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DISTRIBUTION OF THE CONEY, *Epinephelus fulvus*, IN THE NORTHWESTERN GULF OF MEXICO

The coney, *Epinephelus fulvus* (Linnaeus), is distinctive from other American groupers since it has bright blue iridescent spots on both head and body (Smith, 1971). In shallow water, the coney exhibits the dark brown color phase and its blue spots are small, about 1 mm in diameter, and each is surrounded by a black ring. Smith (1971) also reported that specimens from deeper water have a red color phase with reduced melanic pigments and iridescent spots reduced to small black punctations. The third color phase is xanthic and is uncommon in deep or shallow water. Xanthic variants have fewer blue iridescent spots on the side, but are otherwise similar to common phases. Other characteristics of the coney are nine dorsal-fin spines, anal fin with three spines and nine soft rays, two black spots on the top of the caudal peduncle, and two at the tip of the lower jaw. Only the coney and the graysby, *E. cruentatus* (Lacepede) groupers have nine dorsal-fin spines. The graysby differs in having red or brown spots on a reddish gray background that are slightly larger, being about 3 mm in diameter, and having no black spots on the caudal peduncle.

The coney is distributed primarily throughout the tropical Atlantic. It occurs in south Florida and the Atnilles to the southwestern Gulf of Mexico, Bermuda, the Bahamas, and from South Carolina to Panama, Colombia, and Brazil (Smith, 1971). There are few records of coney from the Gulf of Mexico.

The first records of coney in the Gulf of Mexico were in the southwestern Gulf region at the Campeche Banks and from

the eastern Gulf region near the Florida Keys (Smith, 1971). Collections by Powell, *et al.*, (1972) and *in situ* sitings by G.B. Smith (1976) extended its range northward in the eastern Gulf to offshore from Panama City, Florida.

This paper reports an extension of the coney's distribution into a third Gulf region, the northwestern Gulf. Three records exist for the occurrence of the coney, from the Flower Garden Banks and Bright's Bank in the northwestern Gulf of Mexico. These banks, approximately 110 nautical miles southeast of Galveston, Texas, contain the most northwesterly coral reefs in the Gulf and, as such, comprise a unique habitat that can support the coney and other serrands.

The first known specimen of coney in the northwestern Gulf region was caught on a handline on 27 May 1950 by researchers on the Bureau of Commercial Fisheries research vessel "Oregon" off the East Flower Garden Bank at 27°55'N 93°37'W in 55 meters of water (Springer and Bullis, 1956). On 2 December 1980, a second coney specimen (177 mm total length (TL)) was caught by G.D. Dennis on a handline aboard the "Jess and Tina" on the LGL Ecological Research Associates Cruise 80-2 off the West Flower Garden Bank at 27°52.07'N 93°48.80'W in 21 meters of water (G.D. Dennis, Texas A&M University, pers. comm.). This specimen is catalogued in the Texas Cooperative Wildlife Collection at Texas A&M University (TCWC 3523.1). On 4 June 1983, a 302 mm TL coney was caught by M.B. Gohlke on hook-and-line aboard the sportfishing boat "Que Pasa" off Bright's Bank at 27°50'N 93°20'W in 46 meters of water (M.B. Gohlke, 1001-1021 East Shaw, Pasadena, Texas 77506, pers. comm.). This specimen was donated to The American Museum of Natural History

(AMNH 55079).

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LITERATURE CITED

- Powell, D., L. Dwinell, and S.E. Dwinell. 1972. An annotated listing of the fish reference collection at the Florida Department of Natural Resources Marine Research Laboratory, Fla. Dep. Nat. Resour. Mar. Res. Lab., Spec. Sci. Rep. No. 36, 179 p.
- Smith, C.L. 1971. A revision of the American groupers: *Epinephelus* and allied genera. Bull. Am. Mus. Nat. Hist. 146, Article 2:67-242.
- Smith, G.B. 1976. Ecology and distribution of eastern Gulf of Mexico reef fishes. Fla. Mar. Res. Publ. No. 19, 78 p.
- Springer, S., and H.R. Bullis, Jr. 1956. Collections by the *Oregon* in the Gulf of Mexico. Lists of crustaceans, mollusks, and fishes identified from collections made by the exploratory fishing vessel *Oregon* in the Gulf of Mexico and adjacent seas 1950 through 1955. U.S Fish Wildl. Serv. Spec. Sci. Rep. Fish. No. 196, 134 p.

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