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CASV 11.12.1946

Sta. No. H45-15

Locality: Baja California: Estero de Punta Banda (opening  
to Bahía de Todos Santos), about midway between Ensenada  
and Punta Banda. In channels about 1/4 - 1/2 mi. from entrance

Lat.  $31^{\circ} 46' - 47' N$ ; Long.  $116^{\circ} 37' - 38' W$ . (USC & GS chart 1149, 1889)

Water: salt or very nearly so; bottom vis. about 2-4 feet

Vegetation: *Zostera* thick to lacking (said to have become  
established in recent years from stands at head of lagoon)

Bottom: mostly firm sand, some mud Temp.:  $63^{\circ} F$  (air  $73^{\circ}$ )

Shore: broad sand & mud tidal flats Current: none to slight

Distance from shore: to 50 ft Tide: -0.9 at 2:46 P.M.  
(Ensenada Bay)

Depth of capture: various (see notes) Depth of water: 5 ft

Method of capture:  $3' \times 17'$  bag seine of screen;  $5' \times 25'$   $\frac{3}{8}$ " semi with  $5' \times 5'$   $\frac{1}{2}$ " bag

Collected by: H. H. Hubbs, R. A. Campa, S. J. Storer & Johnson Date: II. 9. 1945

Orig. preserv.: about 10.9 a. m. Time: 2:30 - 6:30 P.M.  
P.W.T.

Collection saved in 2 5 gall. cans [(a + b) and  
(c + d)]. Except for many of *Fundulus* and myriads of  
yg. atherines almost entire collection was preserved.



a -  $31^{\circ} 46' 05'' N$ ,  $116^{\circ} 37' 15'' W$ .

b -  $31^{\circ} 46' 00'' N$ ,  $116^{\circ} 37' 20'' W$ .

c -  $31^{\circ} 46' 45'' N$ ,  $116^{\circ} 37' 30'' W$ .

d -  $31^{\circ} 46' 40'' N$ ,  $116^{\circ} 37' 30'' W$ .

In a and c *Zostera* generally  
dense, with small openings.  
In b and d mostly open sand  
bottom with slight thin  
patches.

Brant were seen in some numbers and are  
said to winter here in considerable abundance,  
feeding on the sea-grass.

over

27. Fundulus p. parvispinis: abundant at a, especially in mouth (nearly dry) of large eastern channel - mostly in open water a few inches deep over mud and sand; few at b; moderate nos. at c; none at d.

CAS 19365

64, ~~30-80~~ 30-80 mm = 91 spec., 45-82

35. Paralabrax clathratus: several yg. + 1 hl. gr. in

19400 Zostera at a. 6 spec., 47-118 mm.

Paralabrax nebulifer: 2° a few yg. and small ser. 4

19377 hl. gr. at a, in Zostera; 1 from c or d, 48-730 mm.

Paralabrax maculato-fasciatus: 1 hl. gr. (saved) and 1 ad

CAS 9415 (eaten) at a, in Zostera. [2 hl. gr., 98-126 mm]

40. Atherinopsis californiensis: ser. of yg., supposedly in (disc.) a, b and perhaps d (one school in d, perhaps not this sp.), 138 from d.

Atherinopsis affinis: many yg. - ad., common locally

(disc.) 2 Atherinopsis littoralis in a and c in deep pockets; some at b and possibly there at d. Most of the

larger ones look like food littoralis but many smaller ones (hl. gr.) seem to be of californiensis type. Mostly in deep holes. Roughly same proportions from (a+b) and (c+d).

(disc.) Leuresthes tenuis: small ser. of hl. gr., recognized only at a. Caretaker of fishing resort (Rancho de Estero) says grunion spawn in great quantities at d.

47. Mugil cephalus, reportedly abundant; seen jumping. Cymatogaster aggregatus: adult ♂♂ + ♀♀

CAS 19367 in small ser. at a, including ♀s with large yg.; 3 yg. at c. 33 spec., 25-121 mm.

57. Syngnathus leptorhynchus: 19 ser (65-162) moderately so at c; (about 50) 2 at b and d, 49-179 mm. Syngnathus ocellatus: 2 (91-148) from c (con.)

Oct 590

Pituophis: 1 collected at edge of ocean  
cliff, elev. about 50 feet, about  
0.5 mi. S. of "Halfway" ~~at~~ (i.e., about  
2.8 mi. S. of Arroyo Descanso.  
Clover and brush area, II:10:1945  
On Mesquite Point.

32° 10' 00" N., 116° 54' 45" W. USCG chart  
1149 (1889).

To Klauber II: 13:1945

P. catenifer annectens (iden. by Klauber)

zeilichthys mirabilis: 4 yg. from c. H 45-15 (con.)  
Counts taken

59. Quietula y-canda: sm. ser. yg. - ad at a and c; 19 specimens at a; 22 at c. 41 spec., 15-42 mm. (46 yg. + 2 ad. 17 at c)

CAS 19406 lypsius gilberti 3 sm. ser. yg. - ad. at a and c.  
color not at end. postlarval 18-38 mm. subadult  
Clevalandia us: 1 ad., ~~specimens~~ from at a, 146

CAS 19393 common at c (33) large numbers seen here in schools swimming just off bottom.

61. Zibronia e. elegans: 1 ad. in Zostera at a.  
Striped with gray and brown, with blue flecks in brown; velli clear.

CAS Heterostichus rostratus: series of postlarvae to subad., all in a. Postlarvae show pink tinge from dorsal aorta, also some pink about head. First skin color is sooty in band over vertebrae. Then the primary silvery band shows up as sooty bars developed, first over anal fin and onto fin, then across body in transitional stages, approach toward all-glass phase noted. In Zostera.

Hypsobremis gentilis: sm. series in eel grass at a. 11 (38.5-83.5) R.J.K. Feb '59

64. Paralichthys californicus: a few in a, 11 in d. (21 (54-123) mod. to lg. yg. +

Hypsozetta g. guttulata: sm. series, a, b, and c and 1 from d. yg. - subad. yellow

Copper parasite sent to USNM. about muzzle on blind side. 10 yg. - ad. from a + b.

Discarded 27/11/48. Counts in group 64 file.  
Pleuronchthys gutta: sm. ser. at a and c.

Loan to UCLA 12:12:54  
Young with and day in color adults Pleuronchthys gutta: a dried, discarded IX:14:62 DAD  
Symphurus aticandiff: sm. ser. yg. at a. 14 spec., 33-47 mm. Returned IX. 6. 1956

59. Hypanus gilbertii: on July 9th in formalin  
a high ♂ has the D. dusky blue on basal  
half or  $\frac{2}{5}$  then a broad band of orange  
and a clear tip. 2nd D. has blue spots on  
the dusky base, a clear upper margin, and  
enough bright orange on the rays to form  
a broad subterminal band. Considerable  
orange dropped into C., except on clear tips.  
1 ♀ full of eggs showing through abdomen  
(collected at ♀).