



Southern California Association of Marine Invertebrate Taxonomists

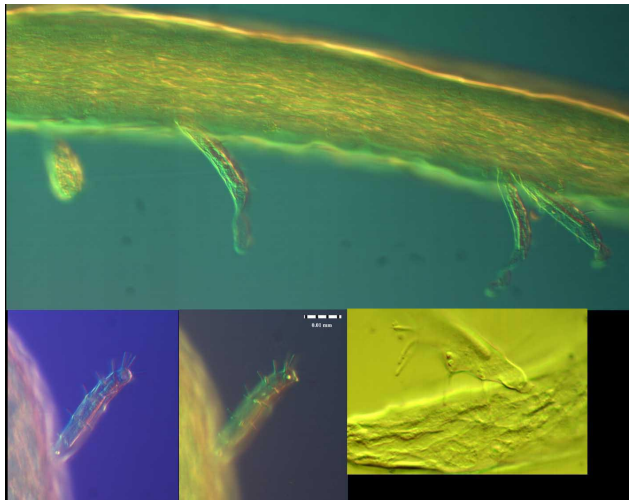
3720 Stephen White Drive
San Pedro, California 90731

April, 2002

SCAMIT Newsletter

Vol. 20, No. 12

SUBJECT:	Ascidians
GUEST SPEAKER:	Megan Lilly
DATE:	17 June 2002
TIME:	9:30 a.m. to 3:30 p. m.
LOCATION:	City of San Diego - Marine Biology Lab 4918 N. Harbor Dr. #201



Gastrotrich?

ITP Regional 2733(2), 17JUL01, 383 ft.
epizoic on *Moorenuphis nebulosa*
From antennae
Image by K. Barwick 7FEB02

Ron Velarde began the April meeting by reminding us that ballots were due at the end of the month. He then quickly reviewed upcoming SCAMIT meetings: May 13, Curatorial Concerns, LACMNH; June 17, Ascidians, CSD; July 15, Photographic and digital imaging for taxonomy and publishing, CSD; August 12, Nereids, LACMNH; September 9, The genus *Epitonium*, CSD.

Larry Lovell had the floor next and told us of a "Species Identification Club" which is being conducted at Scripps. The club meets once a month (approximately), usually on a Wednesday or a Friday, from 3 p.m. to 5 p.m.. It is organized by Bonnie Becker and the focus is mostly on live material collected from rocky bottom habitats. Attendees gather in Ritter Hall, room 229 at Scripps Institute of Oceanography. The next meeting will be Wednesday, June 12 and the topic is crabs. For more information contact Bonnie Becker and bjbecker@ucsd.edu.

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SCAMIT Newsletter is not deemed to be valid publication for formal taxonomic purposes.

Lisa Haney (CSDLAC) had the floor next. She informed us that Steve Lowry from the Australian Museum of Natural History had expressed an interest in coming to the Los Angeles County Museum of Natural History and putting together a workshop on the database program Delta. The workshop would probably last five days and would potentially be some time in September. He is inquiring as to the level of interest among SCAMIT members. There have been recent updates to Delta and it is being supported by the Australian Museum of Natural History. Most members present expressed an interest in attending if it were scheduled.

Megan Lilly then briefly announced that she was in the process of having the actual printing and distribution of the newsletter moved from Los Angeles to San Diego. There were some suggestions that SCAMIT look into self-publishing, i.e., buying a computer, printer etc with SCAMIT funds. However, for the moment, we will continue to contract out the printing of the newsletter. There was then a suggestion that SCAMIT create an annual CD each year containing all of that year's newsletters. These would then be available upon request. Cost, etc, would have to be determined.

It was suggested that a 20th anniversary t-shirt would be a great item to have on sale at the upcoming 20th anniversary party on June 1st. Rick Rowe has been working diligently on this process and the t-shirts should be ready in time for the fiesta.

With that, the main topic of the meeting was addressed. Don Cadien first distributed a handout (attached at the end of the NL). He feels that there are four things which need to be considered: 1) what do we get? (2) What can we get? (3) What should we attempt to work with? (4) Are there approaches to data analysis and interpretation that we can apply?

We then delved into all the logistical problems of trying to keep track of parasite occurrences. A database to be shared among the agencies is going to be developed (hopefully) that will standardize our approach and the cataloguing of this information. Don then shared many examples of parasites/commensals that he has found over the years. Discussing, in many cases, their life history and the host(s) with which they associate.

PRIMER WORKSHOP

For those of you who are statistical analysis buffs, there is an upcoming five day workshop that might be of interest. The Primer Workshop will be held from 17-21 June, 2002 at California State University Fullerton. The workshop will focus on the statistical analysis and interpretation of assemblage data from environmental studies. For more information contact Steve Murray at smurray@fullerton.edu.

NEW NEWSLETTER

There is a new newsletter in existence for those of you interested in the taxonomy and systematics of Sipunculans and Echiurans. It is the creation of Dr. Edward Cutler and for further information please email him at ebcutler@earthlink.net

JOB OPPORTUNITY

The Natural History Museum of Los Angeles County invites applications for the position of curatorial assistant. We seek an individual with expertise in crustaceans, mollusks and/or echinoderms for a permanent position in our Marine Biodiversity Processing Center (<http://collections.nhm.org>). The successful individual will assist with the curation, sorting, databasing, and physical integration of orphan collections into the museum's invertebrate collections.



Applicants should have appropriate degrees in Biology, at least one year of experience with one of the taxonomic groups noted above, and knowledge of contemporary museum collection and specimen conservation techniques. Good oral and written communication skills are essential and experience with collection databasing is desirable.

This position is full-time with full benefits beginning July 1. Salary: \$29,700/year plus full benefits.

Review of applications will begin May 31, 2002. Please send your curriculum vitae, name and contact information for three references, and a cover letter that describes your curatorial experience to:

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**Southern California Association of Invertebrate Taxonomists
Treasurer's Summary**

Fiscal Year April 1, 2001 – March 31, 2002

SCAMIT began the year with total cash assets of \$12,029.76 and ended the year with total cash assets of \$10,696.30, a decrease of \$1333.36. Income from dues (\$1425.00), miscellaneous items (SCAMIT mugs \$22.00), and interest (\$311.88) totaled \$1758.88, but with the payment by SCCWRP for Bight'98 euclymenid and lumbrinerid polychaete identifications, made for a grand total income of \$7,946.38.

Highlighting the year were publication of SCAMIT's Fourth Edition of the Taxonomic Listing of Soft Bottom Macro- and Megainvertebrates (\$1395.99); final delivery of identifications, keys, and voucher sheets for the euclymenid and lumbrinerid polychaetes generated by Larry Lovell as part of his contract with SCAMIT to perform the Bight'98 identifications (\$6187.50); and two workshops featuring Eugene Coan for molluscs, and John Chapman for amphipods (\$154.50 and \$230.00, respectively). Expenditures for publishing the newsletter totaled \$1515.50 for the hard copy and \$149.70 for the electronic versions for website maintenance. Member Jay Shrake is SCAMIT's webmaster and provides his outstanding service gratis.

Although the overall spending is in a deficit, members can take comfort in the fact that SCAMIT is producing good taxonomic products for which the monies are dedicated. Having the Fourth Edition of the Taxonomic Listing published and continued quality taxonomic workshops places SCAMIT in a good position to pursue new funding when the time comes.



A PARASITIC HANDOUT BY DON CADIEN (CSDLAC)

WHY WE SHOULD CARE

Monitoring permits have language requiring evaluation of the health of the community in terms of parasites, disease, and anomalies - at least for trawl analyses. While agencies often have fairly well established patterns of reportage of fin rot, ambicoloration, neoplasms, pseudotumors, and other conditions of fish, symbionts of fish and macroinvertebrates are often unreported. These animals, by either their presence or absence, can convey information on the health of the marine environment, and deserve greater attention. This is the first of what is likely to be a string of meetings to consider the inter-organism relationships in our monitoring programs.

BACK TO THE BOOKS

In preparation for this meeting it may be beneficial to revisit some of our basic biological training on the interactions between species. In re-reading the portions dealing with symbioses in several texts I found differing definitions and degrees of appreciation of these interactions between authors. Paul Colinvaux, for instance, stated that symbiosis and commensalism were virtually synonymous; a concept at variance with those presented below. A more widely held, and appropriate view, is that of Bob Ricklefs who states in several texts that parasitism is only a special case of predator-prey interaction, a suggestion supported by the definition of parasitism offered below.

The traditional basis of distinguishing between predation and parasitism is one of scale. Predator-prey relations have been understood to involve a larger species attacking a smaller. Parasitism is usually understood as just the opposite, a smaller species (often much smaller) attacking a larger. This relatively clear differentiation becomes muddy when the eater and the eaten are of similar size, or when small animals act cooperatively as pack hunters. This is a clearly predatory activity, although the predator may only be a fraction of the size of the prey. Perhaps a more useful conceptual difference is between predation, which nearly always results in the death of the prey, and parasitism, which very seldom results in the death of the parasitized. Once again there are complications. Is a death from influenza a result of predation in the aggregate by the virus, or is it just a situation of poorly adapted parasitism?

And what of grazing? Mobile invertebrates which graze on sessile invertebrates are not typically viewed as predators, especially if the sessile invertebrate is colonial or has indeterminate growth (such as a sponge). Removal of some tissue here is usually viewed as equivalent to consumption of a portion of an "animal" such as bivalve siphon-nipping by fishes. While individual hydroid zooids may be totally consumed by grazing sea-slugs, the colony (the "functional individual") survives. This again is a removal of a part rather than a consumption of the whole.

Another variant is the view that mutualist interactions can be either positive or negative. In effect this treats mutualism as a higher level organizing concept, covering both competitive and mutualist relations as listed in the table below.



One might question the idea of neutralism as being an interaction between two organisms when it is defined by lack of effect on both sides. This is a situation in which two organisms occupying either the same or overlapping niches can coexist without influencing one another under normal circumstances. Under unusual conditions, such as a collapse in shared resources, neutralism can change into competition. In others an assessment of a neutral relationship may only reflect lack of knowledge of the ways in which these two co-existing forms interact.

It would be wise to remember during our examinations that these species-species interactions have evolutionary significance, and can be either of ancient or modern inception. Those interactions that stem from long co-evolution between the two participants will differ in effect from those whose recent origin has allowed less time for selection in the species involved. There is actually another and more esoteric class of interactions which involves more than two species. One such occurs locally and involves a crab, its barnacle parasite, and an amphipod egg-predator which affects both.

TYPES OF SYMBIOSES

It is sometimes difficult to establish the nature of the relationship between two organisms. As an aid in that effort I provide the following definitions of types of symbioses:

- 1 Parasitism - one species benefits, the other suffers
- 2 commensalism - one species benefits, the other is unaffected
- 3 competition - both species suffer, not necessarily equally
- 4 mutualism - both species benefit
- 5 neutralism - neither species is affected

This can be represented in a table of interactions between species A and species B.

	+	___ 1 ___	___ 2 ___	___ 4 ___
Species A	0	_____	___ 5 ___	___ 2 ___
	-	___ 3 ___	_____	___ 1 ___
		-	0	+
			Species B	



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	Ron Velarde	(619)758-2331	rvelarde@san-diego.gov
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Secretary	Megan Lilly	(619)758-2336	mlilly@san-diego.gov
Treasurer	Ann Dalkey	(310)648-5544	cam@san.ci.la.ca.us

Back issues of the newsletter are available. Prices are as follows:

Volumes 1 - 4 (compilation).....	\$ 30.00
Volumes 5 - 7 (compilation).....	\$ 15.00
Volumes 8 - 15	\$ 20.00/vol.

Single back issues are also available at cost.

