Southern California Association of Marine Invertebrate Taxonomists

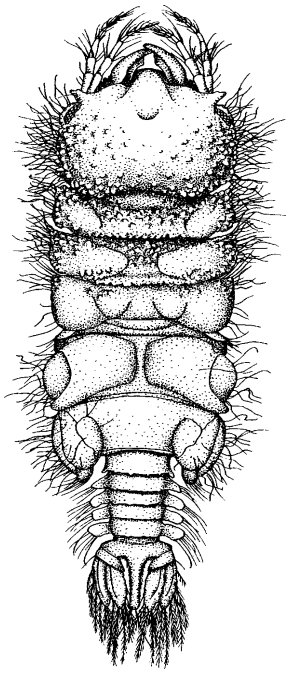
3720 Stephen White Drive
San Pedro, California 90731

December, 1998

SCAMIT Newsletter

Vol. 17, No. 8

SUBJECT:	Examination of the Coe Nemertean Collection
GUEST SPEAKER:	Dr. Eric Hochberg
DATE:	22 February 1999
TIME:	9:30 a.m. to 3:30 p. m.
LOCATION:	Santa Barbara Museum of Natural History Department of Invertebrate Zoology 2559 Puesta del Sol Rd Santa Barbara, CA



Gnathia sanctaecrucis Schultz, 1972

- from the Taxonomic Atlas, Volume 11 Part 2, The Isopoda, Cumacea, and Tanaidacea, pg46.

PAST AND FUTURE MEETINGS

Normally, the January meeting would have been announced with this newsletter, however with the Holidays, etc, we have unfortunately fallen behind in production of the Newsletter. I have included above, the announcement for the next upcoming meeting. Please bear with us as we get back up to speed. Thank you - Megan Lilly (Secretary)

There was no meeting in December, but the Christmas Party took place on the 12th of the month at the Cabrillo Marine Aquarium. The January meeting was held on 19 January 1999 at the Worm Lab of the Natural History Museum of Los Angeles County. Dr. Derek Ellis gave us two short talks in the morning, and the afternoon session consisted of examination of new and unusual species taken in B'98 infaunal samples from the Channel Islands, and San Diego Bay. The minutes of that meeting will be presented in the next Newsletter.

FUNDS FOR THIS PUBLICATION PROVIDED, IN PART BY
THE ARCO FOUNDATION, CHEVRON, USA, AND TEXACO INC.

NOT SO PETTY THEFT

Mea culpa. Although starting off cautiously in the new world of webpublishing, I have become lax, and have failed in my duty to protect copyrighted material. I was alerted to this by a brief note from Geoff Read, whose Annelida site had served to supply text for the November newsletter. I received the material in an e-mail from a third party, but failed to properly note the source in the NL (although the author was acknowledged). Apparently some of the text was added by Dr. Read, although that was not evident in the e-mail missive I received. Regardless, it is my job as editor of the SCAMIT Newsletter to ascertain the status of all contributions made to the NL. I failed to do so in this case.

In general there is a great deal of freedom on the WWW, although there is also a good deal of structure underlying that freedom. One such structural underpinning is the emerging application of copyright law in the electronic medium. Basically, if you say your material is protected by copyright on your webpage (as SCAMIT does on our own webpage)- it is. One does not need to apply for the rights, or submit written copies of material for which copyright is claimed to a controlling agency. The mere claim of copyright is sufficient to provide a legal basis in court, if the origin of the information is provable. Should it turn out that some other party can prove that they were responsible for origination of the material, and not the person who claims the copyright, the claim of copyright offers no protection.

Since many of the parties who place material on the net do so to disseminate it, and not to profit from it, their main concern is that the source of the material used is acknowledged. This is the case for Dr. Read. While he doesn't mind "rebroadcasting" of information provided on the Annelida site, he would like to receive acknowledgment as the source of his material. That this should be so is entirely appropriate, since he is the source, and puts a good deal of labor into providing the service which Annelida represents. I apologize to him for failing to provide such acknowledgment in the last NL where the description of the Brazil conference by Dr Lana was presented, without attribution of the source.

NEW LITERATURE

The latest issue of the Proceedings of the Biological Society of Washington has several items of interest to SCAMIT members. New nereid species are described from Baja California by de Leon-Gonzalez & Diaz-Castaneda (1998). Both are currently known only from the coast of Baja California, and may be endemics. Wider distribution may be demonstrated in the future for these newly described animals. Information bearing on local polychaete species is provided by Lu & Fauchald(1998). They treat *Marphysa belli* and *Marphysa oculata*, both species reported in the past from our area. Specimens referred to these species locally are probably *Marphysa* sp A Harris & Velarde 1983. The new information and redescriptions provided by the authors may assist in evaluation of the local member of this complex.

Although Gerken & Watling (1998) are primarily concerned with the description of a new species of *Diastylis* from Chile, they also emend the description of *Diastylis crenellata* from central California. They note the presence of reduced exopods on the 3rd & 4th pereopods of female *D. crenellata*, characters not noted in the original description.

WICKSTEN ON SHRIMP

Member Dr. Mary Wicksten (TAMU) has sent several e-mail comments regarding her recent synonymy of the shrimp *Neocrangon zacae* with *N. resima* (an action which the editor has not yet adopted), and other matters of interest to the membership at large. They are presented below largely verbatim with her permission.

"I visited the Los Angeles County Museum after Christmas, and examined specimens labelled as *Crangon zacae* and *Crangon resima* from Alaska, southern California, Baja California, Clarion Island in the Revigagigedos and Gorgona Island, Colombia. Anything called 'C. resima' from north of Puget Sound can be safely assumed to be *N. communis*. The specimens have the prominent, characteristic carina of the fifth abdominal somite, regardless of the shape of the rostrum. I also examined some specimens of *N. communis* from Santa Monica Bay, where they were taken at 200 m.

As for the other specimens—I stick with my conclusions with my paper. *Neocrangon zacae* is a junior synonym of *N. resima*. There are long, cilia-like setae on the rostrum of each and every specimen that is in reasonably good condition, regardless of whether the rostrum is only slightly elevated or blade-like and raised. In the latter form, the setae run parallel along the sides of the rostrum, and are not as easily seen as in the specimens with a flatter rostrum. I compared material identified as 'C. zacae' by Fenner Chace himself with specimens from all over the known range of the species. I could find NO consistent morphological differences between them. Specimens with various rostral shapes were taken in the same trawls at the same depths and locations, so there is no difference in habitat or range. The various shapes of the rostrum seem to be due to individual variation. Mary Jane Rathbun, who described *N. resima*, noted that the development of the rostral 'plate' was dependent on age; "specimens 20 mm. long show no evidence of it". Note that the same rostral variation occurs in *N. communis*. One can distinguish *N. resima* from *N. communis* on the basis of the distinct abdominal carina. Anything else—shape of the rostrum, setae on the rostrum, shape of the subchela, body size, carapace width, etc. varies with size and sex of the animal or simply does not show sufficient difference to indicate the presence of a distinct species."

"Please recall that the original description of *Crangon resima* of Rathbun notes that 'specimens 20 mm. long show no evidence of (the rostrum having the shape of a compressed plate)'. Since this plate-like shape varies considerably and occurs not only in *N. resima* but also in *N. communis*, it is not a useful characteristic for species recognition. One can distinguish between *N. resima* and *N. communis* on the basis of the carina of the 3rd-5th abdominal somites, which is easy to see.

As for anything else—length/width ratio of the subchela, angle of the finger of the subchela, setae of the rostrum, shape of the scaphocerite, etc.—I found absolutely nothing that could not be attributed to the size, age, sex or condition of preservation of the specimen. Should you decide to pursue the matter further, please note that *N. resima* as I interpret it goes all the way down to Central America from Monterey Bay. You would need to do a multivariate analysis to determine that any differences were not clinal variation, as occurs in other eastern Pacific carideans. You are welcome to do so—the LACM has hundreds of specimens from all over the place.

I am busy with 5 undescribed carideans from the Galapagos and other parts of the tropical eastern Pacific; also have reports of an undescribed midwater shrimp from southern California." "I will be writing the sections on deep-water decapods for a forthcoming book on deep-water fauna of California. If anyone finds any odd midwater species, I would be happy to have a look at them." If you have specimens in response to this last comment contact Dr. Wicksten at **wicksten@bio.tamu.edu.**

B'98 CRUSTACEA

Member Dr. Tim Stebbins (CSDMWWD) has posted several notes to the TAXONOMY list-server for taxonomists involved in B'98 sample identification. They are reproduced, slightly edited and updated (by Tim), for the information of other members and interested parties who are not list members.

"Everyday the key to SCB Isopods that I distributed appears more and more obsolete, at least in terms of species names. The final source for most of these corrections is the Smithsonian's World List of Marine and Freshwater Crustacea Isopoda, compiled by Brian Kensley and Marilyn Schotte I am currently in the process of rechecking all the SCB isopods against this list. Anyway, following are some changes regarding the cymothoids and gnathiids, a useful reference on the Limnoridae for those interested, plus notes on a possible new serolid from deep waters.

(1) Cymothoidae: Perhaps you remember the discussion, etc. regarding the change from *Lironeca* (with an "r") to *Livoneca* (with a "v"). I think there was an opinion published about this, but I can't recall when this occurred. The current version of the Smithsonian's list uses *Lironeca* in contrast to our use of *Livoneca*. As interesting as this may or may not be, it is actually irrelevant as far as the SCB fauna. In fact, only three (possibly two) species belong in this genus. These are *L. bowmani*, *L. ovalis*, and *L. redmanii*, the latter two which may actually be one species. Although *L. bowmani* does occur in the Eastern Pacific, none of these species is included in the SCAMIT listing for our fauna. The four species of cymothoids that are included in the list are *L. californica*, *L. convexa*, *L. vulgaris*, and *Nerocila acuminata*. *Nerocila* is the only one that remains unchanged, while the three *Livoneca* species have been placed into two different genera: *Elthusa* Schioedte & Meinert, 1884 and *Enipsa* Schioedte & Meinert, 1884. The changes (based on Bruce 1990) are as follows:

L. californica = *Elthusa californica* (Schioedte & Meinert, 1884)
L. vulgaris = *Elthusa vulgaris* (Stimpson, 1857)
L. convexa = *Enipsa convexa* (Richardson, 1905)

I contacted Niel Bruce of the University of Copenhagen (presently at the Queensland Museum in Australia) and Rick Brusca of Columbia University's Biosphere 2 Center, and they confirmed these changes. Rick's monograph on the cymothoid isopods of the eastern Pacific (Brusca 1981) is still the best reference for separating these species.

(2) Gnathiidae: The Gnathiidae were revised in a paper by Brian Cohen and Gary Poore in 1994. This revision removed two of our local species from the genus *Gnathia* Leach, 1814 and placed them in *Caecognathia* Dollfus, 1901. All other of our species remain in *Gnathia*. The changes are:

G. crenulatifrons = *Caecognathia crenulatifrons* (Monod, 1926)
G. sanctaecrucis = *Caecognathia sanctaecrucis* (Schultz, 1972)

(3) Limnoriidae: Cookson (1991) is a useful reference for this family. Although the paper does not specifically deal with species from our region, it is a good general reference on limnoriid terminology and systematic characters. It also has a key to the world species that includes *Limnoria algarum* and *L. lignorum* from our side of the world.

(4) New serolid: There may be a new species of *Heteroserolis* off our coast. Briefly, after looking at some of the Bight'98 samples from San Diego Bay, I noticed that *Heteroserolis carinata* is fairly common in these shallow waters. However, something looked strange

and I compared these bay specimens to a few animals that were recently collected from deeper waters (> 100 m). On a gross level, there appear to be several differences between the shallow and deep animals. I described these differences to Gary Poore from the Museum Victoria, Australia, and he was of the opinion (preliminary of course) that there was likely a new species of serolid from deeper water. Consequently, this is under current investigation. I would appreciate it if you could send me any *Heteroserolis* you collect, especially from deep waters. The differences between the shallow and deep water animals are:

(a) deep water specimens have a much larger dorsal carina, especially on the cephalon, than do shallow water animals. This seems similar to differences described by Hessler (1972) between *H. mgrayi* (i.e., like my deep specimens) and *H. carinata* (i.e., like my Bay specimens).

(b) deep specimens have a rather shallow lateral notch on the pleotelson that does not form a well defined tooth (similar to that described for *H. tropica* and I think *H. mgrayi*), while shallow critters have the distinct tooth or deep notch characteristic of *H. carinata*.

(c) Pereonites 5 and 6 are subequal in width to pereonite 4 in deep water animals (i.e., the lateral margins are fairly smooth and continuous, just a gradual tapering to the pleotelson); in contrast, there is a distinct narrowing of the pereon between pereonites 4 and 5 in shallow water animals. This difference in shape appears distinct even on a few very small juveniles I looked at."

B'98 AMPHIPODS

The following two commentaries were also distributed through the TAXONOMY list-server and are presented here for those who are not involved in Bight 98 sample processing. Both were submitted by Don Cadien (CSDLAC).

This is to alert you to the occurrence of the small talitroidean amphipod *Najna kitamati* in the Bight '98 samples. As of this time the depth of collection is not known to me, but it is doubtless deeper than I am used to seeing this animal. It is rarely encountered, but when found is usually in intertidal scrapings. There are only two species in the family, and only one occurs in the Southern California Bight. Fortunately for us J. L. Barnard found and described it. He originally identified it as *Najna* ?*consiliorum* Derjhavin (Barnard 1962), then later described it as new (Barnard 1979). I suggest you consult his figures of the species in the 1962 paper. When you see this animal it appears similar to *Allorchestes*, but has the antennae strikingly displaced so that the eye is dorsal to both pair. A quick look to the other end seems to indicate that the 3rd uropods are missing, but a very close look will reveal them as tiny, and still there. Barnard's description is adequate to identify the animal so I will not digress further.

I suspect that relatively shallow samples from any of the channel islands may have these animals in them. You are not likely to confuse this with anything else, but since it is relatively obscure, and uncommon, you might not initially recognize it. Once you review the Barnard description (1962), specimens will be immediately recognized if present.

There are two new Bight species of the amphipod genus *Synchelidium* currently designated sp A and sp B of LACSD. Voucher sheets are in preparation, but are not yet completed. Since we are now working on the samples from B'98 I need to let you know what these guys are, so you can recognize them if you get them. Both are similar to other species known from the area. *Synchelidium* sp. A of LACSD would reach couplet 5 of the Bousfield and Chevrier (1996) key, where it would not fit either side of the key dichotomy. It has an obtuse lower posterior corner of epimeron 2 like *S. micropleon*, but has subequal uropod 2 & 3 tips (that is uropod 3 is not especially

shortened, and the two appendages reach about the same distance past the telson). *Synchelidium* sp. Bof LACSD would all the way down to couplet 8 in the key before failing. It would not key to *S. latipalpum* because it lacks the expanded segment 3 of the mandibular palp of that species. It would key well to *S. americanum*, but differs from that species in several respects. *S. americanum* has a rounded posteroventral corner of epimeron 2, while *S*. sp. B has an obtuse tooth. *S. americanum* has a slightly oblique G1 palm, while that of *S.* sp. B is more oblique. A further distinction is that the distal "spines" [setae in Les Watling's usage] on the outer plate of maxilla 1 are tuberculate in *S.* sp. B, and simple in *S. americanum*. Species B could also fall out at couplet 3 of the key, if the term "acutely produced" were inappropriately applied to the obtuse tooth of the second epimeron, and if the G1 propod were considered to be markedly oblique in couplet 2. Should you find yourself at the *S. shoemakeri/ S. millsi* dichotomy, a *S.* sp B specimen would probably be taken to *S. shoemakeri*. *S. millsi* has a G2 propod much longer than *S.* sp B. *Synchelidium shoemakeri* has a short G2 propod, sparse setation of the basis of G1, and tuberculation of the distal spines on the MX1 outer plate; all characters similar or the same in *S.* sp. B. Species B can be distinguished from *S. shoemakeri* by the less oblique palm of G1, by the less prominent posterodistal corner of epimeron 2, and by the more pronounced ventral extension of the posterior lobe of the P7 basis. Hopefully additional characters will be firmed up on the voucher sheets. For now this will have to do. They are all small and white, and look pretty much the same grossly. Nasty group.

ROCK SHRIMP

Two species of the genus *Sicyonia* have been reported from the Southern California Bight in recent years, *Sicyonia ingentis* and *Sicyonia penicillata*. During 1998, both before and during the B'98 sampling, several specimens were taken off San Diego which were believed to belong to a third species, *Sicyonia disedwardsi*. These had been initially identified as *S. penicillata*, which shares with *S. disedwardsi* a bulls-eye like lateral carapace marking. Field personnel had noted some subtle differences in antennal pigmentation and in the shape of the lateral carapace mark which suggested to them that these might not be *S. penicillata*.

The specimens were collected, and after examination in the laboratory the identification was changed to *S. disedwardsi*. As part of the B'98 QC the specimens were reexamined by Don Cadien. He felt that the specimens probably fell within the range of variability of *S. penicillata*. No authoritatively identified *S. disedwardsi* specimens were available at the time for comparison, so the identity of the animals remained in question. Enquiries turned up a series of lots of *S. disedwardsi* at the Natural History Museum of Los Angeles County, which were examined by Don Cadien on 19 Jan 1999.

Externally the two species are quite similar in most characters, and are easy to confuse in the field (and also in the laboratory). The definitive separation depends on the genitalia, particularly that of the male. None of the specimens from off San Diego suspected of being *S. disedwardsi* were males, unfortunately. There are also differences in the formation of the thelycum of the female according to the literature. As this is a particularly complex organ, it was not clear from the published descriptions how the females of the two species differed. It was also not clear if the differences applied to smaller specimens.

Fortunately the material at the museum was authoritatively identified. All the lots examined had been identified by Isabel Perez-Farfante during preparation for description of a new species of *Sicyonia* from the tropical Eastern Pacific (Perez-Farfante & Booth 1981).

The material also covered a range of sizes and collecting areas. Most was from the Allan Hancock Foundation Velero cruises to tropical west America.

Among the literature sources consulted prior to and during the examination of the material were Hendrickx 1984, Perez-Farfante 1985, and Hendrickx 1995 and 1996. *Sicyonia disedwardsi* is not among the species keyed and discussed in Perez-Farfante 1988. A total of eleven specimens identified as *S. disedwardsi* from the museum collections and three from the CSDMWWD collections were compared. Of these eleven were female, and three were hermaphrodites exhibiting both male and female characters (ie. with both petasma and thelycum).

The thelycae of the females of *Sicyonia penicillata* and *S. disedwardsi* proved relatively easy to separate in practice, once actual *S. disedwardsi* specimens were examined. In all the above cases females of *S. penicillata* have the median sinus of the posterior component (see Figure 6 of Perez-Farfante 1985) narrow, while that of *S. disedwardsi* is broad. This is used in Hendrickx 1995 key as the last part of couplet 11..."depresión mediana muy ancha [*S. disedwardsi*]" vs. "depresión mediana angosta [*S. penicillata*]". Perez-Farfante (1985) used other features of the thelycum, but not this median notch, as characters separating the two species in her key. The relative elevation of the bulges at the bases of the legs on sternite XIV which she utilized proved difficult to apply for a less experienced observer than she. The medial notch was easily seen and interpreted in females of sizes ranging from 6.0-24.2 mm carapace length. No overlaps were seen within this size range, and the character differs in other species as well. In *S. disparri*, for instance, it is a shallow lunate notch, neither narrow nor broad, and clearly different from that in either *S. penicillata* or *S. disedwardsi*. While other characters are available, and can be used in conjunction (see descriptions of both species in Perez-Farfante 1985), I recommend you check the posterior median notch of the thelycum for easy separation of females of these species. The structure, number, and disposition of the dorsal crest teeth in the two species is somewhat variable, and will not fully separate them. Likewise the lateral carapace "bulls-eye" marks are subject to some variability in color and distinctness which can lead to confusion of the two species [remember it was field pigment differences that initially suggested the CSDMWWD specimens were not *S. penicillata*].

The structure of the petasma of males is radically different in *S. penicillata* than in all other members of the genus. In *S. penicillata* males the tips of the projections on both the ventrolateral and dorsolateral lobules of the petasma are drawn out into long filaments (see Figure 5 of Perez-Farfante 1985 for general orientation, and Figure 33 for an illustration of petasma structure in male *S. penicillata*). The three hermaphrodite specimens of *S. disedwardsi* examined had typical petasmae of that species (see Figure 28 of Perez-Farfante 1985), but had abnormal thelycum structure. All three had the male gonopores swollen and protrusive, forming conical projections at the bases of the 5th legs. This suggests that active sperm transfer had been taking place just prior to or during collection and preservation. In each specimen the posterior area of the thelycum was smooth and undifferentiated, lacking a median notch or any other obvious structure. The specimens ranged from 13-22mm carapace length, and exhibited the same thelycum anomaly, and the same petasma structure. They came from different collections in different years and in different locations. They ranged in source from off Angel de la Guardia Island in the Gulf of California to off Isla Manuelita, Costa Rica. Depths ranged from 42-146m.

None of the literature consulted makes any mention of intersex or hermaphrodite specimens in this or any other species of *Sicyonia*. Similarly, no mention of

hermaphrodite condition is made by Dall et al. (1990) in their review of penaeoid biology (they cover the traditional 'penaeidae' and include the Aristeidae, the Sicyoniidae, and the Solenoceridae as well as the Penaeidae). One recent report (perhaps the only one) of hermaphroditism in penaeoids is that of Perez-Farfante & Robertson (1992) (thanks to Dr. Ray Bauer for that citation, and for discussion of the problem).

The bottom line for all of this is we still have no authenticated records of *Sicyonia disedwardsi* occurring in the Southern California Bight. The species does occur as far north as Todos Santos Bay on the Pacific coast of Baja California, but is not verifiably recorded from north of that point. None of the other species known from the Panamic region range this far to the north. Currently only ridgeback prawn and target shrimp occur in our waters, but though we are not under strong El Niño influence at the moment, we should always be alert to the possible excursion of other species into our area. Please also watch for additional hermaphrodite specimens. Don Cadien (CSDLAC).

BIBLIOGRAPHY

BARNARD, J. LAURENS. 1962. Benthic Marine Amphipoda of Southern California: Families Amphilochidae, Leucothoidae, Stenothoidae, Argissidae, Hyalidae. Pacific Naturalist 3(3):116-163.

—. 1979. Littoral Gammaridean Amphipoda from the Gulf of California and the Galapagos Islands. Smithsonian Contributions to Zoology 271:1-149.

BOUSFIELD, EDWARD L. & Andrée Chevrier. 1996. The amphipod family Oedicerotidae on the Pacfic Coast of North America. Part 1. The *Monoculodes* and *Synchelidium* generic complexes: systematics and distributional ecology. Amphipacifica 2(2):75-148.

BRUCE, NIEL L. 1990. The genera *Catoessa*, *Elthusa*, *Enipsa*, *Ichthyoxenus*, *Idusa*, *Livoneca*, and *Norileca* n. gen. (Isopoda, Cymothoidae), crustacean parasites of marine fishes, with descriptions of eastern Australian species. Records of the Australian Museum, 42: 247-300.

BRUSCA RICHARD C. 1981. A monograph on the Isopoda Cymothoidae (Crustacea) of the eastern Pacific. Zoological Journal of the Linnean Society 73:117-99.

COHEN, BRIAN & Gary C. B. Poore. 1994. Phylogeny and biogeography of the Gnathiidae (Crustacea: Isopoda) with descriptions of new genera and species, most from south-eastern Australia. Memoirs of the Museum of Victoria 54(2):271-397.

COOKSON, LESLIE J. 1991. Australasian species of Limnoriidae (Crustacea: Isopoda). Memoirs of the Museum of Victoria, 52: 137-262.

DALL, W., B. J. Hill, P. C. Rothlisberg & D. J. Sharples. 1990. The Biology of the Penaeidae. Advances in Marine Biology 27:1-489.

GERKEN, SARAH & Les Watling. 1998. *Diastylis tongoyensis*, a new diastylid (Crustacea: Cumacea) from the northern central coast of Chile, with an amendment to the description of *Diastylis crenellata* Watling & McCann, 1997. Proceedings of the Biological Society of Washington 111(4):857-874.

HENDRICKX MICHEL E. 1984. The species of *Sicyonia* H. Milne Edwards (Crustacea: Penaeoidea) of the Gulf of California, Mexico, with a key for their identification and a note on their zoogeography. Revistas De Biologia Tropical 32(2):279-98.

—. 1995. Camarones. Pp. 417-537 IN: Fischer, W., F. Krupp, Wl. Schneider, C. Sommer, K. E. Carpenter & V. H. Niem (eds.) Guia FAO para la identificación de especies para los fines de la pesca. Pacifico centro-Oriental. Vol. 1. Plantas e Invertebrados. F.A.O., Roma, Italia. 646pp.

—. 1996. Los camarones Penaeoidea bentónicos (Crustacea: Decapoda: Dendrobranchiata) del Pacífico Mexicano. Comisión Nacional para el Conocimiento y Uso de la Biodiversidad/ Instituto de Ciencias de Mar y Limnología, Universidad Nacional Autónoma de México. 147pp.

HESSLER ROBERT R. 1972. The relationship between *Serolis carinata* Lockington and *Serolis m'grayi* Menzies and Frankenberg (Isopoda, Flabellifera). Crustaceana 3(Suppl):1-6.

LEÓN-GONZÁLEZ, J. A. de & V. Díaz-Castañeda. 1998. Two new species of *Nereis* (Polychaeta: Nereididae) from Todos Santos Bay, Ensenada, Baja California, Mexico. Proceedings of the Biological Society of Washington 111(4): 823-828.

LU, HUA & Kristian Fauchald. 1998. *Marphysa belli* (Polychaeta: Eunicidae) and two related species, *Marphysa oculata* and *M. totospinata*, a new species, with notes on size-dependent features. Proceedings of the Biological Society of Washington 111(4): 829-842.

PEREZ-FARFANTE, ISABEL. 1985. The rock shrimp genus *Sicyonia* (Crustacea: Decapoda: Penaeoidea) in the eastern Pacific. Fishery Bulletin 83(1):1-79.

—. 1988. Illustrated key to penaeoid shrimps of commerce in the Americas. NOAA Technical Report NMFS 64:1-32.

— & Billy B.Boothe Jr. 1981. *Sicyonia martini*, a new rock shrimp (Decapoda: Penaeoidea) from the American Pacific. Journal of Crustacean Biology 1(3):424-32.

—& L. Robertson. 1992. Hermaphroditism in the penaeid shrimp *Penaeus vannamei* (Crustacea: Decapoda: Penaeidae). Aquaculture 103:367-376.

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)692-4903	rgv@mwharbor.sannet.gov
Vice-President	Don Cadien	(310)830-2400 ext. 403	dcadien@lacsd.org
Secretary	Megan Lilly	(619)692-4901	msl@mwharbor.sannet.gov
Treasurer	Ann Dalkey	(310)648-5544	cam@san.ci.la.ca.us

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.