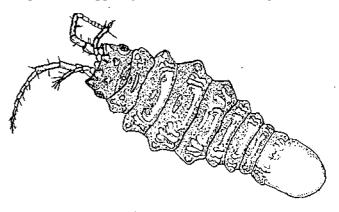
ugust, 1997	SCAMIT Newsletter	Vol. 16, No.4	
NEXT MEETING:	Amphipacifica; a summary/Crustace	a for Ed. 3	
GUEST SPEAKER:	Discussion Leader - Don Cadien (CSDLAC)		
DATE:	17 September, 1997		
TIME:	9:30am - 3:30pm		
LOCATION:	SCCWRP, 7171 Fenwick Lane, Fou California	ntain Valley	

SEPTEMBER 17th MEETING

With the publication of the last (apparently) issue of the journal *Amphipacifica* we can take a retrospective look at the achievements of it's few short years of operation. No single series of publications has had as profound an impact on NEP peracarid taxonomy since J. L Barnard's early 60's papers in Pacific Naturalist. Comment is solicited on all aspects of this work, both good and bad. In particular we will try to correct some of the more vexing errors in the various keys provided during the run of *Amphipacifica*.

We will also attempt to complete consideration of changes, additions and corrections to the arthropod portion of the SCAMIT Taxonomic Listing Edition 2 for the upcoming Edition 3 (including addition of partial synonymies). Please participate if you can, and bring the literature required to support your nomenclatural argument.



Synidotea magnifica Menzies and Barnard 1959 (from Menzies and Miller 1972)

FUNDS FOR THIS PUBLICATION PROVIDED, IN PART, BY THE ARCO FOUNDATION, CHEVRON USA, AND TEXACO INC. SCAMIT Newsletter is not deemed to be a valid publication for formal taxonomic purposes.

DEEP-SEA SYMPOSIUM

The 8th Deep-sea Biology Symposium is set to be held at the Monterey Bay Aquarium, Monterey, California between Monday September 22 and Friday September 26 of this year. Preregistration has long since passed, but late corners will doubtless be accommodated. The theme is Biology and Ecology of the Deep-Sea. Registration fee for the symposium is \$90 for students and \$200 for non-students. Several excursions into the depths of the Monterey Submarine Canyon are planned aboard the Research Vessel Western Flyer and using a new ROV. Participation is first-come first-served for these. Symposium registration includes attendance at the evening social, the dinner, an MBARI reception, a copy of the abstracts, a Tshirt and a group photo. Interested parties should contact Annette Gough or Ginger Hopkins at 408)775-1701 or via e-mail at goan@mbari.org.

COHENS LEAVING NHMLAC

Drs. Dan & Ann Cohen finally are leaving the Natural History Museum of Los Angeles County and moving out of the area. They will be making a new home in northern California away from the smog and bustle of the metropolis. This is ostensibly a final retirement, but both still retain their research interests. Ann has indicated that she may be willing to examine ostracod specimens, but contact her first. They can be reached via e-mail at acohen@ucla.edu

NEW LITERATURE

Member Tim Stebbins (CSDMWWD) brings the following notice received from Dr. Michel Hendrickx to our attention -

"The following books have recently been published by the CONABIO (Comision Nacional para el Conocimiento y Uso de la Biodiversidad, Mexico) and the Instituto de Ciencias del Mar y Limnologia, UNAM (Autonomous National University of Mexico). Both books are available free of charge for institutions, libraries, departments and laboratories involved in the study of marine crustaceans or invertebrates, or marine life in general. Request should be sent to Dr. Michel E. Hendrickx (e-mail michel@mar.icmyl. unam.mx; FAX 69-826133, Mexico). Shipping cost should be paid by the petitioner (about \$7 US per book for USA, Canada and Latin America, air mail; about \$20 MN within Mexico, air mail). [see Bibliography for Hendrickx 1996 and Hendrickx and Navarrete 1996].

Both books are written in Spanish and include keys to families, genus, and species known from the area (31 species of benthic Penaeoidea and 52 species of pelagic shrimps). For each species the following data are provided: synonymy, material examined, characteristics, localities reported for the east Pacific, type locality, geographic and bathymetric distribution, and comments. All species are illustrated and a map with all known sampling localities (new and published data) is available for each species. Results are briefly discussed at the end of each volume."

We were able to examine copies of both publications at the meeting thanks to Tim. While much of the covered fauna does not range into the Southern California Bight, you never know what a strong El Niño might bring.

A report on the results of a recent examination of the demersal crustaceans of the west coast of Costa Rica covers some of the same species presented above (Jesse 1996). Only a few of the reported species (*Platymera gaudichaudii*, *Pyromaia tuberculata, Malacoplax californiensis*, *Callinectes arctuatus, Portunus xantusii, Penaeus brevirostris, Penaeus californiensis, Solenocera mutator*) are also recorded from as far north as the Southern California Bight. Various analyses were performed to characterize the decapod faunas of the three areas sampled.

It should not be surprising that *Pyromaia* tuberculata was recorded from Costa Rica, it seems to be everywhere! We recently have had the results of Japanese investigations on reproduction and growth in this species, and now we have more from Brazilian researchers (Fransozo and Negreiros-Fransozo 1997). The authors describe and figure the two zoeal and the megalopal stage in the development of the species.

Commensal-host relationships between the crab *Pinnixa tumida* and its sea-cucumber host *Paracaudina chilensis* were examined by Takeda et al (1997). As in other holothurian/pinnotherid commensalisms such as that locally between *Caudina arenicola* and *Pinnixa barnhardti* the crab enters and leaves the host through the anus. Those familiar with this cucumber know that the end of the animal found at the sediment surface, and thus the one available for crab entrance, is extremely narrow. The small anal aperture is at the end of a long, narrow, clam-siphon-like "tail" heavily indurated with dermal ossicles. In most cases these are at least partly fused, imparting considerable rigidity to the animals anal end.

The authors provide some disquieting photographs of the commensal entering the host, and report host damage and occasional death as a result of symbiont entrance. Cucumbers were observed to react to attempted commensal entrance by withdrawing into the sediment, or protruding the rear-end and shaking it from side to side to dislodge the crab (sometimes with success). Data on the reproductive cycle of the erab were presented, indicating that only sexually mature crabs enter the hosts.

None of the local specimens of *P. chilensis* known to the editor have yielded associated commensals, but pinnotherids were taken in the same samples in some cases. It is not known if any of the local crab species are associated with *Paracaudina chilensis* in our area, but *Pinnixa forficulimanus* has no known host, and occupies the sandy sublittoral sediments from which the cucumber is taken. Both *P. forficulimanus* and *P.* *minuscula* are small enough to fit relatively comfortably into the host. *Pinnixa tumida* taken from hosts in Japan had carapace widths of 10-12mm, while carapace widths of 5mm or below characterize the two Californian pinnotherids mentioned above.

It may be that the broadly ranging *Paracaudina* chilensis is exposed to a number of different potential commensals in different faunas, some of which (like *P. tumida*) are a poor fit to the symbiotic relationship. Please be alert to the potential associations, and if *P. chilensis* are taken, check for *Pinnixa* species in the sample.

In the temperate Eastern Pacific we have only a single known species of monoplacophoran mollusk, Vema hyalina McLean 1979. This animal is, however, known from shelf depths within the reach of our monitoring programs, while most monoplacophores are from very deep water. None of us have reported one, as yet, but examination of accidentally taken hard substrate (such as rocks taken in trawls) will eventually provide records of the species. With that in mind, the recent review of the group by Haszprunar and Schaefer (1997) is recommended to all local workers on mollusks. It gives a thorough overview of the entire class, and provides much more detailed information on anatomy of the animals than most of the original descriptions.

Since we now know (largely thanks to *Philine auriformis*) that even open coastal areas are susceptible to invasion by exotic introduced species we should familiarize ourselves with the mechanisms of conquest used in biological invasions. Most are straight-forward primary effects such as competition for resources of food or living space, direct predation, or tolerance of conditions not acceptable to the indigenous species. There are, however, more subtle secondary effects such as that described for a freshwater system by Gamradt et al (1997). They report modifications of reproductive behavior in newts caused by aggressive attack by introduced crayfish. As the newts return from the land to streams to reproduce they are driven back by the territorial defense of the crayfish, inhibiting mating and reducing egg production. The heavy rains of 1994-95 produced a natural experiment in Trancas Creek which allowed this effect to be quantified. Crayfish were flushed from the stream in many places by the high flow, while newts on land remained. The authors found an 85% depression of newt egg production in the 1995-96 season (when the crayfish returned) from the level following the 1994-95 flow removal of crayfish.

The villain in this case is the introduced crayfish *Procambarus clarkii*, and the victim the California newt *Taricha torosa*. Other amphibian populations may suffer from the same sort of displacement. Territorial behavior is wide-spread in the sea as well, and effects such as these may be unreported only because observation in the sea is both more difficult and more time-consuming. Reproductive failures are common in many of the invertebrate populations we study; some may result from undetected effects of species introductions such as that described above.

In the last issue of the Newsletter we mentioned an article by Fromentin et al on a technique for analysis of long-term data sets. A second paper (Fromentin et al 1997) has been received which covers the same material with a different emphasis.

An older paper which is difficult to find (Karaman 1974) was circulated at the meeting, and several of the members present took the opportunity to make copies. The paper is a major revisionary treatment of the amphipod family Pardaliscidae, and includes the erection of a number of new genera, several occurring in the temperate Eastern Pacific.

CNIDARIAN RESOURCE

Looking for a rare paper on anemones? The Guin Library at the Hatfield Marine Science Center holds the Charles E. Cutress Collection of books and reprints on anemones and jellyfish. The collection was donated by his wife, Bertha. Chuck Cutress spent 46 years pursuing his research interests around the world. He was Associate Curator at the Smithsonian for 10 years, and spent 25 years at the Institute of Marine Biology at the University of Puerto Rico until his retirement in 1990. Guin Library Staff are willing to make copies. There may be a charge. -Faith Cole (EPA)

Guin Library OSU Hatfield Marine Science Center 2030 SW Marine Science Dr Newport, OR 97365-5296 e-mail: websterj@ccmail.orst.edu

EDITION 3 OF TAXONOMIC LISTING

It was just 2 years from the production of the SCAMIT Taxonomic Listing Ed. 1 to the production of it's descendant Ed. 2. Another 2 years will have elapsed by the time Ed 3 is released. Much of that time has now passed, and a list with draft partial synonymies has been produced at CSDLAC. We will distribute this to a number of members for their input, but will also be relying on direct discussions of the contents of the Ed. 3 list at future meetings. The September meeting inaugurates this series with consideration of the arthropods. Please make every effort to attend meetings in your area of expertise so your input can be received. If you will not be able to attend, please send any changes in Ed. 2 to Ron Velarde or Dave Montagne at the addresses listed in the front of your Ed. 2.

Meetings in October (echinoderms- on the 7th at Orange County Sanitation District); November (other groups, including flatworms, cnidarians, nemerteans, urochordates, brachiopods, echiurans, sipunculids, sponges) at Dancing Coyote Ranch, Pauma Valley on the 16th; December 7th at Larry Lovells, Vista (polychaetes); and January (polychaetes and mollusks) will also address changes to Ed. 2.

MINUTES OF AUGUST 25 MEETING

Following the business meeting we commenced our examination of the two most recent volumes in the Taxonomic Atlas series from the Santa Barbara Museum of Natural History. Chapters by Cadien, Martin & Zimmerman, Gerken et al, Wetzer et al, Wetzer & Brusca, Wilson, Watling & McCann, and Dojiri & Sieg were examined. We will present comments received in the same format used in earlier Newsletter reports on Atlas volumes.

In general those present seemed quite pleased with these two volumes, finding less requiring comment than in some earlier volumes. We examined Vol. 11 first, and commented as follows

♦ Pg. 36 - Serolis carinata has been included in the genus Heteroserolis (see Brandt 1991 and Wägele 1994). This is an older subgeneric designation now raised to generic status.

While discussing the Arcturidae Tim Stebbins brought out a very helpful hint for identification of extremely small (even down to manca size) individuals to genus. Although three genera occur in California, only members of *Neasticilla* and *Idarcturus* can be confused as small juveniles. Tim mentioned that while the ends of the antennae of juvenile *Idarcturus allellomorphus* bear at most a few simple setae, those on *Neastacilla californica* bear blade-like setae ventrally. Since *Idarcturus allellomorphus* was the only species of arcturids in the MMS collections, the question of how to differentiate juveniles never arose in the Atlas.

♦ Pg. 54 - key to Synidotea should not be used. Tim Stebbins has been examining the types of the three species of Synidotea from shelf non-algal benthic habitats; S. calcarea, S. magnifica, and S. media. Identification of these animals has been a problem in the past for many (if not all) workers in southern California. During his type examination he has found that none of the currently available resources are sufficient for accurate identification of these three species (including this key and that of Menzies and Miller 1972 - which include only 2 of the 3; and the table of Iverson 1972, which includes all 3). Preliminarily S. calcarea can be separated from the other two on the basis of it's small light colored eyes, and nearly linear body. The two species with larger, darker eyes and wider intermediate perconites can be separated by the posterior flange on the basis of the pereopods (present in S. magnifica of both sexes and at all sizes, and apparently absent in S. media). All comments pertaining to the dentition of the pleotelsonic margin should be taken with a grain of salt. All three species have at least several teeth, contrary to reports on S. magnifica.

Additional separatory criteria will undoubtedly be found as Tim continues his study of the types and monitoring specimens from California waters. He is currently deficient in specimens of *S. media* from central California. Those with specimens to lend should contact him.

◆ Pg. 68 - in couplet 44A of the key the species should be identified as *Munnogonium tillerae*, not *Austrosignum tillerae*.

♦ Pg. 78 - *Pleurogonium californiense* has been taken as far south as Pt. Loma.

♦ Pg. 78 - *Pleurogonium sp A* has been taken as far south as Pt. Loma.

♦ Pg. 94 - *Belonectes sp A* has been taken as far south as Palos Verdes and as shallow as 305m.

• Pg. 99 - Munnopsurus sp A has been taken as far south as the La Jolla Submarine Canyon, and is frequently encountered in southern California canyons between 300-500m.

• Pg.109 - *Prochelator sp A* is also common in southern California, occurring at depths of 100-500m as far south as the Coronado Submarine Canyon.

SCAMIT members had been exposed to draft versions of both the asellote and non-asellote isopod chapters prior to this publication, so there were few surprises. The relatively high proportion of the asellotes known by provisional species names indicates both the small size of these animals, and the cautiousness of Dr. Wilson. It is likely that several of the janirids, for instance, will prove to belong to established species. Now that this section of the Atlas has been released we need to change the attribution of the provisionals in our databases to reflect it. Thus *Pleurogonium sp A* SCAMIT 1996 needs to be changed to *Pleurogonium sp A* Wilson 1997.

We also were exposed to an earlier draft of the Cumacea chapter by Les Watling. After that presentation SCAMIT members were requested to provide their cumacean distributional data for forwarding to Les. They did, and after a long period of collation (and neglect) on the part of the editor, they were forwarded to him via Paul Scott. For whatever reason he chose to use none of this information. During the meeting we revisited this collected distributional data and added it to the distributions provided in the Atlas.

♦ Pg. 129 - key couplet 1A and 1B. The initial statements in each half of this couplet are reversed. Short telson should be associated with the *Leptostylis* branch, and long telson with the *Diastylis* branch.

♦ Pg. 130 - Distribution should be Puget Sound to off Pt. Loma, San Diego; 41-500m. During consideration of *Diastylis sentosa* reservations

were expressed about the characters used to separate D. sentosa from D. paraspinulosa. The supposed zoogeographic separation, with D. sentosa in Santa Maria Basin and Southern California Bight waters, and D. paraspinulosa in boreal and arctic waters further north was contested. Don Cadien indicated he had seen many individuals with the spine distribution of D. sentosa in Puget Sound samples, well within the supposed cold water habitat of D. paraspinulosa. It is possible that the true *D*. paraspinulosa is of only Arctic occurrence. Pete Slattery at Moss Landing Labs is currently examining material from the Russian arctic coasts according to Doug Diener. We will attempt to get some comparative material of D. paraspinulosa from him which will allow us to better evaluate D. sentosa.

Collected materials to date do not match cleanly either Zimmer's 1926 figure of D. paraspinulosa or the illustrated specimen of D. sentosa. Carapace spine placement is much more variable and is only rarely resolvable into a row or rows.

• Pg. 133 - Distribution of *D. crenellata* should be from Ft. Bragg to the Coronado Submarine Canyon at 11-606m. In the initial presentation of the draft this species had the manuscript name *D. serratocostata*. There was also a second species with the manuscript name *Leptostylis crenellata*. As preparation of the manuscript continued the authors decided that the two were really only adult and juvenile of a single species. Thus the provisional species known for many years as *Diastylis sp A* and *Leptostylis sp E* are both now referable to *D. crenellata*.

♦ Pg. 134 - Distribution of *D. quadriplicata* can be expanded to Eureka to Gaviota at 123-366m.

♦ Pg. 135 - Distribution of *D. santamariensis* can be extended to Puget Sound to San Diego at 6-204m. The species seems to be the most common *Diastylis* in Puget Sound based on samples from several areas examined by Don Cadien. It is very likely that many of the earlier identifications of *D*. *alaskensis* from the area actually refer to this species.

♦ Pg. 135 - The *D. californica* distribution should be from Humboldt Bay to South Coronado Island, Baja California at 19-188m.

◆ Pg. 139 - Bathymetric distribution of *D*. *pellucida* should be 30-829m.

• Pg. 139 - Distribution of Leptostylis calva should read Fort Bragg to Pt. Loma at 8-198m. This species was previously known as L. sp A. According to Dean Pasko, Les Watling expressed the belief that more than one species was being called Leptostylis sp A during his visit to the Natural History Museum of Los Angeles County following his participation in a NAMIT workshop . If this proves to be true, our distributional information will need to be modified to separate records of the component species.

♦ Pg. 142 - Bathymetric distribution of *L. abditus* should read 11-954m. This species was previously identified as *L. villosa* within the Southern California Bight area. The rather broad bathymetric distribution of this and other diastylids reflects a lack of replacement-with-depth within the family; a pattern very visible within the Leuconidae.

♦ Pg. 143 - Bathymetric distribution of Hemilamprops californicus should be extended to 13-177m. There were two other species of Hemilamprops taken in the MMS Santa Maria Basin program which were not treated here. These were given the provisional designations of Hemilamprops sp A and Hemilamprops sp B.
Illustrations of both these species were distributed in a handout at an earlier SCAMIT meeting, and both were included in a talk at the Southern California Academy of Sciences meetings in Pomona in 1986.

Few specimens of either were taken in the Santa Maria Basin. Recently Don Cadien has found H. sp A to be not uncommon in the deeper portions (300-500m) of submarine canyons in southern California based on collections made by Dr. Eric Vetter at Scripps (now at Hawaii Pacific University). Tim Stebbins and Dean Pasko at Pt. Loma have taken H. sp B in recent sampling.

The remarks on the difficulties attending separation of Hemilamprops and Mesolamprops made by the authors were interesting, but clarified little. Until a thorough examination of the situation is performed we must maintain the status quo, and put up with the uncertainty surrounding identifications of females in the cooccurring H. californicus and M. bispinosa (in the south) or H. californicus and M. dillonensis (in the north). In Puget Sound the question of separation of H. californicus and H. gracilis also occurs as H. californicus has been reported from Japanese waters. Hart (1987) also reports H. californicus from Puget Sound as Mesolamprops californiensis. This raises some question of what was really intended. Did she place the species in Mesolamprops based on males with the wrong number of pleopods or was this merely a lapsus?

♦ Pg. 144 - The key to the Leuconidae leaves out Leucon (Crymoleucon) bishopi. This can be added by inserting a new couplet between couplets 3 and 4, and incrementing all subsequent couplet references by one. Insert the following:

- 4A Accessory flagellum minute......(Leucon) 5
- 4B Accessory flagellum more than 50% length of first article of the antennal flagellum...... Leucon (Crymoleucon) bishopi

It should be noted here that there is a disconnect between the written description of several of these leuconids and the illustrations provided by the authors with regard to the relative length of the accessory flagellum. For instance, the illustration for *Leucon (Leucon) falcicosta* shows an accessory flagellum more than half the length of flagellar article one. This is characteristic of species in *Leucon* (*Crymoleucon*) (see page 149).

• Pg. 145 - Doug Diener thought that Alloeoleucon santamariensis was very like the provisional species Leucon sp G, and suggested they might be the same. Don Cadien doubted this, as the anteroventral corner of the carapace illustrated for male A. santamariensis was like that of the female of L. sp G, and unlike males of that species. Other features will be checked to either establish or refute the suggested synonymy, and the results reported in a future Newsletter.

• Pg. 149 - The distribution of L. declivis should be from Pt. Estero to Huntington Beach at 367-952m. There is also a shallow record at 185m, but this is near the head of a submarine canyon and probably is a vertical displacement artifact directly related to upwelling in the canyon. This species was previously known locally as L. sp H.

• Pg. 149 - Epileucon pacifica Jones, 1969 is not appropriately placed in the synonymy of Leucon bishopi. The following entry is also somewhat deficient. The two should be combined to read Epileucon pacifica Bishop, 1981 non E. pacifica Jones, 1969. Distribution of this species should be Santa Maria Basin to Gulf of Panama at 477-930m. Epileucon bishopi was known locally first as Leucon sp B, then as Epileucon sp A.

• Pg. 151 - The distribution of L. falcicosta should be Crescent City to Pt. Loma. Additional records connect the previously isolated report of the species at 410m, and the bathymetric range should be 90-410m. This species was known locally for over three decades as Leucon sp A.

♦ Pg. 153 - Distribution of *L. armatus*, while still based on relatively few records, is Pt. Sur to Mugu Submarine Canyon at 107-222m.

♦ Pg. 153 - L. magnadentata occurs Crescent City to Tanner/Cortez Banks at 109-953m. ◆ Pg. 156 - None of us has encountered Eudorella redacticruris since we were originally made aware of it by Les Watling several years ago. We are puzzled by the extremely localized distribution of this species. Since few samples are available from the depth range reported for this species in recent years, we may not have had the opportunity to see the animal.

◆ Pg. 156-158 - Although relative lengths of uropodal rami are usually meaningful, and have been demonstrated to be so for other members of this family, the differences between *Eudorella truncatula* and *E. pacifica* in uropodal configuration seem slight. This is particularly true when viewed from the perspective provided by the remarks on *E. pacifica* on pg. 156 "This species shows considerable variation, especially with respect to the teeth in the vicinity of the anteroventral corner and associated notch. Additionally, variation in the length of appendage articles and degree of setation has also been seen...".

It is possible that *E. pacifica* and *E. truncatula* are both valid species, and both occur here. It is also possible that *E. truncatula* is another cumacean with a circumboreal distribution which occurs in both the North Atlantic and North Pacific, and that *E. pacifica* is just a synonym of it. A third possibility is that these specimens identified as *E. truncatula* are merely variant *E. pacifica*, and that *E. truncatula* is restricted to the Atlantic. The situation requires further study to weigh these three options, and decide which reflects the available materials.

♦ Pg. 159 - The distribution of *Eudorellopsis* longirostris should extend from Puget Sound to San Diego at depths between 11-358m. There is also one depth outlier record from 606m.

◆ Pg. 161 - The remark that *Campylaspis* canaliculata was previously known from only 2 female specimens refers only to "published" literature <u>so</u>urces. This is one of the more common members of the genus in the Southern California Bight, and both males and females have been previously discussed and illustrated in the Newsletter. The distribution is more explicitly rendered as Ft. Bragg to Pt. Loma at 10-644m.

♦ Pg. 163 - Distribution of *C. rufa* can be extended to Vancouver Island to Pt. Loma at depths of 98-565m. Large adults have recently been taken off both Santa Monica and Pt. Loma.

♦ Pg. 164 - Distribution of *C. rubromaculata* should be Puget Sound to Pt. Loma at depths between 7-588m.

• Pg. 165 - Campylaspis maculinodulosa was known locally as both C sp D and C sp P. It is distributed from the Santa Maria Basin to Pt. Loma at depths between 25 and 154m. Doug Diener indicated that south of Pt. Conception off Gaviota this species completely displaced C. rubromaculata, and was the only bumpy ridged Campylaspis present.

♦ Pg. 168 - Distribution of *C. hartae* should be Puget Sound to Pt. Loma at depths of 7-207m.

• Pg. 168 - Distribution of C. blakei should be Eureka to Pt. Loma at depths of 92-914m. This was known locally as Campylaspis sp E.

• Pg. 170 - Bathymetric distribution of C. biplicata can be extended down to 562m. This species was previously referred to locally as either C. sp B or as C. nr. crispa.

◆ Pg. 173 - Distribution of *Procampylaspis* caenosa should be Cape Mendocino to Pt Loma at depths of 11-200m. This has been referred to as *Procampylaspis sp A* since Given's 1971 thesis.

♦ Pg. 174 - Distribution of *Cumella morion* can be extended to include Pt. Loma at depths of 15-154m. There was no provisional designation in use for this species prior to its description. ♦ Pg. 176 - Distribution of C. californica should be Santa Cruz (Soquel Submarine Canyon) to Pt. Loma at depths between 3 and 305m. This was Cumella sp A for workers in the Southern California Bight for many years.

♦ Pg. 207 - The designation of Sta. BSR-28 is incorrect. Station 28 was not replicated, and should be BSS-28.

♦ Pg. 213 - The status of *Leptochelia savignyi* vs *Leptochelia dubia* is not discussed here. As no synonymy is presented it cannot be determined where the authors stand regarding the synonymy of the two species (or lack thereof), and on the question of page priority and which name is correct. Since they report *L. dubia* we assume that they have consciously chosen it over *L. savignyi*. Dr. Dojiri will be contacted to attempt clarification of the synonymy. The darkly pigmented specimens reported from our area continue to occur sporadically, and remain morphologically indistinguishable from the unpigmented forms of the species.

♦ Pg. 226 - Specimens identified as Leptognathia (now Paraleptognathia) gracilis are frequently encountered in Puget Sound and Southeastern Alaska. Some of these may, however, be referable to P. bisetulosa. Specimens identified as L. gracilis will require re-examination to address that possibility.

• Pg. 231 - Scoloura phillipsi is routinely taken in shallow shelf depths in Puget Sound.

 Pg. 234 - Chauliopleona dentata has occasionally been reported from Puget Sound.

♦ Pg. 235 - Araphura breviaria has been taken as far south as the Coronado Submarine Canyon.

♦ Pg. 245 - Male species 3 has also been taken off Palos Verdes, Los Angeles County.

♦ Pg. 253 Typhlotanais wiliamsi and the three

species which follow it would all have been termed Typhlotanais sp A based on the key prepared by Phillips, and used by many of us. This key uses the number of articles in the female antenna 1 to immediately go to Typhlotanais. Since Pseudotanais makrothrix is eyed, it may not have ended up being put into Typhlotanais. Previous records of Typhlotanais sp A must all be reexamined, as there is no one-to-one replacement which can be done.

♦ Pg. 260 - Pseudotanais makrothrix has been taken in shallow water in outer San Diego Bay.

Time available for the meeting was nearly exhausted by the time that we got to Volume 10. Some questions were addressed, but no comprehensive run-through was attempted. Dean Pasko questioned the absence of *Endeis* cf. *procera* from the pycnogonid list. Don Cadien explained that, while appearing on the earlier handout done for SCAMIT presentation, it was excluded from consideration here. Only a few specimens so identified were taken in Los Angeles Harbor in the mid-70s, and not since. These few were not available for examination during chapter preparation, and with no further records of the animal, it was considered a transient species, and not included in the key.

♦ Pg. 64-67 - The synonymy of *Neocrangon* zacae and Neocrangon resima by Wicksten (1996) was proposed after the preparation of this chapter. Don Cadien had discussed the separation of the three species of Neocrangon here included with Jody Martin during review of the chapter. He agreed that there were indeed three separate species involved, but found potential problems with the identity of one. This stemmed from the illustrations of the type of Neocrangon zacae (Figure 2.4 pg. 65), which show the typical rostral setation of Neocrangon communis. It is possible that there are problems with the types, and that N. zacae is not a valid species. What we have been calling N. zacae, while not the same species as N. resima, may require a new name.

Dr. Martin, now in Washington working with the NSF for a year, will be asked to examine and evaluate the type of *N. zacae* at the Smithsonian in light of our previous conversations. In the mean time, it is recommended that the suggested synonymy of *N. zacae* and *N. resima* not be used.

◆ Pg. 86 - Since this chapter was submitted Acanthaxius spinulicaudus has been transferred to Calocarides by Kensley (1996).

• Pg. 113 - Pinnixa scamit has not been reported by any of the local agencies. While not favoring outright submergence of this taxon back into Pinnixa occidentalis, we are not using it just yet. If it is indeed a valid species and occurs in the Southern California Bight, it is currently being recorded as P. occidentalis in monitoring data.

♦ Pg. 128-129 - The key to the Mysidacea of the Santa Maria Basin is actually a key to the species collected in the two phases of the MMS Santa Maria Basin study. This is what the authors were asked to prepare, but there are many more species which occur in the area than were taken in the two project phases, particularly inshore species. The key is of no utility outside the immediate confines of the collections examined. Those seeking to identify mysids taken in monitoring programs in the Southern California Bight should consult the key and handouts distributed at the last SCAMIT meeting on the group in January 1992. Those from further north should consult Kathman et al 1986 for comprehensive group coverage.

◆ Pg. 131 - The distribution of *Pacifacanthomysis* nephrophthalma extends far beyond the Santa Maria Basin. The species is found throughout nearshore areas of the Southern California Bight.

◆ Pg. 132 - Please note the synonymy mentioned in the remarks under *Inusitatomysis insolita*. Both *I. californica* and *I. serrata* are now considered synonyms of *I. insolita* following II (1964) and Holmquist (1982). We did not have time to examine either of the two articles in the last issue of *Amphipacifica* during the meeting, and will do so as part of the September meeting.

MORE MOOREONUPHIS INFO.

Tony Phillips (CLAEMD) was not present at the polychaete meeting in July where we discussed species of *Mooreonuphis*.

He had a recent comment for SCAMIT members to add to their notes. In Hyperion's benthic monitoring program Tony commonly sees *Mooreonuphis stigmatus* at shallow water stations. Both Orange County and LA County report only seeing an occasional *M. stigmatis* in their benthic sampling programs. *Mooreonuphis nebulosa* is the more commonly reported *Mooreonuphis* species for these two agencies.

BIBLIOGRAPHY

- BRANDT, ANGELIKA. 1991. Zur Besiedlungsgeschichte des antarktischen Schelfes am Beispiel der Isopoda (Crustacea: Malacostraca). Berichte zür Polarforschung 98:1-240
- CADIEN, DONALD B. 1997. Chapter 1. Subphylum Pycnogonida. Pp. 1-47 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 10: The Arthropoda The Pycnogonida; Crustacea Part 1 The Decapoda. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 151pp.
- DOJIRI, MASAHIRO, and Jürgen Sieg. 1997. Chapter 3: The Tanaidacea. Pp. 181-268 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 11: The Crustacea Part 2 - The Isopoda, Cumacea and Tanaidacea. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 278pp.
- FRANSOZO, ADILSON, and Maria Lucia Negreiros-Fransozo. 1997. Larval stages of <u>Pyromaia</u> <u>tuberculata</u> (Lockington, 1877) (Decapoda, Majidae, Inachinae) reared in the laboratory. Crustaceana 70(3):304-323.
- FROMENTIN, J. M., F. Ibanez, Jean-Claude Dauvin, J. M. Dewarumez, and B. Elkaim. 1997. Long-term changes of four macrobenthic assemblages from 1978 to 1992. Journal of the Marine Biological Association of the United Kingdom 77(2):287-310.
- GAMRADT, SETH C., Lee B. Kats, and Christopher B. Anzalone. 1997. Aggression by non-native crayfish deters breeding in California newts. Conservation Biology 11(3):793-796.
- GERKEN, SARAH, Les Watling, and Isabelle P. Williams. 1997. Chapter 3. Subphylum Crustacea, Order Mysidacea. Pp. 123-142 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 10: The Arthropoda - The Pycnogonida; Crustacea Part 1 - The Decapoda. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 151pp.
- HART, JOSEPHINE F. L. 1987. Order Cumacea. Pp 325-328 IN: Kozloff, Eugene N. Marine Invertebrates of the Pacific Northwest. University of Washington Press, Seattle, Washington. 511pp.
- HASZPRUNAR, GERHARD, and Kurt Schaefer. 1997. Monoplacophora. Pp.415-457. Chapter 4, In: Microscopic Anatomy of Invertebrates. Wiley-Liss, Inc.
- HENDRICKXS, MICHEL E. 1996. Los Camarones Penaeoidea Bentonicos (Crustacea: Decapoda: Dendrobranchiata) del Pacifico Mexicano, CONABIO/UNAM (eds.). i-vii, 1-147.

- ---, and Flor D. Estrada Navarrete. 1996. Los Camarones Pelagicos (Crustacea: Dendrobranchiata y Caridea) del Pacifico Mexicano. CONABIO/UNAM (eds.), I-viii, 1-157.
- HOLMQUIST, CHARLOTTE. 1982. Mysidacea (Crustacea) secured during investigations along the west coast of North America by the National Museums of Canada, 1955-1966, with some inferences drawn from the results. Zoologischer Jahrbücher, Abteilung für Systematik 109(4):469-510.
- II, N. 1964. Fauna Japonica Mysidae (Crustacea). Biogeographical Society of Japan, pp. 1-610.
- JESSE, SANDRA. 1996. Demersal crustacean assemblages along the Pacific coast of Costa Rica: A quantitative and multivariate assessment based on the Victor Hensen Costa Rica expedition (1993/1994). Revista de Biología Tropical 44(Suppl. 3):115-134.
- KARAMAN, GORDAN S. 1974. Revision of the Family Pardaliscidae with diagnosis of genera, distribution of species and bibliography (Contribution to the Knowledge of the Amphipoda XLIII). Acta Adriatica 15(7):3-46.
- KATHMAN, R.D., William C. Austin, J. C. Saltman, and J. D. Fulton. 1986. Identification Manual to the Mysidacea and Euphausiacea of the Northeast Pacific. Canadian Special Publication of Fisheries and Aquatic Sciences 93:1-411.
- KENSLEY, BRIAN. 1996. Systematics and distribution of the genus <u>Calocarides</u> (Crustacea: Decapoda: Axiidae). Proceedings of the Biological Society of Washington 109(1):53-69.
- MARTIN, JOEL W., and Todd L. Zimmerman. 1997. Chapter 2. Subphylum Crustacea, Order Decapoda. Pp.49-121 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 10: The Arthropoda - The Pycnogonida; Crustacea Part 1 - The Decapoda. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 151pp.
- McLEAN, JAMES H. 1979. A new monoplacophoran limpet from the continental shelf off Southern California. Contributions in Science, Los Angeles County Museum of Natural History 307:1-19.
- MENZIES, ROBERT J., and Milton A. Miller. 1972. Systematics and zoogeography of the genus <u>Synidotea</u> (Crustacea: Isopoda) with an account of Californian species. Smithsonian Contributions to Zoology 102:1-33.
- TAKEDA, SATOSHI, Seiichi Tamura, and Masahiko Washio. 1997. Relationship between the pea crab <u>Pinnixa tumida</u> and its endobenthic holothurian host <u>Paracaudina chilensis</u>. Marine Ecology - Progress Series 149(1-3):143-154.
- WÄGELE, JOHANN-WOLFGANG. 1994. Notes on Antarctic and South American Serolidae (Crustacea, Isopoda) with remarks on the phylogenetic biogeography and a description of new genera. Zoologischer Jahrbücher, Abteilung für Systematik 121:3-69.
- WATLING, LES, and Linda D. McCann. 1997. Chapter 2: Cumacea. Pp. 121-180 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 11: The Crustacea Part 2 - The Isopoda, Cumacea and Tanaidacea. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 278pp.
- WETZER, REGINA, Richard C. Brusca, and George D. F. Wilson. 1997. Chapter 1.1 The Order Isopoda - Introduction to the Marine Isopoda. Pp. 1-8 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 11: The Crustacea Part 2 - The Isopoda, Cumacea and Tanaidacea. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 278pp.
- WETZER, REGINA, and Richard C. Brusca. 1997. Chapter 1.2 The Order Isopoda Descriptions of

the species of the Suborders Anthuridea, Epicaridea, Flabellifera, Gnathiidea, and Valvifera. Pp. 9-58 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 11: The Crustacea Part 2 - The Isopoda, Cumacea and Tanaidacea. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 278pp.

- WICKSTEN, MARY K. 1996. <u>Neocrangon zacae</u> (Chace, 1937) synonymized with <u>N. resima</u> (Rathbun 1902) and compared with <u>N. communis</u> (Rathbun, 1899)(Decapoda: Caridea: Crangonidae). Proceedings of the Biological Society of Washington 109(1):39-43.
- WILSON, GEORGE D. F. 1997. Chapter 1.3 The Order Isopoda The Suborder Asellota. Pp. 59-120 IN: Blake, James A., and Paul H. Scott, eds. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 11: The Crustacea Part 2 -The Isopoda, Cumacea and Tanaidacea. Santa Barbara Museum of Natural History, Santa Barbara, Ca. 278pp.

Please visit the SCAMIT Website at: http://www.sccwrp.org/scamit/				
SCAMIT OFFICERS: If you need any other information concerning SCAMIT please feel free to contact any of the officers.				
			<u>e-mail address</u>	
President	Ron Velarde	(619)692-4903	rgv@sddpc.sannet.gov	
Vice-President	Don Cadien	(310)830-2400 ext. 403	mblcsdla@netcom.com	
Secretary	Cheryl Brantley	(310)830-2400 ext. 403	mblcsdla@netcom.com	
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)				
Volumes 8 - 15				
Single back issues are also available at cost. 🛛 🔭				