

NOTES ON THE OCCURRENCE OF GILlichTHYS Y-CAUDA AT SAN  
DIEGO, CALIFORNIA.

BY

CHARLES H. GILBERT.

Professors Jenkins and Evermann have recently described from Guaymas, Mexico, a very interesting Goby (*Gillichthys y-cauda*), distinguished, among other points, by having but five dorsal spines. The extension of the range of this species to include the entire Gulf of California region was to be looked for, but its discovery as far north as San Diego was unexpected. On examining recently a bottle of small Gobies (No. 24866), labeled *Gillichthys mirabilis*, collected by Jordan and Gilbert in 1880, at San Diego, I found the collection to consist in equal parts of *Gillichthys y-cauda* and *Lepidogobius gilberti*, the latter a species recently described by Mr. C. H. Eigenmann from San Diego Bay.

A second lot (No. 34904), collected by Mrs. C. H. Eigenmann, contains the same two species, which must be about equally abundant at San Diego.

In all specimens of *G. y-cauda* examined, including the types, I find the dorsal V-15 or 16, the anal 14 or 15. *G. guaymasiae* Jenkins and Evermann, also from Guaymas, has the same number of fin rays, the types in the Museum showing D. V-16; A. 14. I can discover no important difference between the two species in general proportions, or in size of eye and mouth, and am in some doubt as to their distinctness, although they seem to differ somewhat in coloration.

An examination of the types of *Gobius townsendi* Eigenmann and Eigenmann, has shown it to be based on the young of *Gillichthys mirabilis*. In the largest specimens the elongation of the maxillary has become evident. The fin-formula of *mirabilis* is D. VI-12 to 14; A. 12 or 13.

U. S. FISH COMMISSION, August 28, 1889.

Proceedings National Museum, Vol. XII—No. 774.