

Table showing Comparative Proportions of Atlantic Species of CAULOLATILUS.

| | <i>C. chrysopt.</i> * | <i>C. cyanops.</i> | <i>C. microps.</i> |
|---|----------------------------|---|---|
| Height of body in total length..... | 4 $\frac{1}{2}$ | 4 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| Width of body in total length..... | 10 | 8 $\frac{1}{2}$ | 7 |
| Head in total length..... | 4 $\frac{1}{2}$ | 3 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |
| Interorbital width in total length..... | | 12 | 14 $\frac{1}{2}$ |
| Snout in total length..... | | 10 | 7 $\frac{1}{2}$ |
| Upper jaw in total length..... | | 10 | 8 |
| Snout to orbit in total length..... | | 9 | 7 |
| Eye in head..... | 4 | 3 $\frac{1}{2}$ | 6 |
| Nostrils..... | Near eye..... | $\frac{2}{3}$ distance from snout to eye. | Midway from snout to eye. |
| Height of dorsal in total length (of body)..... | | 12 $\frac{1}{2}$ | 13 $\frac{1}{2}$ |
| Anal..... | | | Farther from snout than in <i>cyanops</i> , and two-thirds as high. |
| Caudal..... | | | Less emarginate than in the other species. |
| Pectoral..... | Extends to first anal ray. | Extends to first anal ray. | Does not reach first anal ray. |
| Scales in lateral line..... | 110+ | 108 | 120 |
| Transverse rows of scales..... | | 35 (10 + 25) | 48 (13 + 35) |

* These proportionate measurements, as taken from the "Histoire Naturelle des Poissons", doubtless have reference to extreme length to end of external caudal rays. In this genus, however, the difference thus admitted is not extremely large.

APRIL 30, 1878.

THE OCCURRENCE OF HIPPOCAMPUS ANTIQUORUM, OR AN ALLIED FORM, ON SAINT GEORGE'S BANKS.

By G. BROWN GOODE.

A specimen of *Hippocampus*, measuring about five inches, was procured by the United States Fish Commission from a mackerel schooner, which had captured it, in company with a school of mackerel, on Saint George's Banks, in August, 1873. It was kept alive for some days, and an interesting fact was observed with regard to its habits, its tail apparently not being used for prehension. This specimen agrees very closely with *H. antiquorum* as described by Günther, and is provisionally referred to that species; it does not agree with the description and figure of *H. hudsonius*, DeKay, a species which has never been accurately defined, and which may prove identical with *H. guttulatus*, Cuv.

H. antiquorum is, then, an addition to the fauna of Eastern North America. The geographical range of the species is very wide; it has been recorded from the English coast, the Mediterranean at Malta and other points, Fernando Po, Japan, and Australia. Several specimens were collected in Bermuda in 1872 and 1877 in company with *H. guttulatus*.

A specimen received by Storer from Holmes's Hole was, in his first report, referred to *H. brevisrostris*, Cuv., which is synonymous, according to Günther, with *H. antiquorum*. Storer afterward adopted the name proposed by DeKay, but his description and figure refer to a form more nearly resembling that now under consideration.

The following notes were taken from the fresh specimen, the colors while it was living:—

No. 21044, U. S. Nat. Mus. Cat. Fish.

Body rings, 1 + 10. Caudal rings, 37. Tubercles of body and tail elongated, slightly recurved, usually prolonged into slender filaments; those on the 2d, 4th, and 6th body rings much larger than the others; tubercles prominent and filamentose upon the 4th, 6th, 9th, 12th, 16th, and 20th caudal rings. Ventral tubercles upon 6th, 7th, 8th, and 9th body rings. Occipital crest very high, with five prominent tubercles, the anterior two with long filaments. Length of snout equal to distance from posterior margin of orbit to gill-opening. Operculum marked with fine, radiating striæ.

Radial formula.—D. 19 (the first imperfect). P. 18. V. 4.

Color.—Yellowish-brown; the eyes and cheeks covered with radiating, wavy lines of light brown. Snout encircled by a narrow, undulating, white band near its middle.

The Commission has an accurate sketch by Mr. Emerton.

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DESCRIPTIONS OF NEW SPECIES OF SHELLS FROM CALIFORNIA
IN THE COLLECTIONS OF THE NATIONAL MUSEUM.

By W. H. DALL.

Haliotis (? var.) *assimilis*, n. s.

Shell solid, strong, not very thick, with a rather light pink, white and greenish naere, usually with five open holes; spire more elevated than that of any other Californian species, consisting of two and a half or three whorls; aperture very oblique in adult specimens, the thickened margin of the columella narrow, somewhat concave, inclined sharply inward and upward, about three-fourths as long as the columellar side, of the aperture. Between the row of openings and the columellar edge, the space is unusually broad, marked midway by an obtuse carina, separated from the row of holes by a shallow channel; surface reddish or dull greenish, with rather rough, crowded, unequal, spiral ribs and rounded, irregular, wavy, radiating undulations crossing the spiral sculpture obliquely. The muscular impression, in most specimens, is but lightly marked, and, except for occasional spot-like impressions, is smoothly nacreous, like the rest of the interior. Lon. 4.5 in. Lat. 3.0 in. Alt. of spire 1.5 to 2.0 in. Aperture 3 inches wide and 3.75 long, in an adult specimen.

Habitat.—Monterey; San Diego, Cal.; in deep water only; thrown up by heavy storms, usually dead and worn when found and everywhere rare. Mus. Cat. 31267.

This species, or variety, has long been known to me and to most Californian collections, but has not hitherto been characterized, owing to the dead condition of most of the specimens found. Mr. Hemphill having forwarded two fresh specimens, it seems well to put it on record.

The form is different from any other Californian species; the spiral