



Southern California Association of Marine Invertebrate Taxonomists

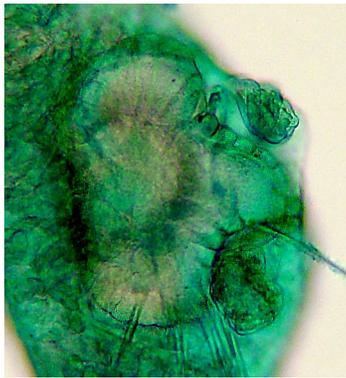
March, 2003

SCAMIT Newsletter

Vol. 21, No. 11

SUBJECT:	Pre-Bight'03 Information Meeting on Deeper Water Bivalves
GUEST SPEAKER:	Paul Scott
DATE:	12 May 2003
TIME:	9:30 a.m. to 3:30 p. m.
LOCATION:	Santa Barbara Museum of Natural History (for directions go to their website listed below) http://www.sbnature.org

MARCH MINUTES



Chaetal spreader from the 5th parapod of a new species of *Spiophanes* being described by Karin Meissner. Image by R. Rowe, Mar03.

The meeting was held at the Los Angeles County Museum of Natural History worm lab. President Kelvin Barwick opened the meeting by asking if there were any nominations for officers. Since there weren't, he moved on to upcoming meetings. On May 12th, the topic will be a pre-Bight information meeting on deeper water bivalves, led by Paul Valentich Scott, at the Santa Barbara Museum of Natural History. On June 9th, the topic will be a pre-Bight information meeting on deeper water Cnidaria and Taxonomic Nomenclature, led by John Ljubenkoy, at the San Diego Lab. On July 14th, the topic will be a pre-Bight information meeting on deeper water echinoderms, led by Megan Lilly, at the San Diego Lab. On August 11th, the topic will be a pre-Bight information meeting on deeper water polychaetes, led by Larry Lovell, at SIO or San Diego Lab (to be determined). Kelvin asked for volunteers to lead future meetings.

We then reviewed Tom Parker's voucher sheet of *Poecilochaetus* sp A. It will be distributed in the newsletter soon.

Tom then passed around a handout entitled "Short Course and Workshop on Computer-Assisted Image Analysis and Measurement" which outlines a course that generally follows the sequence of topics in "The Image Processing Handbook" (3rd edition, John C. Russ, CRC Press, Boca Raton, 1998). The main topics this course covers are Image Acquisition and Storage, Image Processing, Discrimination, Measurement, and Interpretation. For more information, see

<http://members.aol.com/ipcourse>

Tom passed around his voucher sheet of *Arabella endonata* Emerson 1974. He believes this is the species they are getting at Los Angeles County, which was previously being identified as *A. iricolor*.

Tony Phillips reported a distinctive specimen of *Trichobranchus* found in a sample from Goleta. It is similar to specimens of *Trichobranchus* which he found from Catalina Island. Leslie Harris now has the specimen for examination and further identification.

Tom brought in a couple of pieces of literature that may be of interest. The first is: Salen-Picard, Chantal, Denise Arlhac and Elisabeth Alliot, 2003. "Responses of a Mediterranean soft bottom community to short-term (1993-1996) hydrological changes in the Rhone River" in *Marine Environmental Research* Vol. 55 Issue 5:409-427. The other is a Medline abstract: AC Roach, AR Jones, and A. Murray. "Using benthic recruitment to assess the significance of contaminated sediments: the influence of taxonomic resolution" in *Environmental Pollution*, January 1, 2001; 112(2):131-143.

Leslie Harris then introduced our speaker for the day, Karin Meissner from "IFAO" and Rostock University, Germany. Until recently she had worked on a post-doc with Pat Hutchins on the genus *Spiophanes*. According to the last revision of the genus by Maciolek, 2000 there are 13 species and 1 subspecies of *Spiophanes* worldwide. This number will increase considerably with the publication of Karin's paper. Five diagnostic characters and their usefulness in species identifications were discussed. Prostomial shape can range from bell-shaped to sub-triangular to having horns. It can be used to a certain degree in species identification, and Karin concluded that this character is of limited usefulness. The shape of the nuchal organs is species specific and of high importance in identification. The third character discussed was genital pouches. This is a presence/absence character. Genital pouches develop in juveniles, so they are present from a small size and are a good character to use. The neuropodial hooks are of limited usefulness. Karin has examined hooks on many specimens with SEM and found that they are quadridentate, and the position of the pair of uppermost teeth can vary. These hooks are very difficult to access accurately under the light microscope, and consequently, there are some incorrect reports in the literature based on light microscopy. The fifth character is bacillary setae. Karin examined these setae with SEM and concluded that observed differences only represent different states of condition/preservation of these structures. It was concluded that they cannot be used for species identifications.

Söderström 1920 concluded that bacillary setae are used as sort of a brush to distribute mucous secretions during tube construction. These setae extend from an opening in the parapodia, and Karin has discovered that the shape of this opening is species specific. She uses the term chaetal spreader to describe the tongue-like



structure representing the opening of the glandular organ. She has found the chaetal spreader to be an important diagnostic character.

There are five morphological types of chaetal spreaders: 1) simple horizontal slit, 2) "0+1" with semicircular opening (is sometimes heart-shaped), 3) "0+1" with undulate opening, 4) "1+2" with undulate opening, and 5) "2+3" with undulate opening.

Karin then reviewed several species of *Spiophanes* that are included in her manuscript. *Spiophanes kroyeri* Grube 1860, *Spiophanes fimbriata* Moore 1923, *Spiophanes lowai* Solis-Weiss 1983, *Spiophanes berkeleyorum* Pettibone 1962, *Spiophanes duplex* (Chamberlin 1919), *Spiophanes bombyx* (Claparede 1870), *Spiophanes wigleyi* Pettibone 1962, *Spiophanes anoculata* Hartman 1960 as well as three newly described species.

After lunch we studied specimens. The animals were first stained with methyl green. We focused particularly on viewing the chaetal spreaders since it was a character with which most of us were not familiar. We examined two specimens identified as *S. fimbriata* from Los Angeles County Sanitation Districts, station 2A, at a depth of 300m. One specimen had a "0+1 type" chaetal spreader, and Karin confirmed the identification as *S. fimbriata*. The other specimen however had a "2+3 type" chaetal spreader and was identified as one of Karin's new species. Characters that are traditionally used by SCAMIT members to identify *S. fimbriata*, e.g. ventral stain pattern, prostomial shape and presence of occipital antenna, were identical in the specimen of the new species.

Next we examined a specimen of *S. berkeleyorum* from the LACM collection 5027-57. On setigers 5-7 the specimen had a "1+2 type" chaetal spreader which is distinct for *S.*

berkeleyorum. Another distinct feature of *S. berkeleyorum* is the shape of the nuchal organs (see above) which were easily visible with methyl green stain.

We then looked at a specimen of *S. kroyeri* from the LACM collection, LH02-425, from Sweden. It had the "0+1 type" chaetal spreader with a semicircular opening. We noted that the ventral stain pattern was very similar to that of *S. fimbriata*. Both *S. kroyeri* and *S. fimbriata* have ventrolateral intersegmental genital pouches, although there is a slight difference in the setiger number where they start.

A specimen of *S. wigleyi* from City of San Diego (station B-1 Rep 1, 7-13-88, 210 ft., RV) was up next. The prostomium was oval-shaped, and the nuchal organs were dorsal loops. The chaetal spreader on setigers 5-8 was in the shape of an indistinct horizontal slit.

The next specimen was *S. duplex* which had the "2+3 type" chaetal spreader most easily visible on setigers 5-7. The specimen was from LCH-AHF V.5702.

Then we examined some slides of neuropodial setae under the compound scope. In *S. fimbriata*, two types of neuropodial setae are present, striated and granulated. These were somewhat difficult to differentiate under the compound scope

Many thanks to Karin Meissner for her well organized and informative presentation. We look forward to seeing her upcoming publication.

ELECTION TIME!

It's that time again. Unfortunately we have fallen behind (again) in newsletter production so the candidate statements and ballots are being distributed late. However, please take the time to look them over and cast your vote. The ballot is attached at the end of the newsletter and will be due by May 31st. Remember, write-in candidates are always welcome...



CANDIDATE STATEMENTS

PRESIDENT

Kelvin Barwick

I graduated with a B. S. degree in wildlife and fisheries sciences from Texas A&M University in 1983. Currently I work for the City of San Diego's Ocean Monitoring Program as a marine biologist/taxonomist. My taxonomic specialties are Mollusks and Polychaetes. In the past I have worked both as an independent taxonomic consultant, and for private environmental consulting firms, accumulating over 14 years experience in invertebrate taxonomy. I have been an active participant in SCAMIT for over 10 years and served as its Secretary in 1991-92. I hope to continue to develop our goals and plans for the future.

VICE-PRESIDENT

Leslie Harris

Collections manager of the Allan Hancock Foundation Polychaete Collection, at the Los Angeles County Museum of Natural History. Ongoing research centers on taxonomy of the polychaete fauna of Pacific North America, polychaete-algal associations (especially in *Macrocystis*), introduced species, and Caribbean reef polychaetes.

SECRETARY

Megan Lilly

Graduated from Humboldt State University in 1991 with a B.S. in Marine Biology. From 1991-1993, worked at the Santa Barbara Museum of Natural History where the taxonomy of marine mollusks was studied under Dr. Eric Hochberg, Paul Valentich Scott, and Henry Chaney. Currently working as a marine biologist for the City of San Diego's Ocean Monitoring Program. Specialties include echinoderms, miscellaneous phyla and mollusks with an emphasis on cephalopods.

TREASURER

Cheryl Brantley

Cheryl is a marine biologist with the County Sanitation Districts of Los Angeles County. She has worked for the Districts for 16 years

primarily as a polychaete taxonomist. She graduated with her B.A. degree in Aquatic Biology from the University of California, Santa Barbara in 1985. She has formerly served as Secretary of SCAMIT from 1994-98.

MEMBERSHIP RENEWALS

Please remember all membership renewals are due in the month of May. Please make all checks out to SCAMIT and send to the Treasurer:

Cheryl Brantley
JWPCP – Marine Biology Lab
24501 S. Figueroa
Carson, CA 90745

Also include with your check any changes to your address, email, phone number or specialty. If you would like a current membership directory please don't hesitate to ask. We are not mailing out individual hardcopy directories unless members request them to help save on postage.



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SCAMIT Treasury Summary 2002-2003

During the past fiscal year April 2002 – March 2003 expenses totaled \$2589.16 while our income, mainly from membership dues (\$1929.00) totaled \$2801.42. We actually made a small profit this year of \$212.26. As usual, our major expense came from the hard copy publication of the newsletter. We have reduced the costs associated with that publication a little this year by finding a less expensive printer in the San Diego area. We have also decided not to purchase any more letterhead stationery for the printed newsletter and will just use the paper the printer supplies. We had some extra expenses this year associated with our 20 year reunion party but we also recouped some of those costs by selling newly designed T- shirts and some of our SCAMIT mugs. We had no publication grants awarded this year only an honorarium. It was given to Karen Meissner from Rostock University for all the extra effort she put into a wonderful polychaete lecture at the Natural History Museum. SCAMIT remains solvent thanks in large part to all its loyal members. We hope to increase our assets this fiscal year as we pursue some new funding resources. Listed below is a summary of our expenses and income.

Account Balances

Checking	\$1238.56
Certificate of Deposit	<u>\$9363.42</u>
Total	\$10,601.98

Expenses

Hardcopy newsletter	\$827.32
Letterhead – Stationery Supplies	\$272.17
Postage	\$352.59
Electronic newsletter	\$334.85
20 year Reunion party	\$154.75
Reunion T-shirts	\$547.48
Honorarium	<u>\$100.00</u>
Total	\$2589.16

Income

Membership dues	\$1929.00
Bank interest	\$231.42
T-shirt & Mug sales	<u>\$641.00</u>
Total	\$2801.42



Please visit the SCAMIT Website at: <http://www.scamit.org>

SCAMIT OFFICERS:

If you need any other information concerning SCAMIT please feel free to contact any of the officers at their e-mail addresses:

President	Kelvin Barwick (619)758-2337	kbarwick@sandiego.gov
Vice-President	Leslie Harris (213)763-3234	lharris@nhm.org
Secretary	Megan Lilly (619)758-2336	mlilly@sandiego.gov
Treasurer	Cheryl Brantley (310)830-2400x5500	cbrantley@lacsds.org

Back issues of the newsletter are available. Prices are as follows:

Volumes 1 - 4 (compilation).....	\$ 30.00
Volumes 5 - 7 (compilation).....	\$ 15.00
Volumes 8 - 15	\$ 20.00/vol.

Single back issues are also available at cost.

The SCAMIT newsletter is published monthly and is distributed freely through the web site at www.scamit.org. Membership is \$15 for the electronic copy available via the web site and \$30 to receive a printed copy via USPS. Institutional membership, which includes a mailed printed copy, is \$60. All new members receive a printed copy of the most current edition of "A Taxonomic Listing of Soft Bottom Macro- and Megainvertebrates ... in the Southern California Bight." The current edition, the fourth, contains 2,067 species with partial synonyms. All correspondences can be sent to the Secretary at the email address above or to:

SCAMIT

C/O The Natural History Museum, Invertebrate Zoology

attn: Leslie Harris

900 Exposition Boulevard

Los Angeles, California, 90007

BALLOT FOR SCAMIT OFFICERS 2003-2004

Vote for one (1) nominee for each office. Please mail or return completed ballot to Leslie Harris by May 31st, 2003. You may return it to the Secretary or other attending officers at the May meeting. The address to mail it to is:

Attn: Leslie Harris
Worm Lab
Los Angeles County Museum of Natural History
900 Exposition Blvd
Los Angeles, CA 90007

President - The president presides at all meetings and represents SCAMIT in external business affairs.

___ Kelvin Barwick

___ Write in: _____

Vice-President - The Vice-President chairs ad hoc committees, supervises the specimen exchange, tabulates election ballots, and fills in for the President as necessary.

___ Leslie Harris

___ Write in: _____

Secretary - The Secretary keeps minutes of the meetings, is responsible for the newsletter, and preparation of the ballots.

___ Megan Lilly

___ Write in: _____

Treasurer - The Treasurer collects dues, makes disbursements, keeps financial records, and makes an annual statement of the financial status of SCAMIT.

___ Cheryl Brantley

___ Write in: _____

