

DESCRIPTION OF A NEW SPECIES OF STAR-GAZER (CATHETOSTOMA ALBIGUTTA), FROM THE GULF OF MEXICO,

BY

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The steamer *Albatross* has taken some specimens of a species of *Cathetostoma*, apparently the first of the genus known from the Atlantic, at station 2403, where two specimens were obtained. This station is in north latitude $28^{\circ} 42' 30''$, west longitude $85^{\circ} 29' 00''$; depth 88 fathoms. At station 2404 two specimens were also taken; north latitude $28^{\circ} 44'$, west longitude $85^{\circ} 16'$; depth 60 fathoms. These two stations are in the Gulf of Mexico. At station 2410, in north latitude $26^{\circ} 47' 30''$, west longitude $83^{\circ} 25' 15''$, from 28 fathoms, one specimen was trawled. At station 2411, north latitude $26^{\circ} 33' 30''$, west longitude $83^{\circ} 15' 30''$, in 27 fathoms, a young example, 40 millimeters long, was taken. The last two stations are between Tampa Bay and Dry Tortugas, Fla. The largest examples are those taken at station 2403. These specimens are referred to in the description which follows: They are nearly equal in size, the largest one being 160 millimeters long. The length to the base of the caudal is 123 millimeters. The greatest height of the body (35 millimeters) is contained three and a half times in the standard length, and its greatest width is about the same. The length of the head (44 millimeters), not including the preopercular spine, is a little more than one-third of the standard length. The greatest width of the head (42 millimeters) is one-third of the standard length. The width of the interorbital space (11 millimeters) is one-fourth of the length of the head. It contains a deep groove, the length of which is slightly greater than its width and nearly equals the length of the eye. The mouth is nearly vertical when closed. The intermaxillary is slightly protractile. The length of its tooth-bearing surface (13 millimeters) is two-sevenths the length of the head. The maxilla is very broadly expanded behind. Its greatest width (8 millimeters) is about equal to one-third of its length (21 millimeters). The maxilla extends almost to the vertical from the middle of the eye, and the end of the mandible is not much farther back. The length of the mandible (26 millimeters) is contained four and two-thirds times in the standard length. The mandible has two blunt prominences at its

posterior end. The exposed portion of the maxilla is traversed by radiating striae. The lower limb of the preoperculum has three stout spines along its lower border. The length of the humeral spine (15 millimeters) is one-third the length of the head. The humerus is very strongly rugose on its upper border. Three short spines on the anterior edge of the preorbital. Teeth in villiform bands in the intermaxillary and mandible and on the vomer. Palatines in a very short band. A cavity between the head of the vomer and the processes of the intermaxillary ending in a semicircular canal behind, which is separated from the anterior cavity by a flap of skin. Gill openings very wide and only narrowly attached to the isthmus, leaving a free posterior border. Pseudobranchiæ present, small. A small narrow slit behind the last gill; its length about two-thirds that of the eye. Gill rakers tubercular, nine on the anterior arch. A pair of short but stout spines in front of the ventrals. The origin of the dorsal is a little nearer to the root of the caudal than to the tip of the snout; it is midway between the base of the caudal and the middle of the eye. The length of the dorsal base (43 millimeters) is about one-third of the standard length. The third ray is the longest, its length (20 millimeters) being nearly one-half the length of the base of the fin. The last ray is about as long as the eye, and the first is scarcely longer than this. The anal origin is directly under that of the dorsal, and the base of the fin is slightly longer than that of the dorsal. The seventh, eighth, and ninth anal rays are about the longest, their length (17 millimeters) equalling about one-half that of the middle caudal rays. The first ray is not much more than one-half as long as the longest and the rays gradually increase in size to the ninth. The length of the pectoral (35 millimeters) is contained three and one-half times in the standard length. The length of the lowermost ray is less than one-fourth the length of the head. Only the first ray is simple; the rest are divided. The ventral origin is under the eye. The longest ray of the ventral (24 millimeters) is slightly shorter than the mandible. Caudal slightly rounded when expanded; the middle rays as long as the head without the snout. The lateral line begins near the root of the humeral spine, curves upward slightly and runs along the back to the end of the dorsal, then curves downward to near the middle of the caudal base. Skin naked. *Colors*: Upper parts light brown, the upper surface of the head minutely dotted with white; the back with numerous roundish spots and oblong blotches of whitish; lower parts pale. The dorsal with two or three dark blotches near the margin, in some cases not much larger than the eye, in others fully twice as long. Caudal with nine black blotches, those on the outer rays largest, differing in size in different specimens. These blotches are distributed over the greater portion of the fin. Anal pale, with the exception of a brownish blotch on the membrane of the last three rays. Pectoral with a brownish submarginal band on its outer half; this band sometimes broken up on the membrane. Ventrals pale.



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