

Sta. No. 347-68

Locality: Baja California: Todos Santos Bay, Ensenada. Northwest 1/8 mile of beach

Lat. $31^{\circ} 51' 44''$ N.; Long. $116^{\circ} 37' 57''$ W. (USC & GS chart 1046, 1923)

Water: moderately clear outside small waves

Vegetation: algal fragments and masses thick in places - considerable among rocks

Bottom: sand with some mud Temp.: 65° at 6 PM

Shore: sand beach and rocks on the side Current: small waves

Distance from shore: to 200 feet Tide: incoming from

Depth of capture: - Depth of water: ~~3-5~~ 1.2 ft. at 3:30

Method of capture: 25 Baird seine, 1/4" - 3/8" mesh

Collected by: Carl L. & Laura C. Hubbs Date: 11:22:1947

Orig. preserv.: 1090 formalin + borax Time: 3:45 - 6:10 PM

~~the~~ Fair seining -
Selected, as noted.

Dead on beach - Presumably from general vicinity of Ensenada:

5. Triakis semifasciata: 1 lg. ad.

Mustelus lunulatus: 1 lg. ad. ♂

Dead in water - Presumably caught locally

6. Holorhynchus californicus: 1 h. gr.

jaws saved - because topotypic of Rhinogaster ensenadae

(over)

8. Allanetta in moderata: 3 yg.

40. Atherinopsis c. californensis:
ser. yg. - yr., mostly discarded.

Atherinops offinis litorea: series
yg. - ad.; some discarded.

40 Atherinops offinis californensis: several
yr. - hl. yr. (discard)

46 Arremoniscus undulatus: ser. yr., about
half discarded. 11 (67-128)

Scapoid: 2 yg. Rather bright red-
brown with a blackish bar across body
under each D. lower parts, especially on
trunk, bright silvery brassy. P₂ dusky
red, tipped with black. P₁ reddish
becoming blackish outward. D, dusky
reddish. Other fins pinkish.

47. Hyperprotonotus argenteus: ser. yg. 39 (41-48)
R.J.K. Feb '59

Micrometrus minimus: yg. - ad. 10 (30-108)

Adults very bright. Much gilt about
breast above anal, on head, and along
midsides. P₂ yellow at base, white
on spine, red outward. Dark black
blotch behind yellow base of P₁.

Amphistichus argenteus: 2 hl. yr. - ♂₅
+ 1 ad ♂ discarded. 2 (116.5-123.5)

R.J.K. Feb '59

57 Syngnathus euchrous 1 (232)
Holotype

(A few counts taken)

96(83-228)

H47-68 cm.

57. Syngnathus eechrous n.s.

91 ~~♀~~ yg. - ad., incl. ♂♂ with eggs.

General color tone varies from olive-green with brassy yellow bellies to deep hazy brown, ~~off~~ in the uniform phases. The variegated individuals, which are usual, are mostly brown, often a pure deep brown, often reddish brown or purplish brown, occasionally greenish gray. The amount of variegation varies greatly, usually the markings are very intense. In many specimens there is almost as much pearl-gray as ground color on the sides. The spots vary from almost microscopic to coarse, and the different sizes may be mixed in the same individual. Often but by no means always the body is banded with light, and the light bands may be bordered by darker or much disrupted by darker. As a rule the ♀s are more banded with light on the side than the ♂s. There are often light spots along the ventro-lateral keel of the trunk. These may appear as squarish spots but seldom as large hazy crescents as typically in heraldi. Often there is a row of light spots along the ventro-lateral ^{carinal} ~~carina~~ of the tail. Common enough to approach characteristic is a row of squarish spots, one per ring, along the median ^{carina} ~~carina~~ of the trunk. Some individuals are blackish around the C. fin, but this tendency is not as common as in (over)

One specimen has magnificent dark spots along the venter-lateral carina as often in californiensis. Other show these markings weakly, a few particularly the green ones, have fine wavy longitudinal lines.

californiensis. There is at most a very weak diffuse median dark line down the middle of the belly. The opercle varies much more in color than the other species. Often the whole posterior sides of the head are strongly spotted or reticulated with the ^{light} metallic ~~ground~~ color or with the darker color. In many however these parts are almost plain. The lower half of the head behind the eye is more or less metallic but not so prominently so as is usual in heraldi. The dark stripe that extends downward and backward from the eye is typically much less intense than is usual in heraldi. The snout as well as the posterior part of the head is definitely less bicolored than is usual in heraldi. The same tendency toward lesser bicoloration is also evident on the body but to a less degree. None of the specimens shows an approach toward the concentric light markings in the region of the nuchal plates that is characteristic of californiensis.

The head and body are definitely deeper than in heraldi. This especially true of the snout which is much shorter. The eye is somewhat smaller and less protruding than in heraldi. There can be no doubt whatever as to the specific distinctness of enchrous and heraldi.

S. exilis

Syngnathus heraldi heraldi; 34 yg. - ad.

The general color of heraldi varies from dull brassy green through tan to brown and purplish. Typically the lower parts are light and silvery, ~~with~~ often continuous with the light half crescents that typically develop along the ventro-lateral keel. Spots may develop also along the median carina of the trunk. As a rule these are less conspicuous than in euchrous and tend to be roundish rather than squarish. Light cross bars on the back are usually less conspicuous than in euchrous and ~~often~~ ^{often} narrower. Other color features are noted in the account of euchrous.

57

3(191-217)

Syngnathus californiensis exilis ♀: 3 ad ♂s

Counts taken

These have the snout rather intermediate between heraldi and euchrous but the trunk rings were numerous than in either. In order of size from the largest down, the general color is dull green, tan-brown and dark brown. The largest and greenish specimen has lengthwise light wavy lines. The largest and smallest have conspicuous dark reticulations on the opercle, the other pearly spots. The largest specimen has conspicuous dark specks on the otherwise light ventro-lateral keel, over the broad pouch and traces of these marks occur on the

trunk. The next specimen has these spots
differently developed over the broad part only.
The largest specimen has a light median dash
on each nuchal plate. ^{3m} These specimens
the D. covers $1\frac{1}{2}$ to 2^1 trunk rings; in
Beraldi 0 to 1 rings, usually less than 1; ~~1~~
 $1/2$ to $1\frac{1}{2}$ in sacchinos, usually ~~1~~ 1.

61. Heterostichus ^{r.} rostratus: 1 bel. sp. (146)

R.J.K.
Feb 59

Keep colored, with darker bars, belly
orange yellow.

(= "sargasero")