

A second example of *Xystreurus liolepis*, taken at Santa Barbara, is sinistral. The species is, therefore, like *Paralichthys maculosus* and *Platichthys stellatus*, both dextral and sinistral. In the second example the small accessory scales are extremely numerous.

Two more examples of the species, noticed by us as *Platysomatichthys stomias*, have been obtained in trawl-nets from near the Farallones. This species is apparently not congeneric with *Platysomatichthys hippoglossoides*, differing in the long and slender gill-rakers and the ctenoid scales, as well as in the dentition, narrow interorbital space, and other minor details. The large teeth in both jaws, and the small teeth in the outer row in the upper jaw, are distinctly *arrow-shaped*, being abruptly widened toward the tip, thence acutely triangular.

We propose to consider this species as the type of a distinct genus, which may be termed *Atheresthes*, from the arrow-shaped teeth. It may be thus defined :

Atheresthes gen. nov.

Eyes and color on the right side. Body long and slender, closely compressed, tapering into a long and slender caudal peduncle. Mouth extremely large, oblique, the long and narrow maxillary extending beyond the eye. Both jaws with two irregular series of unequal, sharp teeth, which are anteriorly long and slender, posteriorly short. All the long teeth of both jaws, and the outer series of small teeth in the upper jaw, arrow-shaped. Some of the anterior teeth freely depressible. Interorbital space narrow. Gill-rakers long and strong, numerous. Scales comparatively large, ciliated, thin, and readily deciduous, those on the blind side similar, smooth. Lateral line without arch. Fins low and rather fragile, the dorsal beginning over the eye, its anterior rays low. Caudal lunate; no anal spine. Pectorals and ventrals small, the latter both lateral.

Type, *Platysomatichthys stomias* Jor. & Gilb.

NOTES ON SHARKS FROM THE COAST OF CALIFORNIA

By DAVID S. JORDAN and CHAS. H. GILBERT.

The following species of sharks, not hitherto recorded from the Pacific coast of the United States, have been observed by the writers during the present winter (1880):

1. *Isurus oxyrhynchus* Rafinesque. (?)

The jaws of a species of *Isurus* were obtained by us at San Pedro, the shark having been taken off Santa Catalina Island. The teeth agree essentially with those of *Isurus oxyrhynchus* (*Lamna spallanzani* of authors). *Isurus glaucus* has, however, also the same dentition, hence we are unable exactly to determine the species.

2. *Carcharodon rondeleti* Müller & Henle.—*Man-eater Shark*.

A large individual of this species was lately harpooned at the whaling station of Point Carmelo, near Monterey: Its jaws, now in the possession of Mr. A. C. Keating, a druggist at Monterey, are about two feet across.

Schools of this species are said to be occasionally noticed in the open sea from Monterey southward.

3. *Cetorhinus maximus* (Linnaeus) Blainville.—*Basking Shark; Ground Shark*.

An individual of this species, 31 feet in length, was taken March 25 by the whalers at Monterey, and another somewhat larger on March 26. Several others were noticed, but only two were secured. We are told that eighteen or twenty years ago several of them were taken at Monterey, since which time few or none have been noticed in the bay.

4. *Carcharhinus glaucus* (L.) Blainville.—*Blue Shark*.

A young individual of this species, taken in San Francisco Bay, is in the museum of the California Academy of Sciences. A "Blue Shark" is found in the open sea along the southern coast of California, but I do not know whether it is this species.

5. *Galeorhinus galeus* (L.) Blainville.

As already noticed, this species is the most abundant shark of Southern California. It is common at Santa Barbara, and I am told is not unfrequently taken at Monterey.

6. *Galeocerdo tigrinus* Müller & Henle.—*Man-eater Shark*.

As already noticed by us, jaws of an individual of this species were seen by us at San Diego, near which place the animal was obtained.

7. *Cephaloscyllium laticeps* (Duméril) Gill.—*Ground Shark*.

The occurrence of this species at San Pedro has been already noticed by us. At Santa Barbara it is, next to *Triakis semifasciatus*, the most abundant of the sharks. It is there taken daily in the lobster-pots set for the "crawl-fish" (*Palinurus interruptus*). Its habit of inflating itself, when caught, by swallowing air, is very remarkable.

8. *Pleuracromylon lævis* (Risso) Gill.

Two specimens of this species have been obtained by us at Monterey. One of them, a female, taken March 26, had the young about 8 inches long, each of them connected by a long umbilical cord to a placenta which is attached to the uterus. The occurrence of this shark, in connection with its relative, *Mustelus hinnulus* (*vulgaris*, *canis*, etc.), on the Pacific coast, is very interesting.

MARCH 26, 1880.