

Copied for
CAS VII: 9: 1946

Sta. No. 1445-69

Locality: California: entrance to Newport Bay, Corona del Mar, Orange Co., in small embayment between Balboa and East jetties

Lat. _____ ° _____ 'N.; Long. _____ ° _____ 'W. (USC & GS chart _____, 19_____)

Water: rather clear, salt

Vegetation: generally dense Zostera, with open areas; a stringy brown alga and misc. growths on stones

Bottom: mostly sand to clay mud, locally stony Temp.: _____

Shore: sand beach Current: almost none

Distance from shore: to 200 feet Tide: low - 0.2'

Depth of capture: various (top to bottom) Depth of water: to 5 ft

Method of capture: 25' bag seine and 17' x 3' mesh seine with bag

Collected by: S. H. & L. C. Hubbs & E. M. Kampa Date: V. 8: 1945

Orig. preserv.: 10% form + borax Time: 1 - 3:30 P.M.

2000 Sord seining, all saved except as noted.

6. Urobatis halleri: 1 subad. ♀. eel grass
CAS 19357 265 mm.

40. Atherinopsis c. californensis: 1 postlarval, 18 mm.
Among stones in shallow water discarded

500 { Atherinops affinis littoralis: series yr. - ad. (discard)
Atherinops affinis cedrosensis: sev. yr.
in eel grass
in eel grass.

64(54-176)

47A Embriotoeca jacksoni: 1 ad. like those in Mission Bay. Dark olive with bluish at base of A.,

500 and ~~in spots~~ in spots ^{near} scale centers ~~and on spots~~
~~near eye~~ on head and breast (becoming vertical dashes on lower posterior part of body). Lower lip and front of upper yellowish but most of upper lip as well as maxillary dusky. Pectoral and ~~not~~ outer part of 2nd D. and C. dirty yellowish.

Four smallest yg. are reddish over most of fins leaving posterior part of D. and A. clear, becoming bright salmon on basal part of plicae. Lips salmon. About 8 somewhat larger specimens are intermediate toward

the greenish phase. 51 specimens, all larger than the pink ones, but overlapping. the intermediates in size and grading into them in color, in greenish phase, without red, but with some yellowish where the redder specimens are salmon. All in eel grass.

CAS 19353 Cymatogaster aggregatus: 109 series of yg. to br. ad., 0.5 to 1.0 $33-127$ mm saved but larger part discarded. Mostly in eel grass.

~~Damalichthys~~ Rhacochelus toxotes: 4 yg., in eel grass. 3 larger with bright blue and coppery red reflections.

vacca Reddish when seen from above or below, blue from sides, with coppery red streaks between

57-67 mm. scale rows. Considerable copper-red on opercular membrane. Lips pink. Pelvic in front of A.

lemon-orange, rest of A. with slight reddish tinge.

Base of A. and lower edge of peduncle reddish.

Dorsals and C. dusky reddish. A faint dusky bar across middle of body and a blackish bar at base of C. The smallest specimen shows barely a trace of the dark bar on body but the one at base of C. is very distinct. The blue and orange streaks are scarcely apparent. The pelvic fin, anal spines,

and base of A. and pectoral yellow.

newborn, virtually embryonic condition

Brachyistius frenatus: 1 ad. ♂ in eel grass, in deep hawl. Brilliant brassy, purple and blue reflections. Rather prominent streaks along middle of scale rows, grading from dusky above to metallic blue below. Side of head and lower side of body orange between the blue streaks. Dorsals and C. orange-brown, ~~and~~ front part of anal orange along spines and rays, posteriorly, fin clear except for a definite yellow bar at base. Pelvic orange.

CAS 19352
Comites
Fahren

47 con.

Hyperprosopon argenteum: 15 yg. in eel grass
CAS. 19356 45-53 mm.

Micrometrus minimus: series of yg. - h. ads. In the
CAS 19354
breeding of the brassy reflections vary from brassy
green to brassy orange, and the color at the base
of the pelvic varies accordingly from yellow to bright
orange. In eel grass.

51. Sirella nigricans: saved all but one, ~~5~~⁵
CAS 19355
yg. to h. gr. from among stones in shallow
water. 74-140 mm.

53. Scorpaena guttata: 1 yg. and 1 h. gr. from eel grass.
CAS 19362 124 mm.
46-90 mm

55. Scorpaenichthys marmoratus: 11 lg. yg., all from eel grass.
S20
largest possibly a yearling with light areas somewhat
coralline.

Septocentrus armatus australis: ~~5~~^{sum series} h. gr. - lg. ad.

~~S20~~ From eel grass and stones,
counts taken and discarded. 18 spec., 62-152 mm

57. Syngnathus arctus: 3 h. gr. - ad. (69.5-94)

Bryx
S20
all together
Syngnathus
thick eel grass in about 1 ft. deep water, one
caught with dip net. Smallest blackish green,
next light olive, largest brown with considerable
coralline. All three of with fine dark and
light specks.

Syngnathus griseo-lineatus barbarae: series
yg. - lg. ad., all from eel grass, o's with yg.
mostly brown or green, much speckled or
streaked ^{with} light. Back often differently colored from
upper sides. Brown specimens often
definitely purplish, especially in reticulations
on belly. Usually a fine dark streak down

middle of belly. The dark specks along corinae
between plates in definite or lacking. Narrow cross bands
sometimes developed but less conspicuously than observed in auliscus
Syngnathus heraldi heraldi: 12 W. G. (at Mission Bay)

to ad. Pouch empty in 4 ♂♂, eggs or embryos in 2.

All specimens with a swollen area at posterior part
of trunk (such distention not seen in griseolineatus
and usually weak or absent in californicus).

General color varying from yellow-brown to green
light brassy green, to dusky green and to grayish
and purplish brown. Belly rather metallic with
yellow, green or blue reflections predominating in
different individuals. Streak down middle of
belly absent or rarely developed, but then broader
and more diffuse than in barbarae. ^{usually} ~~very~~ heavily
speckled with light. Some with broad or narrow
dorsal cross streaks, occasionally ^{about} ~~absent~~ as well
developed as in auliscus. Light markings on ~~back~~
top of head and body do not show the tendency to
form lengthwise wavy streaks as they sometimes do
weakly in griseolineatus and usually do in
californicus. Usually the lower lateral plates
are ^{each} marked ~~are~~ with a light semi-circle grading
into the color of the belly (barbarae shows very
little tendency to form such markings and in
californicus they are lacking or developed as
more discreet elliptical marks). Dark specks
along the corinae between the plates are lacking
or very weak and diffuse.

57. Syngrapha c. californiensis: 16 yg. ^{ly. fid.}

all from tall grass, particularly in deep water. The ~~ally~~ ^{ally} of ~~males~~ with well-developed ~~males~~ carries eyed eggs, and is the largest. Belly generally bright yellow-green, sometimes pale blue-grey or even pale brownish. Especially conspicuous are the small dark spots, occasionally weak or absent, along the corinae of the trunk between the plates. These provide an almost invariable distinction. The streak along the mid-line of the belly, characteristic of barbarae, is lacking or very weakly developed except in one h. g. specimen. In ~~only~~ almost all specimens the light streakings on the upper and lateral sides of the head and body form more or less definite and extensive ~~longitudinal~~ ^{wavy} lengthwise lines, typically forming a ring on the first malar plate. No such rings observed in the other forms. The specimen with the dark streak on the belly has the D. surface speckled with light so that in color it closely approaches barbarae. When light markings are developed along ventral corinae of trunk (in about $\frac{1}{2}$ of specimens), they tend to be more definite elliptical or oval marks, more or less separated from the light color of the belly, and when they are developed similar marks are usually evident along the median and dorsal corinae.

There now seems little reason to doubt the specific distinctness of quasilineata, heraldi and californiensis.

61. Hypsoblennius gilberti: 1 hl. yr. + 2 ad. ⁹⁵ from
shallow stones. Counts taken 3(57-92)

S70

Hypsoblennius ^{jeffkirsi} ~~kempae~~: 1 yr. (36) from shallow stones,

S70

Counts
taken

36mm. almost entirely olive with dusky bars and
bluish speckles and cross-streaks, with barely
a trace of pink on D. fin and none on body.
The nasal filament however is reddish.

S20 Sibbionina e. elegans: 3 yg. and 1 ad. 1 yg. from
among shallow stones, others from eel grass.

Heterostichus rostratus: lg. series, post larval
to large adults from eel grass. ^{Seven} in post-larval
and transitional stages, too yg. to show color

CAS.
19361

type. 28 more or less typical of eel grass
phase or the ~~juvenile~~ ^{juvenile} development
of same, but some with trace of dark bars,
particularly as nodes in the dark streaks.

16 yg. to ad. definitely not in eel grass phase, though
~~most~~ are brownish green with a combination of
stripes and dark bars. None are in definite kelp
colored phase. Some are grayish green, much
speckled with metallic blue. One is purplish
brown, becoming rather bright purple on belly
and green-brown posteriorly, with 5 narrow
longitudinal dark streaks and several disrupted
zigzag dark bars.

S90 64. Citharichthys stigmaeus: ~~five~~ five hl. yr. - ad. and
one translucent yg. with right eye still ^{partly} on top head.

S90 Symphurus atricandyp: 5 yg., 48-51 mm.

Loans to UCLA
1F:12:54

Returned 1X.6.1956 (4 spec)