

SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS

March 1983

Vol. 1, No. 12

Next Scheduled Meeting:

April 11, 1983

Place:

Marine Biological Consultants

947 Newhall Street Costa Mesa, CA 92627

Special Discussion:

Provisional Nomenclature

Specimen Exchange Group:

Cnidarians and Holothuroideans

Topic Taxonomic Group:

Turridae

MINUTES FROM MARCH 14, 1983

Santa Barbara Museum: Paul Scott, from the Santa Barbara Museum of
Natural History invited all interested people to visit their facilities. The Museum is developing a local voucher collection and is
willing to archive additional collections infinitely. Currently the
Museum's collection is most extensive for mollusks and insects
(including intertidal insects). Anyone who is interested in either
just stopping in to visit, or looking at the voucher collection may
do so 9:00-5:00 Monday through Friday at:

Santa Barbara Museum of Natural History 2559 Puesta del Sol Road Santa Barbara, California 93105

Provisional Nomenclature: PARTICIPATING MEMBERS - Bring in a list of provisional nomenclature currently used by you or your agency. As noted above, a special segment of April's meeting will be set aside to discuss the various terms. We will decide which course of action to take from here regarding provisional nomenclature.

Membership Dues: It's been a whole year now since SCAMIT was organized, and that means we are requesting dues for 1983-84. The dues will be \$5.00 again for both Participating and Corresponding members. Such a bargain! Membership entitles you to receive the monthly Newsletter and to vote in all of SCAMIT elections. An application is enclosed.

Several requests have been made regarding a list of SCAMIT members who do free-lance work. If you are interested in being on a list of people who do such work, mark your membership form accordingly.

Fund Raiding for Video System: Several ideas were tossed around. The most popular were selling SCAMIT coffee mugs and straight-out donations. At this point coffee mugs are just being investigated. However, a straight-out donation has already been received. The first person to donate towards a video system was Gary Gillingham of Kinnetic Laboratories, Inc. (a sum of \$20.00). Thank you very much Gary!

Anyone else that is interested in donating extra money can fill-out the enclosed form. Also T-shirts are still available for \$8.00 plus .95¢ postage.

Treasury Report: As of March 25, 1983 the treasury balance was \$261.87.

The next anticipated expenditure will be for printing which will be about \$50.00.

Elections: The mail-in votes will be tallied at the next meeting with votes at the meeting.

List of March 14, 1983 Topic Species

Volvulella panamica
Acteocina inculta
Rictaxis punctocaelatus
Gasteropteron pacificum
Sulcoretusa xystrum
Cylichna diegensis

Acteorina intermedia
Acteon traskii
Melanochlamys diomedia
Aglaja ocelligera
Philine sp.
Cephalaspidea Genus A species A

Announcements: Two annual conferences are slated for the near future. They are:

Southern California Academy of Sciences May 6 and 7, 1983 at California State University, Fullerton

California Water Pollution Control Association
May 3-7, 1983 at Hilton Riveria Hotel, Palm Springs
This conference will include an ocean monitoring
session on Friday, May 6. The ocean monitoring
session will feature several SCAMIT members as speakers,
including a presentation on SCAMIT itself by John Shisko.



SOUTHERN CALIFORNIA CEPHALASPIDEA

BIBLIOGRAPHY FOR SCAMIT OF PERTINENT REFERENCES

Behrens, D. W. 1980. Pacific coast nudibranchs; a guide to the opisthobranchs of the northeastern Pacific. Sea Challengers, Los Osos, California. 112 pp.

Provides color photographs of living animals of Chelidonura inermis (as Aglaja), Aglaja ocelligera, Bulla gouldiana, Cylichna attonsa, Acteocina culcitella (as Cylichnella), A. inculta (as Cylichnella), Diaphana californica, Gastropteron pacificum, Haminoea vesicula, H. virescens, Melanochlamys diomedea, Philine bakeri, and Rictaxis punctocaelatus.

Burch, J. Q. 1945. Order Opisthobranchiata, suborder Tectibranchiata. Minutes of Conchological Club of So. California 47:9-30.

Contains descriptions and discussion of practically all species of cephalaspids reported between Alaska and the Gulf of California to its date of publication. Comments on variability of species and validity of names and previous reported occurrences make this an extremely valuable reference. Several family and generic keys are also included. The genus Sulcoretusa is established as a replacement name for Sulcularia Dall 1921 (non Rafinesque 1831). The shells of many species are illustrated by poorly reproduced photographs.

Dall, W. H. 1919. Descriptions of new species of Mollusca from the north Pacific Ocean in the collection of the United States National Museum. Proceedings of the U. S. National Museum 56(2295)293-371.

Original description of many cephalaspid species, all except

Original description of many cephalaspid species, all except for Volvulella catharia and Volvulella panamica repeated in Oldroyd. Descriptions are brief and unillustrated.

Gosliner, T. M. 1979. A review of the systematics of <u>Cylichnella</u> Gabb (Opisthobranchia: Scaphandridae). Nautilus 93:85-92.

Not seen, may change status of $\underline{\text{Acteocina}}$ and $\underline{\text{Coleophysis}}$ species.

Gosliner, T. M. 1980. Systematics and phylogeny of the Aglajidae (Opisthobranchia: Mollusca). Zool. J. Linn. Soc. (in press).

Not seen, may change status of $\underline{\text{Chelidonura}}, \, \underline{\text{Aglaja}}, \, \text{and} \, \underline{\text{Melano-chlamys}}$ species.

Harry, H. W. 1967. A review of the living tectibranch snails of the genus Volvulella, with descriptions of a new subgenus and species from Texas. Veliger 10(2):133-147.

Illustrations and brief descriptions of Volvulella cylindrica, V. californica, V. panamica, and V. catharia. Volvulella

cooperi, V. callicera, and V. lowei all placed in synonymy of V. cylindrica. Volvulella tenulssima placed in synonymy of V. panamica. New subgenus, Paravolvulella, erected for V. panamica and V. texasiana n. sp.

Keen, A. M. 1971. Sea shells of tropical West America; Marine mollusks from Baja California to Peru. 2nd edition. Stanford University Press, Stanford, California. 1064 pp.

Provides illustrations and brief descriptions of Acteon traskii, Microglyphis estuarinus, Bulla gouldiana, Atys casta, Haminoea vesicula, H. virescens, Volvulella catharía, V. cylindrica, V. panamica, Chelidonura inermis (as Navanax), Acteocina inculta, and A. smirna.

Keen, A. M., and E. Coan. 1974. Marine molluscan genera of western North America; An illustrated key. 2nd edition. Stanford University Press, Stanford, California. 108 pp.

Provides illustrated key allowing placement to genus for all cephalaspids, as well as other gastropods. If you have an animal you think may be a cephalaspid, start here.

Lemche, H. 1948. Northern and Arctic tectibranch gastropods. 1. The larval shells, and 2. A revision of the Cephalaspid species. Det Kongelige Danske Videnskabernes Selskab Biologiske Skrifter. 5(3): 1-136.

Illustration and descriptions of northern species, some reputedly from the Northeast Pacific. Cylichna alba, Diaphana minuta, Philine polaris, and Cylichna occulata are included. Keys to shells and to animals (where known) are presented.

Marcus, Ernst. 1961. Opisthobranch mollusks from California. Veliger 3(Suppl 1):1-85.

Descriptions and figures (many anatomical details) of Bulla gouldiana, Haminoea virescens, Aglaja dromedea, and Chelidonura inermis (as Navanax). Chelidonura phocae n. sp. is described and illustrated.

Marcus, Eveline d. B-R. 1972. On some Acteonidae (Gastropoda, Opisthobranchia). Papeis Avulsos de Zoologia, Sao Paulo. 25(19):167-188.

Rictaxis is reestablished as a valid genus based on anatomical studies. Acteon traski is confirmed as an Acteon, Rictaxis punctocaelatus confirmed as Rictaxis. Position of Rictaxis painel left open to question since no material with preserved animals was available for study.

Mattox, N. T. 1958. Studies on the Opisthobranchiata: 11. A new tectibranch of the genus <u>Philine</u>. Bull. So. Calif. Acad. Sci. 57(2): 98-104.

Original description of Philine alba, with photographs of both animal and shell and drawings of internal anatomy. Comparison with \underline{P} . bakeri very brief and unconvincing (based on size only).

McLean, J. H. 1978. Marine shells of southern California. Los Angeles County Natural History Museum. Sci. Ser. 24, Revised edition. 104 pp.

Photographs and brief descriptions of the shells of <u>Rictaxis</u> <u>punctocaelatus</u>, <u>Bulla gouldiana</u>, <u>Haminoea virescens</u>, <u>H. vesicula</u>, <u>Acteocina culcitella</u>, <u>A. inculta</u>, and <u>Coleophysis</u> harpa (as <u>Acteocina</u>).

Oldroyd, I. S. 1927. The marine shells of the west coast of North America. Geological Sciences, Vol. II, Part I. Stanford University Publications, Stanford University Press. 297 pp. plus plates.

Still the classic work on west coast mollusks. Reiterates (and provides translations!) of the original descriptions of all species reported from the Northeastern Pacific prior to 1927. Photographs or drawings provided for Haminoea olgae (=H. vesicula). Acteon traski, Microglyphis breviculus, Rictaxis punctocaelatus (as Acteon), Rictaxis painel (as Acteon), Acteocina culcitella, A. magdalensis, Coleophysis harpa (as Retusa), Cylinchna alba (as Cylichnella), Acteocina eximia, Cylichna attonsa (as Cylichnella), Volvulella cylindrica, Sulcoretusa xystrum (as Retusa), and Diaphana californica.

Palmer, K. VW. 1958. Type specimens of marine Mollusca described by P. P. Carpenter from the west coast (San Diego to British Columbia). Geol. Soc. Am. Memoir #76, 376 pp.

Illustrations of the types and discussion of Rictaxis punctocaelatus, Atys casta, Volvulella cylindrica, Acteocina inculta, and Cylichna attonsa. Acteocina planata synonymized with A. inculta.

Rudman, W. B. 1972. On Melanochlamys Cheeseman, 1891, a genus of the Aglajidae (Opisthobranchia, Gastropoda). Pac. Sci. 26(1):50-62.

Melanochlamys raised to generic level and M. diomedea and M. nana indicated as belonging to the genus.

Smith, R. I., and J. T. Carlton (eds.). 1975. Light's manual: Intertidal invertebrates of the central California coast. 3rd edition. University of California Press, Los Angeles. 716 pp.

Key to most local cephalaspid species found in shallow water.

Mel hlamys nana (as Aglaja) referred to synonymy of M.

dio a.

Steinberg, J. E. 1963. Notes on the opisthobranchs of the west coast of North America. II. The order Cephalaspidea from San Diego to Vancouver Island. Veliger 5(3):144-117.

List and comments upon west coast species, with emphasis on familial placement of genera.

Steinberg, J. E., and M. L. Jones. 1960. A new opisthobranch of the genus Aglaja in San Francisco. Veliger 2(4):73-75.

Original description and illustration of Melanochlamys nana (as Aglaja). Considered a synonym of M. diomedea by some (see Smith and Carlton 1974).

Thompson, T. E. 1976. Biology of opisthobranch molluscs. Vol. 1. The Ray Society, British Museum, London. 207 pp.

Extremely good general introduction to cephalaspids (called Bullomorpha by Thompson) including anatomy, reproductive biology, general ecology, evolutionary history, etc. Key provided for British genera. Description and illustration of Arctic and boreal species occasionally reported from adjacent areas north of Pt. Conception, i.e. Diaphana minuta.

Willett, G. 1928. Notes on some Pacific coast Acteocinas, with description of one new subspecies. Nautilus. XLII(2):37-38.

Original unillustrated description of $\underline{\text{Acteocina}}$ intermedia, described as a subspecies of Λ . culcitella.

Willett, G. 1944. New species of mollusks from Redondo, California. Bull. So. Calif. Acad. Sci. 43(2):71-73.

Original description of <u>Philine californica</u>. Photograph of shell provided, and brief <u>description of living</u> animal given (no illustration).



SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS (SCAMIT)

CONSTITUTION

Preamble

In view of the diversity of marine invertebrates in the Southern California area and the many organizations studying the ecology of these organisms, the Southern California Association of Marine Invertebrate Taxonomists was organized by scientists who recognized the need to standardize systematic practices and taxonomic usage through a program of intercalibration. On April 21, 1982, the Association was founded and a Constitution Committee was formed to establish a working framework. This Constitution is the result of the Committee's activities.

Article 1: Name

The organization shall be the Southern California Association of Marine Invertebrate Taxonomists (SCAMIT).

Article 2: Purpose

The purpose of the Association shall be to develop standard procedures in systematic practices and taxonomic usage for marine invertebrates in the Southern California region. This will be accomplished primarily through an intercalibration program and the exchange of information among persons interested in marine invertebrate taxonomy. This will include specimen exchange and confirmation, literature exchange, the development of an intercalibrated reference collection housed at a designated institution, and quest lecturers.

Article 3: Membership

Section 1: Membership

Membership in the Association is open to individuals or institutions interested in the systematics and ecology of marine invertebrates. Membership can be obtained upon written application to the Secretary-Treasurer with an accompanying payment of dues.

Section 2: Type of Members

Charter, Participating, and Correspondent Members are recognized.

Other classes of membership may be created by affirmative vote of twothirds (2/3) of membership.

Section 3: Rights of Membership

All members whose dues have been paid for the current year shall be considered members in good standing and shall be entitled to receive notices of the Association's activities, vote at meetings or by mail, and participate in any activities sponsored by the Association. Other privileges may be designated by a two-thirds (2/3) vote of the membership.

Article 4: Dues

Dues shall be five dollars (\$5.00) annually. The amount and time period of dues shall be established and approved by a two-thirds (2/3) vote of the members voting on the issue. Dues can be changed by the same procedure.

Article 5: Officers

Section 1: Officers

The elected officers of the Association shall be the President, Vice-President, Secretary-Treasurer, and Committee Chairs.

Section 2: Term of Officers

All officers shall be elected by a simple majority vote of the members voting in the election. Officers may hold the same office for an unlimited number of terms. Newly elected officers shall assume the responsibilities of their office in April.

Section 3: Election of Officers

An ad-hoc nominating committee will entertain nominations for election from the membership and prepare a slate of candidates. Election shall be by means of a mail ballot sent February 1. Ballots shall be sent to members in good standing. Results of the election will be announced in April.



Article 6: Meetings

The Association shall normally meet on the second Monday of every month. The President may change meetings if conditions arise to warrant such changes. Actions of the officers may be amended at any meeting of the Association by a two-thirds (2/3) vote of the members present, assuming the Chair of the Agenda Committee has been contacted in time to insert the item in that month's agenda.

Article 7: Limitations

The purpose of the Association are listed in Article 2 of the Constitution. Lobbying, or any activities specifically designed to influence legislation, support political groups, or advance popular, political, scientific, or religious causes are not among the objectives of the Association and neither the Association nor any official group within the Association shall engage in such activity.

Article 8: General Prohibitions

Notwithstanding any provision or the Constitution or Bylaws which might be susceptible to a contrary construction:

- a) The Association shall be organized exclusively for scientific and educational purposes;
- b) The Association shall not participate in, or intervene in (including the publishing or distributing of statements) political compaigns on behalf of any candidate for public office;
 - c) The Association shall not be organized or operated for profit;
- d) The property of this Association is irrevocably dedicated to scientific and educational purposes and no part of the net income or assets of this Association shall ever inure to the benefit of any officer or member thereof or to the benefit of any private person. Upon the dissolution or winding up of the Association, its assets remaining after payment, or provision for payment, of all debts and liabilities of this corporation shall be distributed to a nonprofit fund, foundation, or corporation which is organized and operated exclusively for scientific and educational purposes and which has established its tax exempt status under Section 501 (c) (3) of the Internal Revenue Code.

Article 9: Amendments

This Constitution may be amended by a two-thirds (2/3) majority of those voting at any meeting of the Association or in a mail ballot. In either case, notice of the proposed action will be sent to each voting member of the Association by the Secretary-Treasurer at least sixty (60) days before the date of the vote.

Article 10: Bylaws

The Association may enact Bylaws for interpretation and implementation of the Constitution. Bylaws may be adopted, amended, or repealed by a two-thirds (2/3) majority of those voting at any meeting of the Association or in a mail ballot. In either case, notice of the proposed action shall be sent to each voting member of the Association by the Secretary-Treasurer at least sixty (60) days before the date of the vote.

Article 11: Division

At the discretion of the officers, the Association may establish ad-hoc committees to carry out activities under the overall sponsorship of the Association.

Proposed additional clause





Cephalaspidea of Southern California

(Species which have not been taken recently between Pt. Conception and the Mexican Border, or whose range are questionable are marked with an asterisk.)

Order Cephalaspidea Suborder Acteonacea Family Acteonidae

> Acteon traski Stearns 1898 Rictaxis painei Dall 1903 Rictaxis punctocaelatus (Carpenter 1864)

Suborder Diaphanacea Family Diaphanidae

Diaphana californica Dall 1919

Suborder Retusacea Family Rufusidae

Sulcoretusa xystrum (Dall 1919)

Family Volvulidae

Volvulella californica Dall 1919 Volvulella catharia Dall 1919 Volvulella cylindrica (Carpenter 1864) Volvulella panamica Dall 1919

Suborder Ringiculacea Family Ringiculidae

- * Microglyphis breviculus Dall 1902
- Microglyphis estuarinus Dall 1906

Suborder Bullacea Family Bullidae

Bulla gouldiana Pilsbry 1893

Suborder Atyacea Family Atyidae Subfamily Atyinae

- * Atys casta Carpenter 1864
- * Atys nonscripta (A. Adams 1850)

Subfamily Haminoeinae

Haminoea vesicula (Gould 1855) Haminoea virescens (Sowerby 1833) Order Cephalaspidea (Cont)
Suborder Philinacea
Family Scaphandridae

Acteocina cucitella (Gould 1853)

* Acteocina eximia Baird 1863
Acteocina inculta (Gould 1855)
Acteocina intermedia Willett 1928

* Acteocina magdalenensis Dall 1919

 * Acteocina smirna Dall 1919 Coleophysis harpa (Dall 1871)

Cylichna alba (Brown 1827 Cylichna attonsa (Carpenter 1864) Cylichna diegensis (Dall 1919) Cephalaspidea, unid. sp. A (MBC)

Family Gastropteridae

Gastropteron pacificum Bergh 1894

Family Aglajidae

Aglaja ocelligera (Bergh 1894)
Aglaja purpurea (Bergh 1893)
Chelidonura inermis (Cooper 1862)
Chelidonura phocae Marcus 1961
Melanochlamys diomedea (Bergh 1894)
Melanochlamys nana (Steinberg & Jones 1960)

Family Philinidae

Philine alba Mattox 1958 Philine bakeri Dall 1919 Philine californica Willett 1944 Woodbridgea polystrigma (Dall 1908)

Suborder Runcinacea Family Runcinidae

> Runcina sp. (Endocladia mats) Runcinida sp. (coralline algal rubble)

SOUTHERN CALIFORNIA NINOE (LUMBRINERIDAE)

SPECIES	MAXIUMUM # OF BRANCHIAL FILAMENTS	SETIGERS WITH BRANCHIAE	FREE PECTINATE BRANCHIAE	TYPE OF SUPERIOR FILAMENT	SETIGER W/
chilensis Kinberg, 1865*	9-10	3rd thru 30th	No	Same as others	By 10th-12th
foliosa Fauchald, 1972	12-13	2nd thru 36th	Yes	Foliose	25th thru ?2- '
fusca Moore, 1911	1	1st thru 40th			45th or more
fuscoides Fauchald, 1972+	1	2nd thru 30th			lst
gemmea Moore, 1911	3 (2-5) **	3rd thru 50th	No	Same as others	lst
longibranchia Fauchald, 1972+	6	2nd thru 18th	Yes	2x length of others	lst
sp. A Harris (see below)	5-11	2nd thru 43rd	Varies	Foliose	4th thru 14th

- * N. chilensis has been reported from Southern California, but the specimens I've seen have been sp. A
- + N. fuscoides & N. longibranchia have been collected from Oregon and western Mexico, both are likely to occur here; N. longibranchia has been tentatively identified locally.
- **N. gemmea was reported by Hartman (1968) as having 3 filaments (excluding the postsetal lobe, which is considered the dorsalmost branchial filament by some authors); Moore (1911) says 3, occasionally 4 filaments; Banse & Hobson (1974) state 2 to 5 filaments

NINOE SP. A

SPECIMEN - #	MAXIMUM # FILAMENTS	SIZE (MM) (LENGTH X WIDTH)	TOTAL : SETIGERS**	SETIGERS W/ BRANCHIAE	PECTINATE FREE PORTION	SUPERIOR FILAMENT	SETIGER * 1ST HOOK
Pt. Dume - 13	5	4 × 0.8	30 (inc.)	3-18	No	1/3 longer	4
Dume - 14	5	5 x 0.6	40 (inc.)	3-19	No	1/3 longer	by 7
Santa Monica - 3	6	12 x 1.0	90 (com.)	3-27	No	foliose	8
Aliso - 10	8	9 x 1.5	70 (inc.)	3-32	No	Slightly wider	11
Santa Monica - 2	8	13 x 1.1	100 (com.)	2-30	No	Foliose	9
Santa Monica - 8	8	14 x 1.1	120 (com.)	2-32	Yes	Foliose	?
Santa Monica - 5	10	11 x 1.1	70 (inc.)	2-34	No	Foliose	6
Orcosan - 4	10	16 x 1.1	110 (inc.)	2-40	No	Foliose	12
Santa Monica - 7	11	7 x 1.5	30 (inc.)	2-33+	Yes	Foliose	?
Aliso - 9	11	19 x 1.6	120 (com.)	3-40	Yes	Foliose	?
Aliso - 11	11	22 x 1.8	120 (com.)	3-41	ИО	Foliose	11
Santa Monica - 6	n	23 x 1.8	130 (com.)	2-43	Yes	Foliose	6
Aliso - 12	11	23 x 1.8	140 (com.)	3-42	No	Foliose	9
Santa Monica - 16-22 (6 from 1 station)	5 to 11	5 to 21 by 0.8 to 1.8	40 to 120 (inc. & com.)	3-20 to 2-40	No and Yes	Foliose/ 1/3 longer	5 to 11

The present specimens come from between Oceanside and Point Dume, from 60 meters or shallower. Characters used for identification show much greater variation than in previously described species. This variation appears to be size-related. Whether Sp. A is a discrete species or a complex of several known or undescribed species will depend on its comparative jaw structure and setal composition.

^{*}Includes postsetal lobe (also called the dorsal cirrus or dorsalmost branchial filament)

^{**}approximately.

Marphysa stylobranchiata (Moore, 1909)

Eunicidae

Date Examined and Code: February 14, 1983, AHF 12

Keys Used: Hartman, O. 1968 (Atlas) p. 735

Other Literature: Moore, J.P. 1909 p. 249 Fauchald, K. 1970 p. 55

Banse, K. and K.D. Hobson. 1974 p. 85

Important Characters: Branchia all simple, beginning on setigers 16-20 and ending within 12-20 segments of the pygidium; acicula black at base with pale tips, number 3-5 in anterior segments; composite falcigers with bifid tip, simple limbate setae; no peristomial cirri.

Variability:

Occasionally some branchiae may be branched.

Comments: Hartman (1968) lists the depth range as intertidal to slope depths, in rocky habitats.

Eunice vittata (delle Chiaje, 1828)

Eunicidae

Date Examined and Code: February 14, 1986, OC 16

Keys Used: Hartman, 0. 1968 (Atlas) p. 721

Fauchald, K. 1970 p. 48

Other Literature: Hartman, O. 1944 p. 118

Important Characters: Branchia present from setigers 3, absent from posterior two-thirds of body; single branchial filaments in first one or two branchiae; maximum number branchial filaments 10-12; yellow tridentate subacicular hooks present from setiger 16-24, bidentate composite hooks with pointed hood; occipital tentacles are articulated, earh article long and cylindrical.

Related Species and Character Differences: Eunice americana - occipital tentacles smooth; two to three branchial filaments in the first branchia. Eunice cedroensis - composite hooded hooks have reduced proximal teeth and slightly curved distal teeth (fig. 1) while E. vittata has composite hooded hooks with well developed proximal teeth and strongly curved distal teeth (fig. 2).

Comments: Fauchald (1970) lists the depth range between 10 and 50 fathoms for western Mexico. Hartman (1968) list the depth range between intertidal and 55-110 fathoms.



Fig. 1 (Fauchald, 1970 p. 273)

1/

Onuphis iridescens (Johnson, 1901)

Onuphidae

Date Examined and Code: February 14, 1983, LACO 7

Keys Used: Hartman, 0. 1968 (Atlas) p. 681

Fuachald, K. 1982 p. 49

Other Literature: Hobson, K.D. 1971. p. 533

Important Characters: The first 3-5 setigers have tridentate pseudo compound hooks; ventral cirri cirriform through setigers 5-7; simple branchia present from setiger 1; subacicular hooks present from setiger 12-15 and usually occur 2 to a fascicle; outer ceratophore with 15 annulations; inner ceratophore with 18 annulations.

Related Species and Character Differences: Onuphis elegans - first four setigers with bidentate and tridentate pseudo compound hooks (Hobson, 1971 notes that a few quadridentate hooks are present); subacicular hooks present from setiger 10; ceratophores with 10-11 annulations.

<u>Variability</u>: Juveniles have cirriform ventral cirri through setigers 2-4 and subacicular hooks start on setiger 8-10.

Common Synonyms: Nothria iridescens

Comments: Onuphis iridescens occurs in deeper water than does Onuphis elegans. O. iridescens - intertidal to 2400 M - O. elegans - intertidal to 23 M.

Hyalinoecia juvenalis (Moore, 1911)

Onuphidae

Date Examined and Code: February 14, 1983,

Keys Used: Hartman, O. 1968 (Atlas) p. 667

Other Literature: Fauchald, K. 1972

Important Characters: Peristomial cirri absent; branchia present from setiger 18; tube quill-like, translucent, less than 100 mm long, less than 2 mm wide; shallow depths.

Related Species and Character Differences: Hyalinoecia stricta - branchia present from about setiger 26-30; tubes up to 300 mm long; abyssal depths.

Aids to Identification: Tube quill-like.

Comments: Hartman (1968) notes that <u>Hyalinoecia</u> juvenalis occurs in 8-67 fathoms.

Goniada brunnea (Treadwell, 1906)

Goniadidae

Date Examined and Code: February 14, 1983, OC 14

Keys Used: Hartman, O. 1968 (Atlas) p. 653

Other Literature: Hartman, O. 1950 p. 17

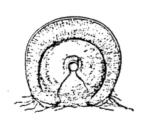
Banse, K. and K.D. Hobson. 1974 p. 81

Important Characters: Notopodia with slender hairlike setae; posterior and median neuropodia with 2 presetal lobes; proboscideal organs broadly flaring (fig. 1); notopodium with small postsetal lobe.

Related Species and Character Differences: Goniada maculata proboscideal organs are slightly flaring (fig. 2) and heart shaped; notopodium without postsetal lobe.

Comments: Occurs in low intertidal depths to over 1200 meters between Alaska and southern California.





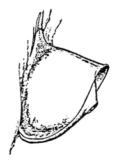




Fig. 1 (Hartman, 1950: p. 145) Fig. 2 (Hartman, 1950: p. 145)

Goniada littorea (Hartman, 1950)

Goniadidae

Date Examined and Code: February 14, 1983, LACO 8

Keys Used: Hartman, O. 1968 (Atlas) p. 665

Hartman; 0. 1950 p. 23

Important Characters: Notopodia with slender hairlike setae; posterior and median neuropodia with single, longer presetal lobe; notopodia with a prolonged presetal lobe; proboscideal organs have a large beak (fig. 1); pigmented dorsally and ventrally with 3 longitudinal rows of dark spots; chevrons number 16-18 on a side.

Comments: Occurs in shallow waters between intertidal depths and 45 meters.

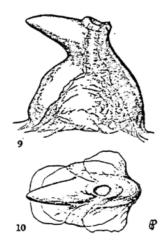


Fig. 1 (Hartman, 1950: p. 149)

Goniada maculata (Oersted)

Goniadidae

Date Examined and Code: February 14, 1983, OC 12

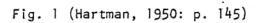
Keys Used: Hartman, 0. 1950 p. 20

Banse, K. and K.D. Hobson. 1974 p. 81

Important Characters: Notopodia with slender hairlike setae; posterior
 median neuropodia with 2 presetal lobes; proboscideal organs slightly
 flaring (fig. 1), heart shaped; notopodium without postsetal lobe;
 chevrons number 7-11 on a side.

Related Species and Character Differences: Goniada brunnea proboscideal organs are broadly flaring (fig. 2); notopodium has
a small postsetal lobe; chevrons number 7-9 on a side.





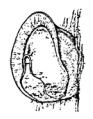




Fig. 2 (Hartman, 1950: p. 145)

Glycera branchiopoda (Moore, 1911)

Glyceridae

Date Examined and Code: February 14, 1983, AHF 10

Keys Used: Hartman, O. 1968 (Atlas) p. 615

Other Literature: Fauchald, K. 1972 p. 101

Important Characters: Proboscideal organs without ridges; probosideal organs include three types: large foliose ones with subterminal pores, smaller similar ones and long slender conical ones with terminal pores; in posterior setigers both parapodial lobes are greatly prolonged; parapodia with single postsetal lobe.

Related Species and Character Differences: Glycera capitata proboscideal organs include only two types: large foliose ones and
tall conical ones; posterior parapodial lobes distenctly shorter
than parapodial bases.

Comments: Occurs in deep slope and basin depths, in mud.

Glycinde armigera (Moore, 1911)

Goniadidae

Date Examined and Code: February 14, 1983

Keys Used: Hartman, O. 1968 (Atlas) p. 643

Other Literature: Banse, K. and K.D. Hobson. 1974 p. 80

Hartman, 0. 1950 p. 49

Important Characters: Dorsal cirrus not incised near tip; parapodia
 uniramous through 30 segments, transitional through 30 or more
 segments, biramous in all posterior segments; notopodial presetal
 lobes cordate (fig. 1); eversible proboscis covered wtih yellow,
 chitinized spines (fig. 2).

Related Species and Character Differences: Glycinde polygnatha - dorsal cirrus incised near tip (fig. 3); parapodia biramous in median setigers.

Comments: Occurs in low intertidal zones to 550 meters.



Fig. 1 (Hartman, 1968: p. 643)



Fig. 2 (Hartmen, 1968: p. 643)

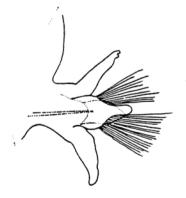


Fig. 3 (Hartman, 1968: p. 645)