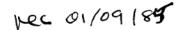
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# Southern California Association of Marine Invertebrate Taxonomists

3720 Stephen White Drive San Pedro, California 90731



December 1984 Vol. 3, No. 9

Next Meeting: January 14, 1985

Specimen Exchange group: Capitellidae

Topic Taxonomic Group: Lysianassidae

#### MINUTES FROM DECEMBER 10, 1984

<u>Guest Speaker - Dr. Pat Hutchings</u>: Be sure to note that Dr. Pat Hutchings (the Australian Museum, Sydney) will be giving a talk on the systematics of Mediomastus (Polychaeta, Capitellidae) during the upcoming January meeting. Pat will be in Los Angeles for one week doing research on polychaetes at the Allan Hancock Foundation, and has kindly agreed to visit us and speak at our meeting.

# 1985-1986 Proposed Agenda - SCAMIT Taxonomic Standardization Program:

February exchange/March topic
March exchange/April topic
April exchange/May topic
May exchange/ June topic
June exchange/ July topic
July exchange/August topic
August exchange/September topic
September exchange/October topic
October exchange/November topic
November exchange/December topic
December exchange/January topic
January exchange/February topic

Arenicolidae, Maldanidae
No exchange; cataloging of collection
Oweniidae, Sabellariidae, Pectinariidae
Miscellaneous gammarideans
Tanaidacea
Mytiloida
Scaphopoda, Aplacophora
Ampharetidae
Terebellidae
Sipuncula, Echiura

Oligochaeta Cumacea

- SCAMIT Library: Thanks to many generous donations the SCAMIT library is developing into a valuable resource. In order to make this collection more accessible to members the literature must be catalogued and a filing system established. On Saturday, January 26th, John Dorsey and others will host a cataloging session at the Cabrillo Marine Museum. Additional help would be appreciated. Contact John at 772-3394 ext. 272 if you wish to participate.
- <u>Computer Systems</u>: A long range goal of SCAMIT is the purchase of a computer system for cataloging specimens and library additions. If you have any recommendations, please contact John Shisko at 772-3394 ext. 269.
- <u>Cabrillo Marine Museum Reference Collection:</u> The Museum currently is conducting an inventory of their reference collection. SCAMIT will be helping the museum standardize scientific (CMM) nomenclature monthly meetings. Cathy Crouch will inform SCAMIT members before each meeting as to what group of species she will present for standardization.
- John Dorsey and Tony Phillips Comments on Syllis (Ehlersia): In a paper to be given at the polychaete conference in Denver, December 28, 1984, John and Tony will talk about the following three species of Syllis (Ehlersia) from southern California: S. (Ehlersia) heterochaeta Moore, 1909, S. (Ehlersia) hyperioni n.sp., and S. (Ehlersia) intermedia n.sp. Based on examination of specimens from throughout the Bight and a single specimen taken by Moore off of Point Pinos, Monterey, S. (Ehlersia) heterochaeta was found to vary little in the morphology of its setae, however, the ratio of long to short setal appendages was greater in the Point Pinos specimens ( $\overline{x} = 4.46$  in median segments) compared with many southern California worms ( $\bar{x} = 3.89$  in median segments, individuals from SMB). The middle pair of eyes in southern California worms lacked lenses, but the specimen from Point Pinos had lenses; all material examined lacked the blotch of pigment behind the posterior eyes as described by Moore. Syllis (Ehlersia) hyperioni n. sp. is characterized by being thread-like, eyeless and composite setae all bidentate with a few superiormost with greatly elongated appendages ( $\bar{x}$  ratio = 8.52 in posterior setigers). Syllis (Ehlersia) intermedia n. sp. also is eyeless and has all bidentate composite setae, but the body is much more robust and ratio of setal appendages much less than S. (Ehlersia) hyperioni ( $\bar{x} = 4.06$  in median segments). John and Tony cautioned about the use of the term "spiniger" in this group of syllids; many authors have published keys wherein S. (Ehlersia) possesses a few superiormost spinigers but S. (Typosyllis) has only falcigers. Many species of S. (Ehlersia) have true spinigers, but others have elongated setal appendages with bidentate tips, therefore not true spinigers. A better character for this group is the ratio of long to short setal appendages, as discussed in John and Tony's paper which will be submitted to the Proceedings of the Biological Society of Washington, so names of new species should not be used until published.

<u>Sue Williams Reviews Some Ampharetidae</u>: Sue Williams soon will be submitting a paper for publication dealing with the taxonomy of southern California Ampharetids (Polychaeta). In her paper she will be making the following changes:



3. Dewer 9

Anobothrus occidentalis	to	Sosane occidentalis
Anobothrus trilobata	to	Eclysippe trilobata
Amage longibranchiata	to	Mexamage longibranchiata
Amage scutata	to	Paramage scutata
<u>Lysyppe</u> annectans	to	Paralysippe annectans (new genus)
Amphisamytha bioculata	to	Mooresamytha bioculata (new genus) Swore
		optione,

\*Please do not use any of the above changes until her paper is published. Sue also discussed the definition of palae as it applies to Ampharetids. Palae = the setae of segment 3 at the anterior margin of the branchia.

## List of Specimens From December 10, 1984:

Travels with Olga: 24 Queensberry Pl. S.W.7 London, England 30 July 1939

Dear Folks: It is Sunday, and since the museum is closed to working, I have decided to stay in my "pension" rather than venture out sight-seeing in London, although there are many places I should like to see.

I have been in London two weeks now, and am much better adjusted to the mode of living than I first was. My greatest difficulty at first was the matter of eating. The restaurant system here is totally different from that in California, and foods one normally eats there are unobtainable or unsatisfactory here, although I have learned that there are plenty of others, and very good. Breakfast is now always served in my room (though rather late, anywhere from 8 to 9 AM). It consists always of a pot of tea, toast and marmalade, and an egg, with or without bacon. This is a typical English breakfast and quite satisfactory. Lunch consists usually of a "shepherd's pie" (something like a meat pie), and a cup of tea, or any other hot entree. Chipped potatoes, (we call them French fried) and fish, or cheese and tomatoes (hot), "huck rabbit", etc., etc. Many other combinations that at first seemed strange to me, are now quite satisfactory. Dinners were at first a real problem to me, before I learned where London really eats. A so-called dinner is never under 2/6 (about 65 cents and tip) and usually 3/- or 4/- labout \$1.00). Now I usually go to one of 3 companies (chain stores). Lyons (Yews, caterers to the King by appointment!), ABC (Aerated Bread Company) or EDCL (Express Dairy Company, Ltd). None of these names looks like a restauranteur, and unless one gets into the place, there is little to indicate the presence of a restaurant. I have learned, however, that they have extensive menu lists



and good reasonable prices. Beautiful, delicious pastries, unlike anything one sees in America, are eaten everywhere, and are quite cheap (about 2 1/2 d which is 5 cents each). Tea at four PM is an institution. One could not go through the day without it. And tea is much better here than at any other place I have ever had it.

I am living on a street where street musicians seem to find a profitable business. There are young men and old, singly, in duets or groups, singers, violinists, organ grinders. An old lady comes occasionally. She nearly always sings "Lead Kindly Light". This morning, among others, there was a very well-dressed, elderly English gentleman with top hat, cane and spats, walking in the middle of the street, singing a song whose title I did not catch, but it was Irish and sounded something like "In my little old log cabin On La Cree". Several people hurled pennies down at him. When these big pennies (2 cents) are thrown down from a 5th story window, they really clatter. My window is a second-story (called first floor always in England) opening out onto a balcony. The windows are long and high, and have on the inside a set of folding doors to close them in addition to heavy cretonne curtains.

The place at the British Museum (Natural History) where I work, is rather unusual in several respects. The particular division is "The New Spirit Building", an annex to the main building, on the far side. It contains most of the alcoholic-type specimens in the BMNH, and about it are 4 floors of offices and laboratories. I am on the top floor, in the division of Annelids. To gain access to these laboratories requires a bit of training. There is only one entrance way to the whole set of buildings. Everything is heavily guarded. Not even the most trusted worker (or even the director) is given a key except while in the building. At night he leaves it at the entrance desk. When I enter, I descend to the ground floor, pass through many, semi-dark passages, most of which are lined by specimen cases not now in use. Right now this what leads through many galleries of all sorts of cows and oxen, goats and sheep, life-sized casts of African bushmen in their native habitats, African pygmies, and antlered mammals. I feel as if I have acquired a speaking friendliness with all of these strange beasts. After meandering through several long galleries, I come at length to the fire preventive department, a guard house, a receiving department, before I arrive at the entrance of the "Spirit Building". From there I take the lift to the top floor and enter a large, pleasant, north-side laboratory. To the one side is Mr. Monro's laboratory, to the back the door leads to the specimen stacks. Sometimes, when I go out with Mr. Monro, we go yet another way, through long galleries of corals, humming birds (thousands of them), large brilliant cassowaries and other birds. Anyone may, of course, examine these marvelous collections.

I am planning to go to Plymouth, Cornwall (the Marine Biological Laboratories), during the week of August 14th. It is a day's journey from here, via the southern English coast, and in far-off S.W. England. Plymouth is one of the world's most famous biological stations, and I should be loathe to miss it, now that I am in England. I return here after a few days.



The political picture from this vantage point is anything but encouraging London's numerous green parks are full of trenches. Overhead, in the sky, are the "barrage blimps". I had not heard of them before. They are gas-filled dirigibles (unmanned), tied up to a lot somewhere, and connected with cross wires to other nearby blimps similarly attached. The idea is to protect London, for a 7-mile radius from Charing Cross, from diving, bombarding planes. It is believed that the cross wires of the barrage blimps would cause a diving plane to be wrecked. The whole set-up looks very ineffectual, and the blimps are much too low. I really do not see how London can protect itself from aerial bombardment. The big "black-out" is being staged on the night of August 9th, when, at 12:30 PM, every light in London will be either out or so subdued as to be invisible from the air, the purpose being complete concealment in event of war. You may know, the whole issue, (Danzig, etc.), is supposedly coming to a head at the end of August. Actually, there is so much preparedness, and talks of war, that it does not seem possible to put it off much longer. People agree that it will make a "nasty mess", but that it is bound to be inevitable, ultimately.

London is very cosmopolitan. East Indians are quite numerous. One also sees (or hears) many french people, Italians, Americans, etc. One can always recognize an American, (or I mean, I can). They use expressions that do not belong to an Englishman. Yesterday, on the street, I heard, "give my best to the Vassar girl". An Englishman would never give "his best" like that! I entered a book store and found a Chicago buyer heckling over prices. He could have been nothing but Chicago. Yes, it turned out he was Norman Hall, well known on both sides of the Atlantic. And the french, etc. Had I room and time, I could add a lot. However, best wishes to you all. I hope some of you will someday enjoy London as I am.



# A LIST OF COMMON MARINE BIVALVES OF THE SUBCLASS ANOMALODESMATA FROM SOUTHERN CALIFORNIA

BY

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Playa del Rey, California 90291

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ANOMALODESMATA
   PHOLADOMYOIDA
       PANDORACEA
            PANDORIDAE Rafinesque, 1815
                Pandora bilirata Conrad, 1855
                    Syn. Pandora (Kennerlia) biscarinata Carpenter, 1864
                Pandora filosa Carpenter, 1864
                    Syn. Kennerlia filosa Carpenter, 1864
                Pandora puctata Conrad, 1837
                    Syn. Pandaora depressa auctt not Sowerby, 1830
            LYONSIIDAE Fisher 1887
                Entodesma inflatum (Conrad, 1837)
                    Syn. Lyonsia diaphana Carpenter, 1856
                Entodesma pictum (Sowerby, 1834)
                    Syn. Lyonsia inflata Conrad, 1f837
                         Lyonsia picta Sowerby, 1834
                         Lyonsia diaphana Carpenter, 1856
                         Entodesma spongiophila Dall, 1871
                Entodesma saxicolum (Baird, 1863)
                Lyonsia californica Conrad, 1837
                    Syn. Lyonsia haroldi Dall, 1915
                         Lyonsia pugetensis Dall, 1913
                         Lyonsia hyalina auctt not Conrad, 1831
                         Lyonsia gouldii Dall, 1915
                         Osteodesma nitidum auctt not Fabricius, 1798
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#### PERIPLOMATIDAE Dall, 1895

Periploma discus Stearns, 1890

Mytilimeria nuttalli Conrad, 1837

Lyonsia nesiotes Dall, 1915

Periploma plainiusculum Sowerby, 1834

Syn. Periploma argentaria Conrad, 1837
Periploma obtusa Conrad, 1837
Periploma papyracea Carpenter, 1856
Periploma lenticularis Sowerby, 1834
Periploma excurva Carpenter, 1855
Anatina alta C.B. Adams, 1852
Periploma sulcatum Dall, 1904

Mya striata auctt not Montagu 1815

Syn. L californica auctt not Conrad, 1837

THRACIIDAE Stoliczka, 1870 Asthenothaerus villosior Carpenter, 1864 Syn. Thracia diegensis Dall, 1915 Cyathodonta dubiosa Dall, 1915 Syn. Thracia plicata auctt not Deshayes, 1832 Cythodonta undulata auctt not Conrad, 1849 Cyathodonta pedrocina Dall, 1915 Thracia curta Conrad, 1837 Thracia trapezoides Conrad, 1849 Syn. Thracia curta auctt not Conrad, 1837 Syn. Thracia schenki Tegland, 1933 POROMYIDAE Dall, 1886 Poromya tenuiconcha Dall, 1913 Syn. Poromya soyoae Habe, 1952 Dermatomya tenuiconcha sagamiensis Okutani, 1962 CUSPIDARIIDAE Dall 1886 Cardiomya balboae (Dall, 1916) Syn. Cuspidaria balboae Dall, 1916 Cardiomya californica (Dall, 1886) Syn. Cuspidaria californica Dall, 1886 Cardiomaya costata (Sowerby, 1834) Syn. Cuspidaria costata (Sowerby, 1834) Cuspidaria dulcis Pilsbry & Lowe, 1932 Neaera costata Bush, 1883 Antina costata Sowerby, 1834 Cardiomya isolirata Bernard, 1969 Syn. Cuspidaria balboae auctt not DA11, 1916 Cardiomya pectinata (Carpenter, 1f864) Syn. Neaera pectinata Carpenter, 1864 Cuspidaria pectinata (Carpenter, 1864) Cuspidaria behringensis (Leche, 1883) Cardiomya robiginosa Okutani & Sakurai, 1964 Cardiomya behringensis Okutani Scarlato, 1972 Cardiomya planetica (Dall, 1908) Syn. Cuspidaria planetica Dall, 1908

Cuspidaria parapodema Benard, 1919

Syn. <u>Cuspidaria apodema</u> auctt not Dall, 1916 Neaera obesa auctt not Loven, 1846

Leiomya scabra (Carpenter, 1f864)

Syn. Plectodon scaber Carpenter, 1864

#### VERTICORDIIDAE Stoliczka, 1871

Verticordia ornata (d'Orbigny, 1853)

Syn. <u>Hippagus novemcostatus</u> Adam & Reeve, 1850 <u>Verticordia caelata</u> Verrill, 1882

SPECIES	GEOGRAPHY RANGE EXTENSION	DEPTH B	OTTOM TYPE
PANDORIDAE			
Pandora bilirata	Forrester Is. Alaska to Pt. Abreojos, Baja, CA	5-284	mud & clay
Pandora filosa	Nunivak Is. Bering Sea to Todos Santos Bay, Baja, CA	20-300	gravel
Pandora punctata	Vancouver Is. to Gulf of Calif.	2-50	
LYONSIIDAE Entodesma inflatum	Vancouver Island to Guayaquil, Ecuador	int37	
Entodesma saxicolum	Aleutian Is. to Baja, CA	inter- tidal	holes & crevices
Entodesma pictum	Alaska to Ecuador	int80	sand & gravel
Lyonsia californica	Sitka, Alaska to Todos Santos, Baja, CA	int100	sandy mud
Lyonsia nesiotes	Catalina & Coronado Island	10-120	
Mytilmeria nuttalli	Forrester Island, Alaska to Mexico	0-40	in tunicates
PERIPLOMATIDAE Periploma discus	Monterey, CA to El Salvador	0-10	mud
Periploma planiusculum	Pt. Conception, CA to Nigritos, Peru	3–6	mud
Periploma sulcatum	San Pedro Bay & Redondo Beach		
THRACIIDAE  Asthenothaerus  villosior	San Pedro, CA to Cape San Lucas, Baja, CA	0-65	mud
Cyathodonta dubiosa	Monterey, CA to Cham- perico, Guatemala	5-75	

SPECIES		GEOGRAPHY RANGE EXTENSION	DEPTH	BOTTOM TYPE
Thracia curt	<u>:a</u>	Icy Cape, Artic Ocean to Baja & Ecuador	40-120	shale
Thracia trap	pezoides	Craig, Alaska to Redondo Beach, CA	20-200	
POROMYIDAE				
Poromya tenuiconcha		Alaska Peninsula to Coronado Is.	60-1318	rocky
CUSPIDARIIDAE				
Cardiomya ba	alboae	Cortez Bank, CA to Catalina Island	45-170	
Cardiomay californica		Puget Sound, WA to So. CA & Galapagos Island	15-640	mud
Cardiomya co	ostata	So. CA & No. Gulf of CA to Guayaquil, Ecuador & the Galapagos Islands	4-95	
Cardiomya is	solirata	Pt. Loma, CA to central part of the Gulf of CA	55-190	
Cardiomya pe	ectinata	Alaska to Panama Bay	9-265	
Cardiomya pl	lanetica	Pribilof Is. Bering Sea to Cedros Is., Baja, CA	20-2400	
Cuspidaria p	parapodema	Off Sitka, Alaska to Panama Bay	50-320	
Leiomya scal	ora	Puget Sound, WA to Panama & Galapagos Is.	20-320	
VERTICORDIIDAE				
<u>Verticordia</u>	ornata_	Cosmopolitan: Catalina Is., CA to Panama Bay; Japan, Antilles, Peru, Galapagos Is.; Mass. to Florida, West Indies, Bermuda & Brazil.	10-400	

SCAMIT Code: LACO 41 Date examined: December 10, 1984

Voucher by: Paul Scott (SBMNH)

# Synonymy:

Thracia diegensis

#### Literature:

Palmer, 1958 (holotype photo); Oldroyd, 1924; Dall, 1915 (as T. diegensis)

# Diagnostic characters:

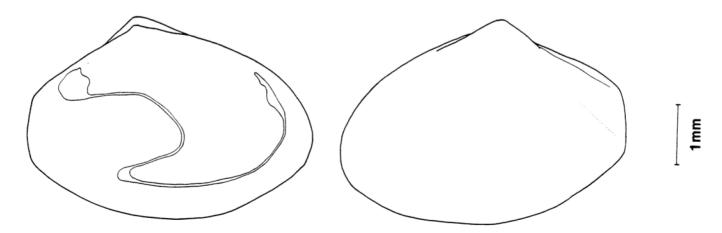
- 1. Hinge plate thin or absent, hinge teeth completely absent.
- 2. Ligament internal
- 3. Resilium directly beneath beaks, without buttress.
- 4. Small size, adults to 10 mm in length.

## Additional notes:

1. Juveniles of Asthenothaerus, Periploma, and Thracia are easily confused externally. In specimens less than 8 mm, the hinge structure must be observed. Periploma and Thracia have distinct hinge tubercles even at a juvenile stage.

Depth range: Intertidal to 65 m.

Distribution: San Pedro, California to Cabo San Lucus, Baja California, Mexico



Drawings by Laurie Marx, Santa Barbara Museum of Natural History

SCAMIT Codes: OCSD 51, PL 55,

LACO 42, SCCWRP 48

Date Examined: December 10, 1984

Voucher by: Paul Scott (SBMNH)

# Synonymy:

Osteodesma <u>nitidum</u> Gould, 1853 <u>Lyonsia californica haroldi</u> Dall, 1915 Lyonsia gouldii Dall, 1915

#### Literature:

Dall, 1915; Oldroyd, 1924; Grant & Gale, 1931; Abbott, 1974.

## Diagnostic characters:

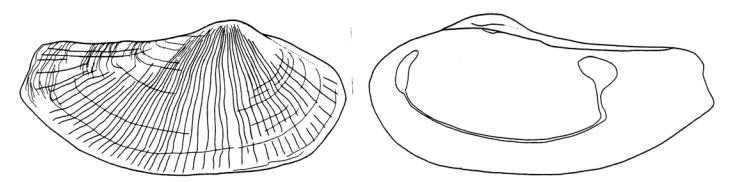
- 1. Shell thin, fragile, opalescent inside and out.
- 2. Shell elongate and inflated anteriorly under beaks.
- 3. Commonly has radial lines in periostracum.
- 4. Commonly has sediment adhering to periostracum.

#### Additional notes:

- At the present time we are using Bernard's (1983) synonymy of <u>Lysonia gouldii</u> in that no distinct characters can be found for this species.
- Juvenile <u>Entodesma picta</u> (a rare species) may be confused with <u>L. californica</u>. Be aware of any aberrent juvenile specimens which might be Entodesma.

Depth range: Intertidal to 100 m.

Distribution: 54N to 17N (Bernard, 1983)



Drawings by Laurie Marx, Santa Barbara Museum of Natural History

SCAMIT Codes: OCSD 50, PL 54 Date examined: December 10, 1984

Voucher by: Paul Scott (SBMNH)

Synonymy:

None.

Literature:

Oldroyd, 1924; Abbott, 1974

Diagnostic characters:

1. Beaks with radial crack which is strong in adults, weak in juveniles.

- 2. Adults discoid in shape, beaks central.
- 3. Postero-dorsal margin with slight truncation.

## Additional notes:

1. <u>P. discus</u> is easily differentiated from <u>Periploma planiusculum</u> by the centrally located beaks and discoid shape (adults only) of the former.

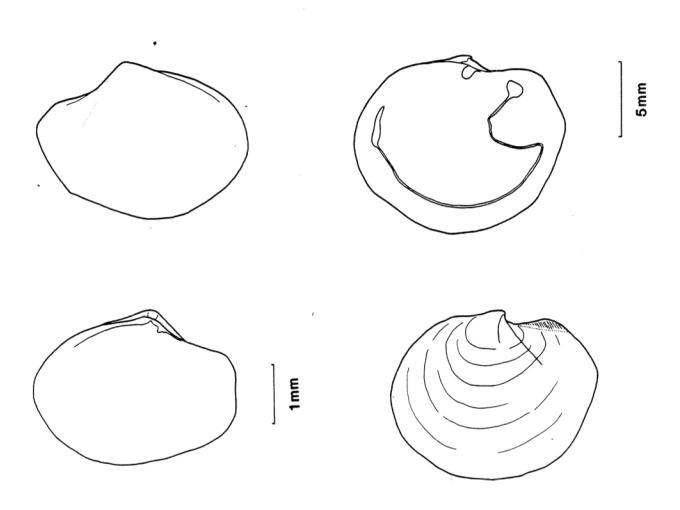
2. Juveniles of P. discus are easily confused with juveniles of Thracia trapezoides and Asthenothaerus villosior externally. All three species have juveniles with a blunt posterior rostrum and prominent central beaks. Juveniles must be opened to observe the hinge structure. P. discus has a distinct spoon chondrophore which is directly below or slightly posterior of the beaks. The chondrophore is evident as a large posterior tooth in small (3-5 mm) juveniles.

Depth range: Intertidal to 40 m

Distribution: 37N to 23N (Bernard, 1983)

See reverse side for illustrations

Drawings by Laurie Marx, Santa Barbara Museum of Natural History



SCAMIT Code: HYP 39 Date examined: December 10, 1984

Voucher by: Paul Scott (SBMNH)

Synonymy:

Kennerlia filosa Carpenter, 1864

## Literature:

Palmer, 1958 (Syntype photo); Oldroyd, 1924; Abbott, 1974.

## Diagnostic characters:

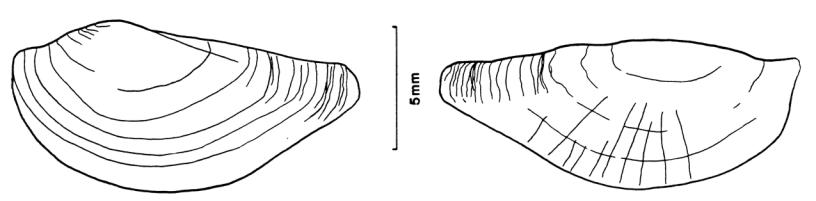
- 1. Shell compressed, thin, inequivalve; right valve almost flat, left valve moderately convex; opalescent inside and out.
- 2. Posterior drawn out into a rostrum in adults.
- 3. Postero-dorsal margin nearly straight.

#### Additional notes:

Juveniles of <u>P</u>. <u>filosa</u> and <u>P</u>. <u>bilirata</u> Conrad, 1855 are easily confused. The truncate posterior of <u>P</u>. <u>bilirata</u> adults does not appear to be found in juveniles less than 8 mm. For this reason it is suggested that specimens smaller than 8 mm be identified as <u>Pandora</u> sp. juvenile.

Depth range: 20 to 300 m (Bernard, 1983)

Distribution: Alaska to Ensenada, Baja California, Mexico



Drawing by Laurie Marx, Santa Barbara Museum of Natural History

Southern California Anomaldesmata Bibliography

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