

State or Country: <sup>Mexico:</sup> off W coast of Baja California Nte. Field No. = 510 66-16  
County: ..... Map: Topog. Charts 1:18 1964, 1960  
Locality: about midway from San Diego to Isla Guadalupe + H.O. 5760, 1961  
Lat. 31° 01.3' to 31° 07.7' N., Long. 118° 06.5' to 117° 57.5' W.  
Water: clear, blue  
Vegetation: 31° 04.5' N 118° 02.0' W

Bottom: very even, smooth and nearly flat  
Cover: ..... Temp: .....  
Shore: ..... Current: .....  
Dist. offshore: ← m. (est.) to surface Stream width: .....  
Depth of capture: ← Depth of water: 848-952 fath. \* P.D.R.  
Collected by Carl L. Hubbs, Robt L. Wier, Allan J. Storer, and party in  
Tide S10 R/V Alexander Agassiz Date: III: 31: 1966  
Method of capture: 10-ft Isaacs-Kild midwater trawl, non-closing.  
Orig. preserv.: 10% buffered formalin Time: 1442 - 1832 PST  
See over for log. MY66-I-5

Trawl with meter-net cod-end.

\* Rising from 876 to about 800 in retrieval of net from 500-meter hold (last 10 minutes)

1 4-oz. and 1 2-qt. jar of fishes. In addition one large melanophad and 1 *Pavilux ingens* (hl-gr.) frozen for blood study.

2 1-gallon jars of invertebrates.

1 4-oz jar of plankton obtained by straining all washings through cod-end of 6-meter net.

Bottom extremely even, at first dropping gently, then rising very gradually until start of final retrieval, during which trawling fell from 848 to 876 fathoms, then became greatly confused, with some multiple trawlings rising nearly to 800 fathoms (during last 10 minutes only of haul).

Log of haul, over.

Carl L. Hubbs.

*Holtbyrnia latifrons*  
8 ~~*Pettisodus caeillus*~~ 3 (19-35)  
10 *Ichthyococcus irregularis* (33)

- Gift to IMARPE, Peru	
10 <i>Sternoptyx diaphana</i> GIFT	3 (29-36)
25 <i>Hierops crockeri</i>	1 (20)
25 <i>Parvilux ingens</i>	2 (58-74)
25 <i>Triphoturus mexicanus septentrionalis</i> :	
-	163 (19-64)
61 <i>Melanostigma pammelas</i>	1 (66)
8 <i>Talismania bifurcata</i>	1 (27.7)
10 <i>Argyropelecus affinis</i>	4 (22-51)
10 <i>Argyropelecus sladeni</i>	2 (16-20)
10 <i>Idiacanthus antrostomus</i>	<del>1 (34) (larva)</del>
-	2 (34-150)
8 <i>Sagamiichthys abei</i>	1 (20)
10 <i>Cyclothone signata</i>	18 (13-30)
10 <i>Cyclothone atraria</i>	3 (49-58)
10 <i>Cyclothone acclinidens</i>	234 (19-59)
31 <i>Scopelogadus m. bispinatus</i>	3 (53-68)
31 <i>Scopeloberyx opisthopterus</i>	1 (27)
31 <i>Poromitra crassiceps</i>	1 (24.5)
31 <i>Melamphaes parvus</i>	3 (26-36)
10 <i>Stomias atriventer</i>	1 (27)
9 <i>Bathylagus pacificus</i>	1 (96)
9 <i>Bathylagus ochotensis</i>	3 (11-21)
9 <i>Bathylagus wesethi</i>	13 (25-68)
53 <i>Sebastes</i> sp.	1 (8)

Mexico: MV 66-I-6  
 State & Country: off. W. coast of Baja California Norte Field No. = S10 66-  
 County: Map: Topographic Charts I. & I.B., 1964, 1960  
 Locality: about midway from San Diego to Isla Guadalupe + H.O. 5760, 1961  
 Overall: Lat.  $31^{\circ}07.4'$  to  $31^{\circ}03.1'$  N, Long.  $117^{\circ}57.0'$  to  $118^{\circ}02.0'$  W.  
 Water:  
 Vegetation:  
 Bottom: phosphate pebbles and very fine gray-green mud (trace each)  
 Cover: Temp.:  
 Shore: Current:  
 Dist. offshore: Stream width:  
 Depth of capture: bottom Depth of water: >800-940 fath, PDR  
 Collected by Carl S. Huber, Robt L. Wisner, & party, all on S. Storn, & party on  
 Titer: S10 R/V Alexander Agassiz Date: III: 31: 1966  
 Method of capture: 40-ft otter trawl with  $\frac{1}{2}$ -inch (square measure) mesh  
 Orig. preserv.: 10% buffered formalin <sup>overall</sup> Time: 2032 11:31 - 0005 11:1 PST  
 (On bottom not more than 2100-2330)

### False start

- 1938 hrs. net in water at  $31^{\circ}07.4'$  N,  $117^{\circ}57.0'$  W. length 880 fath  
 Very soon brought back aboard to adjust boards.  
 2013 g/c 0400 T to run back to good bottom, attempting (in fog) to reach original position.  
 2022 g/c 225° T to make 220° "good" for third try.  
 2028 trawl in water, depth 870 fathoms. Position same as at false start, or nearly as "Bridge" can assume. Depth 870 fath  
 2032 Starting down; 878 fath  
 (Later assumption: net couldn't have reached bottom short of 920 fath  
 2102 Paying out net; 932 fath.  
 2120 Wire jumped meter wheel at 3420 m/WO; payout stopped for repairs.  
 2138 Depth increased to maximum here, at 945 fathoms [labels read '940'].  
 2145 Payout stopped; 940 fathoms  
 Between 2145 & 2201 depth decreased to 920 then increased to 924 fath  
 2211 Payout resumed; depth has increased to 928 fath  
 2220 Wire jumped meter wheel again; depth has increased to 940 fath.  
 Very confused bottom trace starts here. Main trace disappears at 2025 but jumbled record without sharp edge begins at 2220, rising to 860 at 2240  
 2240 Wisner (alone) now noted confused record, stops ship, then starts winding up cable at stop-and-go speed of ship to keep ahead of wire, now trending nearly vertically.

over  
MV 66-I-6 (cont.)

2300 depth signal now fairly clear at 848 fath.,  
with much "mush" below.

2317 depth signal now faint, with one trace at  
840 fathoms, but rest confused here and  
later with over-stery outgoing signal.  
But at no time did trace appear below 500 fathoms.

IV:1:1966 Trawl out of water at 0005 hr., at  
estimated position of 3103.1' N.,  
118°02.0' W.

Wisner notes: "This is the first time this much  
wire has been run off the winch. The wire was  
not wound on in phase with the fairlead."

Preserved dry:

1 8-oz jar with a few dead gastropods, and  
2 solitary corals, & 2 pieces of scaphopods.

Preserved frozen

1 5-gallon jar of rocks (+ 1 piece of wood) \*

→ mostly seem to be phosphate flakes and  
nodules; a few beach pebbles of  
gryshale and quartz (few); some shale  
reddled with pholad borings (all  
empty). Possibly we encountered  
a significant phosphate deposit.

Includes base  
of large glass  
sponge on  
bit of phosphatic  
breccial?

1 4-oz jar with 3 flakes of asphalt,  
still flexible, and 2 flakes of hardened  
to various consistency. Only 1 tiny  
clinker and 1 piece perhaps coal.

Preserved in 10% buffered formalin

1 4-oz jar of forams, etc., obtained by  
straining hull washings through the  
cod-end of a meter net

1 16-oz jar of odd decapods (effort made  
to pick out all, with vial inside containing  
1 white isopod, 1 spiny little amphipod  
crustacean, 2 fragilipectens, 2 small  
crinoids (all seen), 1 brachyopod (thin,  
translucent shell).

1 16-oz jar of small invertebrates picked out.

1 2-qt jar of scarcely sorted remnants of  
miscellaneous invertebrates.

1 2-qt jar of glassy worm tubes, etc. were picked out

1 1-gal. jar of holothurians (all picked out)

1 1-gal jar of large ophiurans.

Trace of Macrocytis (not saved)

NO FISH.

To Dr. Arkenius  
SI: 5:1966-1090  
for core storage  
later.  
S.L.H.

Carl L. Hubbs