



February, 2004

## SCAMIT Newsletter

Vol. 22, No. 10

<b>SUBJECT:</b>	<b>Review and Identification of Photos taken during B'03 trawls</b>
<b>GUEST SPEAKER:</b>	<b>none</b>
<b>DATE:</b>	<b>13 April 2004; TUESDAY</b>
<b>TIME:</b>	<b>9:30 a.m. to 3:30 p. m.</b>
<b>LOCATION:</b>	<b>SCWWRP for directions - <a href="http://www.sccwrp.org">www.sccwrp.org</a></b>



*Diopatra tridentata* Hartman 1944  
Anterior Dorsum  
SBOO I-6(2), 22 July 1997, 93 ft  
City of San Diego  
Image by K. Langan

### FEBRUARY 9 2004 – DEEP WATER ONUPHIDS

At the beginning of our meeting Rick Rowe (CSDMWWD) passed around some digital images of *Aberranta* sp SD2 that he had recently identified in one of his deep water samples. The provisional sheet identifies the diagnostic characters and Rick will post it on the SCAMIT website soon. He also passed around another sheet of digital images of a strange polychaete, possibly a scalibregmatid, he found at one of their standard survey stations from 319 ft.

President, Kelvin Barwick, then gave a tour of San Diego's new two story laboratory building. It houses the Taxonomy, Data, and Field Operations groups along with Microbiology and Toxicity. It was very impressive with lots of space and all cubicles seem to have a window with a view of the channel outside the lab. Their lunch room is upstairs with a balcony to take advantage of the view and sunshine. However,

we all agreed the most impressive part of their new lab was the beautiful 35 panel glass sculpture titled “Micro-Macro” that resides in the entry foyer. This sculpture expands vertically up to the 2<sup>nd</sup> story. Each glass panel is a separate digital image of an invertebrate structure taken from an artistic viewpoint in shades of blue and back lit. We were told that it is even more impressive at night since the lighting casts wave like patterns on the glass from behind. It is truly a work of art that would impress even a non-marine biologist. It also provides a great guessing game for biologists to name all the structures and what animals they are from.

Ron Velarde (CSDMWWD) led our meeting on deep water onuphids in preparation for analyzing the Bight '03 benthic samples. He first distributed a species list of onuphids consisting mainly of species names from our SCAMIT Taxa list and other local deep water species reported in the literature. This list is attached at the end of the newsletter.

Those present at the meeting reviewed the list and made a few changes. It was noted that *Kinbergonuphis vexillaria* on Ron's species list is listed as *Onuphis vexillaria* in Fauchald 1982, and that *Onuphis pallida* should be dropped from the SCAMIT taxa list. A few old specimens identified as *O. pallida* have since been reviewed and found not to be that species. It had been erroneously left on the SCAMIT taxa list after review for the last edition.

For *Mooreonuphis* species use the table of SCAMIT list species written by Rick Rowe from 1997. It is available on the SCAMIT website as a PDF document under the taxonomic tool section. Check where the subacicular hooks start. There seems to be a great deal of variation amongst what setiger the branchiae begin. For those specimens without branchia check to see if there are others in the sample with branchiae that you might be able to identify. If you don't have a complete animal it still might be useful to list it as a provisional and

note how many setigers long it is without branchiae. There are also two different color morphs of *Mooreonuphis nebulosa*; one with 2 pigment spots on the dorsum of each setiger and the other looks as if the 2 spots have grown together to form a sort of “dumbbell” shape.

Later in the day, Ron distributed a handwritten table of North Pacific species of *Mooreonuphis* that he had completed in the past. It has species listed that we might want to consider looking for while processing our Bight '03 samples. It will be included as an attachment with a future newsletter.

Below are the problems discussed at the meeting with our common *Onuphis* species:

For specimens with branchiae beginning on setigers 3 – 6: it is difficult to separate *Onuphis geophiliformis* from *O. affinis*, which is a new species described by Hilbig (1995) in the MMS Atlas from deep water. *O. geophiliformis* is similar to *O. affinis* in the first occurrence of subacicular hooks but differs in the number of setigers with pseudocompound hooks (3 for *O. geophiliformis* and 4 for *O. affinis*). Also note that juveniles of some species may only have branchiae from setiger 3-4 but the adults will have branchiae from setiger 1.

*Onuphis eremita parva* has single branchiae from setiger 1. The branchiae then become at least bifid, and usually pectinate with up to 5 filaments farther back after setiger 18-20. It is described as having interramal papillae present in setigers 4 thru 10 but these may be difficult to see. *O. eremita parva* is a shallow water species with dark transverse bands dorsally across each anterior segment. *Onuphis multiannulata* also has single branchiae from setiger 1 and pectinate branchiae further back. But *O. multiannulata* is found in deeper water, is virtually unpigmented and lacks interramal papillae on setigers 4-10.

It was decided by members that to avoid confusion, the species listed as *Onuphis* sp 1 of San Diego that originated from a 1993 Point Loma key to Onuphidae, would now be called



*Onuphis* sp A of SCAMIT. This animal has subacicular hooks first present from setiger 9 and the anterior setigers have a transverse pigment band across the posterior half of each segment. However, the thickness of the pigment bands can differ and sometimes this species can be confused with *Onuphis elegans* which also has pigment bands and subacicular hooks first present from setiger 9. The major difference between these two species is the shape of the branchiae, which is often best viewed from the side. *O.* sp A has branchiae that are thin and cylindrical along the entire body. *O. elegans* has branchiae from setiger 10 that are thickened with posteriorly directed triangular or wing-like shaped extensions.

The animal from deep water that we commonly identify as *Onuphis iridescens* may not be that species. Fauchald 1982 lists *O. iridescens* as being an intertidal to shallow subtidal animal and we commonly see it at 200-300+ m depth. The outer lateral antennae of our animals are much too long compared to the description in Fauchald 1982 which states that they only reach setiger 3 and the ceratophores are longer than their styles. Ron is currently reviewing a number of our local *O. iridescens* specimens to see if perhaps a provisional voucher sheet should be written up for our common deep water animals.

Next we discussed the three species of *Diopatra* on the SCAMIT taxa list. *Diopatra splendidissima* is from shallow water and has side pigment spots along the dorsum of the animal that generally begin in the posterior branchial segments and continue on for several segments. The spots are noticeable in the absence of body pigment on the rest of the animal. Ron pointed out another pigment character that he likes to use to help identify *D. ornata*. There is pigment on the subdistal portion of the antennae but the tips are white or unpigmented. Also, the anterior of the animal tends to be darker than the rest of the body. We examined several specimens of *D. ornata* at the meeting and this antennal pigment pattern seems

to be consistent. *D. ornata* is generally found shallower and in coarser sediments than *D. tridentata* which typically has large dark spots middorsally on anterior segments.

From one of San Diego's Pre-Bight deep water (508m) test samples Rick Rowe (CSDMWWD) found specimens of *Kinbergonuphis vexillaria*, which he shared at the meeting. The most noticeable difference between this animal and most of our common onuphids was the short ceratophores (un-like *Onuphis*) and no pigmentation. While Rick couldn't see the pectinate setae, which is generally difficult on most onuphids, it was still easy to see that this animal was different from other common genera. Taxonomists should keep an eye out for this species in their deep water samples. As mentioned previously, Fauchald 1982 lists this species as *Onuphis*, but based on the generic revision of Paxton 1986, it gets transferred to *Kinbergonuphis*.

#### CHANNEL ISLANDS INTERTIDAL SURVEYS

Following is an email from Dan Richards with the field schedule for intertidal surveys at the Channel Islands.

"Greetings,  
2004 will begin the 23rd year of monitoring in the rocky intertidal at Channel Islands National Park. I have put this off about as long as possible, but here finally, is the field schedule for the Spring Rocky Intertidal Monitoring at the islands.

Since the fall monitoring was so late in the year and the bio-tech is not on-board yet (and it looks like the March weather won't cooperate nicely), our monitoring won't begin until the end of March. I have tried to plan these trips around the normal transportation schedule, as always unforeseen changes could alter beginning and end dates by a day or two, extreme weather may force the cancellation of a trip. If you are interested in joining me for any of these trips let me know and I will discuss the particulars with you.



Monday, March 29-Friday, Apr 2 - West Santa Cruz Island (if the tech is on and the weather is OK, this may shift to March 15-19)

Wednesday, Apr 7-Wed, Apr 14 - Santa Rosa Island

Thursday, May 6- Tuesday, May 11 - San Miguel Island

Friday, June 4- Tues, June 8 - Anacapa, East Santa Cruz Is.

Dan”

Dan Richards  
Channel Islands National Park  
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### NEW LITERATURE

Following are emails from member Kathy Langan and Leslie Harris with regards to a new polychaete book:

“FYI: I recently inquired about the 2003 Barnich and Dieter volume on “The Aphroditoidea (Annelida: Polychaeta) of the Mediterranean Sea” and wanted to pass on the response I received (including order information) in case any of you are interested in ordering it.

Thanks,  
Kathy Langan”

Barnich, Ruth;Fiege, Dieter: The Aphroditoidea (Annelida: Polychaeta) of the Mediterranean Sea 2003. 167 pages, 74 figures, 6 tables, 2 plates, 30x21cm (Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, Band 559) ISBN 3-510-61353-8 paperback, US\$ 52.94. Prices indicated do include postage and packing costs (surface mail). Payment is possible by cheque (for customers of the United States or Canada: personal US\$-cheque) The cheque should be made out to:  
E. Schweizerbart’sche Verlagsbuchhandlung

(Nägele u. Obermiller), Johannesstr. 3A, 70176 Stuttgart, Germany. Or we do also accept payment by credit card — Visa and Mastercard (no American Express Card). If you will choose this method of payment, please let us know your exact credit card details as well as the expiry date and the security number (we suggest by Fax should be the most secure way — or split in two or three e-mails). We are looking forward to receiving the confirmation of your order which might be placed by e-mail or Fax.

Kind regards,  
Alexia Fabrizi  
E. Schweizerbart’sche Verlagsbuchhandlung  
(Naegele u. Obermiller)  
Gebr. Borntraeger Verlagsbuchhandlung  
Science Publishers  
Johannesstrasse 3 A  
D-70176 Stuttgart  
Tel. ++49-711-351456-0 FAX ++49-711-351456-99  
Germany  
e-mail: mail@schweizerbart.de”

And... Leslie’s Response:  
“I have a copy that Ruth was kind enough to send me. It’s very good with the added bonus of 2 plates of color images taken by Dieter. There’s almost no overlap with our fauna. The only species that occur locally are *Harmothoe fragilis* Moore, *H. extenuata* (Grube), and *H. imbricata* (Linnaeus). Otherwise our species are not even mentioned in discussions, so SCAMIT members may prefer to save their money for something closer to home.

L”

### JOB OPPORTUNITY

#### Scientific Assistant

The American Museum of Natural History is seeking a Scientific Assistant to assist the Curator of Malacology with various tasks related to research on marine mollusks, potentially including sorting of bulk samples, histology, literature research, and data management. Will also assist in management and curation of a





large worldwide collection of marine, freshwater and terrestrial mollusks, plus associated library and photographic collections, including computerized cataloging, answering inquiries, supervising volunteers, filling loan requests, and hosting visitors. Must be willing/able to handle alcohol-preserved specimens, to lift reasonable loads, and to work at height on a safety ladder. Experience with word processing, databases, web-page management, and digital imaging, as well as possession of a valid driver's license, highly desirable. Background in systematics, invertebrate zoology, collections management, histology, and/or molluscan taxonomy preferred. Required: BS in biology or equivalent in a related field. Full time, \$27,433/year + excellent benefits. Please email, fax or mail resume as soon as possible to:

Dr. Paula M. Mikkelsen,  
Division of Invertebrate Zoology,  
American Museum of Natural History,  
Central Park West @ 79th St  
NYC, NY 10024, fax 212-769-5277  
(refer to "SciAsst JS"), mikkel@amnh.org.  
EOE.

### SCAMIT LISTSERVOER CHATTER

Below are emails recently being circulated on the SCAMIT listserv regarding local crustacea:

Doug Diener, MEC - "Just when I thought things were getting easier! In processing the remaining misc inverts and making a voucher collection from a trawl off Oceanside at 250m I ran into problems with the Crangonidae and in particular *Neocrangon*. All the shrimp in question have two median dorsal carapace spines. There are three morphological types of *Neocrangon* in the samples: the most common species appears to be *Neocrangon communis* which fits the descriptions fairly well with the third through fifth abdominal somites being carinate and the rostrum not elevated or with adornment. The next most abundant type appears to be *N. resima* with an elevated rostrum and usually an obvious ventral blade,

however these all have abdominal segments 3-5 being carinate, which is not in agreement with the keys. Then there are a few remaining specimens that lack the carinae but have elevated rostrums. I'm not sure whether the variability in the rostrum is causing confusion or we have hybrids or another species in our midst. I was wondering if anyone else has noticed this problem.  
Make my day. Doug"

(In response)Dean Pasko, CSD - "Hi Doug, I've noticed this inconsistency with the rostrum before (i.e., getting some intermediate stages of the ventral blade), but I haven't noticed the carinae problem. Most (can't say "all") of the *N. resima*-type specimens that we see in SD do not have carinae on abdominal somites 3-5. Thanks for bringing it up though, and we'll look more closely from here on out.

FYI: while some of you Crustacea-types are reading....I want to add something about Oedicerotids, specifically concerning *Americhelidium* sp SD1 and *Americhelidium* sp SD2. I recently ran across "good" specimens of *Americhelidium rectipalmum*, *A. shoemakeri*, and *A. micropleon* (the latter requiring further confirmation) in samples from ABC labs. The two provisional species mentioned above are clearly different from the three described species. The provisional species are closest to *Americhelidium shoemakeri*. *Americhelidium* sp SD1 can be distinguished from *A. shoemakeri* by the presence of erect dorsal setae on pleonites 2 and 3, the less oblique Gn1 palm, and more robust Gn2 (see provisional voucher sheet). *Americhelidium* sp SD2 is more closely related to *A. shoemakeri* and can be distinguished by the less oblique Gn1 palm and the rounded postero-ventral corner of pleonite 2 (see voucher sheet). So please use provisional voucher sheets to distinguish these animals. To date, *Americhelidium* sp SD1 and *Americhelidium* sp SD2 have only been recorded in SD.  
Thanks,  
Dean"



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### UPCOMING MEETINGS

The Southern California Regional Chapter of the Society of Environmental Toxicology and Chemistry is having their 2004 Annual Meeting. It will be held 21-22 May at Point Loma Nazarene University in San Diego. Program highlights include two short courses on Friday May 21 titled:

- 1) An Introduction to the Biotic Ligand Model for Predicting Metal Toxicity
- 2) The Southern California Coastal Index of Biotic Integrity: A Tool for the Protection of Aquatic Life Beneficial Uses.

On Saturday, May 22, there will be a Plenary session, Site-Specific Objectives: Science and Policy Considerations.

Pre-Registration and Abstract submission deadline is April 9, 2004. For more information please go to the website at:

[www.socalsetac.org](http://www.socalsetac.org)

### BIBLIOGRAPHY

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- Hobson, Katharine D. 1971. Some polychaetes of the superfamily Eunicea from the north Pacific and north Atlantic Oceans. Proceedings of the Biological Society of Washington 83(47): 527-544.
- Paxton, Hannelore. 1986. Generic revision and relationships of the family Onuphidae (Annelida: Polychaeta). Records of the Australian Museum 38: 1-74.



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 at their e-mail addresses:

President	Kelvin Barwick (619)758-2337	kbarwick@sandiego.gov
Vice-President	Leslie Harris (213)763-3234	lharris@nhm.org
Secretary	Megan Lilly (619)758-2336	mlilly@sandiego.gov
Treasurer	Cheryl Brantley (310)830-2400x5500	cbrantley@lacs.org

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.

The SCAMIT newsletter is published monthly and is distributed freely through the web site at [www.scamit.org](http://www.scamit.org). Membership is \$15 for the electronic copy available via the web site and \$30 to receive a printed copy via USPS. Institutional membership, which includes a mailed printed copy, is \$60. All new members receive a printed copy of the most current edition of "A Taxonomic Listing of Soft Bottom Macro- and Megainvertebrates ... in the Southern California Bight." The current edition, the fourth, contains 2,067 species with partial synonyms. All correspondences can be sent to the Secretary at the email address above or to:

SCAMIT

C/O The Natural History Museum, Invertebrate Zoology

attn: Leslie Harris

900 Exposition Boulevard

Los Angeles, California, 90007

SCAMITed4GenusSpecies	DESCRIBERandDATE	H 44	H 68	F 68	F 82	MMS 95	P86	NOTES
Diopatra ornata	Moore 1911	X	X	X				
Diopatra splendidissima	Kinberg 1865	X	X	X				
Diopatra tridentata	Hartman 1944	X	X	X				
Hyalinoecia juvenalis	Moore 1911	X	X	X				
Mooreonuphis exigua	(Shisko 1981)					X	X	
Mooreonuphis litoralis	(Monro 1933)	X	X		X		X	
Mooreonuphis nebulosa	(Moore 1911)	X	X	X	X	X	X	Two color morphs
Mooreonuphis segmentispadix	(Shisko 1981)					X	X	
Mooreonuphis stigmatis	(Treadwell 1922)	X	X	X	X		X	
Mooreonuphis sp SD1	Rowe 1996 §							
Nothria occidentalis	Fauchald 1968	X	X	X	X	X	X	
Onuphis elegans	(Johnson 1901)	X	X		X	X	X	
Onuphis eremita parva	Berkeley and Berkeley 1941		X		X		X	
Onuphis geophiliformis	(Moore 1903)		X	X	X	X	X	
Onuphis iridescens	(Johnson 1901)	X	X	X	X	X	X	
Onuphis multiannulata	Shisko 1981						X	
Onuphis sp A	SCAMIT 1992					X		= Onuphis sp "intermediates" sensu Hobson (1971); O. sp 1; O. sp SD1
Paradiopatra parva	(Moore 1911)	X	X	X	X	X	X	
Rhamphobrachium longisetosum	Berkeley and Berkeley 1938	X	X	X		X	X	
<b>Additional Species</b>								
Anchinothria hiatidentata	(Moore 1911)		X		X		X	
Diopatra neotridens	Hartman 1944	X		X				
Diopatra obliqua	Hartman 1944	X						
Hirsutonuphis zebra	(Berkeley and Berkeley 1939)	X			X		X	
Hyalinoecia stricta	Moore 1911		X	X				
Kinbergonuphis abyssalis	(Fauchald 1968)			X	X		X	Probably Paradiopatra fide Paxton (1986)
Kinbergonuphis cedroensis	(Fauchald 1968)			X	X		X	
Kinbergonuphis microcephala	(Hartman 1944)	X	X	X	X		X	
Kinbergonuphis mixta	(Fauchald and Hancock 1981)				X		X	Probably Paradiopatra fide Paxton (1986)
Kinbergonuphis paradiopatra	(Hartman 1944)	X	X		X		X	
Kinbergonuphis pigmentata	(Fauchald 1968)			X	X		X	
Kinbergonuphis proalopus	(Chamberlin 1919)			X	X		X	Onuphis profundus Fauchald 1968 is a synonym fide Fauchald (1982)
Kinbergonuphis pygidialis	(Fauchald 1968)			X	X		X	
Kinbergonuphis vexillaria	(Moore 1911)	X	X	X	X	X	X	fide Paxton (1986)
Leptoecia abyssorum	Chamberlin 1919			X			X	
Mooreonuphis guadalupensis	(Fauchald 1968)			X	X		X	
Mooreonuphis microbranchiata	(Fauchald 1968)			X	X		X	
Mooreonuphis veleronis	(Fauchald 1980)	X	X		X		X	Nothria stigmatis intermedia Hartman 1944 is a synonym
Mooreonuphis sp SD2								
Onuphis affinis	Hilbig 1995					X		
Onuphis farallonensis	Hobson 1971				X		X	
Onuphis mexicana	(Fauchald 1968)			X	X		X	
Onuphis pallida	(Moore 1911)		X		X		X	
Onuphis similis	(Fauchald 1968)			X	X		X	
Onuphis vibex	(Fauchald 1972)				X		X	
Rhamphobrachium cristobalensis	Fauchald 1968			X			X	? juvenile of R. longisetosum (Paxton, 1986)