

Copied for CAS
VII: 12: 1946

Sta. No. H45-87

Locality: California: reef at Bird Rock,
San Diego - Tide pools in part, mostly
open reef flat.
Lat. $32^{\circ} 48' 30''$ N.; Long. $117^{\circ} 48' 20''$ W. (USC & GS chart 5106, 1917.)
Water: clear, salt
Vegetation: dense growth of Phyllospadix,
with much brown algae (Eisenia, Sargassum,).
Bottom: rock Temp.: mod.
Shore: reef to cliff Current: none to mod. waves
Distance from shore: to 200 ft in places Tide: low (-0.8' at 6:36
A.M. - corrected)
Depth of capture: Depth of water: to 3 feet
Method of capture: dip nets
Collected by: C.L. & L.C. Hubbs & E.M. Kampa Date: VI: 13: 1945
Orig. preserv.: 10% form + borax Time: 6:15-9:00 A.M.

Considerable nos. discarded - fishing
was primarily for Rimicola.

47. Micrometrus minimus 8 ads of this yr.
Counted + discarded.

Common in one moderately open area
about $3' \times 5'$ about 1' deep. It's ripe,
both sexes with much orange and yellow.

51. Squilla nigricans: toward inner edge
of flat reef and in tide pools, but none
collected.

55. Clinocottus analis australis: 5 (9-13)
and white post-larvae, and 1 green
juvenile. The largest post larva developing
considerable green in light areas, especially
in front of caudal. Specimens show transition
nicely. Lengths: postlarvae 10; transitional
11; juvenile, 12.5 mm. Half grown to adults,
common toward inside of reef and in tide pools.
(over)

at 520 in
larval
collection

55: (con.) Eucleya rubellio: 7 yg. - bl. gr.
16-29 mm. Counts taken and discarded.

in two color phase groups: 34

60A Rimicola eigenmanni ~~eigenmanni~~: ~~32~~ ad. (23-33)

3 ♂, 2 ♀. All more or less color of brown algae, some grading a little toward green, seemingly less than in previous collections. Some somewhat purplish and some somewhat reddish. Average size large. At least some are mature ♀s with gray-cream eggs, nearly ripe. Of the 32 fish only 3 are ♂s. Counts and measurements in Group 60 file.

Not a one has lengthwise dark band, the nearest approach is a very slight horizontal elongation of the dark spots along the axis. Several which were opened had eaten amphipods.

(60A) Rimicola ~~obscurus~~ ^{eigenmanni (see above)}: 2 ad., ♂ + ♀. ~~32~~ ~~32~~ ~~(23-33)~~
Counts in Group 60 file, Specimens at S.D.O.

Both taken in hauls with some Phyllospadix but many attempts in heavy stand of surf grass yielded no specimens of either species. Both specimens are clear green with distinct bluish stripe from pectoral to caudal.

61 Parachanna integrigera: 4 ad., counts taken and discarded. The chief sexual dimorphism seems to lie in the larger mouth of the ♂. Upper jaw about 2.2 instead of 2.4 in head. The ♂ does not have a broken anterior dorsal lobe as in P.

Counts taken on all but 2 ♀s and 1 ♂ in Group 60.

The 2 specimens checked on JUN 15 1953 B. Eigenmanni with Briggs, H.S. King.

namoratus (according to Breder, 1939). In fact in one ♂ (the light red one) the front of the dorsal is lower than in the ♀'s and the membrane is convex between the 3rd and the 4th apices. One ♂ is light red over the body with only traces of the dusky bars. The other is brownish purple with 2 large ochraceous blotches on middle and lower sides. The darker specimen has a large d. ocellus with a complete silver-gold ring surrounded by blackish. The redder specimen has the ocellus smaller and with a ring on the outside posterior dorsally and scarcely developed elsewhere, and with the dusky diffusion only in front on the main spot. The 2 ♀'s are much like the darker ♂ in color, one is even blacker with a little of the ochraceous. The ocellus is similar.

Sibborsia elegans elegans: 1 - 2 ygt. sample yg. (abundant) to adult. Saved at Scripps for variation counts. In eelgrass and algae

61 Hypsoblemmus gilberti: 2nd (73-79). From under large flat stone in very small shallow upper tide pool.

Ulivola sanctae-rosae: 3 yg. 53-70 mm. Dissected out of brown algae on open part of reef in shallow water. St. h., 55, 60, 71 mm. ~~Small~~ Smallest and largest, greenish brown

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with rather dense red-brown freckles over entire body. Other specimen more reddish brown with the freckling indistinct and scarcely evident excepting around margin of axial blue-gray spots. These blue spots are scarcely evident on the 2 others. All 3 have the throat region green.