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, <u>Typosyllis</u>
Topic Taxonomic Group*	Amphinomidae, Euphrosinidae, 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 meting.

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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 U 1&2 bearing subapical spination - 3 ← subapical supernumerary spination	
	Rami of U 1&2 lacking subapical spination - 4	
3.	Posterior corner of EPI3 with large recurved hook	- Metharpinia jonesi
	Posterior corner of EPI3 rounded sub-quadrate	- M. coronadoi
4.	With supernumerary telsonic spines	- Grandifoxus grandis
	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	- Rhepoxynius sp. A
	P5 with teeth but without spurs - 8	
8.	Teeth of P5 very large and few in number	- R. variatus
	Teeth of P5 small and numerous - 9	
9.	Rostrum narrow and short; teeth of P5 enlarged	- R. abronius
	Rostrum spatulate and long; teeth of P5 small	- R. epistomus
10.	Art6 of G1 narrow	- R. fatigans
	Art6 of G1 broad - 11	
11.	Female eyes very small; U3 inner ramus short	- R. daboius
	Female eyes large; U3 inner ramus long	- R. lucubrans
12.	P5 with two large spurs on art2	- R. bicuspidatus
	P5 with medium or small teeth but no spurs - 13	
13.	P5 with 3 teeth	- R. tridentatus
	P5 with 4 or 5 teeth - 14	
14.	Rostrum very short and narrow	- R. stenodes
	Rostrum short and broad	- R. heterocuspidatus
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	- Foxiphalus similis
	Cusp small, short	- F. cognatus
18.	P3 stout, art5 of P5 stout	- F. major
	P3 slender, art 5 of P5 slender	- F. obtusidens
19.	U1&2 peduncular apices lacking spine combs - 20	
	U1&2 peduncular apices bearing spine combs - 21	
20.	EPI3 with a large tooth	- Eyakia robustus
	EPI3 without a tooth	- E. calcaratus
21.	EPI3 lacking ventral setae	- Eobrolgus spinosus
	EPI3 with 1 or 2 ventral spines	- E. chumashi

VOUCHER SHEET

Identified as:	Acesta horikoshii (Imajima 1973)
Specimen Code:	PL 2
Keys Used:	Lovell, L. 1977 (unpublished SCCWRP taxonomic meeting).
Other Texts Consulted:	Imajima, M. 1973- p. 258; Strelzov, V.E. 1973.
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.
Common Synonyms:	Aricidea horikoshii (Imajima 1973).
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
Keys Used:	Hartman, O. 1968 (Atlas) - p. 639; Fauchald, K. 1977 - p. 91.
Other Texts Consulted:	Hartman, O. 1940 - p. 242.
Important Characters:	Proboscideal organ of one type, conical with numerous ridges; parapodia reduced, post setae 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.
Keys Used:	Hartman, O. 1968 (Atlas) - p. 637; Fauchald, K. 1977 - p. 91.
Other Texts Consulted:	Hartman, O. 1940 - p. 242; Johnson, H. P. 1901 - p. 411.
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; Fauchald, K. 1968 - p. 30.
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 cirriform 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. profundi 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
Keys Used:	Hartman, O. 1968 (Atlas) - p. 533. Banse, K. and K. D. Hobson, 1974 - p. 69.
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.