copied for USC V:1947

Sta. No. 1747-50

Locality: Baja Calif: between San Felipe and San Felipe Pt. ~~From the Camp~~ to about 1st rocky pt from Campo Uno to village (Norte)

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

Water: moderately clear until disturbed; salt.

Vegetation: very little short algae

Bottom: gravel ~~and~~ to boulders (little sand, mostly) Temp.:

Shore: ~~stoney~~ to low cliffs, to mt. Current: considerable

Distance from shore: on the reef, reef about 100 yds wide Tide: ~~low~~ receding at low

~~Depth of capture:~~ Depth of water: to 15" (mostly less)

Method of capture: dernis and by hands turning over stone

Collected by: C.L. + L.C. Hubbs Date: IV:4:1947

Orig. preserv.: 10% form. + boras Time: 5-6:30 P.M.

Identified VII:17:1952 by C.L. Hubbs

All fishes saved.

Small collection of invertebrates saved.

Many octopi saved from under flat stone with little water. The light colored species was breeding abundantly with many masses of eggs.

"pulpo"

The large light colored specimen was very different in habits ~~and~~ clinging very securely to the hand and when the warmth preserving the suckers would stick tight to glass wherever they touched. Brittle stars very abundant.

~~2 sea urchins~~

Effort to save a few.

2 small sea urchins found + preserved.

26A Myxophis vafer Jordan + Gilbert 4 (69, 81, 201, 276 mm. S.L.)

2 recently traw. and 2nd. Color waxy yellow with silvery blue belly. Visibly punctate with black. Small pores

Halichoeres semicinctus (Ayres): 1(45)

50A Labrid: 1 yg. Vertical fins light orange, D. + A. with whitish border. D with 2 black, gray-bordered ocelli. General color olive with a slightly bluish streak just below mid sides, continuous with the upper brilliant blue part of the silver blue lower side of head. Head strongly bicolored with considerable pink in snout, upper lip and nape. Top of head has pair of silver blue stripes, diverging from a common origin at front of snout, gradually reaching x body. Upper parts of body with reddish spots. In one of larger pools, parallel with shoreline, against sand.

59. Gillichthys seta 63mm. S.L.: yg.-ad. Light olive with blackish olive and blue gray markings. Found in small shallow pools around bigger stone. 18 specimens. 13.5-63mm. S.L. dried + rotten disc. 20 Oct. 1958 R.R.

~~59A Emblemaria sp. #1~~ ~~(1 ♂ 39)~~

Johnsoni: ~~1~~ 2 ad. ♂'s + 2 ad ♀'s from pools. ♂ with D. A. and P_2 largely blackish, but ~~black~~ color variegated. Pelvics ~~only~~ black with lighter border. Lower side of head dusky orange. Lighter bars and vertical streaks grayish blue becoming pale olive against the back. The bars are reddish brown, broken by the bluish markings.

* Low ♂ intermediate in color, and does not have 1st. D. stripe produced.

♂'s lighter and more definitely

colored with a little pink in the fins. Fins are light and speckled. Pelvic has only a little blackish on each side. Light bars are more prominent as also the light specks and vermiculations within the bars. Side of head more definitely variegated. Pectoral has at its base 2 blackish markings. Upper opercular below with blue. In the ♂ these are hardly noticeable. Top and sides of head are much more definitely variegated than in the ♂.

Phallodiscus funebris (54-70)

60C ~~Bays~~ ~~Gobies?~~ : ~~Tags~~ 3 ad. ♂

~~This is~~ all from under stones, virtually at high tide where there was scarcely any water beneath stone or steeply sloping part of beach, near cliff. The skin is very lax, like a liquid. Darker markings are purple, much broken by blue gray reticulations of varying intensity. General color very dull olive, trace of purple anteriorly. Vertical fins pale olive with almost no marking. The smallest specimen has the general pattern as described less evident but anteriorly has silver blue specks somewhat aligned transversely.

Gobiesox ae

60A ~~Boogs kelpies~~ ~~pinnifer~~ : 99.- ad. 35 (21-70)

Plain grayish olive bars on a blue gray base. Others almost sooty black.

One with narrow light bars, On back silvery olive. Vertical fins margined with bright blue gray. A small one from under stone high up has about 7 very distinct oblique cross bars with light centers. Base of C. cream. Margin bright blueish white. Rest of C. blackish. One of yg. was pale olive with blueish cross markings. Other yg. colored like ad. mid tide levels under stones, sometimes merely moist.

60B Tomicodon 24(28-45)

~~Coloration~~ humeralis: 4 ads. Pronotum ~~blackish~~. under stones. Pectoral black spots rather prominent and with some pink about them in a light band with a dark ~~red~~ brown center that connects the spots. In the largest and darkest specimen the cross bar next forward is largely orange becoming olive medially where there is light translucent streaks. The main part of the body is purplish with cream colored strongly oblique cream lines. The transverse bars anteriorly are olive to purple with irregular blueish light areas.

"Gobiesox strumosus" ever for puffer

Arbacicosa sp.? : ads, very common, ~~discolored~~ but restricted to damp situations and slight puddles

features are the deep red spots on the trunk and in a ~~line~~ broad, curved band from the opercles to ~~the~~ both lips. The nasal filaments are intense orange but there is only a little dull pink in the large supraorbital tentacles. There is a brilliant orange crescent just behind the eye, separated from the large blue black wedge on which there are some irregular orange marks. There are some brownish red specks and reticulations on the top of the head. The general body color is a reticulation of light brown and bluish, with much disrupted D. bars of darker color. The lower side of the head is slatey with the dark cross pattern very faint, and at most a bare trace of lemon in the main pair of light spots. The dark red spots of the body, occur near the base of the spinous D. Each interspinal membrane has a marginal crescent of brilliant orange. The tips of the spines are gray. Well beyond the middle of the fins there is a lengthwise dark streak, beyond which the fins is lighter than below. The soft D. has some faint blotching of reddish and bluish toward the base. The rays are ochraceous just within the gray tips. The C. has several bars of dull orange on a gray base. The A. is gray at the base then black, with blue exerted strongly

branched ray tips gray-white. Pectorals are gray. P_2 largely blackish slaty with front of fin and tips of rays pale.

Q is: Like the red spots on the trunk and have the opercles, cheeks and muzzle heavily spotted with brown, so heavily that the ground color may appear as reticulations. There is a very prominent light orange bar behind the eye, followed by a dark blotch which becomes blue black only along front edge. Top of head somewhat variegated. The nasal filament varies, greenish, yellowish, orange. Lower side of head grades from blackish gray in front to greenish behind and has the characteristic pattern of Kanyaw moderately developed. Two main light areas vary from indistinct to distinct, and in color are gray, olive or yellowish.

The body as a whole is mostly olive with the blue gray markings largely horizontal medially but dorsally arranged around within and between moderately conspicuous D. bars. There is a slight to rather strong wash of pink on the Dorsals; the margin of the fin is colored as in P_1 but very much less conspicuously. D_2 and C. rays cross marked with olive to ochraceous and blue gray. A. is gray becoming

below stones.

Olive colored with more prominent D. spots bright blue and blue lines and broken lines on side. P, D. and A. light blue. Caudal darker olive with gray border. Taken almost exclusively under stones at very high level. Some have very diffused broad sooty cross bars.

Light markings much more numerous than in humeralis and shin finer and shaped differently the trunk region being more swollen as seen from above. Much less wedge shape.

The habit at was like that of the Sohissa on the sloping beach high up near rocks.

61. ~~Hyp~~ Malacoclemmys ? : 1 ad., ~~diffe~~ of general color olive or upper quarter then a broad band of red-brown from eye to upper part of C. then a yellowish band ~~and~~ then olive. All areas much spangled with silvery blue. ~~The~~ Most of spangles ~~are~~ are irregularly arranged, but there is one especially prominent row down the middle of the red brown band. All told there are about seven

To Clark Hubbs, Stanford 12-18-1947

in size
such stripes, mostly increasing downward
The shoulder girdle in front of the
pectoral is blue with blackish
reticulations. The side of the head
is coarsely punctate, the top finely
punctate with blue. On the opercles
there is a sub-median blotch of coppery
cream. Lower part of head is very
finely marked. The Dorsals are
very pale olive with reddish specks
and barring. In front of fin is a
long horizontal area with some cream
and pink bordered with blackish purple
but opened in front of fin. Above this
there are very fine reddish streaks
on a light base. The rest of the spinous
D. has oblique stripes of reddish
D_{2+} And C. rays finely cross-barred
with amber purple. A. on basal 2/3
is pinkish orange with large blue
spots, Anteriorly sooty with bluish
white on front of rays where excepted.
C. becomes yellow outward. Pelvics
yellow.

Probably new species, possibly
same species as at Punta Pariñas.

7 (52-74.5)

61A Hypsoblennius jenkinsi: 3 ad. ♂ + 4 ad ♀ ♀

In small pools about boulders
The species is certainly different from
H. Kampae. The ♂'s: the outstanding

jet black in a streak just ~~over~~ within the whitish margin. Pelvic is gray to sooty with white or cream front edge and ray tips.

61B Hoyprosoblennius gentilis ~~nichattsi~~ 7(43.5-56.5)

: 3 ♂♂ grading from immature to high, and 4 ad ♀♀. Found in pools beneath stones.

Gift To
CiCi Mar
La Paz,
Mexico

The relationship with gentilis is extremely close, but the distribution, size, habitats, and intensity of color in ♂♂, along with the extreme canine development indicate the genetic distinctness.

The 3 ♂♂ form a graded series connecting the ♀ color with that of the very high ♂. In high ♂ the lower part of the head is a very intense deep orange-red, ~~with~~ invaded by ~~the~~ brilliant silver streaks of which the posterior 2 are joined together to cross the edge of the gill membrane fold. In the medium ♂ the front of the throat is orange with streaks less conspicuous. In the smallest ♂ the throat is blue gray, becoming yellow-orange along lower lip and in 3 lateral blotches. In the low ♂♂ the streaks are less conspicuous, in the ♀♀ hardly evident except as the silver blue tinged intervals between the 4 oblique olive markings.

In the high ♂ the supra-orbital filament is dark centered and orange

fringed, in the ♀ intermediate. The 2 higher ♂'s lack the Dorsal vacuities, in ♀'s it is conspicuous blue-black and bordered behind in 2 or more membranes by bright orange. In the high ♂'s the side of the face has dark hexagons (deep purple in the highest, olive in the other), separated by a silvery reticulum. The main part of the body lacks the ~~median~~ axial dash streak of the ♀'s ~~as it is~~ has this represented only dippsicly. In both sexes the lower partly disappears and ♀ the bars tends to form another higher lengthwise streak. ~~The~~ On the caudal 2/3 the D. ~~of the high ♂ has cream and yellow markings~~ is gray with coarse blackish spotting. ~~On~~ The outer part of the fin contains considerable yellow; and D. is similarly but much less faintly colored. In the ♀'s the D. markings are more of a red-brown and much more definitely continuations of the dark bars of the body. In the ~~high~~ 2 ♂'s the C. varies from gray to amber with at most a bare trace of the barring of the ♀. In the high ♂ the A. is blackish with a light border and with pinkish white pointed rays. In the ♀'s the fin is coarsely spotted with reddish to olive on a blue gray base and there is a blackish streak just within the ~~light~~ border. In the high ♂'s the ~~pectoral~~ P. is blackish with some amber at the tips of the rays, and the V. is partly black with a gray outer border. In the lowest ♂ and the ♀'s the fin is mottled with olive basally and barred

#47-50

with same color outward, and the pelvics is either less blackened or is blotched with olive or reddish, within the pale border.

64A Paralichthys estuarius ♂: 1 (35) ♀: 1 immature yg. gray with olive black specks and reticulations, and with rather large blotches of light brown, extending toward the axis of the body from each of the most prominent blackish specks. Found toward low tide line in small pool with gravel bottom

"simpsoni"

IV:7: 1947

44 Bairdiella : 1 specimen pulled up on shore at San Felipe, Baja Calif. Preserved with turtle in formalin 1:8

* 59 Gobiosoma heterolepidotum
- PARATYPES 4(25-40)