Southern California Association of
Marine Invertebrate Taxonomists

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San Pedro, California 90731

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SCAMIT Newsletter

Vol. 19, No. 9

SUBJECT:	Lumbrinerids along with a Special Presentation on Ophiuroids and ecotoxicological research
GUEST SPEAKER:	Larry Lovell & Dr. Dimitri Deheyn
DATE:	9 April 2001
TIME:	9:30 a.m. to 3:30 p. m.
LOCATION:	Scripps Instituion of Oceanography Benthic Invertebrate Collections Area

Myrianida pachycera (Augener)
Photo by Arne Nygren

The next meeting topic will be Lumbrineridae, presented and led by Larry Lovell. Larry will be presenting the results of his expert examination of the B'98 lumbrinerids. We will also be treated to a talk by Dr. Dimitri Deheyn entitled "Shedding Light on the Subject of Pollution: could bioluminescence of brittlestars be used in ecotoxicological research?" Dr. Deheyn's series of papers on brittlestar bioluminescence over the past years have often been included in the New Literature section of the Newsletter. This should be a very stimulating presentation, and will give us a chance to talk to him directly.

Come, and bring your specimens of lumbrinerids - both the occasional intact specimens, and the more typical fragmentary ones - for possible examination at the meeting. This will be a full day.
For further directions please visit the SCAMIT website.

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WORKING KNOWLEDGE

Two of the largest POTW dischargers in Southern California have job opportunities for SCAMIT readers. Two biologist positions have closed at the County Sanitation Districts of Los Angeles County, with interviews very soon. The City of San Diego currently has a position for an entry level Marine Biologist listed on the SCAMIT website. The response to this offering will be establishment of a list of qualified applicants who will be considered for the current posting and any others that arise in the next year or so.

Most of us will have one or more new compatriots as a result of these position availabilities. Hopefully these fresh faces will prove to be active participants in SCAMIT.

ELECTIONS

Once again we are faced with an uncontested election. No new candidates have been proposed, or have volunteered to run in opposition to the current slate of officers. Fortunately, all of the current officers have consented to run for an additional term. They are ably serving the organization, and their willingness to continue is admirable, but they must be getting a bit tired after years (in one case decades) of service to the membership. If this trend continues we may soon be placed in the uncomfortable, and I believe unprecedented, situation of having no candidates for one or more offices should one or more of the serving officers be unable or unwilling to run again. Please consider this, and reconsider the possibility of serving as an officer during the next year. Hopefully our 2002 election will embrace more diversity of choice for the membership. Voting has always been on a par with or below levels of participation in the U.S. as a whole, and those elections are vigorously contested. How interesting can it be to vote on a pro forma basis? We need more participation, not less, and a hard fought campaign might actually provide some. Please try to overcome your ennui and return your ballots with your votes and comments, despite the nature of this election. The candidate statements and ballot are included in this newsletter.

NEW LITERATURE

Animals with complex life-cycles provide a rich breeding ground for misinterpretation and misunderstanding among those of us who must try and identify them in our daily lives. Perhaps foremost among these are the hydrozoan Cnidaria, whose alternation of generations has produced so much confusion that entire taxonomic hierarchies have been placed in competition. Bavestello et al (2000) discuss a further complication to an already difficult situation, morph reversibility. This usually involves a regressive transformation of the medusa phase into a polyp phase without going through sexual reproduction. Such changes are often produced by unusual environmental conditions. The usual result is a polyp similar to, but not identical with, the polyp which originally liberated the medusa. Research is continuing, but we should be alert to this possible complication of an already murky identification area.

For reasons unknown taxonomic subjects tend to go through research and/or publication cycles. Currently there is a cycle of unusual activity in the publication of articles on a generally under-treated area; the taxonomy of aplacophore mollusks. In this group investigations from all over the world have bearing on the California fauna because the literature as a whole is not very rich and every little bit has the potential of assisting us with our local fauna.

Garcia-Alvares, Urgorri & Salvini-Plawen (2000a) describe new species of *Dorymenia*, a genus represented in the California fauna, from the South Shetland Islands. They also (2000b) describe a new *Sputoherpia* from Spanish waters. This later genus is not represented locally, although two other genera in the Amphimeniidae, *Platymenia* and *Pachymenia*,

are represented in deeper Californian waters. Scheltema & Ivanov (2000) provide an examination of the Prochaetodermatidae from European waters. We do have a local representative in southern California, *Spathoderma californica* (Schwabl 1963), and a number of species from further north in the Eastern Pacific. In this group the gross appearance of the organisms can be used as a cue in their speciation, and one of the most informative aspects of the present paper is its fine drawings of the gestalt of whole animals. Fourteen members of the family, distributed among five genera, are treated in detail. This neatly complements and extends Scheltema's earlier treatment of the family.

In addition to description of new species, the entire basis of the taxonomy of the group is being reassessed. Scheltema & Schander (2000), for instance, reexamine character states of a variety of species in describing seven new species from various geographic areas. They emphasize characters of hard parts and body form as valuable analytic characters and provide a cladistic analysis of the considered taxa. None of these species are local, but several of the considered groups are represented locally, and the discussion of characters is quite useful.

Debate has been often joined concerning the appropriate status and relationships of the aplacophores, including the nature of the relationship between the two main types of animals combined under that term - the ventral groove bearing solenogasters, and the posterior gill bearing caudofoveaceans. There are two main "sides" in this debate; one maintaining the primitivity of the group, and the other suggesting it is advanced with its unique body derived by paedomorphosis. Haszprunar (2000) revisits and summarizes this debate and provides a new cladistic analysis. The present paper will not end the debate, but provides a useful discussion of the various lines of evidence. Those interested in further information on the group should visit the aplacophore homepage at:

http://www.whoi.edu/science/B/aplacophora/

With the recent WEMAP sampling, regional monitoring continued the trend of intrusion into shallower waters begun during B'98 sampling. It behooves us, therefore, to begin to consider the structure of estuaries in which we may soon begin, or are now sampling. Emmett et al (2000) provide a broad framework for such consideration and treat all of the estuaries on the west coast. Their paper provides a concise summary of general knowledge of estuaries along our coast and provides a bibliography of articles describing, in more detail, individual bodies of water.

JANUARY 8 MEETING MINUTES

The meeting was held at the San Diego Marine Biology Laboratory. President Ron Velarde began the business portion of the meeting. He handed the floor over to Vice-President Leslie Harris who gave us the upcoming schedule of meetings.

The next meeting is a 2-day meeting, February 12 and 13, and will be held at the Los Angeles County Museum of Natural History. We will be discussing 2 large polychaete families from the 7th volume of the MMS Atlas, the Ampharetidae and Terebellidae.

The March meeting will be held on March 19 at the San Diego Marine Biology Laboratory. Guest speaker Karen Green will attend as we discuss the capitellid chapter of Volume 7 of the MMS Atlas. Karen has done extensive work on polychaete staining patterns and we are fortunate to have her participation at this meeting.

The April meeting will be held on April 9 and is to be held at Scripps Institute of Oceanography. Our guest speaker will be Larry Lovell and he will elaborate on the lumbrinerids from the Bight‘98 project.

Please inform Leslie Harris if you have visiting colleagues who are coming to town and would like to be a guest speaker at a SCAMIT meeting.

Dot Norris circulated several articles that she found in Current Contents. They were: Bhaud (2000), Olive et al (2000), Pleijel (1999), Rozbaczylo & Simonetti (2000), Jha et al (2000).

Leslie reported that the Los Angeles County Museum has recently hired 2 people, Kathy Omura and Phil Hoover. They will primarily be sorting invertebrate samples that have been deposited at the museum.

Ron Velarde then notified us about a couple of meetings. The Southern California United Malacologists met on Saturday, January 20 in the Times-Mirror Room at the Los Angeles County Museum. George Davis from the crustacean department and Lindsey Groves from the mollusc department were co-organizers of the meeting.

The Southern California Academy of Sciences meeting will be held in May 2001. Stay tuned for more details in upcoming newsletters.

Next, Leslie introduced our guest speaker, PhD student Arne Nygren from the University of Göteberg,Sweden. Arne’s dissertation will be on the polychaete subfamily Autolytinae. In his presentation, Arne described the different reproductive strategies of autolytines, gave tips on identifying autolytines, and presented his research.

In the Autolytinae there are approximately 140 described species in 5 genera. He described the different types of reproductive strategies including epigamy and schizogamy. There are different types of schizogamy; scissiparity in which 1 stolon is produced at a time and gemmiparity in which many stolons bud off from the posterior of the adult. For example, epigamy is found in *Autolytus noroi* and *A. magnus*. Anterior scissiparity is found in *Proceraea* spp, *Procerastea* spp and *Virchowa* spp. Posterior scissiparity is found in *Autolytus inermis*. Gemmiparity is found in *Autolytus* spp and *Myrianida* spp.

Arne gave us some general advice to use when examining autolytines. He said that it is best to view live material when possible. He discussed the various morphological groups of autolytines and listed which characters are most useful in identifying and separating the groups. The number of teeth and rings in the trepan is the most important structure. Arne found that squeezing the anterior end of the specimen on a slide and mounting with permount works well to view the trepan. Other useful characters include the number of muscular bands in the proventricle, length of cirrophores and length of nuchal organs.

Arne then showed us slides of autolytines that he had identified from the Southern California area. Among the species were *Autolytus pentadentatus* Imajima, *A. convolutus* Cognetti, *A. inermis* Saint-Joseph, *A. noroi* (Imajima & Hartman), *Myrianida pachycera* (Augener), *Proceraea nigropunctata* Nygren and Gidholm, *P. okadai* (Imajima), *P. kiiensis* (Imajima), *P. cornuta* (Agassiz), *P. gigantea* Nygren and Gidholm and *Procerastea* sp.

In Arne’s research he investigated 3 questions: 1) Is schizogamy or epigamy the primitive mode within Autolytinae?, 2) Which type of schizogamy is the most plesiomorphic?, and 3) Are the five genera monophyletic groups? In his analysis Arne used morphological and molecular characters to construct a phylogenetic tree. The conclusions he drew from the phylogenetic tree were: 1) schizogamy is the primitive reproductive

condition, 2) the tree was inconclusive so the second question remains unanswered at this time, and 3) *Autolytus* is a non-monophyletic group.

Arne would be glad to receive any live material. Most autolytines live in intertidal, subtidal, hard bottom habitats and consequently, most described species come from these habitats. In Southern California we probably encounter undescribed species, since the samples from our monitoring programs are collected from mainly soft bottom habitats.

Next was Ron Velarde's presentation on his work with autolytines at Long Beach State University. The topics he covered were: 1) major characteristics of the subfamily Autolytinae, 2) major characteristics of the genera, 3) Autolytinae previously reported from California, 4) material and methods, and 5) new records of Autolytinae from Alamitos Bay.

Ron showed major characteristics on the general body form. Most California species have not been looked at closely, especially the trepan. There was a discussion about the use of clearing solutions in order to better view the trepan. Oil of wintergreen has been tried but there has been limitations. Although it clears the animal, the tissue becomes very brittle making it difficult to save the specimen.

Ron distinguished between thick and thin types of bayonet setae as follows: thick bayonet setae were more than1/2the width of the compound setae, and thin bayonet setae were less than 1/2 the width of the compound setae.

There was a generalized life cycle chart with reproductive stolons formed by budding from the adult, then they developed swimming setae, and stolons swarmed at the surface. This uncommon life cycle has led to significant problems in the taxonomic literature. Some species have had 3 separate descriptions; one for the female stolon, one for the male stolon, and one for the adult.

Ron presented a summary of species that were known from California including records, reported taxon, author, locality, and revised taxon. He described how he and some colleagues collected live material from docks in Alamitos Bay. Using night lights for illumination, they collected swimming stolons with nets and took them back to the lab where Ron kept the stolons and observed the growth of the juveniles. Meeting participants enjoyed taking a trip to the past, and some identified themselves in Ron's slides from ca. 20 years ago!

Next we turned our attention to some of the smaller polychaete families from the MMS Atlas, Volume 7. First up was Chapter 3, the Fauveliopsidae (Blake & Petersen 2000). This was an excellent chapter and included details of morphology and taxonomic history. We discussed *Fauveliopsis* sp SD 1 and how it differs from *F. glabra*. *Fauveliopsis* sp SD 1 has 1 spine and 1 capillary seta in each posterior ramus, and *F. glabra* has 2-3 spines and 2-3 capillary setae in each posterior ramus.

In *Fauveliopsis* sp SD 1, the interramal cirri are ovate, and in setigers 1 and 2, they are in a medial position. In F. *glabra*, the interramal cirri are stalked, and in setigers 1 and 2, they are close to the notosetae.

The SCAMIT record of *F. armata* collected from Orange County, 300m is questionable and should be checked using the new chapter and the information provided here.

The next chapter we discussed was Chapter 11, Family Sternaspidae (Petersen 2000). The chapter contains extensive details on this small but interesting group and it includes a table (11.1) of validly described species. We discussed *Sternaspis* cf. *fossor* and decided to continue to use *Sternaspis fossor* for our specimens that we collect in Southern California. SCAMIT does not retain the "cf" designation, but recognizes the difficulties with the identity of this "cosmopolitan" species

presented in this chapter by Mary Petersen. The other species described was *S. maior* which lives in deep habitats and has not been recorded by SCAMIT members.

The next chapter we discussed was Chapter 2, Family Acrocirridae (Blake 2000b). Ron noted two updates to the SCAMIT species list; *Acrocirrus frontifilis* Banse 1969 and *Macrochaeta* sp A fide Rowe 1999 will be added in the next edition. There was discussion of the provisional species, *Macrochaeta* sp A (formerly *Acrocirrus* sp SD 1), described by Rick Rowe from the City of San Diego's International Treatment Plant stations and Bight'98 stations. It occurred at depths ranging from 33m to 171m. *Acrocirrus heterochaetus* Annenkova 1934, the species described in this chapter, has not been reported by SCAMIT. When identifying acrocirrids, we agreed to use Banse 1969 to supplement this chapter.

The next chapter up for discussion was Chapter 6, Family Scalibregmatidae (Blake 2000e). SCAMIT reports only *Scalibregma inflatum*. We discussed the description of *S. californicum* in the Atlas and agreed to examine more of our specimens of *S. inflatum* and see how they compare. Rick Rowe has examined one specimen and found 3 blunt setae with grooves in addition to the 5 pointed setae shown in Figure 6.1.G for *S. californicum*.

We discussed the record of *Asclerocheilus californicus* which is reported in the SCAMIT species list. Tom Parker had found these specimens at a station with coarse sediment at a depth of 300m. After reviewing some characters of the specimens, we decided to back off to "sp" on the identification.

There was reason to celebrate during our lunch break; it was Dot Norris's birthday! Dot also had a treat for us; a video tape with spectacular footage she shot while swimming with a whale shark and manta rays. Both of these dive trips took place during Dot's trip in November to the Kona coast of Hawaii.

The next chapter discussed was Chapter 7, Opheliidae (Blake 2000f). Two of our local provisional species should be added to the key, *Ophelina* sp SD 1 fide Rowe 1995 and *Armandia* sp SD 1 fide Rowe, 1999. A voucher sheet for *Ophelina* sp SD 1 has been distributed to SCAMIT members. This species is very similar to *O. breviata* (Ehlers 1913). A voucher sheet for *Armandia* sp SD 1 will be produced following a comparison to the nearly identical *Armandia agilis* (Andrews 1891) reported from North Carolina, Bahamas, and the Gulf of Mexico (see Uebelacker and Johnson, 1984, Vol. III pp. 17-11 and 17-18). Following, are the suggested additions to the Chapter 7, Opheliidae key on page 149 which include the local provisionals.

4A. Branchiae present, 27 pairs; setal lobes small; short anal funnel with 8 short cirri and a long unpaired cirrus.....*Armandia brevis*

4A'. Branchiae present, 37 pairs; setal lobes long anteriorly, decreasing in size becoming small by the 14th setiger; long, tubular anal funnel with 14 short, terminal cirri and a long unpaired, ventral and subterminally inserted cirrus.....*Armandia* sp SD 1

5A'. Body moderate to small; branchiae present; anal funnel a long, cylindrical tube with eight short and two ventral, longer (3x) cirri.....*Ophelina* sp SD 1

Rick Rowe has reported a specimen with the pectinate branchiae of *Euzonus dillonensis* (Hartman 1938) from an International Treatment Plant station (ITP I-6, 24 Jan.2000, 85ft. depth) near the U.S.-Mexico border. And it was commented that although *Travisia granulata* Moore 1923 was found in the list of species for this chapter, it was not included in the key or within any of the diagnoses.

The final chapter under discussion for the day was Chapter 1, Flabelligeridae (Blake 2000a). In this chapter, the synonymy of *Brada pluribranchiata* with *B. villosa* proposed by

Pettibone 1954 was followed. SCAMIT, however, does not accept this synonymy and will continue the current usage of both species names. Similarly, SCAMIT does not agree with the synonymy of *Flabelligera infundibularis* with *F. affinis* proposed by Pettibone 1954. A question arose regarding Figure 1.2.c on page 9. This illustration of a notoseta from *F. affinis* was taken from Uschakov 1955; however, these specimens were not listed among the ones examined. SCAMIT feels this synonymy needs justification and will continue to use *F. infundibulum.*

While the generic diagnosis for *Diplocirrus* is included in this chapter, no species were included. Blake does mention that he identified several species from deep-water samples taken off northern California, but none were encountered as part of this study. SCAMIT lists *Diplocirrus* sp SD 1 fide Rick Rowe 1998 which commonly occurs in San Diego Bay (and possibly other bays in Southern California).

The description of *Piromis hospitis* was examined carefully and it was determined that Blake's *P. hospitis* is actually *Piromis* sp A Harris 1985. *Piromis hospitis* Fauchald 1972 is valid and Leslie Harris has examined the holotype and found differences with *P*. sp A. Both have paired dorsal papillae; hence the first sentence under the remarks section on page 13 is incorrect. *Piromis* sp A has broad papillae and *P. hospitis* has narrow papillae. There is also a difference in where the bifid neurosetae start; they start on setiger 2-4 in *P*. sp A and setiger 7-30 in *P. hospitis*. SCAMIT will continue to use *P*. sp A. There will be a notation in the next SCAMIT species list following *P. hospitis*, "not *P. hospitis* of Blake 2000".

The description of *Pherusa capulata* (Moore, 1909) was questioned because the single specimen examined and illustrated was a juvenile (6mm long). When identifying specimens of *Pherusa* and *Piromis*, refer to Leslie Harris's handout which illustrates some distinguishing characters of both genera. In Hartman 1969, there is an error with a figure accompanying the description of *Pherusa capulata*. Figure 2 is actually an illustration of a *Piromis* sp A neuroseta .

It appears that *Pherusa neopapillata* and *P. papillata* are reversed. For example, Figure 1.7.B (an original figure) is what we would call *P. papillata* Hartman 1961. Leslie has looked at many specimens of both of these species and she concluded that the local species we commonly encounter in soft sediments is *P. neopapillata*. Therefore, a change should be made to the key on page 4. Couplet 8A refers to *Pherusa papillata* and 8B refers to *P. neopapillata*. Additional changes suggested for the Flabelligeridae key on pages 3 and 4 include the following:

2B'. Neurosetae from segments posterior to cephalic cage include unidentate, curved, and hooded falcigers.....*Pherusa negligens*

3A .....change *Piromis hospitis* to 9

9A. With large triangular dorsal pair of papillae on each segment anteriorly.....*Piromis* sp A

9B. With narrow, cirriform or digitate papillae on each segment anteriorly.....*Piromis hospitis*

Consideration of the remaining chapters of Volume 7 will continue at future meetings.

My Life as a Biologist
by Donald J. Reish
Chapter 20: The Worm Farm

How did the worm farm come about? Like so many things, some incidental events led to the establishment of the worm farm. As I had discussed in earlier chapters, I established the culture of *Neanthes* in1964. My students and I used the worms for a variety of experiments. In 1975 I was invited to present a paper at ASTM (pre-E-47 times) sponsored symposium at Virginia Polytechnic University in

Blacksburg. I presented a talk on the culture techniques with polychaetes and discussed their potential as toxicological test animals. After my presentation two men talked with me about the possibility of shipping worms to them. One was Jim Horne (I see him every year at SETAC) and one from the US Navy. They both purchased worms from me-adult size-and thus the worm farm began. I also sold *Capitella* and collected *Dexiospira* for settlement studies which resulted in 2 papers with people from Harvard.

As I left Blacksburg, I noticed a sign giving directions to Christiansburg, 3 miles. I had spent a week-end there in 1942 with my Dad and we stayed at his brother's home. On my next visit to Blacksburg for a work-shop, I met my cousin. Another cousin had gone to Virginia Polytech. After completing his PhD, Mike Johns did a post-doc at the EPA lab in Rhode Island. He worked with Carol Pesch. She had spent 3 weeks in my lab learning how to culture *Neanthes*. She had established a culture in Rhode Island and Mike had helped her. Mike then took a position with a consulting firm in Seattle. An area in Puget Sound was declared a superfund site and Mike, together with Tom Ginn and others developed the 20 day juvenile growth test for studying effects of contaminated sediment. I was involved in some of the planning and development of this test. The test became standard and was picked up by other agencies and many consulting firms. At the present time cultures of this species are maintained by the Army Corps in Mississippi, Hong Kong, Korea, and the United Kingdom.

Why use this animal? It lives in sediment, the worms are isogenetic, readily available, and have excellent control survival. While it is not the most sensitive test animal, the use of growth as a measure is a good sublethal test. How many labs have used this animal? Presently about 80 firms. At last count the total sold over the past 25 years is nearly 400,000. This figure does not include those used by my students and me nor the tests I conducted at Orange Co. Sanitation District. I have prepared a bibliography of the published papers, abstracts and some reports-it totals about 200 citations. This figure does not include the reports issued by consulting firms since I do not have access to them.

Jim Weinberg and his wife followed up on earlier studies by Gerald Pesch and found that the Connecticut Population (known as *N. acuminata*) has a chromosome number of 2N=22; my lab culture has 2N=18; the local natural populations has 2N=18 but the centromere is located at a different spot in one chromosome pair. A Hawaiian population has 2N=28. The Southern California population should not be referred to as *N. acuminata* (as indicated in the SCAMIT species list). It is a new species! No one has looked at the chromosome number of *N. caudata* (the European species which is the same general type as the others). I also found it at Eniwetok Atoll, Marshall Islands. How many similar species problems like this occur in polychaetes? I think it is widespread as shown with the *Capitella* complex.

What do I do with the money from the sale of worm? Many things. It has paid salaries to many students (still does) and my son Jim, I started taking salary after I reached the age of 70. It has paid my way to scientific meetings, helped with publication costs for the polychaete proceedings, helped pay travel expenses for students going to meetings, helped pay for sea water, and even purchased air conditioning units for biology department offices.

What has the worm meant to me? I think that it has helped to emphasize the importance of polychaetes in marine environmental studies. I think that I have been one of the principal players, if not the principal one, in championing the cause of the importance of polychaetes in marine pollution studies (50 years). This worm has provided me the

opportunity to attend meetings and given me a forum to stress the importance of polychaetes. Polychaetes have played an important role in my scientific life and *Neanthes* has been at the forefront.

Next: Retirement years

[Editor's Note - with this installment we return to the final chapters of Dr. Reish's memoirs. He still continues with an interesting and busy life however, and hopefully more chapters remain to be written. The next two Newsletters will be graced with Chapters 21 and 22. Stay tuned.]

OUT IN THE COLD

(Larry Lovell has safely returned from the Antarctic, but we will continue to print his correspondence from that journey)

Hi family and friends,
Yes it is day two of MOCHNESS. The fish (as we call it) is in the water and sampling for krill. Last night was the first night of MOCHNESS. The weather was very nice with little wind. The catch was good and not overwhelming, but it did take until 11:00 am to finish processing the three samples collected. That was with 7 of us doing it. There were four species of krill (*Euphausa superba* being the dominant), a few amphipods, some ctenophores, a few juvenile fish, and a few larval fish. The *E. superba* had green stomachs from all the phytoplankton they had been eating. There were literally thousands of krill and the other organisms separated into jars for counting and weighing. They are then placed in an optical plankton counter that works like this. The krill are put into the top of the counter, they are suspended in seawater and run past a beam of light. Every time the beam of light is interrupted the machine makes a count of one. For the number collected, this is the most efficient way to count the extremely large numbers. I now know why whales, penguins, seals, and other sea birds love krill. They are about the size of a small shrimp and very abundant in these cold productive waters. Four of us ate some raw last night. It was salty, a little crunchy, and tasted like Ebi sushi (raw shrimp). I finally got to bed at noon.
Will probably have the same routine tonight, but I may be up later since there will be two grab samples coming aboard tomorrow morning some time that I am in charge of processing (sieving, relaxing, and preserving). It should go smoothly. This is something I have done before many times.
The sun set at 2:30 am last night and rose at 3:30. It was a really beautiful sunrise with no clouds.
Hope you all have a happy Turkey Day. I will be working the night shift one more time then switching back to days on Friday.
Regards from Sea,
Larry

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CANDIDATE BIOGRAPHIES

PRESIDENT

Ron Velarde

Ron is the current President of SCAMIT and a past Vice-President; he has been a Marine Biologist with the City of San Diego since 1983 and currently is the supervisor of Benthic Taxonomy for the Ocean Monitoring Program. His taxonomic interests include most groups, especially polychaetes and nudibranch mollusks. He earned his B.S. degree in Marine Biology from California State University, Long Beach, in 1976, and did post-graduate research on the systematics and ecology of autolytid polychaetes.

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 to 1993, worked at the Santa Barbara Museum of Natural History where the taxonomy of marine mollusks was studied under Dr. Eric Hochberg, Paul Scott, and Hank Chaney. Currently working as a marine biologist for the City of San Diego's Ocean Monitoring Program. Specialities include echinoderms, miscellaneous phyla and mollusks, with an emphasis on cephalopods.

TREASURER

Ann Dalkey

Ann is presently the Treasurer for SCAMIT and has held this position since SCAMIT was founded. Ann is a member of the water biology staff at the Hyperion Treatment Plant where she specializes in the identification of polychaetes and amphipod crustaceans. Prior to working at Hyperion, Ann was a member of the laboratory staff at the County Sanitation Districts of Orange County. She worked there for nearly 10 years, reaching a position of senior laboratory and research analyst. She received her B.S. from California State University Long Beach in Marine Biology in 1974 and her M.S. from the same university in 1982. Her thesis research pertained to polychaete bioassay.

SCAMIT would like, at this time, to extend its heartfelt thanks to Ann Dalkey for serving unerringly and graciously as its treasurer for the last 20 years. This year will be Ann's last as she has expressed her desire to retire (well earned) from the position next year. We look forward to our last year with her and hope some one will start considering filling this position in the future.

BALLOT FOR SCAMIT OFFICERS 2001-2002

Vote for one (1) nominee for each office. Please mail or return completed ballot to Leslie Harris by May 31, 2001. You may return it to the Secretary or other attending officers at the April or May meeting. The address to mail it to is:

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.

____ Ron Velarde

____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.

____ Ann Dalkey

____ Write in: _____

2001-2002 SCAMIT Meeting Topics - Please suggest any topics you deem worthy of a SCAMIT meeting.

_____

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 e-mail address

President	Ron Velarde	(619)758-2331	rgv@mwharbor.sannet.gov
Vice-President	Leslie Harris	(213)763-3234	lhharris@bcf.usc.edu
Secretary	Megan Lilly	(619)758-2336	msl@mwharbor.sannet.gov
Treasurer	Ann Dalkey	(310)648-5544	cam@san.ci.la.ca.us

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