SOUTHERN CALIFORNIA ASSOCATIONOF MARINE INVERTEBRATE TAXONOMISTS



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Acanthodoris sp - unusual color morph of Acanthodoris rhodoceras??
B'18 station 10237, 1 August 2018, 12m
Photo by Z. Scott, CSD.

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14 JANUARY 2019, B'18 TRAWL INVERTEBRATE FIDS CONTINUED, OCSD

Attendance: Ron Velarde, Megan Lilly, Wendy Enright, Maiko Kasuya, CSD; Erin Oderlin, Greg Lyon, Jennifer Smolenski, CLAEMD; Don Cadien, Jovairia Loan, Chase McDonald, LACSD; Tony Phillips, Dean Pasko, DCE; Jim Mann, Aquatic Bioassay; Mike McCarthy, Danny

Tang, Ernest Ruckman, Ben Ferraro, Kelvin Barwick, OCSD; Alex Tasoff, California Lutheran University.

This meeting was a continuation of the B'18 trawl invertebrate FIDs. City of San Diego shared photos and specimens of a small pink anemone

UPCOMING MEETINGS

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

found living on airplane wreckage at 173m (B'18 station 10992, 7 September 2018). It resembled *Stephanauge* but consensus was to leave it at Actiniaria due to its small size and no one being comfortable with the prospect of its dissection revealing anything of significance. The other specimen brought by CSD was an unusually colored *Acanthodoris* from B'18 station 10237, 1 August 2018, 12m (see cover photo). A tentative ID of *A. rhodoceras* was assigned prior to the meeting, but Wendy and Megan were unsure how much variability in color was allowable. Those present at the meeting felt it should be left at *Acanthodoris* sp.

Jennifer wanted to revisit their mysterious Pennatulacea from the November FID meeting since Dean Pasko and Tony Phillips were now both present. It was collected at B'18 station 10245, 4 Sept 2019, 57m in Santa Monica Bay. It closely resembled a *Virgularia*, but had very large, orange polyps and large leaves, and it was neither of our two "known" species, *V. agassizii*, or *V. californica*. Neither Dean or Tony could assign a species name, and it was suggested that it be given the provisional name, Pennatulacea sp HYP1. CLAEMD has been seeing this unusual Virgularid in their standard monitoring stations since 2015.

Further specifics of the meeting were not noted, but it was a productive day with many specimens examined and most FIDs being resolved to some level whether it was to species or only to Family.

NO MEETING IN FEBRUARY 2019

11 MARCH 2019, B'18 POLYCHAETE FIDS, NHMLAC

Attendance: Brent Haggin, Bill Furlong, Norbert Lee, LACSD; Angelica Zavala Lopez, MTS; Gabriel Rodriguez, Veronica Rodriguez-Villanueva, Adam Webb, Maiko Kasuya, CSD; Bryce Perog, CSU Fullerton; Mike McCarthy, Ernest Ruckman, Rob Gamber, Kelvin Barwick, OCSD; Larry Lovell, DCE; Greg Lyon, Jennifer Smolenski, Erin Oderlin, CLAEMD

At this point a discussion began about B'18 samples, progress, time lines, etc. Due to LACSD's time constraints for routine work, the B'18 Benthic QC probably won't be attempted until April-June of 2020.

It was announced that certain volumes of the MMS Atlas are available through CLAEMD. If you are interested in a copy please contact Jennifer at: jennifer.smolenski@lacity.org.



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And with that it was time for polychaetes...Following is an accounting of FIDs examined:

Aphrodita sp (LACSD Station 4D – 30m) – Brent Haggin.

The specimens Brent shared were $\approx 1/8$ ", at which point Kelvin asked if there wasn't a SCAMIT convention to back off if it is less than 1/2"? Larry agreed that was the convention. Brent went through the characters as to why this individual had conflicting diagnostics, and then set it on the dissecting scope to be displayed on a screen. The room unanimously, and immediately, agreed that this worm was too small to be identified to species. Larry reiterated that IDs should be left at *Aphrodita* sp for animals \approx .5 mm to 1.5 mm.

Kirkegaardia sp (LACSD Station 8B – 150m) – Brent Haggin

This animal had a stain pattern that resembled *Kirkegaardia* sp SD9 (Rodriquez-Villanueva 2008 §). Erin asked if there is a certain region of the body to look for chaetal serrations? Veronica responded that it should be in the mid to posterior part of the body. Larry added, "as far posterior as possible". A definitive ID of this specimen was not achieved. However, it was recorded as Cirratulidae in the LACSD data. Brent noted - This animal presents a potential problem as *Aphelochaeta* sp HYP5 Phillips 2004 § and *Kirkegaardia* sp SD9 have a similar description and stain pattern and discerning between the two depends on interpretation of the serrations on the neurochaetae.

Euclymeninae sp (LACSD Station 7D – 30m) – Brent Haggin

The methyl green (MG) staining pattern revealed a widow's peak and a lateral stripe; could this be a third species? Larry noted that all 3 individuals had a lateral **and** ventral stripe, which identified them as *Euclymeninae* sp A. Discussion ensued about variability and interpretation of MG staining patterns.

Eucranta noculata (Polynoid – 300m station) – Norbert Lee

The specimen was examined by all and Kelvin tried to view chaetal characters at 1000x. Despite everyone's best efforts, no conclusion was reached as to the accuracy of the ID.

8 APRIL 2019, CRUSTACEA FIDS AND TOOLBOX REVIEW, LEAD B. FERRARO, OCSD

Attendance: Kelvin Barwick, Ben Ferraro, Danny Tang, Ernie Ruckman, OCSD; Craig Campbell, Cody Larsen, Joanne Linnenbrink, CLAEMD; Don Cadien, Jovairia Loan, LACSD; Katie Beauchamp, CSD

Kelvin opened the meeting by mentioning that neither the SCAMIT Secretary, nor the Secretary's appointed alternate for taking meeting minutes (i.e. Jennifer Smolenski), were present at today's meeting. He requested a volunteer, and with hesitation, Jojo Loan graciously offered. Kelvin proposed that future meetings, instead of focusing on one phyla, could rather involve having the "newer taxonomists" (those who now have a workable familiarity with their respective phyla) break off into smaller groups, and have discussions amongst themselves regarding their specialized phyla. These could involve questions that they have about specimens, or just looking at/sharing interesting specimens. Kelvin added that this type of meeting would work best in a lab where training scopes are "at the ready", such as OCSD, LACSD, or CSD. This proposal was met with general agreement. With no other business items to discuss, Kelvin, Danny, and Ernie excused themselves to allow for the main taxonomic portion, led by Ben Ferraro, to begin.



The purpose of the meeting was to go through the SCAMIT website's Taxonomic Toolbox Arthropod section, and to determine whether changes needed to be made. The focus was to address 4 points: (1) is the information in the toolbox sufficient for the listed species? (2) is there supplementary material that could be added? (3) is the information still relevant/applicable? (4) should any items be removed?

Ben was recording any Toolbox changes needed and he will provide a listing to Dean Pentcheff for website updates. He began the meeting by saying there were over 700 Arthropod Toolbox items; there would be a lot to cover... He suggested that DCE may have additional supplementary material to add, but that will require a discussion with a DCE representative.

They started from the beginning of the Arthropod list:

Class Pycnogonida:

All the information in the Toolbox is still relevant for Pyconogonids. Craig suggested that we also include Bonnie Bain's Pycnogonid key which she provided at a SCAMIT meeting she lead in May 2017 (NHMLAC). Ben suggested creating more voucher sheets for pyconogonids. Don mentioned that most of the current literature should suffice for identification purposes, but Ben replied that voucher sheets are needed for provisional species encountered. Everyone agreed this would be helpful.

Order Isopoda

Don mentioned an email from Tim Stebbins (March 27, 2019) with regards to isopods in which he suggested deleting two items that have been obsolete since 1999; Ben had already recorded the necessary changes to his list. Thanks Tim!

Order Decapoda

It was agreed that for Order Decapoda, the information contained in the "Other Useful Tools" was valid and helpful. Mary Wicksten's monograph (Wicksten 2012) was mentioned as a good reference and it was suggested a link be added. Greg Jensen's (2014) decapod book, "Crabs and Shrimps of the Pacific Coast" was also recommended. Craig mentioned that there is an electronic version that has an interactive key. It was unclear if it was available to all, or only for subscribers.

Superfamily Sergestoidea

It was agreed upon that although it's a pelagic group, and therefore not reported, it will remain in the Toolbox. It contains valuable information for determining species. Don also recommended Michel Hendrickx (1995 & 1996) as a valuable resource for Eastern Pacific species, with special focus on those found off Mexico.

Family Galatheidae

There is a "California Galatheids" key, authored by Don, available in the Toolbox. Don noted that *Munida tenella* is not included in the key (although it has been encountered by CSD, and is included in the SCAMIT list). He offered to modify the key to include the species. A picture was taken during the Bight'18 Intercalibration trawl comparing *Munida hispida* and *Pleuroncodes planipes*. It provides a good morphological comparison of the two species, and Ben offered to upload that photo.



Superfamily Paguroidea

Don suggested creating an 'Other Useful Tools' section for this Superfamily and including a brief list of references. He offered to create this list and send it to Ben. For family Paguridae, Don noted the need for a reference sheet comparing *Pagurus armatus* and *Pagurus spilocarpus* because of their similar characteristics (Ed note * - this sheet has since been created by M. Lilly and distributed; it will be uploaded).

Superfamily Cancroidea

Joanne asked if there was a way to differentiate juvenile Cancer crabs. Don mentioned that there is a juvenile Cancer crab key, but there is no comprehensive treatment of juveniles in a growth series; one can't definitively know if the species was identified correctly unless the specimen is allowed to grow. He suggested looking at Mary Wicksten's monograph to see if there are any descriptions for juveniles. (Ed note* - CSD has a "1.5 cm rule", in that if the specimen is smaller than 1.5 cm, the ID is left at Cancridae).

Superfamily Majoidea

Ben offered to provide a key for the spider crabs, written by D.L. Zmarzly.

Superfamily Pinnotheroidea,

Craig offered to provide a *Pinnixa* key written by D.L. Zmarzly (1992).

Family Hippolytidae

There is a "Key to the Genus *Spirontocaris*" in the Toolbox that includes *Spirontocaris* sp 1. The one concern was what/where is this species (it's not included on the SCAMIT list), but otherwise, Don considered this key to be a valuable resource. Jojo mentioned that Wicksten's monograph also has keys for *Spirontocaris* that are quite helpful; there was general consensus that Mary's monograph has proven quite useful.

Family Pandalidae

There is a "Revised Key to the Pandalidae of California", written by Don (1998). Jojo pointed out that *Plesionika carinirostris* was not included in the key; LACSD just came across this species in their recent February trawls. Don offered to update the key to reflect this species.

Class Ostracoda

There is a *Euphilomedes* comparison sheet (unknown author) in circulation that has been useful in the identification of *Euphilomedes* spp. Ben will ensure that it's added to the Toolbox.

With examination of specific groups complete, more general topics ensued. Ben suggested adding more good quality photos to the Toolbox and it would be helpful to have more voucher sheets. Ben stated that due to the Bight'18 project, most of the POTWs have trawl invertebrate "photo vouchers" that have been confirmed by other taxonomists and which could easily be added to the Toolbox. Although the focus for the day was on Arthropod photos, it could potentially apply to the entirety of the Toolbox. There was a concern about file size with such a feat, and Ben said he would discuss it with Dean Pentcheff, SCAMIT's webmaster.



Another suggestion was to add hyperlinks to the pdf files in the Toolbox, that would then direct the user to a photograph of the species in question. There was a concern about authentication of the photos (if they were correctly identified species), but ultimately it was agreed that it shouldn't be an issue since the photos would have been authenticated by the respective labs/scientists.

There are Generic name changes throughout the Arthropoda section of the Toolbox, which are not necessarily reflected on the sheets, but the Toolbox links will at least be updated to reflect the appropriate species names.

There were also cases of duplicate pdf files in various sections and those will be removed.

There was a document with the entirety of its information pulled directly from Wikipedia (in the Toolbox under the Ostracods - Other Useful Tools section, "Ostracoda_An Introduction"). It was agreed that it wasn't necessary to include Wikipedia references as a resource in the Toolbox.

It was decided, after finishing the Ostracods, this was a good place to end the meeting. Review of everything in the Toolbox for Arthropods was complete except for the Superorder Peracarida. Ben cautioned that it *may* take another 3 meetings to get through Peracarida.

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

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