

120. *Sertularella polyzonias* Gray.  
(Var.)  
U. S. F. C.—Off Cape Cod, Mass., 27 fath.
121. *Sertularella tricuspadata* Hincks.  
U. S. F. C.—Off Cape Cod, Mass., 18 fath.
122. *Globiceps tiarella* Ayres.  
U. S. F. C.—Buzzard's Bay, Mass.

## PORIFERA.

123. *Cliona sulphurea* Verrill.  
BORING SPONGE.  
U. S. F. C.—Vineyard Sound, Mass.
124. *Microciona prolifera* Verrill.  
RED SPONGE; OYSTER SPONGE.  
U. S. F. C.—Vineyard Sound, Mass.

THE LIFE COLORS OF *CREMNOBATES INTEGRIPINNIS*.

By ROSA SMITH.

The type specimens of this species were described (Proc. U. S. Nat. Mus., 1880, 147) after the color markings were changed from immersion in alcohol. The following description is made from two living examples: Ground color, light purplish brown; top of head and snout, greenish yellow; a broad streak of coralline pink, closely resembling the color of *Callithamnion heteromorphum*, from eye across cheek and opercles; the base of the pectoral fin is of this color, outlined by a black crescent, beyond which the tips are transparent and pale green, dotted with black. On the side of body below lateral line are three orange-colored, nearly circular blotches, the anterior one overlapped but not entirely covered by the tips of the pectoral, the first spot equaling or larger than the orbit, the two posterior ones somewhat smaller. Dorsal fin with eight nearly square purple spots, alternating with lighter spaces of similar size and shape; the seventh dark dorsal spot is a green ocellus (black in the preserved specimen) encircled with a narrow ring of orange color and surrounded with very dark green, the ocellus covering the twenty-fourth, twenty-fifth, and twenty-sixth dorsal spines. The lips are pale green. A white dot at base of occipital tentacle as large as pupil; minute white dots along lateral line from its origin to the point of curvature, and a larger white dot close under the twenty-first or twenty-second dorsal spine. Anal fin marked with dark spots similarly to the dorsal and narrowly margined with white. Caudal transparent, pale green, dotted with black. Ventrals obscurely barred with black. Ventral surface lighter than sides of body.

Lower rays of pectorals projecting beyond membrane, the upper rays much less projecting.

Beginning of anal fin a little nearer tip of snout than base of caudal.

The number of fin rays and all other characters agree with the original description.

One of the present examples was taken February 6, 1883, with a dip-net, from a shallow tide pool about 4 by 6 feet in diameter, two or three miles distant from the locality where this species was discovered. The floor of the pool was of sand and no pools intervened between it and the sand beach, so that this one would be unsurrounded with water at

every medium low tide. *Plocamium*, coralline, and other algæ, as well as *Zostera*, were growing on sides and bottom of the pool. Total length,  $2\frac{1}{8}$  inches.

A specimen, larger ( $2\frac{1}{4}$  inches total length) than either of the type specimens, was collected at the first-known habitat on the 17th instant. It was in a large, deep pool, where the water was frequently changed by the breaking of the surf, under a heavy growth of "eel-grass" and sea-weeds. In addition to the species first found in company with *Oremnobates*, an adult example of *Heterostichus rostratus* (Grd.) was taken. This fine specimen of *Oremnobates* was brought a distance of 12 miles in about a pint of sea water, and lived 28 hours after it was captured.

SAN DIEGO, CAL., April 18, 1883.

**NOTE ON THE OCCURRENCE OF GASTEROSTEUS WILLIAMSONI GRD., IN AN ARTESIAN WELL AT SAN BERNARDINO, CAL.**

By ROSA SMITH.

Length,  $1\frac{2}{3}$  inches to base of caudal. Head,  $2\frac{1}{5}$  in length; depth,  $3\frac{1}{5}$ ; eye, 3 in head.

Dorsal spines rather short; very slightly serrate; ventral spines reaching tip of pubic bone, serrate on both edges. The single specimen is so badly dried and decayed as to render it impossible to count the soft rays of any of the fins except the pectoral; the caudal fin is mostly broken off, and the anal spine is not discernible; the second dorsal spine has come off and the third is very small. Pectoral rounded, of 10 rays. The color is, of course, dark brown from drying. Some dark punctulations are seen, with a magnifying glass, on anterior part of body. Top of head, scapula, and suborbital bones, granulate; opercles, striate. The pubic process, extending upward from ventral to middle of the side, is perpendicularly striate.

After having become thoroughly dried the specimen was given to Mr. W. G. Wright, of San Bernardino, who preserved it in spirits. It is said to have emerged from the pipe of an artesian well from a depth of 191 feet. Mr. Wright informs me that the pipe is so situated as to make it impossible for any one to have placed the fish in the pipe, as, after rising from the well 9 feet from the ground surface, the pipe is returned underground and runs horizontally a distance of 50 feet and then feeds a tank inside a building, the supposition being that the fish found its way into the well from some subterranean stream.

The specimen has been presented to the United States National Museum.

The species is evidently a true *Gasterosteus* and not an "*Eucalia*." It is closely related to *G. microcephalus*, but lacks the lateral plates of that species.

SAN DIEGO, CAL., April 21, 1883.