

State or Country: California

Field No. H 52-181

County: San Diego

Map:

1.

Locality: end of Scripps Pier near La Jolla

Lat.

N., Long.

W.

Water: clear, salt

Vegetation: a little floating macroalgae, *Phyllospadix*, etc.

Bottom: sand

Cover: fishing

Temp.:

Shore: sand beach

Current:

Dist. offshore: 1000 feet

Stream width:

Depth of capture: surface

Depth of water:

Collected by Martin D. Burkhead and Cadet Hand, Jr.

Tide:

Date: VIII: 22: 1952

Method of capture: dip-net (and pistol & shotgun) under light

Orig. preserv.: 10% formalin + 90% P.S.T.

(-250% - isopropyl alcohol VIII: 24: 52.)

AUG 23 1952

Burkhead was attempting to show Hand how to collect sardines by shooting them under a light; little success. I spent brief period with collectors at end of operation.

6. "Stringer" seen.

40. *Atherinops affinis californicus* (Lacep.): 3 large yg caught at 2200 P.S.T., examined & discarded. Rather extreme character & contrasted with littorals. Several "melt" killed by shooting; not seen by me.

42. *Trachurus symmetricus* (Cuv.) : abundant under light; none killed.

57. *Syngnathus* spp. Reported common. At end of period Burkhead reported that 4 about the light and there were present:

Syngnathus exilis 3(159-230)
 1 ad. ♀ 159mm SL, ad. pregnant ♂, with 2 ygs embryos, 160 and 230mm. Larger thought for a time to be possibly a *californicus* x *hualae* hybrid, but on further study and over

over

comparisons regarded as S. heraldi. Reasons for hybrid possibility: (1) unusually large size for heraldi (230mm S.L.) but small for a pregnant ♂ of californiensis; (2) heavy-set, especially about head, with long, deep snout (but found to be within range of large ads. of heraldi with normal counts; (3) almost entire caudal ring (48.3) and D ray (40) counts, giving grand total of 107, on the very slight overlap between the species; (4)

lower part of opercle seems a little more pigmented and reticulated than in good heraldi. But snout is bicolored; interorbital contracted forward & slightly concave, trunk swollen posteriorly, no trace of oral-ringed pigment about nuchal plates; no ^{metameric} dark spots on lower ridge of trunk, or other special features of californiensis. Color olive, with light spots and blotches; top of head light-spotted; back with well spaced narrow light crossbars; squarish extension on each trunk of light lower color; fin blue dashes, a brown leaf of tail, above broadground; below D peculiar pencilled light V's, none on above, others below; sooty toward & on caudal. A few dead eggs among embryos.

Syngnathus californiensis: 1 lb. sp. 155mm S.L.
Counts taken. Carl L. Hubbs.