



**Southern California Association of
Marine Invertebrate Taxonomists**

3720 Stephen White Drive
San Pedro, California 90731

May, 1998

SCAMIT Newsletter

Vol. 17, No.1

NEXT MEETING — The amphipod genus *Photis*: a workshop on ID

GUEST SPEAKER — Dean Pasko/Doug Diener/Don Cadien co-leaders

DATE — June 26, 1998

TIME — 9:30 a.m. to 3:30 p. m.

LOCATION — The City of San Diego Marine Biology
4918 N. Harbor Dr. suite 201
(619) 692-4901

26 JUNE MEETING

Our June meeting will be another in preparation for the Bight '98 sampling, but will be directed to benthos rather than trawl caught animals.

We will hold a workshop to attempt to standardize our handling of members of the amphipod genus *Photis* prior to the regional effort. This is a large, diverse, and important group, and will be even more important in harbor derived samples. It proved one of the groups which yielded less than fully satisfactory treatment in the SCBPP of 1994. All are welcome, bring specimens, bring questions, bring experience, bring literature,... just be there. The broader the participation, the greater the benefit of intercalibration. Contact the secretary if you need a map.



Photis macinerneyi Conlan, 1983
female (above), male (below)
Collected off the Tijuana River
Image by Dean Pasko (CSDMWWD)

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NEW LITERATURE

President Ron Velarde (CSDMWWD) circulated a new book on sea cucumbers (Lambert 1997) at the April meeting. It covers northern species thoroughly, although nearly all of the species also occur in the Southern California Bight. It even has an excellent photo and description of *Paracaudina chilensis*, the only species not included in Mary Bergen's MMS Atlas treatment of the group. Unfortunately the book seems hard to come by. Ron got his at the Birch Aquarium Bookstore, but when I tried to repeat his purchase they had no copies available and seemed unfamiliar with the title. I will be checking to see if this will be available through Sea Challengers (it was not in their recent catalogue).

LYONSIA VS. ENTODESMA JUVENILES

Don Cadien (CSDLAC) recently ran into a problem differentiating juveniles of the clams *Lyonsia californica* and *Entodesma pictum*. Along with Bill Power (also CSDLAC) a search was made through accumulated juvenile specimens identified as both these species to check the identifications. No clear method of separating the specimens into two species was found, and checks of the literature concerning the generic characters uncovered some confusion there as well.

Characters considered were placement of the umbos, configuration of the dorsal margin, degree of truncation of the posterior margin, presence/absence of radial periostracal lines, inflation of the shell (where and how much), presence and degree or absence of concentric undulation in the shell, flatness vs. inflation at the posterior end of the shell, relative thickness and flexibility of the periostracum, and size and evenness of adherent grains. Twenty-five specimens between 2 - 5mm in length were examined, and all of the above characters were found to vary among the specimens, a situation one expects in nestlers such as these. No suite of characters presented itself as a means of

separating the specimens into two groups. We also examined the nature and number of tentacles around the siphons, but observed differences were very likely related to growth. As of now we have no good means of separating the two, and they may be, as Paul Scott suggests is an unpleasant probability, inseparable. Any other experience out there to help us, or any slick methods of separating these juveniles?

By the way adults of both these species have been taken from the area which provided the juveniles. Some of the *Entodesma* adults were actually used in Brian Morton's study of the morphology of the species.

11 MAY MEETING MINUTES

The meeting took place in a spacious lab which had been prepared with dissecting microscopes for us all, and with a selection of specimens kept alive from the recently completed survey of southern California boat harbors undertaken by our hosts.

Gretchen and Charles also distributed their most recent publication (Lambert & Lambert 1998). To further set the stage Gretchen showed us the literature she found most useful and reliable in working with our local (and introduced) ascidian fauna. It included a major source of information on ascidian biology (Monniot et al 1991) which deals with coral reef ascidians. It forms one of the volumes of the Campaignes MUSORSTOM conducted in New Caledonia and vicinity during recent years. It is available locally through Sea Challengers, and was listed in their most recent catalogue.

A second valuable reference covering the Indo-Pacific fauna is that of Kott (1985), covering the phlebobranch and stolidobranch ascidians of Australia. Gretchen pointed out that Kott and the Monniots are not always in agreement on all matters (and sometimes violently



disagree). Having both available helps to understand the battles between them. More of Kott's multi-volume treatment of the Australian fauna is due out, and should be added to this list when it is released.

More locally derived information, including original descriptions of many species are found in Ritter (1907) and Ritter & Forsyth (1917). These are unfortunately long out of print, but should be available at any university library. They cover the California fauna before many recent introductions, which are consequently not included here.

The single most important source for information on our fauna is Van Name (1945), who treats the ascidian faunas of both coasts of both North and South America in some detail. Although more recent than Ritter, it still lacks many of the more recent additions to our fauna which have come from the western Pacific.

An additional piece of literature which Don Cadien recommended is the MMS Atlas volume 14, Section 11: Phylum Chordata: Subphylum Urochordata, Class Ascidiacea by Gretchen Lambert (1996) (who modestly didn't include it among the references she finds most useful).

After perusing Gretchen's literature we were introduced to and viewed the live ascidians on display. The species present for examination were:

Ciona intestinalis
Ciona savignyi
Molgula verrucifera
Molgula manhattensis
Styela clava
Styela plicata
Botrylloides diegensis
Botryllus schlosseri
Botryllus firmus
Microcosmus squamiger

Gretchen recommended using menthol dissolved in 95% ethanol as a relaxant for ascidians. Only one or two drops are needed. It is quick acting and reversible. If it is used to relax the animals prior to preservation there is only a window of about 10 minutes in which the animals are fully narcotized. Once that has passed they will recover to normal reactivity in a short time. She reminded us to put a cover over the dish after adding the relaxant to prevent evaporation. The menthol, which is not very soluble in seawater, is assisted in solution by the alcohol. Menthol can be dissolved in large amount to form a supersaturated solution in ethanol. As the menthol saturated ethanol is introduced to the water containing the specimens the menthol initially is in solution, and quickly acts on the nervous system of the animals. If left alone it will eventually plate out onto the water surface and the sides of the container.

After examining the live ascidians briefly, Gretchen discussed her thoughts on the existence of a new species of *Botrylloides* which is only one-toned in comparison to the common two-toned species, thought to be *B. diegensis* by Lambert.

The one to two difference is that the one-toned species is all of the same color, while the two-toned has two, the one around the zooid systems contrasting with a background color. Some of the differences are listed below:

One-toned (*Botrylloides n sp?*)
 tadpoles = 30 ampullae
 8 oral tentacles
 2nd row of stigmata not complete

Two-toned (*B. diegensis?*)
 tadpoles = 8 ampullae
 16 oral tentacles
 2nd row of stigmata complete



One of the colonies under observation released tadpole larvae during the day, and Gretchen was able to confirm the ampulla count of the two-toned form. Although she has good evidence here that there are indeed two species, it is quite possible that the type lot was mixed, as the two forms were not initially considered to be specifically different.

Reexamination of the type will be necessary to decide if the name *Botrylloides diegensis* goes with the one or two toned species. Gretchen currently uses it for the two-toned.

After reviewing the botryllids, Gretchen proceeded with a slide show covering the species which she and Charles have encountered locally over their many years of surveys, and which are listed in their recent summary of introduced species. The species discussed are listed below (for more details see Lambert & Lambert 1998):

-*Ascidia zara* - from Japan. Found commonly on *Mytilus*. Very similar to the following native species, with which it has been confused. Both have the unusual character of having the eggs red. It can be distinguished from *A. ceratodes* by differences in the nature of the tunic (that of *A. zara* can be torn with forceps, and is papillated in some areas), and by the nature of the blood, which doesn't congeal into a gooey mess of green ichor like that of *A. ceratodes*.

-*Ascidia ceratodes* - Native. Can be distinguished from *A. zara* (introduced from Japan) by it's more durable (can't be torn with forceps) and smooth tunic, and by the blood, which on dissection forms a green goo. Both species have red eggs, but egg diameters differ between them.

-*Ascidia sp* - Gretchen believes it is undescribed. This species (of unknown provenance) differs from the two species above in having colorless or light yellowish eggs. Its tunic is unapillate, but thin. The oral siphon

is elongate in this species. It appears to be similar to *Ascidia malaca* of the Mediterranean, but is not that species according to Claude Monniot.

(Both Gretchen and Charles believe that most sizeable species of tunicate which are **not** introduced, will be found in the literature due to the extensive sampling of Van Name and Ritter.)

-*Styela plicata*. Although a common species in our area, this is probably not native. It was first described from an eastern boat harbor on the basis of a single specimen, and when reported locally in the early part of the century was rare. During the mid part of the century it was absent from our fauna. By 1960 it had become well established again locally. It is now abundant in boat harbors, and has spread to adjacent hard bottoms as well. The actual home of the species is still in question

-*Styela clava*. Originally from the Sea of Okhotsk and the waters around Korea this species has been widely introduced elsewhere. It was first recorded in our fauna in 1933 from Newport Harbor. It is assumed to have arrived in the late 1920's. Its' local history, its' convoluted nomenclatural history and the synonymy of locally described species with it, and good descriptions of the animal are found in Abbott & Johnson (1972).

-*Styela partita* - (now known as *S. canopus*) Native to the east coast of the U.S. Easily identified by the inner lining of the siphons which are divided into four black lobes by thin white lines. It has been known locally since 1972, and is still virtually restricted to San Diego Bay, although found rarely as far north as Oceanside.

The similar *Styela truncata*, a native species, has never been located in So. Cal. despite repeated searches by the Lamberts. It is common in Central and Northern California, but has not made it into the Bight.



-*Ciona intestinalis*. Probably native to northern Europe, and introduced early to our area. It was present in “enormous numbers” in San Diego Bay in 1917. The species is currently abundant in harbors along the Pacific coast, and worldwide, and is believed constantly reintroduced with shipping.

-*Ciona savignyi*. Originally from Japan, the species was first recognized in California in 1985 in Long Beach Harbor. It is now common from San Diego to Santa Barbara. Distinguished from *C. intestinalis* when live by having the end of the sperm duct white rather than red. This seemingly esoteric character was demonstrated on the specimens at hand. The sperm duct is located between and just below the siphons. If the animal is squeezed to flatten this region, the color of the duct end becomes clearly visible.

-*Molgula verrucifera* - Native to our coast, can be distinguished from the other *Molgula* species here by the presence of a thick tunic with “tentacles” - fingerlike protrusions of the tunic which extend around and into the openings of both the atrial and branchial siphons. These are small, but visible.

- *Molgula manhattensis*. Introduced from the eastern U.S., where it is very common from Maine to Texas. First recorded in California in the 1940's, and abundant in San Francisco Bay by the 60's. This species has a much lighter colored and thinner tunic than *M. verrucifera* and has reduced extrasiphonal tunic tentacles.

-*Microcosmus squamiger* - Native to and introduced from Australia, this species was originally listed from our area as *M. exasperatus*. This reflected the position of the Monniots. Kott has since suggested that most of their records of *M. exasperatus* from various parts of the world are actually *M. squamiger* and the Monniots are gradually swinging around to this view as well. Only microscopic

differences separate it from *M. exasperatus*. Our local material falls into this pattern as earlier records of *M. exasperatus* have been reevaluated as *M. squamiger*.

-*Botryllus schlosseri*. Considered native to Europe, and widely distributed by shipping. Absent from our local waters as late as 1945, by the 1960's. common in San Diego and Mission Bays. This can be separated from the local *Botrylloides* spp. by the nature of the systems, which are small, with few zooids, and stellate. In *Botrylloides* the systems are elongate, sinuous, and composed of many zooids.

-*Botrylloides diegensis*. For discussion of this and the next species see text above.

-*Botrylloides* sp. As for previous species. Note: the Monniots have synonymized *Botrylloides* with *Botryllus*, a position much in question, and not adopted here.

-*Botryllus firmus* - Recently described from Indonesia by Monniot (1996), the species was first taken in San Diego Bay in 1997, and has been retaken in spring 1998 in Mission Bay. The species has a very large atrial opening, through which its 18 rows of stigmata can usually be seen in a living relaxed specimen. The colony is raised and thick, with a very tough tunic.

-*Symplegma reptans* - This botrylloid was originally known from Japan. It was first recognized in local waters during the 1997 harbor survey by our hosts. In its young stages it is very difficult to differentiate from *S. oceanica*, another species locally introduced. In this genus the zooids are not arranged into systems around a common cloacal cavity, but are randomly scattered in the colony.

-*Polyandrocarpa zorritensis* - Described from Peru this species is in the process of a rapid spread through the world. It is currently found only at Oceanside and in San Diego Bay, but is expected to spread along the California coast



from harbor to harbor. A colony of *P. zorritensis* looks like a bunch of dark colored cocktail onions packed tightly together on the bottom or in the fouling growth. Each individual is only from 2 - 5mm in diameter, but has fairly prominent siphons. The siphons are greenish tinged, and bear two white spots between each of the lobes on their interior.

A brief overview of Ascidiacean systematics was touched upon at the end of the slides. Locally occurring genera are listed for each group

Class Ascidiacea: Sessile adults, swimming larvae. Orders:

- 1) Phlebobranchiata - mostly thin tunics - *Ascidia*, *Corella*, *Ciona*, *Phallusia*, *Chelyosoma*
- 2) Stolidobranchiata - mostly thick tunics - *Styela*, *Boltenia*, *Pyura*, *Microcosmus*, botryllids, *Molgula*, *Symplegma*,
- 3) Aplousobranchiata - colonials - *Distaplia*, *Aplidium*, *Didemnum*, *Polyclinum*

After the talk we broke for lunch. We walked to a Lebanese deli where food was heartily consumed by all.

The afternoon was spent looking at the live specimens in more detail. In addition, Don Cadien had brought a large, strange *Pyura sp.*, which turned out to be *Pyura lignosa* upon examination. Gretchen was quite thrilled as she previously had not seen this species. The animal was somewhat similar to *P. haustor* in external appearance, being ridged, with a tough tunic, and well-separated siphons. The tunic was very tough, to the point that dissection was complicated. This species has been reported from Coronado Island (see Van Name 1945), but was not known north of San Diego previously. These two specimens came from the rope of a lobster trap caught during trawling off Palos Verdes in 23m of water.

Gretchen gave a very useful pointer during the process of working on the specimens. She suggests that the normal dissection procedure (see Lambert 1996) be modified to accommodate the tunic. In this and species like it where the standard dissection procedure might result in damage to the diagnostic features of the animal, she recommends first removing the tunic, then proceeding with the normal dissection.

She accomplished this by making a ventral incision in an area not likely to reach the animal, then broadened this to allow the tunic to be separated into halves. Once the animal was clearly exposed inside the tunic she carefully separated the siphons, and removed other attachments so that the animal could be completely removed from the surrounding tunic. In this case the tunic was so tough that scissors did not work well, and Gretchen had to resort to a razor blade to cleanly slice it.

Gretchen was quite generous with her taxonomic aid and helped Dean Pasko and Megan Lilly (CSDMWWD) verify some difficult specimens.

Our thanks to our gracious hosts. They set things up ideally for us, and those able to attend benefitted greatly from the opportunity to take a guided tour of the live animals provided. We wish them well in their move to Puget Sound, and into "retirement". At least it will be a change of pace for Charles not to have to undertake another year of fresh young students. Both will probably remain quite active, and may take new jobs up north (some retirement!). Gretchen will be available to consult on identifications of ascidians.

Gretchen provided the following information; "Charley is retiring at the end of this semester, after 28 years at Calif. State Univ. Fullerton. On June 4 we are moving to Seattle, Washington. Our new address will be 12001 11th Ave. NW, Seattle, Wa 98177, telephone number 206-365-3734.



We will continue our same e-mail addresses, at least temporarily [glambert@fullerton.edu]. We will both be doing research in association with the Univ. of Washington. We will continue our studies on the introduction of non-indigenous ascidians to the U.S. Pacific Coast, but move our sampling from southern California to the Pacific Northwest. We also plan to do some traveling; we will be spending the month of October in Honolulu, with Charley doing research on ovulation in *Herdmania momus* and Gretchen working at the Bishop Museum identifying some of their ascidians. Gretchen will continue to produce *Ascidian News* twice a year on our web site at <http://nsm.fullerton.edu/~lamberts/ascidian/>.

Be sure to visit us when you are in Seattle!

My Life as a Biologist by **Donald J. Reish**

Chapter 7: Oregon Institute of Marine Biology and High School Teacher

As I entered the spring of my senior year, I knew what I wanted to do but I did not know where. As I mentioned before, my botany prof., Mr. Sipe, was a person who I would talk with. He made two suggestions which turned out to be extremely important. He knew that I was interested in Invert Zool (the invert prof had a heart attack and was on leave). He had heard that Oregon State was going to reopen Oregon Institute of Biology (OIMB)(the land was owned by U. of O., but nobody there was interested). He suggested that I go to Corvallis and talk with Dr. Ivan Pratt who was going to be the director. My meeting with him was very friendly, and I decided to go there right after graduation. The other suggestion from Mr. Sipe is that there was a shortage of high school teachers and that I could get an emergency credential. I applied and accepted a position at Baker High School (OR) to begin in the fall of 1946.

The six weeks session at OIMB was an exciting time for me. I took invert zool from Pratt and marine algae from a paleobotanist. I had always been interested in the ocean, and the opportunity at OIMB put things into focus for me. The course emphasized identification of marine inverts, more or less like my course in invert systematics at CSULB. The weather was horrible that summer. The dorms were barracks which were built by the Army Corps of Engineers in the 1920's. when they built the breakwaters at the entrance of Coos Bay. The barracks were then used by the CCC [Civilian Conservation Corps - ed.] during the 1930's. At high tide the water was below my bunk! They moved the building during the winter of 1946-7. The area was filled in by natural deposition during the 1950's. Chuck Cutress was my best friend. The first animal I keyed was an isopod; the first polychaete was *Halosydna brevisetosa*. On the mud flat trip we saw a *Neanthes brandti* that measured over 1 meter in length crawling over the surface. Dr. Pratt took movies of it. My term project was making a quantitative comparison of the mid-tide animals of a protected rocky beach with an unprotected one. Dr. Pratt wanted me to break my contract and start working on my masters at Oregon State. I said I did not want to break my contract, but that I would come back to OIMB the summer of 1947 and start my masters with him that fall.

I took three education courses in August 1946 at Oregon State. I didn't study very hard. My childhood friend John was back from the war and we did things together. I took my finals on a Friday and the following Monday (Labor Day) I attended my first teacher's meeting in Baker (400 miles away); the next day I began teaching 6 periods of high school biology!

I really enjoyed teaching biology. Conditions were primitive compared to what I had at Corvallis High. The lab consisted of moveable tables and chairs and nine old compound microscopes. Sometimes I was able to get 2 or 3 days ahead of the students. Baker was a town



of 9000. I ran into a least one of my students whenever I left the house where I had a room. Another teacher lived there also and we took our meals with the Episcopalian minister. He became a good friend. We played cribbage and golf. He and his wife visited us about 25 years ago. The low point was that I caught mumps from my students and I missed 3 weeks of school. I wasn't really sick; I prepared lesson plans for the sub who had never taken biology. I also lost \$100 salary out of my contract of \$2100. The minister offered me a 4 year scholarship to become an Episcopal minister. It was flattering, but I was not in the least bit interested. The year at Baker was fun. During Thanksgiving break, I went skiing at Mt Hood. I later got John, Bob, and Miles skiing. Miles still skis. I am hoping to go to Baker (now Baker City) next year to attend the 50th anniversary of my students. I was offered another contract, but I thought it best if I start working on my masters. I left Baker the day after school was out. I hitch hiked to Chicago to see my brother who was now an airline pilot and my grandmother Shatto (her husband died when my Dad was 4 years old). I had always wanted to take a long hitch hiking trip—this was it. I had hitch hiked in Oregon during WWII. I then headed back to Oregon and to attend my second summer at OIMB.

Next: I become a polychaetologist!

SCAMIT WEBSITE

Well, it's finally happened. SCAMIT now has it's own domain, and a new website. Those of you who receive the newsletter as a PDF document off the site have already been notified by e-mail. For the rest of you, our URL is <http://www.scamit.org>. Webmaster Jay Shrake has modified our look considerably. Let him know how you feel about the new site. Our thanks to SCCWRP and to Larry Cooper for all their help in the initial stages of our webification. We would not be on the web were it not for their support, encouragement,

and assistance. We will be phasing out the existing site under SCCWRP's aegis, and will be moved entirely to our own domain by the time you have access to this newsletter.

EL NIÑO BIOLOGICAL EFFECTS

An e-mail message was received from Jack Engle about recent observations he made on San Clemente Island. It, and responses from some of the people he sent it to are reported below.

“Just returned from 5 days of Channel Islands Research Program scuba surveys at San Clemente Island. We were surprised to find tropical arrow crabs (*Stenorhynchus debilis*) at 3 locations, often in association with coronado urchins (*Centrostephanus coronatus*). They were fairly common at 10-60ft at 1 site at the southern end of the island (10-20 observed on typical recon dives). We collected 15 representative specimens (14 preserved, 1 live) and took u/w photos. There has also been a recent report of some at Catalina Island. The typical northern limit info for this species is Gulf of California. Any previous records from California?

We also collected a juvenile urchin, apparently the slate pencil urchin, *Euclidaris thouarsii*, and observed several tropical fishes, including Guadalupe cardinalfish (*Apogon guadalupensis*), rainbow scorpionfish (*Scorpaenodes xyris*), and swallowtail damselfish (*Azurina hirundo*). The cardinalfish and scorpionfish turned up in fair numbers at various sites, and were documented with u/w photos. The damselfish was a single siting at 1 location.

Any other observations/information on the above species would be appreciated.”

Jack received the following response from member Constance Gramlich (SDSU) [slightly edited to remove parts of Jack's original message]



“Sounds like a great trip! *Stenorhynchus* was also seen for the first time, and in great numbers, on our Puertocitos class trip, rocky intertidal. What a wonderful crab it is.

There was a MAJOR settlement of *C. coronatus* in Mission Bay last fall. I sent some to Gordon [Hendler -LACMNH]. Yes, I have seen them [slate-pencil urchins] at Pyramid Cove in the past. Not only that, we had cardinalfish (I'd have to check my notes for the species) for the first time and in high numbers in the INTERTIDAL at Puertocitos (tooo... bad we got blown out by Baja winds the first day and had to return).

I went on a sampling trip in Batequitos Lagoon with Danny Heilprin and found bonefish larvae, *Callinectes*++ and *Panaeus*+++ . In previous seinings they found a BLUE BOBO!! And probably a sharpnose puffer. I was sent photos taken at La Jolla to ID which proved to be banded butterfly fish (NOT scythe marked) juvenile, and sharpnose puffer. Also, Lookdowns have a breeding population in south San Diego Bay (Danny's group found them first). *Sicyonia penicillata* target shrimp (VERY pretty) in San Diego Bay. *Pleuroncodes* are here too. This was/is a splendid El Niño. Coronados should be VERY interesting!!!

Collected *Stenorhynchus* 5+ in Mission Bay (!!) Also saw many small *Dromidia* molting. The *Argopecten* have died off (although there may still be a population in the warmer east end of the bay). Still incredible numbers of *Centrostephanus*. ”

Member Mary Wicksten (TAMU) also responded with the following “ Jack: In the report of the Alijos expeditions, I recorded *Stenorhynchus* from Guadalupe Island, Mexico, which is the previous northern record. This is surely an “El Nino” phenomenon. If you have an aquarium, keep some of these cute crabs. They will store extra food on the rostrum for a “late night snack”.”

Both Greg Jensen and I responded back to Jack that we hadn't seen the species previously in Californian waters.

CSDMWWD personnel are also seeing their share of ENSO effects. Dean Pasko reported a mass stranding of *Pleuroncodes planipes* at Del Mar on May 23 and 24. Within a few days of this Megan Lilly saw hundreds of dead *P. planipes* stranded at Ocean Beach. On Tuesday May 26, Ross Duggan and Eric Nestler, while sampling approximately 6 miles offshore, observed baleen whales believed to be either blues or finbacks. Several local fisherman also made similar observations near that time. Ross reported that the whales seemed to be making numerous shallow dives. The fathometer showed a “large mass” at approximately 50 feet, suspected to consist of *P. planipes* . The whales' behavior suggests they were feeding on these red crabs, which may explain their occurrence inshore in our waters.

In the recently completed trawl series off Palos Verdes we saw additional evidence of ENSO effect in recurrence of species noted earlier. As in February trawls we took *Pantomus affinis* and *Plesionika trispinus* again, as well as several more *Solenocera*. In the previous set we had a single small individual not reproductively mature. In this series we got mature specimens of both sexes, and were better able to identify them. Based on a character which we now know not to be useful, we identified the single immature specimen from February as *Solenocera florea*. This was incorrect. The character of the shape and ventral indentation of the first abdominal epimeron is common to both species. At any rate, our mature male *Solenocera mutator* had the same ventral indentation and epimeral widening seen in the small juvenile reported previously. Our record of *S. florea* was incorrect, and a corrected couplet to separate the two species will be provided.



By the way, we perceived our *Pantomus* to be hippolytids in the field, and returned them for further identification on that basis. If you have long rostrumed “hippolytids” with very long sixth abdominal segments, and very delicate legs, you may also have *Pantomus*. The species has a potentially useful color marking in the field: the anterior lateral region of the carapace bears a diffuse red spot which is slashed through by an irregular white bar, otherwise the animal is nearly all white, off-white, or tan. Once in the lab the articulated rostrum of the species is a definitive character for the identification as *Pantomus*.

Our *Plesionika trispinus* specimens were adults, and included two berried females! The animal is reproducing locally, or at least attempting to. Eggs of the species are a light forest green.

We also had a somewhat larger catch of *Pleuroncodes* in May than in February, but it was still much smaller than other previous catches. *Sicyonia penicillata* was again taken at our transect in south Santa Monica Bay. Just a single adult specimen this time.

VELERO COLLECTIONS CONTINUED

The following is the text of an e-mail response to Mary Wicksten’s comments on the Velero midwater trawl collections from a previous newsletter. It was sent to her by Leslie Harris (LACMNH), who kindly allowed me to reproduce it here for our edification.

“I just read your note about the Velero midwater collections in the SCAMIT Newsletter. I can supply you with the “full story”, which is short but sad: they were thrown out.

Sometime in 1988, while I was still at AHF, Mike Crowe came to me & said that the old greenhouse was going to be cleared out & demolished. There was a ton of old collections in there, he said, and if I wanted to save any I

better hurry. The school was going to hire a hazardous-waste disposal company to deal with the jars. Well, the situation turned into a typical hurry-up-and wait situation.

It was several more years before anything actually happened, by which time I had moved with the polychaete collection to LACM. Alerted once again by Mike, I took several people from LACM (including Jody Martin) to look at the collection. The specimens were indeed in the sorry state you described. Jody lamented the impossibility of saving the collection: there were thousands of jars, in poor shape, and LACM did not have the resources (money, manpower, space, and time) to deal with it.

In the end, Jody took only a small number of jars that appeared to have identified specimens (probably less than 100). That same day the disposal crews in their white overalls & masks moved in & started work. None of the material in the greenhouse went to the Santa Barbara Museum. SBMNH had previously been given part of the Hancock Collections housed in the first floor collection area (cephalopods, cnidarians, some of the miscellaneous phyla): perhaps this is what your informants remembered.

It is a great shame that these midwater samples were never properly curated and processed. I’m sure a comparable effort will never be made again due to the high cost of ship-time. This story of neglect and disposal should serve as a warning to today’s agencies that irreplaceable collections cannot be allowed to just sit on shelves somewhere. Invariably some administrator will get alarmed at the thought of all that “hazardous waste” or the space taken up by “useless material” & order it trashed. Proposals should include a budget for the proper care & maintenance of the resulting specimens. Ideally the material should be



donated, with appropriate funding, to an institution dedicated to the preservation of natural history specimens for research purposes.

Oops, I began preaching to an already converted audience! I just feel so strongly about the waste of good collections that I spend a good chunk of my time scouring the internet for people who might make collections in the course of their studies and then badger them until they promise me/LACM their critters. Sorry to be the bearer of bad news, but then, you already suspected the worse, didn't you?"

FUTURE MEETINGS

July Meeting - Monday 13 July at Worm Lab, Natural History Museum of Los Angeles County. Topic: "Problem polychaete taxa". This meeting will be to evaluate the status of, and how we variously identify, the following groups (which proved to be inconsistently identified in the SCBPP): *Levinsenia* spp.,

Protocirrinera spp., *Cossura* spp., *Mediomastus* spp., *Ophelina* spp., *Sthenelais* spp., *Driloneris* spp., *Fauveliopsis* spp., *Terebellides* spp., and *Demonax* spp.

By the end of the meeting we hope to have the nature and magnitude of the problems within each of these taxa better defined. We can then proceed to address them in turn.

There will be **no August meeting** since we will be in the middle of Bight '98 sampling, and scheduling would be impossible.

The **September Meeting** will be again held at the Worm Lab of the Natural History Museum of Los Angeles County. It will be the follow-up to the July meeting. Hopefully during the intervening period we can find or devise methods of standardizing identification practices in the considered taxa groups prior to beginning work on the Bight '98 infaunal samples. The date of the September meeting will be decided at the July meeting, and announced in the July Newsletter.

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SCAMIT TREASURY SUMMARY, 1997-98

During the past fiscal year, April 1997 through March 1998, costs for producing the newsletter, \$1854.37, (including printing, postage, and supplies) decreased substantially from the previous fiscal year (\$3532.09). Costs were lower in 1997-98 because no paper purchases were needed (a large order was processed in the previous year) and also to the addition of an e-mail membership category. Costs for preparing for and publishing online amounted to \$270.60. Two workshops were hosted at a cost of \$100.00. Although at least one publication is presently underway, no publication grants were issued during the year. SCAMIT's primary source of income, \$1375.00, came from membership dues which covered most of the costs for producing the newsletter. Grants and workshops will continue to be funded from the money collected for creating the Taxonomic Listing for SCCWRP during the 1994-95 fiscal year. The following is a summary of the expenses and income:

Expenses	
Newletter	1,854.37
Online publishing	270.60
Publicationa (Voucher Reprints)	0.00
Grants	0.00
Miscellaneous	221.88
Total	\$2,446.85
Income	
Dues	1,375.00
Interest	293.10
T-Shirts	0.00
Donations	20.00
Miscellaneous	0.00
Total	\$1,688.10
Account balnaces(March 31, 1998)	
Checking	981.49
Savings	14,183.27
Total	\$15,167.76



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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.