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A FIRST RECORD OF THE BIGEYE THRESHER, Alopias superciliosus, THE BLUE SHARK, Prionace glauca, AND THE PELAGIC STINGRAY, Dasyatis violacea, FROM THE GULF OF MEXICO.

There are a number of species of marine fishes that occur in the temperate and sub-tropical western Atlantic that are not reported from the Gulf of Mexico. Certain western Atlantic species truly may not occur in the Gulf, but others are not recorded because of insufficient sampling by a method which would collect these species. Several fish species are taken primarily on floating longlines, and the extensive commercial longline fisheries of the Atlantic coast of the United States offer a greater probability of recording captures of rarely caught fish. Longlining is not a widely used fishing method in the Gulf, and Gulf records may be lacking for this reason. In addition, existing commercial records usually are not readily accessible to the scientific community, and therefore commerical catches of the rarely caught species are seldom documented in the scientific literature. Such is apparently the case for the bigeye thresher, Alopias superciliosus, the blue shark, Prionace glauca, and the pelagic stingray, Dasyatis violacea.

Alopias superciliosus, a cosmopolitan warm-temperate and tropical species, is taken occasionally on longlines off the Atlantic coast of the United States (Springer, 1943; Bigelow and Schroeder, 1948; Casey, 1964; Schwartz and Burgess, 1975; Stillwell and Casey, 1976; Compagno, 1978; Gulf of Mexico Fisheries Management Council, 1979; Gruber, 1980) but previously has not been reported from the Gulf of Mexico. Clark and von Schmidt (1965) noted an erroneous reference in Bigelow and Schroeder (1948) of a specimen taken in the Gulf off Englewood, FL. That specimen, first reported by Springer (1943), was actually taken in the Atlantic off Salerno, FL. Branstetter (1981) reported a possible capture of a bigeye thresher (*ca.* 350 cm TL) off Southwest Pass of the Mississippi River, based on a description of the specimen, but he did not see the shark, nor were data available for verification.

On 21 August 1980 a female A, superciliosus (ca. 250 cm TL) was caught by a commercial longliner off the north Texas coast at 27°39'N 94°37'W in waters approximately 400 m deep. The head and caudal fin of the shark are deposited in the Texas Cooperative Wildlife Collection at Texas A&M University (TCWC 3097.1). On 23 May 1981 a second specimen, a mature male (ca. 300 cm TL), was taken by one of us (JDM) while aboard a commercial longliner off the south Texas coast at 26°22'N 96°19'W. The head, caudal fin, and claspers are deposited at Texas A&M University (TCWC 3109.1). These records, plus the tentative record of Branstetter (1981) infer that the bigeye thresher may be widely distributed in the pelagic waters of the Gulf, but the species has not been taken previously due to a lack of sampling.

Prionace glauca is found in all world oceans from cool-temperate to tropical regions (Bigelow and Schroeder, 1948; Compagno, 1978), and is the most common of the oceanic sharks (Casey, 1964; Pratt, 1979). However, its presence in the Gulf of Mexico has not been verified, even though commercial fishermen have reported occasionally catching them off the Texas coast (Baughman and Springer, 1950).

On 21 August 1980 a commercial longliner took four blue sharks in the northwestern Gulf at 27°39'N 94°37'W. The four sharks were discarded, but a photograph (Figure 1) of the head of one of the specimens (supplied by G. Graham) reveals several of the diagnostic

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features of *P. glauca*: 1) long narrow snout, 2) short labial folds, 3) upper jaw teeth serrate, upper medial tooth large and erect, lateral teeth oblique and curved posteriorly, and 4) blue dorsal color. The individual in the photograph appears to be a large specimen (*ca.* 175 cm TL, based on known size of the hook and gaff in the photograph), and was representative of the size of all four individuals (G. Graham, pers. comm.).

Dasyatis violacea was first reported from the northwestern Atlantic by Bigelow and Schroeder (1962), and subsequently reported from Flemish Cap off Newfoundland (46°19'N 44°43'W) to the Lesser Antilles (12°29'N 56°42'W) (Bigelow and Schroeder, 1965; Scott and Tibbo, 1968; Wilson and Beckett, 1970); and from the southwestern Atlantic (20°53'S 37°16'W and 21°36'S 46°44'W) (Sadowsky and deAmorim, 1977), but not from the Gulf of Mexico.

On 27 April 1980 an adult male specimen of *D. violacea* was captured by a commerical longliner fishing the upper 70 m in waters exceeding depths of 1400 m,

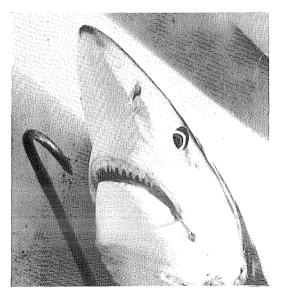


Figure 1. Head of one of four blue sharks, *Prionace glauca*, taken from the northwestern Gulf of Mexico, 21 August 1980. Note the apparently aberrant outer tooth in the fifth row on the left side of the jaw; it is erect and broadly triangular.

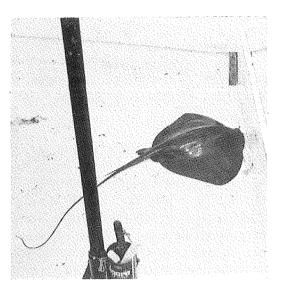


Figure 2. Adult male pelagic stringray, *Dasyatis violacea*, taken from the northwestern Gulf of Mexico, 27 April 1980.

in the northwestern Gulf of Mexico (27°06'N 94°02'W). Unfortunately, the specimen was discarded, but a photograph taken by G. Graham revealed the following diagnostic characters of D. violacea: 1) snout rounded, anterior margin forming a broad convex arc (straight or weakly concave in males); 2) posterior margin of disc nearly straight; and 3) tail abruptly narrowing distal to the caudal spine (Wilson and Beckett, 1970). The Gulf of Mexico specimen appears to have a complete tail, unlike most of the specimens examined by Wilson and Beckett (1970), and to be mature from the size of claspers which lie to the left of the tail base (Figure 2).

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