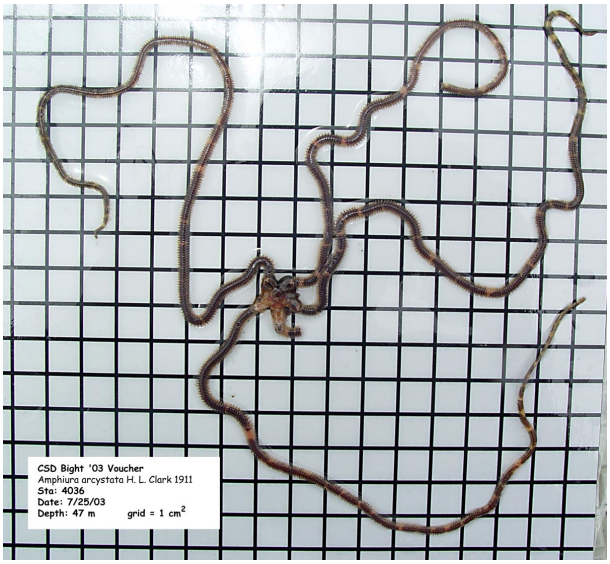
Southern California Association of
Marine Invertebrate Taxonomists

Dec. 03/Jan. 04 **SCAMIT Newsletter** Vol. 22, No. 8/9

SUBJECT:	**How to legally transport biological samples in alcohol or formalin.**
GUEST SPEAKER:	**Discussion Lead: Leslie Harris**
DATE:	**8 March 2004**
TIME:	**9:30 a.m. to 3:30 p. m.**
LOCATION:	**Los Angeles County Museum of Natural History 900 Exposition Blvd.**



- Since there was no official December meeting this volume will be the combined December/ January newsletters.

- M. Lilly

JANUARY 2004 MINUTES

The meeting was held in the Polychaete Collection Room at the Los Angeles County Museum of Natural History. Vice-President Leslie Harris passed around several pieces of new literature. Please see the bibliography at the end of the newsletter for a listing.

To begin the polychaete portion of the meeting, Kelvin Barwick distributed a table of characters of nine City of San Diego and SCAMIT species of *Polycirrus*. He used characters from Hutchings and Glasby 1986 to construct the table and requested that members review and use the table and send comments back to him. The morphology of the lower prostomial lip was not included in the table, and Larry Lovell commented that this character

is distinct in some species. Larry offered to send his notes on lower lip morphology to Kelvin to include in a final version of the table. It was also suggested that Kelvin add a column to his table including the distribution of nephridial pores.

Many SCAMIT polychaete taxonomists use methyl green staining patterns for identifying *Polycirrus*. While a few descriptions and illustrations already exist, it would be helpful to have a more comprehensive set to complement the characters listed in Kelvin's table. It was suggested that members take digital pictures of staining patterns and have them posted to the website in order to share the information.

Larry described some of his observations on *Polycirrus* that he made during sample processing. He found that *P*. sp A is usually found in its tube while *P. californicus* is not found in a tube. In addition, *Eteone pigmentata* and *Malmgreniella sanpedroensis* have been discovered to be commensal in the tube of *P*. sp A.

Leslie Harris volunteered to write up a protocol for identifying species of *Polycirrus* that we are likely to encounter in the Bight '03 samples. We agreed to put aside specimens of *Polycirrus* that we can not identify. Larry volunteered to be the specialist for this taxa and will examine any problematic specimens that we may encounter.

Larry led the discussion for the next topic of the day, Lumbrinerids. He reviewed the updates to his presentation at Scripps a couple of years ago. We are using *Scoletoma* "complex" for specimens previously identified as *S. luti*. Rick Rowe raised the question of whether we can use *S. luti* for a specimen that looks like the picture in the original description (Berkeley & Berkeley 1945) with the very long posterior postsetal lobe. Leslie replied in the affirmative and noted that *S. luti* specimens are rare in the Southern California Bight.

For identifying Lumbrinerids, use Rick Rowe's updated version of Larry's key. *Lumbrineris* sp E did not make the SCAMIT species list, however it is included in the updated key.

Larry commented that he recently recorded a *Drilonereis longa* from San Elijo. He cautioned that this is not the long, stringy, white *Drilonereis* that we previously referred to as *D. longa*.

Lumbrineriopsis sp SD 1 fide Rowe 2002 was briefly discussed. A specimen was recorded from San Diego station B-11 Rep 1 on January 9, 2002 at a depth of 289 ft. *L*. sp SD 1 has large, flask-shaped carriers and a subterminal tooth on the posterior hooks.

We discussed the Magelonidae next with Rick reviewing the 1991 key produced by Dean Pasko as an adaptation of the key in Hobson and Banse 1981(Dean originally cited it as 1984). Rick has distributed a page of modifications to couplets in that key and plans to release a complete revision of the key soon.

Magelona sacculata can be differentiated from other Bight species by the presence of lateral pouches between setigers 10 and 11.

M. hobsoni is uncommon, but has been reported by San Diego. It is has symmetrical pennoned tips on special setae and a truncate anterior margin (reduced anterior horns) while *M. pitelkai* has asymmetrical pennoned tips on special setae and a rounded anterior margin.

M. hartmanae is similar to *M. hobsoni* but has no inferior lateral lamellae on the 9th setiger.

M. californica has not been reported from this area; it occurs up north and is not listed in the SCAMIT Species List. Interestingly, the holotype is from Mission Bay, intertidal. Leslie pulled the specimen for examination and we found the prostomium was spatulate. The specimen was in poor condition so we didn't manipulate the anterior portion to look for lobes.

No one from our area has recorded *M. cerae*. Leslie pulled the type specimen for examination. We confirmed that there are no dorsal or ventral median lobes after setiger 9, and the uncini are bifid hooks. We also examined a paratype from Oregon. The methyl green staining pattern was determined as dark on the ventrum of setigers 3-6 and darkest on setigers 4 and 5.

M. berkeleyi is our most common Magelonidae, and this species has no dorsal median lobe on the 9th setiger. Rick suggested staining specimens with methyl green to confirm the identification. Typically the stain is intense from the beginning of the 5th setiger through two setigers, then lighter and speckled for another two setigers.

M. sp B fide Harris & Rowe 2003 is a new undescribed species that is very similar to *M. berkeleyi*. *M*. sp B differs in its possession of a regularly crenulated anterior margin and methyl green staining through most of the thorax. Magelonidae specimens often do not uptake methyl green stain or require a long time in a very concentrated stain solution to exhibit the typical patterns. So while stain patterns may help generally, some specimens may have to be identified based on morphology and their indeterminable staining ignored.

We moved on to examine a Trichobranchid brought by Tom Parker. It was collected off Palos Verdes at a depth of 400-500m. The specimen had large, ribbed lappets resembling "Batman's cape". Leslie passed around her notes describing *Octobranchus* sp A Williams and "*Bizzarobranchus*" (Trichobranchidae, genus B) Williams.
Characters of *Octobranchus* sp A include a linear body, eyes on the prostomium, and 16 thoracic setigers. Uncini start on setiger 5 (3-6 uncini/fascicle) and each has a scoop-like, striated structure under the main fang (visible at 400x-1000x). There are 3 pairs of lateral lappets on segments 2, 3, and 4; the pair on segment 3 is the largest. The lappets of segment 4 continue across the dorsum, forming a shelf-like ridge behind the last pair of branchiae. There are 4 pairs of cirriform, wrinkled branchiae. The notopodia have prolonged setal lobes and the parapodia protrude from the body.
Characters of "*Bizzarobranchus*" include 4 pairs of branchiae; the first pair is subulate and originates from the anterior of segment 1. The other 3 pairs of branchiae are short and thick. Lappets are present on segments 2, 3, 4, and 5; those on segments 4 and 5 are largest. The lappets and the thick branchiae are ribbed. Eyespots are usually present, and there are 16 thoracic setigers. Uncini start on setiger 6 (approximately 30 per fascicle), are heavily crested, and have a tongue-like structure below the main fang. We agreed that Tom's specimen was a "*Bizzarobranchus*".

The next family of polychaetes that we discussed was Glyceridae. At a previous SCAMIT meeting, we had reviewed Böggemann 2002 which included a revision of Glyceridae. We noted some potential problems with certain species and their diverse geographic ranges. Many Glycerid type specimens have been lost, and observations were based on illustrations and/or literature, not on examination of specimens from our coast. We discussed *Glycera americana* originally described from Society Island. Böggemann proposed that specimens similar to *G. americana* on our coast be called *G. pacifica*; however, no Eastern Pacific (local) material was examined. According to Böggemann, *G. americana* has 2 ridges and *G. pacifica* has 3 ridges on the proboscidial organs. We have observed both 2 and 3 ridges on proboscidial organs of local specimens. We will continue to use *G. americana* for our Eastern Pacific (local) specimens while examining additional material and with the realization that what we see may belong in some other, or new taxon. (Additional discussion of this issue appeared in the SCAMIT Newsletter, November, 2002, Volume 21, No. 7).

As reported from previous SCAMIT meetings, two forms of what we call *Glycera nana* are present. One form has subequal presetal lobes in mid-body setigers while the other form has presetal lobes with the inferior much larger than the superior. To standardize our *Glycera nana* identifications, we agreed to lump both forms as a single taxon and record the presetal lobe condition in the comments section of the data sheets.

Tony Phillips reported that he has already identified many Bight'03 polychaete samples. He found a *Glycera robusta* off Pt. Conception and reported a new *Marphysa* from shallow depths, in harbors and bays. He is erecting a provisional species, *Marphysa* sp HYP1 and will send out a voucher sheet soon. Otherwise he has been encountering our common species.

Larry and Leslie led a discussion on new restrictions surrounding the shipping of hazardous materials, more specifically, specimens in ethanol or formalin solutions. These new restrictions establish very specific criteria for the proper packaging, labeling, and shipping of hazardous materials. The rules and regulations are specific for the chemical, concentration of the solution, and the solution volumes. Even box construction and inner packing materials must be considered and packaging done by a certified agent. There have been very hefty fines imposed on violators for the improper packaging, labeling, or shipping of hazardous materials including specimens packed in preservative. Because these new Department of Transportation regulations effect the work performed by many SCAMIT members, this subject will be revisited in more detail (with possible solutions) at the March meeting.

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