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SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEDRATE TAXONOMISTS

October, 1982

Vol. 1, No. 7

Next Scheduled Meeting:

November 8, 1982

Place:

Marine Biological Consultants

947 Newhall Street

Costa Mesa. California 92627

Specimen Exchange Group:

Syllidae, Nereidae

Topic Taxonomic Group:

Podoceridae, Ischyroceridae, and

Corophildae

MINUTES FROM OCTOBER 18, 1982

Business: The business part of the meeting was short this month. A couple of items were brought to everyone's attention. The charter is considered to be formally accepted and will be typed and distributed. All members are encouraged to attend the morning portion of the meetings, even though the topic taxonomic group may not be of interest. The morning meetings include discussions pertinent to all groups. Subjects that will be discussed in future meetings are use of ICZN nomenclature, computerized species coding, details concerning the voucher museum, and development of SCAMIT's position concerning the fate of the Allan Hancock Foundation museum collection.

Obtaining Literature: Some members mentioned they had difficulty obtaining newly published literature. It was pointed out that Smithsonian Institute literature (especially the recent 1982 Barnard and Barnard Smithsonian Contributions to Zoology, No. 357) can be obtained by phoning (202) 357-1300. General concensus on the best way to obtain NTIS literature is to write.

News Notes: Dr. William A. Newman from Scripps Institute of Oceanography will be giving a seminar entitled "Abyssal hydrothermal springs-Refugia? More evidence from the barnacles" on Wednesday, November 24, at 12:00 in PH1 (Science Lecture Hall) - 140 at California State University, Long Beach.

Request for Specimens: A parasitic copepod on the polychaete Spiophanes

berkeleyorum was recently found by Hyperion. Dr. Ju-Shey Ho from
California State University, Long Beach thinks it might be new to
science and needs additional material for a description. Anyone
having polychaetes (all species) with parasitic copepods, please
bring them to the next meeting. (Dr. Ho would probably appreciate
any parasitic copepods!!).

T-Shirts: SCAM!T t-shirts are now available. They come in yellow, blue, or tan, in regular or french-cut styles, with the logo in blue on the back and a hermit crab with SCAM!T on the front pocket. The shirts sell for \$8.00 plus .95¢ postabe. The procedes will go into SCAM!T's treasury.

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List of Species Exchanged from September 13, 1982

Ampelisca brevisimulata

- A. pacifica
- A. macrocephala
- A. pugetica
- A. agassizi
- A. hancocki

from October 18, 1982

Foxiphalus obtusidens

F. similis

Heterophoxus oculatus

Rhepoxynius bicuspidatus

- R. epistomus Marchesi
- R. heterocuspidatus
- R. stenodes
- R. variatus



Notes on <u>Micropodarke</u> <u>dubia</u> (Hessle, 1927)

Ronald G. Velarde

Two other important characters which occur in the literature were omitted from the voucher sheet.

1. Ventral segmental lobes

- in addition to ventral cirri, there are ventral "Lobes that originate slightly posteriorly to the bases of the parapodia, reach two-thirds the length of the parapodia in the first three or four setigerous segments; they are about four times as long as they are wide. Posteriorly they are much shorter" (Figure 3). (Banse and Hobson, 1968, pg 13).
- although this is a good character of Micropodarke dubia, other hesionids may also possess these lobes. Banse and Hobson (1968, pg 14) state that "Nereimyra punctata (Miller) has the mentioned lobes (Figure 3). mediad to the ventral cirri (Banse, 1956)".

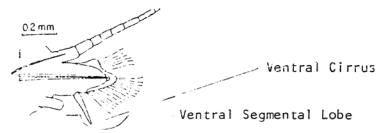


Figure 3. Posterior view of median parapodium (from Banse and Hobson, 1968).

2. Compound setae

- superior and inferior compound setae have finely serrated, distally bidentate blades. Those in the middle part of the fasicle have blades with an additional three to four long, thick, coarse spines along the basal cutting margin (Figure 4). (Imajima and Hartman, 1964, pg 83).



Figure 4. Compound seta from middle part of the fasicle (from Banse and Hobson, 1968).



ANNOTATED BIBLIOGRAPHY OF LITERATURE ON NEP AMPELISCID AMPHIPODS

Barnard, J.L. 1954a. Amphipoda of the family Ampeliscidae collected in The Eastern Pacific Ocean by the Velero III and Velero IV. Allan Hancock Pacific Expeditions; 18(1), pp. 1-137, plts. 1-38.

The major source for description and illustrations of Eastern Pacific ampeliscids, although the key has been superceded, and taxonomy used here has been amended by later publications.

Barnard, J.L. 1954b. Amphipoda of the family Ampeliscidae collected by the Velero III in the Caribbean Sea. Allan Hancock Atlantic Expeditions; report #7, 12pp., 2 plts.

Illustrates some of the variations in urosome morphology for \underline{A} . $\underline{cristoides}$, and \underline{A} . agassize (as \underline{A} . vera).

Barnard, J.L. 1960a. New bathyal and sublittoral ampeliscid amphipods from California, with an illustrated key to Ampelisca. Pacific Naturalist; 1(16-17), pp. 1-37, 11 figs.

Presentation of a reworked key to both local and world wide species of Ampelisca using pictorial, tabular, and the usual verbal approaches. Ampelisca amblyopsoides n. sp., A. macrocephala unsocalae n. ssp., and Byblis barbarensis n. sp. described. Additional information and/or illustration provided for A. eoa, A. coeca, A. furcigera, A. plumosa, and Haploops tubicola. New synonyms: A. catalinensis to eoa, A. latipes to macrocephala, A. californica and gnathia both to A. pugetica, A. vera to compressa, and A. isocornea to romigi. Most synonymies resulting from recognition of relationships between females and gerontic males.

Barnard, J.L. 1966a. Submarine conyons of Southern California. Part V-Systematics: Amphipoda. Allan Hancock Pacific Expeditions; 27(5), 166pp., 46 figs., 22 tabs.

Presentation of a key to world-wide Byblis. Description of Ampelisca romigi ciego n. ssp., Byblis bathyalis n. sp. and B. tannerensis n. sp. Reintroduction of Haploops spinosa as a valid name based on presence/absence of spine row on periopod 5.

Barnard, J.L. 1967. New species and records of Pacific Ampeliscidae (Crustacea: Amphipoda). Proceedings of the United States National Museum; 121(3576), 20pp., 4 figs.

Introduction of <u>Ampelisca eschrietii</u> records from Eastern Pacific. Provision of additional illustrations of <u>A. eschrietii</u> and <u>A. schellenbergi</u> from Albatross material.

Barnard, J.L. 1971a. Gammaridean Amphipoda from a deep-sea transect off Oregon. Smithsonian Contributions to Zoology; #61, 86pp., 48 figs.

Provision of additional illustrations of Ampeliscas eschrictii. First Eastern Pacific record of Byblis crassicornis (now recorded from the Bight by Rich Klink ex BLM material). Rectification of previous Haploops spinosa/tubicola controversy by recognition of Kanneworff's synonymy of spinosa with tubicola.

- Bousfield, E.L. 1973. Shallow-water gammaridean Amphipoda of New England. xii+ 312pp., 69 plts. Comstock Publishing Associates/Cornell University Press, Ithaca.
- Good Illustrations of Ampelisca agassizi and A. macrocephala.
- Holmes, S.J. 1908. The Amphipoda collected by the U.S. Bureau of Fisheries Steamer "Albatross" off the West Coast of North America in 1903 and 1904, with descriptions of a new family and several new genera and species. Proceedings of the United States National Museum; 35(1654), pp. 489-543, 46 figs.
- Original descriptions of Ampelisca cristata, A. plumosa, A. pacifica, A. californica (=pugetica Stimpson), A. coeca, and A. lobata, all very poorly illustrated.
- Kanneworff, Ebbe. 1966. On some amphipod species of the genus <u>Haploops</u>, with special reference to <u>H. tubicola</u> Liljeborg and <u>H. tenuis</u> sp. nov. from the Oresund. Ophelia; 3, pp. 183-207, plt. 7, 8 figs.
- Very well documented synonymy of <u>Haploops spinosa</u> with <u>H. tubicola</u>, and provision of copious illustrative material.
- Lincoln, R.J. 1979. British Marine Amphipoda; Gammaridea. vi-658pp., 3 plts., 280 figs., British Museum (NH).
- Excellent illustrated key separating Ampelisca, Byblis, and Haploops at generic level. Description and illustration of Ampelisca macrocephala and A. eschrictii and Haploops tubicola.
- Mills, R.L. 1967. A reexamination of some species of Ampelisca (Crustacea: Amphipoda) from the East Coast of North America. Canadian Journal of Zoology; 45, pp. 635-652, 4 figs., 3 tabs.
- Useful key to WN Atlantic Ampelisca, a surprising number of which are also present in our fauna. Sunonymy of A. compressa (and vera) with A. agassizi. Clear tabular comparison of A. macrocephala and A. eschrictii. Illustrations, though originally fine, were reduced to far for printing and are of limited use.

Shoemaker, C.R. 1931. The stegocephalid and ampeliscid amphipod. crustaceans of Newfoundland, Nova Scotia, and New Brunswick in the United States National Museum. Proceedings of the United States National Museum; 79(2888), 18pp., 6 figs.

Good original description and illustrations of $\underline{\text{Haploops}}$ $\underline{\text{spinosa}}$, now synonymized with H. tubicola.

Ampelisca agassizi (Judd, 1896)

Ampeliscidae

Date Examined and Code: October 18, 1982, Hyp 12

Keys Used: Barnard. 1954. A. Hancock Pacific Exp. 18(1)

Important Characters: Third pleon epimeron not produced; elongate rami on uropod 3, produced pleon segment 4; article 4 on peracopod 5 with a posterior lobe and article 5 slightly notched anteriorly.

Related Species and Character Differences: This species is very similar in appearance to A. pugetica except it lacks the produced third pleon epimeron and saddle-shaped fourth pleon segment.

Common Synonyms: Ampėlisca compressa Holmes. 1903. Ampelisca vera Barnard. 1954.

Rheopoxynius heterocuspidatus

. . . .

Phoxocephali dae

Date Examined and Code: September 13, 1982. OCSD 7

Keys Used: Barnard, J.L. 1960. A. Hancock Pacific Exp. 18 (3)

Other Literature: Barnard. 1979. Proc. Biol. Soc. Wash. 92(2):368-379.

Barnard, J.L. and C.M. Barnard. 1982. Smithsonian Contrib. to
Zool. 357.

Important Characters: Spatulate rostrum and uneven teeth on peraeopod.

Related Species and Character Differences: Looks similar to \underline{R} . stenades and \underline{R} . abronius except the rostrum is broader in \underline{R} . heterocuspidatus.

Variability: Teeth on peraeopod 5 and shape of third pleon epimeron will vary.

Common Synonyms: Paraphoxus heterocuspidatus

Rheopoxynius stenodes (Barnard, 1960)

. . . .

Phoxocephalidae

Date Examined and Code: September 13, 1982, OCSD 6

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3)

Other Literature: Barnard. 1979. Proc. Biol. Soc. Wash. 92(2):368-379.

Barnard, J.L. and C.M. Barnard. 1982. Smithsonian Contrib. to Zool.

357.

Important Characters: Very narrow rostrum. Four or five small to medium teeth on peracopod 5.

Related Species and Character Differences: Related to \underline{R} . abronius but differs by lacking epistomal cusp, and having fewer teeth on peraeopod 5.

<u>Variability</u>: Setation and shape of pleonal epimeron slightly variable.

Teeth on peraeopod 5 also slightly variable.

Common Synonyms: Paraphoxus stenodes. (Barnard: 1960)

Ampelisca brevisimulata

Ampeliscidae

Date Examined and Code: October 18, 1982 PL 7

Keys Used: Barnard. 1954. A. Hancock Pac. Exp. 18(1)

Other Literature: Barnard. 1960. Pacific Naturalist 1(16).

Important Characters: Spines on inner ramus of uropod 3 that resemble spines on a cactis plant; lower front edge of head subparallel to upper margin, bisinuous third pleon epimeron.

Related Species and Character Differences: A. cristata has similar shape to head but is more elongated and has a carina on pleon segment 4.

Variability: Juveniles will have fewer spines on Uropod 3 than adults
Males will vary slightly in the shape third pleon epimeron, fourth
pleon segment, and uropod 3. Barnard (1954) illustrates the
differences well.

Ampelisca macrocephala

. . . .

Ampeliscidae

Date Examined and Code: October 18, 1982, SCCWRP 9

Keys Used: Barnard: 1954. A. Hancock Pac. Exp. 18(1)

Other Literature: Barnard, 1960. Pacific Naturalist 1(16)

Important Characters: Looks like <u>brevisimulata</u> but has lower margin of head is oblique to upper and the third uropod inner ramus has no spines. A large spine projects from the outer ramus of the second uropod. Article 4 on peraeopod 5 has two elongate setae on lower hind corner and article 6 is elongated.

Common Synonyms: A. latipes

Ampelisca pacifica

Ampeliscidae

Date Examined and Code: October 18, 1982; PL 8

Keys Used: Barnard. 1954. A. Hancock Pac. Exp. 18(1)

Other Literature: Barnard. 1960. Pacific Naturalist 1(16)

Important Characters: The rami on uropod 3 are very broad. Head has lower margin subparallel to upper, 3rd pleon epimeron produced.

Ampelisca pugetica

Ampeliscidae

Date Examined and Code: October 18, 1982; Hyp 11

Keys Used: Barnard. 1954. A. Hancock Pac. Exp. 18(1)

Other Literature: Barnard. 1960. Pacific Naturalist 1(16)

and notched anterior edge of article 5 on peraeopod 5. Carina of pleon segment 4 saddle shaped.

Common Synonyms: A. californica Holmes (1908). A. gnathia Barnard (1954)

Foxiphalus obtusidens (Alderman, 1936)

Phoxocephali dae

Date Examined and Code: September 13, 1982; Hyp 9

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3)

Other Literature: Barnard. 1979. Proc. Biol. Soc. Wash. 92(2):368-379.

Important Characters: The epistome always looks 1/2 way produced and 1/2 way not. Third pleon epimeron slightly concave with setae present and rounded on the lower hind corner.

Variability: Epistome is rounded to slightly produced - see the illustrations on pg. 256, plate 35 A-D. Barnard. 1960. Third pleon epimeron - amount of setation varies.

Common Synonyms: Paraphoxus obtusidens (Alderman, 1960)

Aids to identification: This is a common species that is variable but Barnard documented variability quite well. B. Benedict said not to be concerned about the subspecies.

Comments: Add to couplet II(a) in Barnard 1960 "obtusidens may be slightly produced" to aid in working through the key to obtusidens.

Foxiphalus similus (Barnard, 1960)

Phoxocephalidae

Date Examined and Code: September 13, 1982; SCCWRP 7

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3)

Other Literature: Barnard. 1979. Proc. Biol. Soc. Wash. 92(2):368-379.

 $\frac{\text{Important Characters:}}{\text{1960 pg. 231 pl.}} \begin{array}{c} \text{Prominant epistome - as illustrated in Barnard} \\ \end{array}$

Common Synonyms: Paraphoxus similus (Barnard, 1960)

Heterophoxus oculatus (Holmes 1908)

Phoxocephalidae

Date Examined and Code: September 13, 1982; SCCWRP 8

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3)

Important Characters: Article 2 of peraeopod 5 not expanded. Basal
 ensiform process of antenna 2 very prominant. Third pleon epimeron
 with a large hook.

Rhepoxynius bicuspidatus (Barnard. 1960)

Phoxocephalidae

Date Examined and Code: September 13, 1982; PL 5

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3)

Other Literature: Barnard. 1979 Proc. Biol. Soc. Wash. 92(2):368-379.

Barnard, J.L. and C.M. Barnard. 1982. Smithsonian Contrib. to Zool.
357.

Important Characters: Two large spurs on peracopod 5 are very distinctive.

Related Species and Character Differences: An aberrant form occurs locally in depths less than 30m and is most abundant at 6m. It is characterized by a very short epistome, smaller size, and a shorter second spur on article 2 of pereaopod 5.

Common Synonyms: Paraphoxus bicuspidatus (Barnard. 1960)

Rhepoxynius epistomus (Shoemaker, 1938)

Phoxocephalidae

Date Examined and Code: September 13, 1982; PL 6

Keys Used: Barnard. 1960. A. Hancock Pacific Exp. 18(3).

Other Literature: Barnard. 1979. Proc. Biol. Soc. Wash. 92(2):368-379.

Barnard, J.L. and C.M. Barnard. 1982. Smithsonian Contrib. to
Zool. 357.

Important Characters: The epistome is highly characteristic; long and pointy (base thickness may be slightly variable) and highly visible. Seven small, even teeth are on pereaopod 5 and the rostrum is spatulate.

Related Species and Character Differences: Differs from R. abronius by having a broader rostrum; smaller teeth on peraeopod 5, and the presence of a large apical spine on the peduncle of uropod 1.

Common Synonyms: Paraphoxus epistomus (Shoemaker, 1938). Trichophorus epistomus (Shoemaker, 1938)

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