



Southern California Association of Marine Invertebrate Taxonomists

January, 2005

SCAMIT Newsletter

Vol. 23, No. 9

SUBJECT: B'03 Anthozoa
GUEST SPEAKER: John Ljubenkov
DATE: 14 March 2005
TIME: 9:30 a.m. to 3:30 p. m.
LOCATION: Dancing Coyote Ranch
contact M. Lilly for directions

JANUARY 10 2005 MINUTES



Rhizochilus antipathum
found on the black coral
Antipathes dendrochristos.
Collected near Hurricane Bank at
approximately 420 feet.



Bill Schneider with his specimen
of *Antipathes dendrochristos*

The meeting was hosted by SCCWRP and began with the business portion. President Kelvin Barwick announced the upcoming 9th Annual SCUM meeting to be held on January 22nd at the San Diego Lab. Member Dot Norris sent an announcement for the 4th Annual Bioinvasions Conference to be held in New Zealand on August 23-26, 2005. Kelvin then announced upcoming SCAMIT meetings which can be found on the SCAMIT website.

Treasurer Cheryl Brantley introduced Bill Furlong who is a new employee at the CSDLAC Lab. He will be working on sponges and decapods. Cheryl also introduced Seth Jones from Merkel & Associates in San Diego who is somewhat of a newcomer to SCAMIT meetings.

Member Don Cadien requested that additions and emendations for the SCAMIT Species List Edition 5 be sent to him.

Ananda Ranasinghe had the floor next and extended a thank you to Dave Montagne for all his work in overseeing and handling the Bight '03 data, and to the taxonomists who worked so hard in processing the samples. He also thanked everyone in the room for completing their work on this project. We finished a year earlier than the previous Bight '98 survey.

The purpose of this meeting was to follow up on the February 2003 meeting that focused on future directions for SCAMIT. The summary for that meeting is in the SCAMIT Newsletter, Vol. 21, No. 10. Before we engaged in specific topics, Dave Montagne took the floor and expressed some ideas on how he and others perceive SCAMIT. He felt it might provide context for the day's discussion on the development of a taxonomic database and other tools. Dave's view of SCAMIT has evolved as his responsibilities have shifted from those of a taxonomist, to tasks more focused on policy and regulation. His original view of SCAMIT was as an organization with a local focus on mutual education and assistance among taxonomists working on NPDES monitoring within the region. While SCAMIT was regional in nature, the benefits derived from participation were realized in application to individual monitoring programs. The impetus for its formation and activities was the individual desire of its active members to grow and perfect their skills as taxonomists and to produce monitoring data within their individual programs of the highest possible quality. The value of SCAMIT as a regional program was not fully realized until the initiation in 1994 of true regional monitoring with the SCBPP. SCAMIT was able to seamlessly step into the role of a regional taxonomic resource because we had our program of activities and products in place. In subsequent regional programs SCAMIT has continued to play this important role of providing valuable quality assurance to the task of assessing biological integrity of infaunal and epifaunal invertebrate communities in the SCB.

This truly regional role for SCAMIT, in what are very high-visibility surveys, has greatly elevated our organization's profile. SCAMIT is frequently mentioned as a model for regional taxonomic QA by state and federal agencies addressing the development of biologically-based habitat quality assessments. Regulatory agencies have become increasingly sensitive to the dependence of such bioassessments on accurate and consistent taxonomy. Dave noted that there has been a gradual shift away from a sole reliance on contaminant-based criteria to assess habitat quality. New standards are being developed that include biological metrics that rely upon quantitative, species-level descriptions of marine and aquatic invertebrate communities. For instance, the BRI (Benthic Response Index), developed as part of the SCBPP, is highly dependent on good taxonomy. Dave noted that approximately 70 similar indices of biointegrity have been developed worldwide, many relying on species-level taxonomy. Within California, statewide Sediment Quality Objectives for enclosed bays and estuaries, are being developed by the State Water Resource Control Board that will include infaunal community assessment as a key component. These new objectives, which will become important regulatory tools affecting all wastewater and stormwater dischargers upstream of bays and estuaries (within the state) as well as dredging operations within ports and harbors, will increase the demand for the type of services and activities provided by SCAMIT.

This trend towards the increasing reliance on taxonomy-based indices is also seen in the freshwater world. California is developing biological tools for the assessment of surface waters. For instance, Jim Harrington and his group from California Fish and Game Aquatic Bioassessment Laboratory have developed an index for streams that relies upon the condition of the benthic macrofauna. They have concluded that there is a need for statewide, standardized taxonomic practices to assure that these assessments are accurate. To provide for



that need they have created the California Aquatic Bioassessment Laboratory Network (CAMLnet). This organization is in its infancy but will expand rapidly as these new tools become required elements in the assessment of surface waters in the State. Harrington has cited SCAMIT as the model for CAMLnet's development. Dave concluded that we should be aware of these issues and the fact that others are looking to us as a model for implementing regional taxonomic standards and QA as we discuss the future of SCAMIT.

At this point, others joined in the discussion. Cheryl commented that some freshwater people have joined SCAMIT recently. Ananda explained that SCCWRP is involved in studies that expand upstream into freshwater because those processes affect what happens in the ocean.

Kelvin was asked by the North American Benthological Society if SCAMIT has a certification process for taxonomy. They have proposed a model and more information about it can be found on their website:

www.benthos.org/Classified/index.cfm/AdID/1222/task/display.

Rick Rowe said the San Diego Stream Team has a certification program for taxonomy that involves a training program for their personnel to insure they are capable of working up the samples. He commented that a certification program at work may be a motivational factor for employees to improve their performance.

Ananda pointed out that we should first decide what we want to "be" (e.g. what we're willing and capable of) and then offer our services. Rick suggested expanding the distribution of the SCAMIT species list from border to border. Tony Phillips (City of Los Angeles) explained some significant changes in their new permit that commences in March. The program, with regards to ocean sampling, will be cut in half

while they expand sampling into wetland areas. This will incorporate new habitats and depths and they most certainly will see an increase in their species list.

At this time, we returned to the agenda for the meeting. Rick initiated the discussion for the first item, an online taxonomic database. He summarized the work he has done including searching for products that already exist, defining what information we want to include, and researching the idea of an "interactive species list". Ananda asked, "Who's the audience or target?" and suggested that we keep that in mind while developing the database. Lisa Haney (CSDLAC) commented that such a product would be very valuable to the newer taxonomists as several of our experienced taxonomists approach retirement.

Todd Haney (UCLA/NHMLAC) then described his prospective contribution to the database project. He provided a handout titled "A Funding Opportunity for the Development of Digital Taxonomic Products" and then presented the idea of writing a proposal to NSF, or another appropriate agency, for funding of the database project. In order to make any progress on this project, we must have supporting funds. Most of any award received would go towards salary. A computer scientist (programmer) would be hired, and time for work by participating taxonomists and others would be compensated by pay. With most active members having full-time employment in addition to occasional taxonomic work on a contractual basis, funds would be needed in order to compensate taxonomists for their time and contributions to the database project. Todd noted that he considered the strength of such a proposal to be the high degree of collaboration, the widespread utility of the product in both applied and academic settings, the general reliability of much of the data that have been produced by 30 years of monitoring efforts, the potential for training activities, and the special knowledge of the regional fauna that is shared



among the SCAMIT membership. Discussion followed about the issues of restricting information and obtaining certification. A condition of any NSF award would be that any products resulting from the project must be made freely available to all. SCAMIT would focus on the benthic invertebrate fauna of southern California, using the 4th edition of its taxonomic listing as a “backbone,” and include ecological data as well as taxonomic data. Todd explained that it might be prudent to first contact agencies to identify the most appropriate source of funding, given the nature of the project, and then apply for a small grant in support of planning and the completion of a full proposal. Todd noted that it would be worthwhile to begin considering details now for the submission of a proposal in 2006.

Shelly Walther suggested talking with Karen Stock of OBIS (Ocean Biogeographic Information System). Ananda pointed out that “SCAMIT needs to decide what SCAMIT wants to do”, not what other agencies might want us to do. It was asked if the executive committee has discussed a NSF proposal. Cheryl replied they have discussed this project and the executive committee did not want to make a decision for such a large project by themselves. They want the input of members. All members present at today’s meeting were in favor of proceeding with this proposal.

It was decided that a committee needed to be formed. Dean Pasko added that he felt this committee should be committed to both the proposal and taxonomic certification. It was agreed that the committee will consider the relationship between these issues; however, it is important to start on the NSF proposal first. The volunteers for the committee are: Todd Haney, Kelvin Barwick, Dave Montagne, Dean Pasko, Tony Phillips, Rick Rowe, and Shelly Walther. The committee will hold its first meeting Monday, January 24th, at 9:30 a.m. at SCCWRP.

Next Cheryl suggested a change for the newsletter. Perhaps the newsletter should be published bi-monthly, and there are several reasons to support this change. It would save time and money (postage). Also, it takes time to get feedback for the minutes and to produce voucher sheets and other taxonomic tools, so allowing 2 months to do this would lead to newsletter production in a timely manner. For important information that needs to be distributed soon, members can use the list-server or website.

After lunch, Don initiated a discussion about provisional species in databases. We questioned whether any existing databases include provisional species and how we might include ours. SCAMIT has many provisional species and dealing with these is part of our goal. This led to a suggestion by Lisa that SCAMIT should publish more species descriptions. It was commented that Mas Dojiri had a workshop on just this topic several years ago. Members were reminded that SCAMIT has some money for publishing, specifically for page charges and illustrations.

We moved on to our next item, Recruitment/ Training. This committee consisted of Lisa Haney, Megan Lilly, and Shelly Walther. One suggestion was development of a power point presentation that can be shown to classrooms and outreach programs and perhaps on the website. The presentation would include information about SCAMIT and the science of taxonomy. Lisa Haney volunteered to produce the presentation, and she will present a draft at the June SCAMIT meeting. Another suggestion was sponsor a prize for a science fair project that has similar interests as SCAMIT.

Shelly Walther reported back on her efforts concerning Advocacy of SCAMIT. She contacted Dr. Vicki Pearse, editor of *Invertebrate Biology* to discuss the idea of SCAMIT starting a journal on alpha-taxonomy of the Southern California region. Dr. Pearse felt that such a journal would not be inclusive



enough. It was suggested that SCAMIT members submit manuscripts to the journals Southern California Academy of Sciences and Zoological Taxa. Along those same lines, it was suggested that we schedule a SCAMIT meeting on electronic publishing of manuscripts.

Cheryl passed along a tip for posting taxonomic tools such as images and keys. Please e-mail Jay Shrake (our webmaster) directly to have him post it on the website. Cheryl also reported that Jay is looking into finding a new web host, and the officers should get together with Jay to discuss this.

The next topic of discussion was the SCAMIT library. The library currently resides in Don Cadien's office and consists of approximately 12 boxes of reprints. We discussed different ideas about what to do with the library. It was agreed that it is not getting used much, if at all, and that most of the reprints are duplicates of what exist in our own libraries. The idea of selling it was put forth which was then followed by the question whether it is worth someone's time to catalogue it first. This Herculean task has since been accomplished by Don Cadien and John Miller of LACSD. Members will get first choice at purchasing reprints (probably \$1 each), and the remainder will be sold in one batch. Don agreed to pick a day for members to peruse the library.

Shelly initiated a discussion on the topic of un-SCAMITized provisional species. It was proposed at the first Future of SCAMIT meeting that they be tackled and made into SCAMIT species. It was pointed out that many provisional species only have one or two specimens to represent the species, and SCAMITizing these may not be appropriate. Rick suggested that people should at a minimum get some documentation out to other taxonomists via the Taxonomic Tools section of the website. Lisa suggested the Taxonomic Tools section be split into two sections, "SCAMIT Species" and "Works in Progress".

And with that the meeting was adjourned for the day.

SCUM DROPPINGS

The Ninth annual SCUM meeting took place on 22 January 2005 at the San Diego Lab, hosted by Kelvin Barwick. As usual things were informal. After introductions we had presentations from several people including a report on multiannual population changes at a deep water site in the central pacific. Jim McLean gave us an update on his progress and expected publication dates for his two volume treatment of the mollusks of the NEP from Mexico to Puget Sound (Vol. 1) and from Puget Sound to the Russian Arctic (Vol. II). These will complement the recent bivalve monograph of Coan, Valentich Scott & Bernard. A number of workers gave us brief synopses of their recent work. Kelvin gave a presentation on the work of the Wastewater Lab that stimulated a good discussion of waste disposal. One of the attendees showed us a most remarkable artifact he had snagged on one of our offshore banks. It was about 6-7 feet tall, and unfortunately not alive when taken. It was a black coral skeleton of very bush like appearance. There were interesting mollusks and corals attached to this colony, and many gave it close scrutiny (see cover photo). We had a nice lunch and then were given a facilities tour by Kelvin. After a group photo folks dissolved into smaller groups for separate discussion.

In a fairly unlikely case of serendipity a paper describing the black coral, whose skeleton we had a chance to examine, came out in Zootaxa. It is available as a free downloadable PDF document and is titled: Opresko, Dennis M. 2005. A new species of antipatharian coral (Cnidaria: Anthozoa: Antipatharia) from the southern California Bight. Zootaxa 852:1-10 (available from www.mapress.com/zootaxa/content.html)





SCUM (Southern California Unified Malacologists) meet but once a year in January to reconnect, find out who's up to what, and generally hobnob with fellow mollusk enthusiasts. Anyone interested in attending the next meeting should contact Dan Geiger at the Santa Barbara Museum of Natural History, who will host the meeting next year. Don Cadien (CSDLAC)

JOB OPPORTUNITY

The Santa Barbara Museum of Natural History is seeking a database specialist to develop and implement an online database of specimen and taxonomic data on California beetles. Responsibilities will include enhancing an existing MS Access database, porting data to MS SQL Server, developing a web interface for secure database access, and applying biodiversity informatics community standard protocols (DiGIR, XML) to permit database interoperability with other online services. The position requires thorough understanding of relational databases, including MS Access and MS SQL Server, Structured Query Language, ODBC standards, the use of XML to transport

data between database systems, protocols for providing database access online, and web page construction, including HTML, PHP, JavaScript, CSS, and web ready imagery.

This is a full time, temporary position lasting up to one year. To apply send resume and description of qualifications, including URLs of online databases previously implemented to Human Resources - CDS, Santa Barbara Museum of Natural History, 2559 Puesta del Sol Rd., Santa Barbara, CA 93105.

A more detailed job description is posted at www.sbnature.org/visitors/hr.php.

For additional information email Dr. Michael Caterino at mcaterino@sbnature2.org.
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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:

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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.

The SCAMIT newsletter is published monthly and is distributed freely through the web site at 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



Application for Student Participation

Second International Marine Bivalve Workshop Kungkraben Bay, Thailand 21 August to 4 September 2005

In July 2002, a two-week field workshop on marine bivalves was held in the Florida Keys (see <http://peet.fmnh.org/Workshops.html>). Students worked one-on-one in research teams with some of the world's leading marine bivalve experts, culminating in a series of joint publications in a dedicated issue of the internationally recognized journal, *Malacologia* (see <http://peet.fmnh.org/Images/Cov1.pdf> and <http://peet.fmnh.org/Images/Cov4.pdf>).

We are pleased to present, again in association with our U. S. National Science Foundation grant from the Partnerships in Enhancing Expertise in Taxonomy (PEET) program (<http://peet.fmnh.org>), the Second International Marine Bivalve Workshop (IMBW2). This event will be held as part of "Marine Molluscs of Kungkraben Bay, Thailand," being organized by Drs. Kashane Chalermwat and Pichai Sonchaeng (Burapha University), Dr. Fred Wells (Perth, Western Australia), and us.

Kungkraben Bay is located in the Ta Mai District in Chantaburi Province (12°32'N to 12°41'N, 101°52' to 101°57'E), 230 km southeast of Bangkok, west of the city of Chantaburi. The area is part of a Royal Conservation Project in the northern Gulf of Thailand, and was not affected by the devastating tsunami last December. The bay is 4.6 km long and 2.6 km wide, with a fringing mangrove forest 30-200 m wide on the inner bay side, and up to 20 m high. The mangroves are mixed, with *Rhizophora*, *Sonneratia*, *Avicennia* and other genera occurring. Much of the bay dries during spring tides. The center of the bay is soft sediment with a variety of sediment sizes, ranging from fine muds to coarser sands. Two species of seagrass are found in small quantities in the center of the bay. The deepest part of the bay is 8 m. The headlands are both rocky, with a diverse assemblage of molluscs. The outer margins of the bay are sandy shores, with a fisheries research station on the eastern shore. A small coral reef occurs in shallow water near the shore about 1 km south of the fisheries station. In addition to operations originating from shore, we plan to also have a limited amount of trawling from commercial fishing boats and some diving.

As previously, the emphasis of IMBW2 will be on the taxonomy and anatomy of selected shallow-water bivalves. Students will again be paired with practicing bivalve researchers, with the goal of producing publishable peer-reviewed manuscripts. We hope also to include presentations by the participating scientists, invited guests, and by each student on the research conducted at the workshop.

Full student funding for the workshop will be provided to selected candidates, including assistance with air transportation to and from Bangkok and the workshop fee (which includes basic accommodation (at Chanthaburi Campus of Burapha University), meals, local transportation [land and sea], laboratory space, limited lab equipment, and collecting permits). Travel visas and medical insurance are the personal responsibility of each participant.

Requirements are a bachelors-level degree (masters preferred), proficiency in English, the ability to swim (preferably to snorkel; scuba diving is optional and dependant on certain conditions), a willingness to work long hours in field collecting and laboratory work, plus a strong interest and career goals in organismal biology and malacology. Prior experience with marine bivalves is useful but not required – one of the goals of the workshop is expose new students to this field of malacology.

There are 4 available slots for students from outside Thailand (an additional 4 for Thai students will be chosen by separate panel in Thailand – we will forward Thai applications accordingly). Your application must include:

- Up-to-date Curriculum Vitae, including full name, institutional address, academic status, phone number, and email.
- Description of your prior experience with marine invertebrates and/or mollusks, plus a statement of your interest in participating in the workshop and how it can advance your research goals (max. 5 pages).
- One supporting email or letter of recommendation from your major advisor or another professional who is familiar with your record and abilities.

Send all materials (email submission strongly preferred) to Dr. Mikkelsen (address and email below). All materials must be received **by 20 March 2005**.

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