

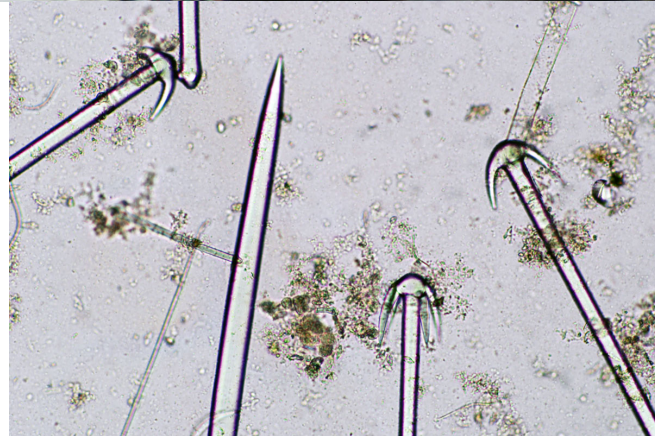
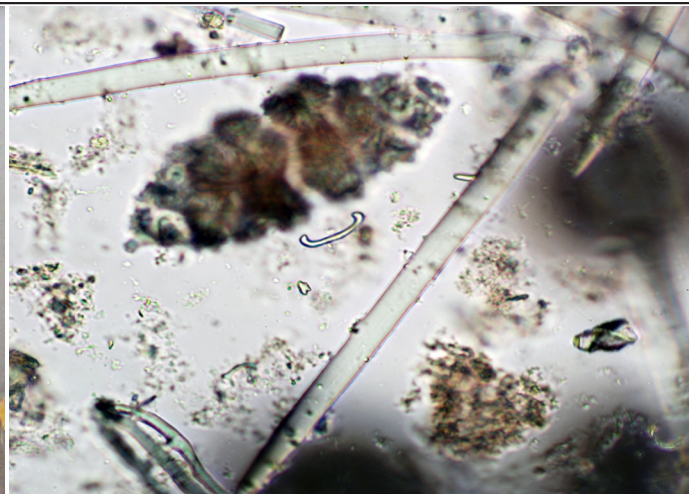
# SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS



November–December, 2018

SCAMIT Newsletter

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*Arcanus* sp, B'18 station 10265, 8 August 2018, 80m  
Growing on a Gorgoniidae

Top spicule photo shows contaminants; sclerites (Gorgoniidae) and ossicles (Holothuroidea), not to mention most likely spicules from other sponge species encountered in the trawl.

Field photo by Z. Scott (CSD)  
Spicule photos by M. Lilly (CSD)

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The SCAMIT newsletter is not deemed to be a valid publication for formal taxonomic purposes

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**5 NOVEMBER 2018, B'18 TRAWL INVERTEBRATE FID REVIEW, OCSD**

**Attendance:** Laura Terriquez, Kelvin Barwick, Danny Tang, OCSD; Maiko Kasuya, Megan Lilly, Wendy Enright, Ron Velarde, CSD; Jim Mann, Aquatic Bioassay; Jennifer Smolenski, Greg Lyon, Erin Oderlin, CLAEMD; Christine Boren, Bill Furlong, Jovairia “JoJo” Loan, Chase McDonald, Brent Haggin, Don Cadien, LACSD; Wayne Dossett, MBC; Mary Tamburro, Merkel & Assoc.

Kelvin started the meeting asking attendees to do a “round robin” of introductions. Upcoming meetings were then announced and after, the taxonomy portion opened with Megan’s discussion of B’18 trawl FID sponges.

**UPCOMING MEETINGS**

Visit the SCAMIT website at: [www.scamit.org](http://www.scamit.org) for the latest upcoming meetings announcements.

Megan had created a very brief PowerPoint which reviewed 3 sponges she had attempted to ID from B’18 trawls. She showed photos of the animals in the field as well as spicule photos taken in the lab. Both she and Wendy Enright spent a bit of time attempting IDs and then sent their results to Don Cadien for his input (as part of the B’18 trawl invert voucher QA/QC process). The final identifications were:

- *Acarnus* sp (see cover photos)
- *Halichondria* sp
- *Lissodendoryx* sp

Megan briefly (and bitterly) complained about the difficulty in feeling confident regarding sponge identifications due to the strong possibility of “spicule contamination” in any given tissue sample. For a more thorough discussion of this problem, see SCAMIT NL Vol 31 nos. 3&4 (Sept-Dec 2012) which covers a meeting with Dave Elvin (one of the authors of the “sponge book”). She took the level of silence in the room as tacit agreement and sympathy.

Her next FID animal was a coral tentatively ID’ed as *Desmophyllum dianthus* (Scleractinia; Anthozoa). It was compared to an OCSD voucher and confirmed.

Danny had a few quick questions about some crustacea he encountered during the B’18 trawls. He asked for consensus/verification (which he received) that both, *Pasiphaea pacifica* and *Eusegerges similis* (Arthropoda; Decapoda) were not to be included in the data due to their pelagic nature. He then asked if anyone else was seeing variability in the rostrum of the decapod *Spirontocaris holmesii*? Chase confirmed he’d been seeing some variability in this structure.

That ended the discussion part of the meeting and we moved to the lab to spend the rest of day reviewing specimens.

Following is a summary of FID specimens organized by taxonomist and agency.

Brent (LACSD):

- B’18 station 10283, FID Polychaeta *Aphrodita* sp = *Aphrodita castanea*
- B’18 station 10296, FID Polychaeta *Aphrodita* sp = *Aphrodita castanea*



JoJo (LACSD):

- FID ascidian = *Halocynthia igaboja*
- Very small, juvenile, Echinodermata = Asteroidea

Jennifer (CLAEMD):

- Zoanthid tentatively identified as *Epizoanthus induratum*. Megan looked at it but didn't feel qualified to make a "final call" and said it needed to be reviewed by Tony Phillips and Dean Pasko. (This identification was later confirmed by T. Phillips)
- FID Pennatulacea – it was an unusual specimen and no one felt confident about assigning it a species level identification. The idea of designating a provisional name was proposed. CLAEMD said they would consider that option if no more progress had been made on its identification by the time of the B'18 trawl data deadline

Erin (CLAEMD):

- The ascidian *Bathypera feminalba* – confirmed by Megan
- Juvenile, 3-armed asteroid which Megan thought might have been a *Myxoderma platyacanthum*, but could not confirm

Greg (CLAEMD):

- The gastropod *Simnia barbarensis* - confirmed by Ron
- The gastropod *Calinaticina oldroydii* - confirmed by Kelvin

Wayne (MBC):

- The holothuroid *Apostichopus* sp A – both the specimen and live photos were reviewed and the ID was confirmed
- The echinoid *Brisaster townsendi* - confirmed

#### **19 NOVEMBER 2018, SPECIES LIST REVIEW COMMITTEE (SLRC), OCSD**

**Attendance:** Megan Lilly, Wendy Enright, Katie Beauchamp, CSD; Larry Lovell, Tony Phillips, Dean Pasko, DCE; Ben Ferraro, Kelvin Barwick, OCSD; Jovairia "JoJo" Loan, Brent Haggin, Don Cadien, LACSD; Greg Lyon, Erin Oderlin, CLAEMD; Remote attendee – Leslie Harris, NHMLAC

The meeting was called to order by Kelvin who gave a very brief overview of the committee's structure and purpose. Kelvin was then nominated, and unanimously approved, to be the Chair for ed. 13 of the SCAMIT Species List.

Wendy Enright then brought up the csv file of the Species List she created and wanted feedback from the other agencies; is it working for them? JoJo said that it has been working well for LACSD but Brent also chimed in and said he noted that there were 2 higher order classification columns (Tribe and Superclass) that were not present in ed. 11. Greg Lyon is still working on it and will report back.

Tony opined that ed. 12 was one of the "cleanest" Lists produced so far, with far fewer spelling errors, typos, etc.



Kelvin demonstrated his method of annotating his pdf working copy of the Species List so when it is time for the next edition, all his notes/comments are in one place.

Kelvin then queried the group about a reasonable time frame for publication of ed. 13. Wendy pointed out that since we have to use ed. 12 for the B'18 samples, we may as well wait to start working on ed. 13. Consensus was reached for 1 July 2020 as the tentative publication goal.

There was a brief discussion about whether efforts should be made to get the Species List published in a peer-reviewed journal. The suggestion originally came from our webmaster Dean Pentcheff but he unfortunately was not in attendance to explain his thoughts on this matter. Kelvin asked for suggestions on where (which Journals) the List should be published. Some recommendations were: Zoo Keys (Tony), SCAS (Larry), Checklist journals (Leslie). Arguments for the idea included: Brent - gives us more legitimacy among the scientific community; Ben – the List informs policy at the agencies, it would be nice to have it validated by the larger scientific community. However, Don brought up a legitimate con: why publish a List that is static and will be outdated within a year or two? We would then have an outdated List “stuck” in the literature.

Wendy and Brent offered to look at current published checklists and find out what the Journal requirements are, etc., and will report back at the next meeting.

Dean Pasko brought up the point that the biggest problem with our Species List being accepted and published is that it contains many provisional species (approx. 300) for which there is not adequate documentation as per the requirements of a peer-reviewed journal. Dean feels we need to “clean up” the provisional species before trying to pursue publication.

A discussion then ensued about both SCAMIT and “in-house” (among the agencies) provisional species. In order to clean up our provisional species listings both Dean and Ben suggested that we have meetings, by Phyla, to address this issue. As we meet we will review the provisional species and make a series of decisions regarding each species - (1) Is it supported by documentation? If not, then should it be expunged from the SCAMIT “hold” list? (2) If it is documented, is it in the SCAMIT Toolbox? If not, should it be uploaded? We decided these meetings need to begin sooner rather than later as this is an issue that’s been needing attention for some time.

Back to the upcoming production of ed. 13, Brent will be sending out the various phyla sections to the leads for those groups. It will be up to the leads to disseminate the information to the secondary and tertiary members. Don also suggested that at least two weeks prior to our meetings any edits, and literature used to justify the edits, be sent out to the various subcommittees.

Our next SLRC meeting will be in 6 months after which we will start ramping up the frequency of our meetings to a quarterly schedule.

Leslie then brought up the idea of SCAMIT having a presence at the upcoming IPC 13 (13th International Polychaete Conference). It was discussed whether we should do a presentation on the “working” polychaete section of ed. 13 and seek feedback from the world renowned polychaete experts that will be present. This will be added as an agenda item for the upcoming Annual SCAMIT Membership meeting in December.

We then moved on to a discussion about the SCAMIT Database project and BRI (benthic response index) calculations. This subject was initially brought up by Erin and Greg, and so Kelvin turned the floor over to Erin. At CLAEMD they are concerned by the p-codes that are based on ed. 5 of the Species List (see Smith, R.W. et al 2001 for information on p-codes and





BRI). As the taxonomy has changed over the last 7(!) editions of the Species List, application of p-codes to the updated taxa names must be done individually by each agency, introducing potential inconsistencies. She and Greg feel that standardized application of appropriate p-codes to the current taxonomy is necessary for the BRI to function as intended. Without standardized application of p-codes, there is concern about discrepancy among the calculated BRI results. Circling back to the Database Tool, they feel it could help agencies update their species lists and stay consistent amongst each other with regards to p-codes and BRI calculations. She suggested, as an “action item”, that each agency share p-codes to check for inconsistencies, and work with a single chosen benthic infauna data set to apply their BRI calculations, and subsequently compare their results. Assuming there are discrepancies, as we all suspect there might be, these can then be shown to SCCWRP as a way to leverage our request for help with the SCAMIT Database Tool. Kelvin stated that the idea is the Database could become the “keeper” of the BRI, so that as species lists are updated, the changes will cascade to the p-codes, creating a consistency amongst agencies and in usage.

It was mentioned that since all the agencies rely on BRI calculations, SCAMIT should bring this issue to CTAG (Commissioner Technical Advisory Group) and ask them to help us in our efforts to seek support from SCCWRP. We decided on people from the various agencies that would spearhead the efforts. Below are the suggested volunteers. Since some people were “volunteered in absentia”, this list may change. Kelvin said that he could not be the Chair of the Committee as he feels overextended. However, he would want to participate as a representative of the SLRC/OCSD:

CLAEMD – Erin Oderlin (Chair) and Greg Lyon

OCSD – Ben Ferraro, Kelvin Barwick

CSD – Wendy Enright, Maiko Kasuya and Ron Velarde

LACSD – JoJo Loan, Chase McDonald, Shelly Walther

SLRC – Kelvin Barwick

ABC - Karin Wisenbaker

MBC - ?

Kelvin will adapt a previous list serve group (original database committee) for this newly formed committee. He will be sharing the log on information with Erin (Chair).

We closed the day with a round table discussion. JoJo brought up the need for another B'18 Trawl Invertebrate FID meeting, and Kelvin agreed to add it to the annual meeting schedule. We also reviewed the “cut off” point, with regards to salinity, for species inclusion in the List. Animals inhabiting environs with  $\geq 12$  ppt salinity will be included; those from less saline habitats do not meet the requirements for inclusion based on the parameters spelled out in the front matter.

With that we created an “Action Items List” based on the day’s decisions and adjourned.

### 3 DECEMBER 2018, ANNUAL MEMBERSHIP MEETING, SCCWRP

**Attendance:** Kelvin Barwick, Ben Ferraro, Danny Tang, Rob Gamber, OCSD; Wendy Enright, Megan Lilly, CSD; Cody Larsen, JoAnne Linnenbrink, Craig Campbell, Greg Lyon, Erin Oderlin, Jennifer Smolenski, CLAEMD; Dean Pentcheff, NHMLAC; Terra Petry, Jovairia Loan, Brent Haggin, Christine Boren, Bill Furlong, Norbert Lee, Don Cadien, LACSD; Larry Lovell, DCE

Kelvin Barwick, SCAMIT President, opened the meeting at 9:30. He started by discussing the situation with the Don Reish fund that SCAMIT had originally planned to collect and then donate



to the IPC for a student grant. However, Erin, our Treasurer, spoke with a tax accountant who advised SCAMIT that doing so could jeopardize our 501 (c)(3) status. So, people are encouraged to make private donations in Don Reish's memory and can do so through the CSULB 49'er foundation. The link for donating can be found on the IPC 13 website. The monies that Don Reish himself had donated have since been disbursed towards student grants.

The next topic was Institutional SCAMIT memberships. It was recently realized that this level of membership is not written or codified anywhere. It has always been passed down, through word of mouth from officer to officer, that an institutional membership includes 6 electronic memberships and 1 hard copy of the NL. We realized that this is a "pretty good deal" for whomever purchases this membership and so in April (a month prior to membership renewal month, May) the Executive Committee will revisit this issue and determine a new fee for an institutional membership and codify it in the membership form.

The creation of a PayPal account for SCAMIT has been a success. Erin reported that 36 members used this option for paying their dues. Unfortunately, Erin miscalculated the dues for PayPal users and was off by 2 cents (under). She personally made up the difference but next year there will be 2 cents added to the cost of paying your dues via PayPal.

Reviving the BATMAN (Benthic Assessment Taxonomy Management) group, or creating a similar type of working group, was the next subject. Erin Oderlin and Greg Lyon reviewed the problem of possible "drift" in application of the p-codes among the agencies and the resulting differences in BRI calculations. They had discussed this at the previous month's Species List Review Committee meeting and were covering it again for the attendees that had not been present. It is SCAMIT's hope to find a way to be the "keeper" of the p-codes and have them associated with the Species List and maintained in a database. This would allow for consistency among the agencies and SCAMIT would function much in the same way as it does for taxonomy. SCAMIT realizes it needs to come up with an actual dollar figure proposal to bring to CTAG and SCCWRP for help in finally getting the Database Tool completed, even if for now it serves the sole purpose of maintaining the integrity of the Species List and the p-codes.

The plan is for Erin and Greg to gather a list of p-codes from the various agencies and run test BRI calculations on an "unbiased" dataset (a previous Bight survey dataset was suggested). The results will show how much drift exists between the agencies.

A subcommittee will be formed to address this issue and it was decided that each of the agencies should have at least one taxonomist and one analyst, assigned to this committee. Near the end of the meeting Dr. Dave Gillett, of SCCWRP, joined us to give us his opinion on the issue. He agrees that we need to run a "test case" and look for evidence of a problem. Once we have that evidence he can take it to his supervisors at SCCWRP and ask for support for the SCAMIT database project, to help resolve this issue. This is no small matter as, at least for the POTWs (Publicly Owned Treatment Works), the use of the BRI is written in to their permits and is a required calculation.

Kelvin then gave a brief overview of the work being done by the Species List Review Committee. Edition 12 was successfully published on 1 July 2018, and work on ed. 13 has begun. Edition 13 will have a 2 year publication cycle and the aim is to have it published 1 July 2020. There has been some discussion on the pros and cons of having our List published in a peer-reviewed journal. An exploratory committee has been formed to research this option.



One possible problem with publishing the List to a peer-reviewed journal are the many SCAMIT provisional species contained therein. While attempts have been made in the past to “clean up” the List, it has yet to be accomplished. So, the SLRC will be having a special “provisional species review” meeting on December 19<sup>th</sup> at SCCWRP. The goal for that day is to go through the provisional species, broken up into groups by phyla and their respective experts, and simply answer two questions: (1) Is there documentation to support the species? (2) If yes, is it sufficient and has it been distributed to SCAMIT members in some fashion? Species for which there is not adequate documentation should be culled and that will be a start towards “de-cluttering” the Species List.

We then went on to schedule out SCAMIT meetings for the next 12 months and were successful in filling the calendar.

A delicious lunch, provided by SCAMIT as a way of thanking our members, was enjoyed by all.

### **19 DECEMBER 2018, SLRC PROVISIONAL SPECIES REVIEW, SCCWRP**

**Attendance:** Kelvin Barwick, Ben Ferraro, Danny Tang, OCSD; Jovairia Loan, Brent Haggin, Don Cadien, LACSD; Leslie Harris, NHMLAC; Jennifer Smolenski, Greg Lyon, Erin Oderlin, CLAEMD; Larry Lovell, Dean Pasko, Tony Phillips, DCE; Megan Lilly, Wendy Enright, CSD

The purpose of the meeting was to review agencies’ provisional species spreadsheets and rank each species from 1-3; with 1 = insufficient material, probably no future material coming, should be moved to archive list; 2 = sufficient information for identification purposes and for in-house SCAMIT use, but not ready for publication; and 3 = complete voucher or ID sheet that is sufficient for publication. A ranking of “3” means if the SCAMIT List is published in a peer-reviewed journal and we are asked about a species, we can provide complete and detailed information that will allow said species to be distinguished and identified. In the morning we were able to cover, mollusks, echinoderms, crustaceans, and all of the miscellaneous phyla except cnidaria and polycladida.

We decided to break for lunch at that point and hear from Dr. Steve Weisberg (SCCWRP Director) as he’d asked for a few minutes of our time. Steve had been contacted by BOEM (Bureau of Ocean Energy Management) as they are looking to create a regional ocean data portal on the west coast. They asked Steve for his recommendation on which aspect of ocean monitoring to look at for concerns related to acidification and other factors. They are exploring aquaculture, Marine Protected Areas (MPAs), environmental monitoring, etc. Steve suggested looking at the benthos. The possibility of applying the M-AMBI (Multivariate AZTI Marine Biotic Index, the index adopted by the EPA for application to its coastal assessments) was discussed. Before any analysis can begin there is a need to identify all the large west coast datasets, e.g., EMAP, POTW monitoring (Washington, Oregon, California), and academia. Once the datasets have been gathered, they need to be “harmonized.” The taxonomic aspect of this is where Steve thinks SCAMIT could play an important role. He is offering to use some of the monies provided by BOEM to pay SCAMIT to help harmonize names up and down the entire west coast. BOEM is particularly interested in Morro Bay and Humboldt Bay but will probably start in Southern California due to the number and thoroughness of the region’s data sets. The first step is for SCCWRP to put together a list of existing datasets.

Steve wanted to gauge our interest. He is willing to give a \$10k donation to SCAMIT to have us help work on the taxonomic harmonization aspect. The question arose, does SCAMIT want



to create a contractual obligation with SCCWRP? Can we? Can we do it with individuals? The contract between BOEM and SCCWRP is being written as having 3 one-year extensions with the hopes of slowly moving up the coast.

Don asked, who is going to be guarding the gate of the portal? Steve replied that SCCWRP will, since the data will be on SCCWRP's server. Don felt it was important that whoever is handling the data, understand the concept of taxonomy, with which the staff at SCCWRP are quite familiar.

Brent asked Steve what was the expected time line for the first part of the project? He replied that one hadn't been set yet but was hoping to get data together by May 2019 and hopefully have SCAMIT work on it in June. Ultimately, he wants to provide BOEM with a database with the M-AMBI applied and have created a few maps, etc., showing examples of its usefulness.

Larry mentioned that Henry Lee (EPA) recently worked with DCE (Dancing Coyote Environmental) on the CBRAT (Coastal Biotic Response Assessment Tool) which has some similarities to what was being discussed. Although CBRAT was looking more at abundance, distribution, and life history of specific phyla.

Wendy recommended that we take the idea back to our respective program managers and see if they feel we have resources to provide.

Don pointed out that there will be two levels of harmonization; the 1<sup>st</sup> level will rely only on published literature; the 2<sup>nd</sup> (higher) level, will involve efforts by practicing taxonomists up the entire assessed range.

Someone mentioned the now defunct NAMIT (Northern Association of Marine Invertebrate Taxonomists) who covered the Pacific Northwest. Do they have old data that would be accessible? It was suggested that someone try to find contacts among previous members.

In the afternoon we broke into two groups; one working on polyclads and cnidarians, and the other on polychaetes.

After the provisional species review was over those of us remaining readjoined in the large conference room and discussed how and if SCAMIT is going to move forward with Steve Weisberg's proposal. After much discussion about pros, cons, options, etc., with helpful input from Dean Pasko about what it was like to run the CBRAT program for the EPA, we decided that the very first step is to have a CPA verify that SCAMIT, as a non-profit, can accept this project without jeopardizing our 501 (c)(3) status. Erin Oderlin agreed to this task and will report back.

#### LITERATURE CITED

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Please visit the SCAMIT Website at: [www.scamit.org](http://www.scamit.org)

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