NOTES

OCCURRENCE OF MATURE REDFISH, *SEBASTES MARINUS*, IN SPORT FISHERY OF THE NEW YORK BIGHT

In the 1971 sport fishery survey of the New York Bight waters, party boat captains reported catching redfish, *Sebastes marinus*, along the edges of the Hudson Canyon. Specimens obtained and examined later were found to be sexually mature fish. This is the first record of redfish being caught in the marine sport fishery off New York, and is a substantial extension of the southern and western breeding range for *Sebastes* in the north Atlantic.

Redfish occur on both sides of the north Atlantic and Goode and Bean (1895) listed the southernmost limit in the western Atlantic off the northern coast of New Jersey (lat 39°48′N; long 71°49′W). Schroeder (1955) reiterated this limit when he reported catching redfish between long 70°00′W and 71°59′W in water deeper than 394 m. Davis and Joseph (1964) reported one specimen (330 mm SL) off Virginia (lat 37°38′N; long 74°15′W) but did not include details on maturation. Prior to my find, the southernmost extent of a breeding population in the western Atlantic was that reported by Bigelow and Schroeder (1953) from Great South Channel off Nantucket Island.

Redfish exist in commercial concentrations from the Gulf of Maine and Georges Bank north to southern Greenland. Although an excellent table fish, redfish are not actively sought by New England anglers because they are usually found in deep water and provide little sporting action. They are caught regularly by anglers at Eastport, Maine (Kelly and Barker, 1961) and occasionally elsewhere along the Maine coast, but few are caught by sportsmen south of there.

During July and August 1971, I collected 14 specimens (13 ripe males and 1 gravid female containing well-developed larvae) from party boat captains. These redfish had an average length of 208 mm, ranging from 188 to 222 mm and averaged 257 g, ranging from 190 to 309 g. Ages ranged from 7 to 11 years with 8-year-old fish being the dominant age group. Their physical characteristics are like those described and pictured by Bigelow and Schroeder (1953) for *Sebastes marinus* from the Gulf of Maine. Each fish had a well-developed bony protuberance on the lower jaw and the anterior preopercular spine projected anteroventrally (Figure 1). The average ratio of horizontal diameter of orbit to head length was 29.5%.

Party boat captains caught these specimens incidentally while fishing for red hake, *Urophycis chuss*; tautog, *Tautoga onitis*; and black sea bass, *Centropristis striata*; on wrecks in 55 to 69 m in the upper end of the Hudson Canyon (general area: lat 40°12′N; long 73°44′W) (Figure 2). Party boat captains also reported

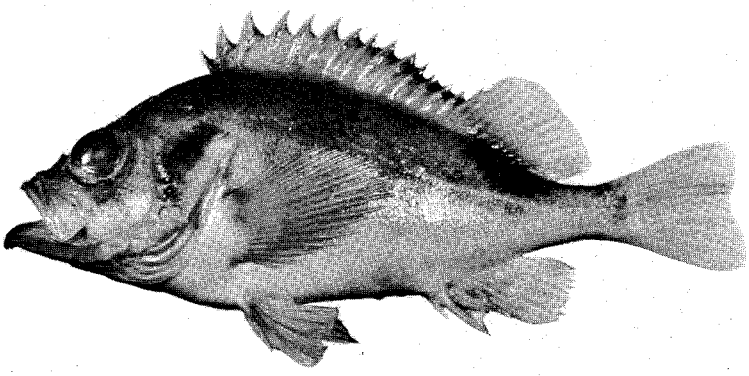

FIGURE 1.—A mature male redfish, 222 mm SL, caught at the northern end of the Hudson Canyon.

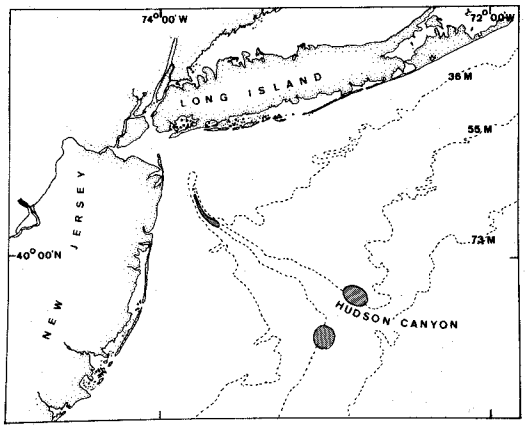

FIGURE 2.—The three areas (cross hatch) where sport fishermen caught redfish in the New York Bight.

catching redfish while fishing for Atlantic cod, *Gadus morhua*, and pollock, *Pollachius virens*, on wrecks deeper than 55 m in the general vicinities of lat 39°48′N, long 72°50′W and lat 39°36′N, long 73°03′W (Figure 2). I did not inspect these fish for positive identification. I received no reports of redfish being caught in water shallower than 55 m or any reports of redfish being caught over natural habitats. Party boat captains reported catching redfish during February, March, June, July, and August, mostly during the latter 2 months.

Several party boat captains reported catching redfish during the last 10 years. Although some captains said they caught up to 35 redfish during at least one trip in past years, I estimate that the total sportsmen's catch in 1971 was less than 100 fish.

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