SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS NEWSLETTER

June, 1982

Vol. 1, No. 3

Next Scheduled Meeting: July 19, 1982 at 9:30 a.m.
Place: Marine Biological Consultants
        947 Newhall Street
        Costa Mesa, CA 92627

Guest Speaker: Dave Montagne from Los Angeles County Sanitation
               on Phyllodocids

Specimen Exchange Group*: Hesionidae, Pilargidae,
                          Typosyllis

Topic Taxonomic Group*: Amphinomidae, Euphosinidae,
                       Phyllodocidae

MINUTES FROM JUNE 14, 1982:

Name and Logo

The ballots were counted and the winning name was Southern California Association of Marine Invertebrate Taxonomists (SCAMIT). Now we need a logo for the association. All suggestions for a logo are welcome. One will be selected at the next meeting.

Charter

A charter has been drafted and submitted to participating members for review. The charter defines the name, purpose, types of memberships, dues, officers, and activities of SCAMIT.

*The addition of the specimen exchange group was made to help distinguish the organisms being exchanged from those being discussed at the meeting.

APPLICATION FOR MEMBERSHIP
TO SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS

June 1982 - May 1983 Membership fee is $5.00, payable to Ann Martin at 10844 Ellis Avenue, Fountain Valley, CA 92708.

Type of Membership (please check one):
   Charter ( )  Participating ( )  Correspondent ( )
Membership Dues

Members of SCAMIT will receive the monthly newsletter, plus other mailing of additional Association activities. Memberships are $5.00 for June 1982 - May 1983 and are being accepted now. Please make out your check to Ann Martin. A receipt of membership will be returned to you.

Once an official charter is adopted and a logo is selected, an account will be opened for SCAMIT. This should take place in July and afterwards checks can be made out to SCAMIT directly.

Specimen Exchange

An official numbering system for specimens has been established. Each specimen should be marked with:

1) Abbreviation of the respective agency. Designated abbreviations are:

- AHF - Allan Hancock Foundation
- CM - Cabrillo Marine Museum
- DS - Dale Straughan
- HYP - Los Angeles City (Hyperion)
- IEC - Interstate Electronics Corporation
- JE - Jacobs Environmental
- LACo - Los Angeles County Sanitation
- MEC - Marine Ecological Consultants
- MBC - Marine Biological Consultants
- OrCo - Orange County Sanitation
- PL - San Diego Sanitation
- REISH - Dr. Don Reish Graduate Students
- SCC - Don Maurer
- SCCWRP - Southern California Coastal Water Research Project

2) Arabic numeral for the species.
3) Letter for individuals.
4) Station number.

A list of stations with coordinates and depth from participating members should be available for the July meeting. These lists will be consolidated and made available to all participants. This should be very helpful for the specimen exchange.

Questionnaire

Enclosed is a copy of a questionnaire concerning the POLYCHAETA publication for interested people.
Dear Colleague:

Since the last issue of POLYCHAETA, Volume 8, August 1976, several changes have taken place including budget constraints and increases in costs for postage. Many of you have continued to correspond and send me reprints despite the lack of further POLYCHAETA issues. Therefore, I felt obligated to prepare this volume. Financial support from the University of Maine Sea Grant Program has made the reproduction and dissemination of this volume possible. Typing was provided by the Ira C. Darling Center for Research, Teaching, and Service. Support from both organizations is gratefully acknowledged.

Now to the question of whether I should produce future issues of the POLYCHAETA. I will be guided by your responses on the enclosed, brief questionnaire. Several facts should be considered:

1. All should be aware that Dr. Donald J. Reish, Dept. of Biology, California State University, Long Beach, CA 90804, USA, has been producing Polychaete Club News. Some "Segments" contain citations of literature dealing with polychaetes. Don depends upon contributions to continue this service.

2. There are several literature reference sources available to many of us including:
   a. Zoological Record
   b. Biological Abstracts
   c. Deep Sea Research Oceanographic Literature Review
   d. Aquatic Sciences and Fisheries Abstracts
   e. Oceanic Abstracts
   f. Marine Science Contents Tables (FAO)
   g. Freshwater and Aquaculture Contents Tables (FAO)
   h. Pollution Abstracts

3. While I remain willing to volunteer my energies to compile and edit future issues of POLYCHAETA, funds probably will have to be provided to defray reproduction and mailing costs. The UMe Sea Grant Program has indicated a willingness to consider publication of future issues. Their undertakings, however, may require a fee (probably in the range of one to three US dollars) to help defray costs.

4. It is my feeling that the usefulness of a newsletter depends upon its timeliness; that is, it should be published at frequent intervals. A realistic balance between publication effort, cost, and value to the user seems to me to be annual. If a newsletter is to be of value to you, what is your opinion as to the frequency of publication?

Please return the following questionnaire to: Dr. David Dean, Editor
Ira C. Darling Center
Walpole, Maine 04573 USA

1. The POLYCHAETA is valuable to me and should be continued. _____ YES _____ NO
2. How often should it appear? _____ once every two years _____ once a year _____ twice a year
3. I am willing to pay a fee of between $1 and $3 US per issue _____ YES _____ NO
4. Additional comments or suggestions:

5. My proper title, name, and mailing address is (please print or type):
HELPFUL HINTS

Don Cadien has compiled this key from existing Barnard keys with some additions and modifications to accommodate species that were undescribed in 1960. Paraphoxus oculatus is not included because it belongs to another subfamily. Please use the key and see how it works. It will be discussed at the amphipod meeting.

Key to the local species in the 6 genera of the phoxocephalid subfamily Birubiinae recorded from California.

1. Rostrum abruptly narrowed in front of eyes - 2
Rostrum tapering evenly in front of eyes - 15

2. Rami of U1&2 bearing subapical spination - 3
Rami of U1&2 lacking subapical spination - 4

3. Posterior corner of EPI3 with large recurved hook
Posterior corner of EPI3 rounded sub-quadrate

4. With supernumerary telsonic spines
Without supernumerary telsonic spines - 5

5. Epistome with an anterior cusp - 6
Epistome unproduced - 12

6. Epistomal cusp long - 7
Epistomal cusp short - 10

7. P5 with two large spurs on art2
P5 with teeth but without spurs - 8

8. Teeth of P5 very large and few in number
Teeth of P5 small and numerous - 9

9. Rostrum narrow and short; teeth of P5 enlarged
Rostrum spatulate and long; teeth of P5 small

10. Art6 of G1 narrow
Art6 of G1 broad - 11

11. Female eyes very small; U3 inner ramus short
Female eyes large; U3 inner ramus long

12. P5 with two large spurs on art2
P5 with medium or small teeth but no spurs - 13

13. P5 with 3 teeth
P5 with 4 or 5 teeth - 14

14. Rostrum very short and narrow
Rostrum short and broad

15. Art1 of ANT2 ensiform - 16
Art1 of ANT2 not ensiform - 19

16. Epistome with anterior cusp - 17
Epistome unproduced - 18

17. Cusp large, massive, long
Cusp small, short

18. P3 stout, art5 of P5 stout
P3 slender, art 5 of P5 slender

19. U1&2 peduncular apices lacking spine combs - 20
U1&2 peduncular apices bearing spine combs - 21

20. EPI3 with a large tooth
EPI3 without a tooth

21. EPI3 lacking ventral setae
EPI3 with 1 or 2 ventral spines

- Metharpinia jonesi
- M. coronadoi
- Grandifoxus grandis
- Rhepoxynius sp. A
- R. variatus
- R. abronius
- R. epistomus
- R. fatigans
- R. daboius
- R. lucubrans
- R. bicuspidatus
- R. tridentatus
- R. stenodes
- R. heterocuspitudatus
- Foxiphalus similis
- F. cognatus
- F. major
- F. obtusidens
- Eyakia robustus
- E. calcaratus
- Eobrolgus spinosus
- E. chumashi
VOUCHER SHEET

Identified as: Acesta horikoshii (Imajima 1973)

Specimen Code: PL 2


Important Characters: Modified setae neuropodial; modified setae with distally curved tip, covered by short cilia, narrow guard along the convex side of the shaft; well developed, simple neuropodial post setal lobes in anterior parapodia; branchia number 33 pairs beginning on setiger 4 and with the last 5 increasing in size; notopodial post setal lobes simples; median antenna extends back to setiger 5; ventral cirri present.


Aids to Identification: Modified neuropodial setae appear to be unique; ventral cirri present.
VOUCHER SHEET

Identified as: Hemipodus californiensis (Hartman, 1938).

Specimen Code: AHF 1


Important Characters: Proboscideal organ of one type, conical with numerous ridges; parapodia reduced, post setal lobe broadly truncate and slightly pointed; ventral cirrus retains same shape and relative size throughout body length and may even appear to be smaller in the posterior region.

Related Species and Character Differences: H. borealis has proboscideal organs of two types; parapodia more elongate, the post setal lobe is broadly rounded; ventral cirri change shape in posterior segments, becoming triangular (long and pointed). The ventral cirri are cordate in anterior segments.

Aids to Identification: Has uniramous parapodia.

Comments: Prefers clean, sandy beaches; may occasionally occur with H. borealis (See attachment in Newsletter No. 1).
VOUCHER SHEET

Identified As: Hemipodus borealis (Johnson 1901).

Specimen Code: AHF 2.


Important Characters: Two types of proboscideal organs, more numerous tall and slender, with faint ridges, less numerous are shorter, thicker, with distinct ridges; parapodia elongate, post setal lobe broadly rounded; ventral cirri change shape posteriorly, becoming triangular, anteriorly they are cordate.

Related Species and Character Differences: H. californiensis has a single type of proboscideal organ; parapodia are reduced, post setal lobe broadly truncate; ventral cirrus retains same shape and relative size throughout body length and may appear smaller in posterior segments.

Aids to Identification: Has uniramous parapodia.

Comments: Prefers sandy beaches with organic enrichment. (See attachment in Newsletter No. 1).
VOUCHER SHEET

Identified as: Onuphis nebulosa (Moore 1911).

Specimen Code: Hyp 1

Keys Used: Hartman, O. 1968 (Atlas) - p. 690;
Hartman, O. 1944 - p. 69;

Other Texts Consulted: Shisko, J. 1977 (unpublished SCCWRP);
Moore, J.P. 1911 - p. 269;
Monro, C.C.A., 1933 - p. 76.

Important Characters: Ceratophore annulations (4); ventral
     cirriiform cirri (8); rarely 10;
     occurrence of 1st branchia (6-8);
     occurrence of 1st subacicular hook (20); composite spinigers present;
     anterior hooded hooks trifid.

Related Species and
Character Differences: O. microcephala, O. vexillaria have
     thick acicular hooks in anterior
     segments and trifid hood hooks, but no
     composite spinigers, eyes present.
O. microbranchiata has thick acicular
     hooks, trifid hooks and composite
     spinigers in anterior segments, but
     branchia do not begin until setiger 13,
     eyes present. O. profundii has thick
     acicular hooks and trifid hooks in
     anterior segments, but composite
     spinigers absent; branchia begin
     setiger 7; 5-7 ceratophore annulations;
     lacks eyes.

Variability: Branchia: Hartman, O., 1944 - branchia
     present from setigers 4 to 12; Hartman, O.,
     1968 - branchia present from setigers
     7-10; Fauchald, K. 1968 - branchia always
     present by setiger 8, never anterior to
     setiger 6. Color pattern: 1) transverse
     row of 4 black spots intersegmentally -
     2 spots on dorsum and 2 between successive
     parapodia on posterior face of segments,
     through 16-20 segments, gradually fading
     out; 2) the 2 dorsal spots, of varying
     shades of brown, merge medially to form
     transverse bar, parapodial spots larger,
     diffusing with similar, though weaker
     color over most of dorsum.

Comments: Both color patterns can appear in the same
     sample.
VOUCHER SHEET

Identified as: Nereis procera (Ehlers 1868).

Specimen Code: Hyp 2


Important Characters: Homogomph notopodial falcigers, falciger with short, lozenge-shaped appendage; paragnaths on area 4 of proboscis form crescent shape; posterior dorsal tentacular cirri usually much longer than others, extending to setigers 4-8.

Variability: Paragnaths on area 5, usually absent.