much larger than of old, that carry ice and scour the coasts westward and southward, going in the latter direction 300 to 400 miles. It seems strange to me that the fishery of a few years past, which was not large, should almost entirely use up an abundance of fish. The scarcity is with the following species, which are inhabitants of the bays all the year: Sheepshead, salt-water trout, redfish, mullet, gray snapper, and other small species. These fishes are yet abundant in Southern Florida, as they used to be here. The pompano, bluefish, Spanish mackerel, &c., all migratory, are, apparently, as abundant as ever some years and scarce others. I think also that there has been a decrease with the red snapper, for the most of the old fishing grounds are barren, and smacks have to go farther each year to find new ones. During the past winter we have fished along the edge of the 100-fathom curve in 30 to 40 fathom water from south from Pensacola to west from Cedar Keys, which takes us from 50 to 200 miles from home.

Beyond these limits we have found no fish. A comparison of a fishing chart of 1878 with one of 1883 shows great changes for so short a time. During the spring large schools of red snappers come inshore—perhaps after small fishes—but they swim at the surface, and cannot be taken with hook and line. The Key West grouper fishermen have been able to catch but few fish of late. They say that their grounds, which extend from Key West to Cedar Keys, are worn out. As other and improved means are adopted to secure fish, there will no doubt prove to be a sufficient supply for a long time, but when we find them disappearing so fast before our comparatively small fishery we are inclined to look farther into the future than we otherwise would.

Should the Albatross come this way I will take pleasure in doing anything that I can to forward the exploration, and, if my personal services would be acceptable, can direct her to all of the fishing grounds, &c.

I will undertake to do something at once in regard to the collection of porpoises. Nearly every day at sea they play about the smacks and could be easily harpooned. I do not think that there are any harpoons in the city, but will look around to-morrow. There are seemingly at least three kinds of porpoises, besides the so-called blackfish, sperm-whale, and finback whale. The larger porpoise, uniform brown, lives in the bays and at sea, sometimes straggling a mile or so up fresh-water rivers. The two smaller kinds, one plain brown and the other mottled with white, live exclusively at sea, I think.

Whales seldom come inside of 40 fathoms of water, but black fish are seen within a half mile of the beach.

PENSACOLA, FLA., *May 5, 1883.*

120.—PROPOSED LIMITATION OF MENHADEN FISHING TO JUNE 1, AND OF MACKEREL FISHING TO JUNE 15.—OCCURRENCE OF HERRING.

By W. A. ABBE.

[From letters to Prof. S. F. Baird.]

It seems to me that an easy way to settle the dispute between the shore fishermen, or the amateur fishermen on the Jersey coast, and our menhaden fishermen is to pass a general law refusing to grant fishing or coasting licenses to menhaden fishermen before June 1 of each year. This would allow the fish to settle on their feeding grounds, and I am confident that they would return to the Maine coast.

NEW BEDFORD, MASS., *September 7, 1882.*

I have recently conversed with a good many owners and fishermen from Booth Bay to Portland, and have been surprised to find such a general sentiment in favor of a law restricting the catching of mackerel before June 15. I am assured also that the same sentiment exists at