

State or Country: ..... Field No. ET(B)-H-31  
 County: ..... Map: ..... 1  
 Locality: Eastern Pacific Ocean near hydro. station  
ET-H-31  
 Trawls 5, 6, 7, 8 bet. 10°52' N to 10°59' N to 88°02' W  
 Lat. .... N, Long. .... W.  
 Water: .....  
 Vegetation: .....  
 Bottom: .....  
 Cover: ..... Temp.: H<sub>2</sub>O 26.4°C  
 Shore: ..... Current: 1 1/2 knots  
 Dist. offshore: ..... Stream width: .....  
 Depth of capture: 0-189 fms. Depth of water: 1485-1650 fms.  
 Collected by A.W. Eckling, John Kneiss, John Kauerchen etc. (names)  
 Tide: ..... Date: 4 Nov. 1955  
 Method of capture: 10' Isaacs - Midwater trawl  
 Orig. preserv.: 10% Formalin Time: 1530-1745 C.S.T.

(daytime haul)  
 First in a series of 4 hauls (rapidly following each other) to determine the composition of the P.S.T. and the migrations of the various component parts (see personal notes - A.W. Eckling for this day). Trawled at successive half-hour intervals at 189 f, 170 f, 178 f. Bottom of scattering layer at or below deepest area penetrated. Haul in P.S.T. super abundance of Gonophores and hatched fishes, large collection of the latter (*Argyrops* (fishes?)) 13-1/2 gal. Gonophores discarded. Several *Parasera*, present in 1 gal jar, fish in 2 gal.

A.W. Eckling 5 Nov. 1955  
 Kept out pelagic crab (similar, cf. art. *Portunus*) in bait tank.

Over for app. list.

10. Argyropelecus lychnus Garman 339Yg-Ad(10-45)
- 10 <sup>AWS</sup> ~~Vinciguerria~~ lucetia (Garman) ~~120~~Yg-Ad(16-41)  
<sup>51:56</sup> ~~Retubna~~ 170
25. Diogenichthys laternatus (Garman) 5HG-Ad(13-23)  
<sup>To P. Harry</sup> ~~Lestidium~~  
<sup>m.s. 58</sup> (~~Paralepididae~~) 3Yg(28-67)
- 25A Scopelarchoides nicholsi (Parr) 2Ad(69-83)  
 GIFT To Cornell → 2(67.4-91.2)
- ~~26. leptocephalus eel larvae 2~~
- 31A Melanomphaes <sup>spinifer</sup> ~~macrocephalus~~ Perr 3Yg(19-26)
34. (Tetraodontidae) 1Yg(5)
42. (Carangidae) 2Larv(8-11)  
 (Carangidae) 1PL(8.5)
- 64A Bothus constellatus (Jordan) ~~& Goss~~
- 64 Etropus sp 1Larv(16)  
<sup>Abelichthys "spiny-headed" flatfish</sup> → 1PL(9)
- Disc. Unident., badly damaged 4 (#)  
 A.W. Ebeling  
 13 Feb. 1957
64. (Paralichthinae) 4PL(15-18)
- 10 Vinciguerria lucetia 50(20-40)
- 26 Faciola ~~gilberti~~ (leptocephalus) 1(106)  
 → Hoplunnis sicarius

Trawl #5

Coll #: ET(B)-H-31 (S10-55-231)

Date: 4 Nov 1955

By: A. W. Ebeling

Pos.

(Trawl 5, 6, 7, 8)

Trawl in H<sub>2</sub>O: 1520 C.S.T. Position: 10°52'N 88°02'W

Trawl aboard: 1745 C.S.T. Position: 10°57'N 88°05'W

Wire out: 660m Time: 1548

2 wires of bundle crossing

| Time | L  | Cos L | M. wire | Depth T. | Depth H <sub>2</sub> O |
|------|----|-------|---------|----------|------------------------|
| 1600 | 59 | .52   | 660m    | 169f.    | 1485f.                 |
| 1620 | 57 | .54   | 575m    | 170f.    | 1580f.                 |
| 1645 | 61 | .48   | 650m    | 171f.    | 1650f.                 |
| 1715 | 60 | .50   | 650     | 178f.    | 1565f.                 |

1620 - 575m

1645 - 650m

1715 - start, 1m

In scattering layer - superabundance  
of sea walnuts and hatchet fish -  
several Pueria J.K. O<sub>2</sub> determinations.  
Trawl #6 to follow immediately.  
139ab. Stenopores discarded

~~RR65-28~~

SIO 55-231 ET(B)-H-31 Tr S  
near Hydro. Sta. ET-H-31

Pandma → Puntarenas

1200 10° 20' N, 88° 07' W  
025° G 170 rpm

1217 c/c 100° G c/s 50 rpm

1227 c/c 025° G c/s 170 rpm

1347 c/s 50 rpm

1352 c/s 170 rpm

1515 c/s 50 rpm

1520 c/c 060° G c/s 30 rpm

1533 c/s 60 rpm

1640 c/c 040° T

1645 c/c 305° T

1735 stop; trawl on board

Need knots for Horizon for:

30 rpm

50 rpm

60 rpm

170 rpm