

## AMPLIACIONES DE AMBITO

The Pacific burrfish, *Chilomycterus affinis* (Tetraodontiformes: Diodontidae)  
in the Northern Gulf of California (Sea of Cortez)

(Rec. 5-V-93. Acep. 8-IX-93)

Key words: Burrfish, *Chilomycterus*, Diodontidae, Gulf of California, new record.Pacific Burrfish, *Chilomycterus affinis*  
Gunther, 1870

**Previous range:** In the eastern Pacific from Peru in the south to as far north as San Pedro in southern California, and off the Galapagos Islands (Eschmeyer et al. 1983). In the Gulf of California, the Pacific burrfish was previously known from the boundary of the central and lower Gulf, near Guaymas (Thomson et al. 1979).

**New range:** In the upper Gulf of California, on the Baja Peninsula at Bahia de los Angeles. This new locality extends the recorded range of the Pacific burrfish 125 km north into the northern Gulf of California.

**Comments:** A specimen of the Pacific burrfish, *Chilomycterus affinis*, in the recent skeletal element collection of the Museum of Paleontology, University of California, Berkeley, U.S.A. (UCMP 136878), was collected on 2 September 1978 in La Bahia de los Angeles, on the eastern coast of the Baja Peninsula. It was picked-up on the shore of a bay roughly 15 km south of the town of Bahia de los Angeles. The specimen was an adult approximately 323.4 mm in standard length, sex was not determined. Two other dried whole specimens of *C. affinis* are in the natural history museum at La Bahia de los Angeles, Baja California; additional information on these specimens was not available. Identification of all three specimens was based on the dermal spines; burrfishes have short, fixed dermal spines with wide triradiate bases,

but porcupinefishes (*Diodon*) have long, erectile double-rooted spines (Miller and Lea 1972). This alone allows positive species identification for the Bahía de los Angeles specimens as *C. affinis*.

Walker (1960) and Thomson et al. (1979) divided the Gulf of California into three zoogeographic zones. These are the upper Gulf (north of Bahia San Francisquito in the west and the southern tip of Isla Tiburón in the east), the central Gulf (south to La Paz in the west and to Guaymas in the east), and lower Gulf (south of La Paz and Guaymas). These additional specimens now extend the range of *C. affinis* into the lower portion of the upper Gulf, proving that the Pacific burrfish is not restricted to the lower Gulf, but can be considered a member of the upper Gulf ichthyofauna.

## ACKNOWLEDGEMENTS

I thank M.T. Greenwald, T. Iwamoto, J. Siegel, D.A. Thomson, H.J. Walker Jr. and A.M. Kiener for assistance on this paper.

## REFERENCES

- Eschmeyer, W.N., E.S. Herald & H. Hammann. 1983. A field Guide to Pacific Coast Fishes of North America, Peterson Field Guide Series, 28. Houghton Mifflin, Boston. 336 p.
- Miller, D.J. & R.N. Lea. 1972. Guide to the Coastal marine fishes of California. California Fish Bulletin No. 157, California Department of Fish and Game. 249 p.

Thomson, D.A., L.T. Findley & A.N. Kerstich. 1979. Reef Fishes of the Sea of Cortez. University of Arizona, Tucson. 302 p.

Walker, B.W. 1960. The distribution and affinities of the marine fish fauna of the Gulf of California. Syst. Zool. 9:123-133.

Douglas J. Long

Department of Integrative Biology and Museum of Paleontology, University of California, Berkeley, C.A. 94720, U.S.A.

### AMPLIACIONES DE AMBITO

#### Young sailfish *Istiophorus platypterus* (Osteichthyes:Istiophoridae) in Cabo San Lucas, Baja California Sur, Mexico

(Rec. 30-VI-93. Acep. 8-IX-93)

**Key words:** Sailfish, Baja California Sur, Mexico, new record.

The sailfish *Istiophorus platypterus* (Shaw and Nodder, 1792) is a pelagic migrating fish distributed in the subtropical and tropical oceans. Although *I. platypterus* is often considered the only recognized species of sailfish (Morrow and Harbo 1969), Nakamura (1985) accepted *I. albicans* (Latreille, 1804) as a valid Atlantic species.

The sailfish's abundance is relatively high along continental and island shorelines and has a great economic importance as a game fish. *I. platypterus* grows to 3 m (length) and 60 kg (weight) (Nakamura 1985).

In México, the species is captured from Baja California Sur to the state of Guerrero on the Mexican mainland. In spite of its importance for commercial and sport fishing, information of its biology is scarce. The presence of young stages of sailfish in the eastern central Pacific (México region 23°-15° N) has been reported by Laurs and Nishimoto (1970) and Guzmán and López (1986). The same area has been cited as a probable area for

a nursery and growth (Beebe 1941) but references for Atlantic ocean population are more numerous.

As a derivative result of a study on food habits of dolphin fish *Coryphaena hippurus* (Linnaeus, 1758) in the Cabo San Lucas area (22° 53' N and 109° 54' W), three specimens of young sailfish were obtained. These specimens of *I. platypterus* were incorporated to the ichthyological collection of the Centro Interdisciplinario de Ciencias Marinas (CICIMAR-IPN No. 2735). This is the first record of young sailfish in waters adjacent to the Gulf of California and extends nearly 1000 kilometers north their previously reported range in the Eastern Pacific (Guzmán and López 1986).

This record, and data from Eldridge and Wares (1974) and Ochoa *et al.* (1991) about gonadal development and maturity, confirm the assumption that the waters around the southern part of Baja California peninsula are an area of reproduction and growth for *I. platypterus*.