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Cross section through the dorsum of unknown juvenile hormathid (Anthozoa: Hormathiidae) from Monterey Bay Canyon (322m). Photo by Charles A Phillips, 2014.

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11 JANUARY 2016, MISCELLANEOUS PHYLA MYSTERY SPECIMENS NHMLAC

Attendance: Wendy Enright, Megan Lilly (CSD); Don Cadien, Larry Lovell (LACSD); Greg Lyon (CLA-EMD); Tony Phillips, Dean Pasko (Private Consultants); Leslie Harris (NHMLAC)

Business: Larry announced that we are almost caught up with past Newsletters. He also opened the nominations for Officers via an earlier email and again at this meeting. The current slate of officers was renominated by Tony Phillips, which

UPCOMING MEETINGS

Visit the SCAMIT website at: www.scamit.org for the latest upcoming meetings announcements.

was seconded by Megan Lilly. The officers present agreed to run again, and we, of course, renominated Erin for Treasurer in absentia. Nominations will remain open and can be submitted via the general list server, email, or at the February meeting. Ballots will be distributed via email in February and will be due to Leslie Harris by the March meeting.

It is always good for new persons to become involved, bringing fresh ideas and new energy. The history of Officership in SCAMIT has two trends 1) long tenure and 2) a supportive work affiliation with a POTW. Most officers have been part of POTW agencies, with a few exceptions (Leslie, Don when working for Marine Biological Consultants, Larry when operating as a private consultant, and Dean). Larry encouraged those who work for a POTW to consider becoming more involved with SCAMIT to share their ideas and give back to the organization.

We then discussed the need for meeting topics for 2016-17, lest we be blighted with a polychaete-centric agenda. Regional Bight QA, specifically the synoptic data review (SDR) often generates the need for meeting topics, and this regional survey was no different. Larry noted Erin's comment at the Executive Committee meeting that we don't need to have the same old "experts" lead the meeting. Less experienced members, those with the questions could provide the subject matter. The topic could also be more problem-driven rather than taxa-driven. In essence the meeting could be organized by one or more people with problems requiring resolution but without those individuals necessarily being in charge of providing the answers or preparing to lead a workshop. These individuals might instead be responsible for pulling together a list of specimens to be reviewed, and coordinate with the Vice-President to organize the meeting.

Megan then noted that when she was Secretary she had received comments that the meeting discussion would often become too esoteric and that those people who we are trying to help would get lost in the discussion. They might come away with an answer, but confused as to the how or why we arrived at it.

Tony then brought up several groups that are in need of some attention and resolution, such as Heteronemertea, cirratulids, and pyramidellids. Tony has 20 species of *Turbonilla*, which includes eight species from San Diego that are in need of discussion and sharing. It's the same with *Odostomia*. Megan brought up other phyla that require work, such as *Leptosynapta*, *Listriolobus*, and *Chiridota*. Some of these (e.g., heteronemerteans) were discussed in the Bight-related SCAMIT meetings, but the SDR demonstrated that more work is needed. Megan offered to take some time to review the City of San Diego's lab conventions for certain taxa, and generate a list that might be used to jump-start a meeting or two.



And then there is always the problem of keeping up with the literature. For example, Tony brought up the recent papers from the 2014 Nemertean Conference (see Kang et al 2015) who used morphology and sequencing to show that records of *Lineus ruber* from the Pacific coast of North America are actually *Rhamphogordium sanguineus*, as well as Hiebert and Maslakova (2015), also using morphology and sequencing, to show that records of *Micrura alaskensis* Coe 1901 from the northwest and northeast Pacific are actually a complex of five cryptic species.

However, Don argued that this is not the time to address Pyramidellids suggesting that instead we wait until Pat LaFollette's review of Dr. McLean's pyramidellid chapter is available, after which we would have a better idea of what to do. The tome will include about 350 described species from the west coast, some of which will probably be considered invalid from the get-go. Turrids are another example of a group that needs a lot of work, as do the shelled opisthobranchs. Larry added that we should include trawl material in these meetings as well. So a sea cucumber meeting that included trawl organisms could hold a full day.

Don also supported the idea of a different type of meeting: "question-based" meetings instead of "answer-based" meetings. Say for example, choose a phylum and see what we do and do NOT know about that group in order to be good practitioners of that group. Perhaps have people send in questions ahead of time so that they could be addressed during the meeting. Leslie suggested that the morning be a general discussion that generates the questions, with the afternoon providing answers, better defining the questions, or just helping define what needs to be addressed at a later meeting.

Leslie then asked whether SCAMIT should bring in someone to help with some of the problem groups that we wrestled with during this, and previous, Bight surveys (e.g., Dr. Jon Norenburg for nemerteans). SCAMIT could pay for travel and meals in exchange for help resolving our problem taxa. A multiple-day workshop might be required, but that would be great if we could work it out. We would just need to make sure the expert would be able to approach the problems as we do and understand that we could not process our specimens in the same way that he/she might (i.e., with serial sections, etc.).

Tony also brought up the issue we have with certain other problematic animals, such as phoronids and earlier SCAMIT protocols that were established for their enumeration. We tend to see a lot of fragmented specimens that are missing their lophophores in certain environments, but they often go uncounted so as to avoid double counts, a convention adopted when double van veen grabs were used to collect replicate infauna samples.

Megan then suggested that the idea of what to count and not count might also be a topic for discussion and resolution. She recalled being trained at some point that one should only count animals that are likely participants in the trophic structure of the benthos (i.e., a feeding organism at the time of capture). This idea likely was related to the decision of when to count (or not) what appears to be an apparent molt of a crustacean or an epitoke of a polychaete, etc. This led to the thought that perhaps it was time to hold a meeting to discuss general taxonomic conventions to standardize as well as possible inter-lab speciation and enumerations.

Of course, there is the age old question of what groups need provisional species voucher sheets prepared or the most help in resolving troubling species...besides the worms that is. Other meeting topics such as "How to ID this [insert taxon here]," or an even less formal format where those new to taxonomy can bring questions or specimens for resolution to the meeting for help answering the question or performing the identification. Periodic meetings that focus upon a



larger taxonomic group (e.g., Mollusca) where questionable specimens can be brought and we can have general discussions about resources, the known fauna, the species we don't report but that are also possible, useful, and perhaps more importantly, not useful literature.

This led us to an attempt to describe our membership. There are three levels of membership: those with limited experience that don't even know what questions to ask but need assistance identifying the specimens at hand; those with enough experience and knowledge that they know the questions to ask, but are not sure how to answer them; and those older types who have moved beyond the general problems of identifying the organisms and tend to be more interested in the esoteric questions of phylogeny.

Leslie asked that we break from these discussions and get started with the event at hand…blobs of the unknown.

We spent the rest of the morning and afternoon, with only a brief break for a snack graciously provided by the NHMLAC, reviewing jars and vials of unidentified collections. We were able to discard many samples because the specimens were in such poor condition that they no longer retained the characters necessary for a proper identification or were actually something other than a once live organism. Other specimens were identified to broad categories (phyla, families, etc.), with a few specimens identified to species. Overall we identified or categorized a number of specimens: echiuran (*Nellobia eusoma*); bryozoa (*Crisia occidentalis, Bugula neveritina* Type D, *Cellaria diffusa, Thalamoporella californica*); hydrozoa (*Candelabrum*, sp); Ascidiacea (compound ascidians, *Thaliacea, Molgula* sp., *Styela* sp.); Anthozoa (Edwardsiidae, *Halianthella* sp.); sponges; Platyhelminthes (Acotylea); pelagic Nemertea; Molpadiidae; Anomura (*Pagurus aleuticus*); Pleurobranchidae.

Kathy Omura remains hopeful that SCAMIT will be able do this again in February. There are a few odds and ends remaining, mostly the ascidians, stony corals and anemones. She offered to pull out other taxa if that is where the group's interest lies.

18 FEBRUARY 2016, MISCELLANEOUS PHYLA MYSTERY SPECIMENS, NHMLAC

Attendance: Wendy Enright, Megan Lilly (CSD); Don Cadien, Larry Lovell (LACSD); Erin Oderlin, Greg Lyon (CLA-EMD); Ben Ferraro, Kelvin Barwick (OCSD); Leslie Harris (NHMLAC)

The day began with "round robin" introductions as we had a new face in the crowd, Ben Ferraro from OCSD.

Larry then started the business portion of the meeting by discussing the upcoming election for SCAMIT officers. He announced that the current suite of officers had been nominated, but he opened the floor for any other nominations. None were given and so it was moved and seconded to close nominations for this year's election. The ballots will be emailed out by the end of February and will be due March 18th.

How to fill the months ahead with meetings was the next topic.

The March meeting will be held on Tuesday March 22 to discuss polychaetes. The plan is to focus on a few areas that are frequently sources of confusion and consternation: speciating specimens of Lumbrineris when you have only anterior parapodia; distinguishing Euclymeninae sp A vs. B,



among other polychaetes issues. The meeting will be held at the Natural History Museum of Los Angeles County (NHMLAC).

The April meeting will be Monday, April 18th and will look at the issue of *Solamen* versus *Crenella* and other perplexing mollusk issues. The meeting will be held at the Orange County Sanitation District (OCSD).

We were not able to decide on a topic for May. Larry will likely be unavailable to attend a May meeting due to upcoming knee surgery.

Larry also announced that the Southern California Academy of Sciences (SCAS) Annual Meeting will be May 6th and 7th at University of Southern California (USC). SCAMIT has traditionally set up an information and membership table at these meetings. Usually Larry mans the table, but again, due to his knee surgery, he will be unable to perform this duty. We're hoping someone else will volunteer as it is a good outreach opportunity for SCAMIT. We only have the table set up on the first day, Friday, but we are there all day. Whoever does volunteer needs to contact Larry so he can put them in touch with the proper people at both USC and SCAS to coordinate the logistics.

The 12th International Polychaete Conference (IPC) will be held at the National Museum Wales in Cardiff, UK this year from August 1–5, 2016. Larry is looking forward to attending. As for the 13th International Polychaete Conference, an organizing committee has already been formed and consists of several SCAMIT members (Leslie Harris, Bruno Pernot, Larry Lovell, Kurt Fitzhugh, Greg Rouse, Lisa Levin, Jim Blake, Nancy Maciolek, and Christine Whitcraft). If selected at the IPC 12, the 2019 IPC 13 will be held at Long Beach State University to honor to Dr. Reish.

With the business portion of the meeting concluded, it was time to open jars containing "mystery blobs" with all taxonomists present doing their best to identify the contents to the lowest possible taxon. Many of the animals had been preserved for so long that proper dissection and/or identification was next to impossible, but even getting an animal to Phylum, Order, or Family is helpful with regards to the Museum organizing its collections.

To Kathy Omura's delight, the group spent the rest of the morning and afternoon reviewing jars and vials of unidentified collections. This set of samples included primarily stony corals and others listed as "anthozoans." As with the previous attempts, some samples included specimens that could be identified to species while others were identified to broad categories (phyla, families, etc.). The following groups were identified or categorized: hydrocoral (*Stylaster californicus* [formally *Allopora californica*]); Corallimorpharia (*Corynactis californica*), Scleractinia (*Coenocyathus bowersi, Paracyathus stearnsii,* unidentifiable corals); Chaetodermatids (*Limifossor fratula, Falcidens hartmanae, Caudofoveata* unidentified); Ascidiacea (*Aplidium arenatum,* unidentified Styelidae); Siphonophora, Spaeronectidae; and unidentifiable Actinaria, Holothuroidea, Enteropneusta, Silicea, Lineidae, Bryozoa, and Sipunculida.

Bibilography

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Please visit the SCAMIT Website at: www.scamit.org

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The SCAMIT newsletter is published every two months and is distributed freely to members in good standing. Membership is \$15 for an electronic copy of the newsletter, available via the web site at www.scamit.org, and \$30 to receive a printed copy via USPS. Institutional membership, which includes a mailed printed copy, is \$60. All correspondences can be sent to the Secretary at the email address above or to: SCAMIT

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