Southern California Association of Marine Invertebrate Taxonomists

3720 Stephen White Drive
San Pedro, California 90731

December, 1992 Vol. 11, No. 8

NEXT MEETING: Discussion on Master Species List and Duplicate Literature

GUEST SPEAKER: None

DATE: January 11, 1993
9:30 am - 3:00 pm

LOCATION: Cabrillo Marine Museum, San Pedro, California

JANUARY 11 MEETING

The meeting will again address the master species list of the southern California benthos. We will break up into smaller groups to address the list phyletically. Each group will review the list for synonyms, spelling, and accuracy in reporting.

Time permitting, a list will be compiled of duplicate literature possessed by SCAMIT and a decision will be made on what to do with it.

Please bring any material or literature deemed necessary.

FUNDS FOR THIS PUBLICATION PROVIDED IN PART BY
THE ARCO FOUNDATION, CHEVRON USA,
AND TEXACO INC.

MINUTES FROM MEETING ON DECEMBER 14

The Christmas party was a big success and fun was had by all. Thanks to Larry Lovell for organizing the party and to all of the people who attended. SCAMIT would also like to thank Ed Maestro of the Cabrillo Marine Museum.

SCAMIT Officers Elections

Nominations are now open for SCAMIT officers for the 1993-94 year. Nominations will be entertained from now, up to and including the January meeting. Send your nominations to the Vice President, Larry Lovell. Ballots will be mailed out with the January newsletter and will be due by the March meeting.

1993-94 Schedule

Larry Lovell is looking for input on possible speakers and subjects for the next year. He would appreciate any input you might have. You can write him at:

Larry Lovell
1036 Buena Vista
Vista, CA 92083

Blue Water Plankton

Dr. Bill Hamner, University of California, Los Angeles, presented a very interesting talk and slide show on Blue Water Plankton. He discussed the many different species that have been discovered and observed using the blue water diving technique. The first discovery was that mucous is an important tool for feeding. The animals secrete external mucous, forming a web, which catches particulates floating in the water column. Another discovery was that whenever the animal's feeding filter becomes clogged they discharge and secrete a new filter. This discharge of material may make up the clumps of marine snow that collect at the bottom of the ocean.

Polycirrinae Workshop

Leslie Harris of the Natural History Museum of Los Angeles County chaired the workshop on Polycirrinae polychaetes. She informed the attending SCAMIT members that there are only three species commonly occurring in soft bottom on the California shelf. The three species are *Amaeana occidentalis, Polycirrus californicus,* and *Polycirrus* sp. I (Banse,1980). Included in this newsletter is a key to the genera of Polycirrinae and generic definitions from Hutchings and Glasby 1986. Also included is a key to the Northeast Pacific *Polycirrus* from Banse 1980 and specific characters used by Hutchings and Glasby 1986.

FUTURE MEETINGS

The February 8, 1993 meeting will be on Brachiopods with Dr. Eric Hochberg and Bivalve Molluscs with Paul Scott of the Santa BarbaraMuseum of Natural History. It will be held at the Santa Barbara Museum of Natural History. The Bivalve groups that will be treated are Tellindae- (potential new species of *Tellina* sp. A of Ljubenkov), Thraciidae- (identifying juvenile specimens of all members in family and deciding correct identification of *Cyathodonta*), Thyasiridae- (identifying all *Thyasira* and checking id on *"Tomburchus" redondoensis*), and specimens that are not *Solemya reidi.* Please bring specimens to the meeting. Paul Scott asked for specimens of *Tellina* to be sent in advance to the Santa Barbara Museum of Natural History tel. (805) 682-4711, ext. 319. Please bring all species of Brachiopoda that have been collected. Paul has arranged for motel accomodations. A special rate ($60/night) has been provided for February 7-8 at:

Colonial Inn
206 Castillio St.
Santa Barbara, CA 93103
(805) 963-4317 ask for Carmela or John

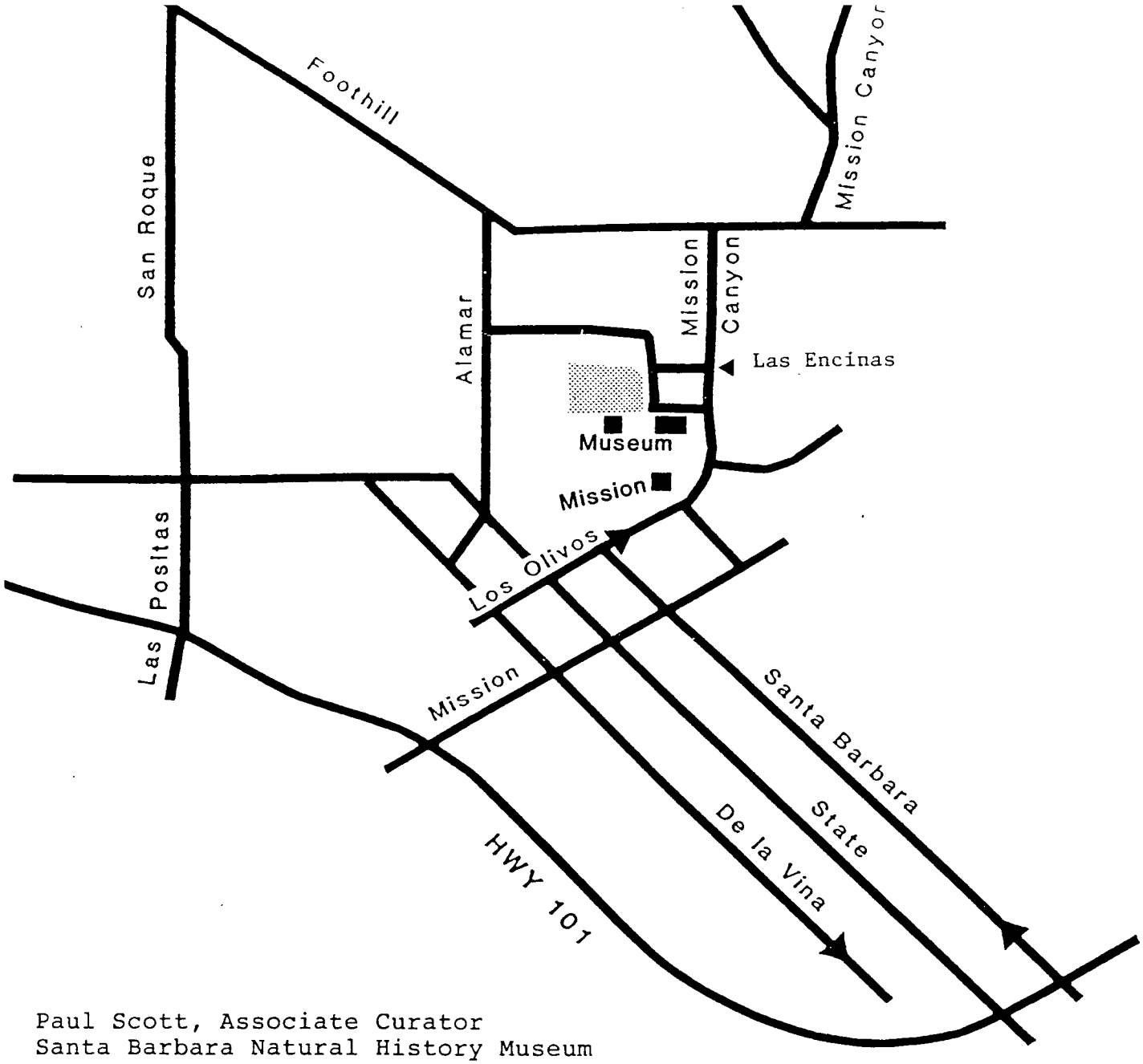
Reservations are required and be sure to mention you are attending the Natural History Museum workshop. The motel is located near the beach (take Bath St. exit off 101 Northbound and turn left at end of offramp). Directions to the museum are included in this newsletter.

The meeting on March 8, 1993 will be on Sabellid Polychaetes II with Dr. Kirk Fitzhugh of the Los Angeles County Museum of Natural History. Kirk will emphasize the Subfamily Sabellinae (*Demonax, Sabella, Megalomma, Pseduopotamilla* etc). So start collecting specimens now. The meeting will be held at the Allan Hancock Foundation Building, University of Southern California, Los Angeles, CA.

SCAMIT OFFICERS:

If you need any other information concerning SCAMIT please feel free to contact any of the officers.

President	Ron Velarde	(619)692-4903
Vice-President	Larry Lovell	(619)945-1608
Secretary	Diane O'Donohue	(619)692-4901
Treasurer	Ann Dalkey	(310)648-5611



Paul Scott, Associate Curator
Santa Barbara Natural History Museum
2559 Puesta Del Sol Road
Santa Barbara, CA
(805) 682-4711

Directions from the south to the Santa Barbara Museum

1) Proceed north on US 101 to Santa Barbara, turn right at the first signal (Santa Barbara St.).

2) Proceed up Santa Barbara St. about 3 miles, turn right on Los Olivos.

3) Go past the Mission, bear left at the "Y", proceed about half a mile.

4) Turn left on Las Encinas, turn left on Puesta del Sol, turn right into Museum parking lot.

5) Invertebrate Zoology is on the west side of the new Collection and Research Center (past the whale, west side of parking lot).

Southern California Polycirrinae

Compiled by Leslie H. Harris, Collections Manager
Invertebrate Zoology Section
Los Angeles County Museum of Natural History
900 Exposition Boulevard
Los Angeles, California 90007

POLYCIRRINAE Malmgren, 1866 (modified from Holthe, 1986a)

Tentacular lobe conspicuous, simple or lobed. Often 2 types of tentacles present. No dorsal branchiae, secondary notopodial branchiae sometimes present. No eyespots. No lateral lobes on the anterior segments. Ventral shields paired, unpaired or reduced. Notosetae, if present, smooth or denticulate. Uncini, if present, breviavicular, brevipectinate, or acicular, always in single rows.

Tribe Polycirrini
: Notosetae present or absent. Uncini breviavicular or brevipectinate. *Polycirrus, Biremis.*

Tribe Amaeanini
: Notosetae present. Uncini manubriavicular or acicular, limited to abdomen. *Amaeana.*

Tribe Lysillini
: Notosetae present or absent. Uncini absent. *Lysilla, Hauchiella.*

Uncertain tribal affinity: *Enoplobranchus.*

Key to Polycirrinae Genera (from Hutchings & Glasby, 1986)

1.	Setae absent in all segments	*Hauchiella*
	Setae present in at least some segments	2
2.	Uncini absent in all setigers	3
	Uncini present in at least some setigers	4
3.	Thoracic notopodia vascularised, some branched	*Enoplobranchus*
	Thoracic notopodia never branched	*Lysilla*
4.	Uncini short handled, present in thorax and abdomen	*Polycirrus*
	Uncini long handled spines, present in abdomen only	*Amaeana*

West Coast Polycirrinae (*sensu* Hutchings & Glasby,1986 and Holthe, 1986b)

Amaeana Hartman, 1959

Amaea Malmgren, 1866

Type species: *Polycirrus trilobatus* Sars, 1863; designated by Malmgren (1866).

Upper lip not folded, lower lip cushion-like. Tentacular membrane trilobed. Branchiae absent. Ventral shields unpaired, well developed. Notosetae from segment 3, smooth, finely denticulate or plumose. Nine (or 10) to 13 thoracic segments. Thoracic uncini absent. Abdominal uncini long shafted, acicular.

Hauchiella Levinsen, 1893

Type species: *Polycirrus tribullatus* McIntosh, 1869; by monotypy.

Upper lip folded, lower lip inconspicuous. Shape of body typical of subfamily, except that all notopodia, neuropodia, and setae are lacking. No branchiae. Tentacular membrane expanded, with 2 types of tentacles. Thorax of about 10 segments, usually about 70 segments in total. A number of more or less unpaired ventral shields.

Lysilla Malmgren, 1866

Type species: *Lysilla loveni* Malmgren, 1866; by monotypy

Upper lip folded, lower lip prominent, gutter-like. Branchiae absent. Expanded tentacular membrane, trilobed, with 2 types of buccal tentacles. No distinct ventral shields. Six to12 thoracic segments. Notopodia from segment 3; notosetae smooth, hirsute, or pinnate capillaries. Thoracic and abdominal uncini absent.

Polycirrus Grube, 1850

Aphlebina Quatrefages in Milne Edwards, 1844.
Torquea Leidy, 1855.
Apneuma Quatrefages, 1865.
Leucariste Malmgren, 1866.
Ereutho Malmgren, 1866.
Cyaxares Kinberg, 1866.
Dejoces Kinberg, 1867.
Anisocirrus Gravier, 1905.
Pseudoampharete Hartmann-Schröder, 1960.
Litancyra Hutchings, 1977.

Type species: *Polycirrus medusa* Grube, 1850.

Upper lip folded, lower lip more or less distinct. Expanded tentacular membrane trilobate, sometimes with lateral lobes reduced; with 2 types of buccal tentacles. Branchiae absent. One unpaired anterior and a number of paired ventral shields. Thorax with variable number of setigers (10-70, more or less specifically constant), notopodia beginning on segment 2 or 3. Notosetae variable, include pinnate, hirsute, smooth-winged or smooth wingless capillaries, but only 1 or 2 setal types present in a given species. Thoracic uncini first present from segments 7 to 18, or absent. Abdominal uncini always present. Uncini usually avicular, sometimes approaching pectinate form.

Specific Characters For *Polycirrus* Used by Hutchings & Glasby (1986)

1. Number of pairs of thoracic notopodia. Only gross differences are of diagnostic value since the absolute numbers of pairs decrease with increasing body size.

2. First segment the uncini occur on; necessary to give range for species. Number of uncini per row increase with increasing body size.

3. Degree of epidermal papillation or tesselation.

4. Degree of segmentation and approximate numbers of ventrolateral pads; may vary with increasing body size.

5. Form of notosetae.

6. Form of uncini, plus dental formula. Dentition is highly variable in some species, so dental formula should include range, or a number of frontal views of uncini should be provided.

Specific Characters Considered Unreliable by Hutchings & Glasby (1986)

1. Number of nephridia; varies with size and sexual maturity.

2. Form of notopodia and presence of lobes; highly variable and influenced by degree of expansion or contraction.

Key to Northeast Pacific *Polycirrus* Species (modified from Banse, 1980)

1 Notosetae plumose, sometimes also limbate. With 10-14 (rarely 15) pairs of notopodia . . . . . *Polycirrus* sp. I
Notosetae limbate (smooth under low magnification, variously ornamented under oil lens) 2

2 With 10-15 pairs of notopodia 3
With 20-25 (40) pairs of notopodia 5

3 Notosetae weakly serrate. Uncini with semicircle of large teeth above secondary tooth . . . . . *Polycirrus* sp. III
Notosetae with fine hairs 4

4 Uncini with 0-3 smaller teeth above secondary tooth . . . . . *Polycirrus* sp. II
Uncini with numerous small teeth above and lateral to secondary tooth . . . . . *Polycirrus* sp. V

5 Notopodia usually with conspicuous posterior lips. Uncinus with semicircle of small teeth above secondary tooth . . . . . *Polycirrus californicus*
Notopodia without conspicuous posterior lips. Uncini without teeth above 1 or 2 small teeth above principal tooth . . . . . *Polycirrus* sp. IV

Polycirrinae Species Occurring in Southern California

Amaeana occidentalis (Hartman, 1944). Type locality: Tomales Bay, California, intertidal. There are two forms. The first is a large worm found in shallow mudflats and bays, such as Elkhorn Slough, Tomales Bay & Mission Bay. The second form is much smaller and occurs in soft bottom shelf and slope areas through southern California. References: Hartman (1944, 1969), Banse (1980).

Hauchiella cf. *tribullata* McIntosh, 1869. Type locality: Scotland. Rare, taken deeper than 600 m. References: Holthe (1986b), Hutchings & Glasby (1986).

Lysilla cf. *loveni* Malmgren, 1866. Type locality: Sweden. Rare, taken deeper than 300 m. References: Banse (1980), Holthe (1986b).

Polycirrus californicus Moore, 1909. Type locality: San Diego, California. The most common polycirrin species found in southern California, in soft bottom sublittoral and shelf areas. Banse (1980) considered *Polycirrus perplexus* Moore, 1923 (type locality: Monterey Bay, California) to be a junior synonym after examination of holotypes. References: Moore (1909, 1923), Hartman (1969), Banse (1980).

Polycirrus sp. I Banse, 1980. Locality: British Columbia, Washington. The only other *Polycirrus* species found locally in sublittoral and shelf soft bottom areas; may co-occur with *P. californicus*. Reference: Banse (1980).

Polycirrus spp. Several different taxa have been found on rocky substrates and in sediments deeper than 600 m.

References

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Holthe, T. 1986a. Evolution, Systematics and Distribution of the Polychaeta Terebellomorpha, with a Catalogue of the Taxa and a Bibliography. Det Kgl. Norske Vidensk. Selsk. Museet, Gunneria 55: 236 pp.

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Moore, J.P. 1923. The polychaetous annelids dredged by the U.S.S. Albatross off the coast of southern California in 1904. IV. Spionidae to Sabellariidae. Proc. Acad. Nat. Sci. Philadelphia 75: 179-259.

The Allan Hancock Foundation Polychaete Collection of the Los Angeles County Museum of Natural History

Dr. Kirk Fitzhugh, Assistant Curator

Leslie H. Harris, Collections Manager

GUIDELINES FOR LOANS, DONATIONS, AND VISITORS

The Los Angeles County Museum of Natural History (LACM) polychaete section has put together the following guidelines to facilitate use of the collection by the scientific community. We want to encourage all our colleagues to deposit type and non-type specimens into our collection, as well as take advantage of the collection's vast holdings.

On 1 July 1988, the University of Southern California (USC) formally transferred legal ownership of the Allan Hancock Foundation (AHF) polychaete collection to the LACM. Specimens, original catalogs, files, and the late Dr. Olga Hartman's library on Polychaeta now belong to the LACM. As part of the transfer agreement, all specimens were accessioned as a unit, and loans that had been made before 1 July 1988 were re-opened through the LACM registrar's office and subject to museum regulations.

Since 1941, the collection has been housed in the AHF building on the USC campus, just across the street from the LACM. The LACM is now in the process of constructing new office and collection space within the museum for the polychaete staff and collection.

The LACM-AHF polychaete collection is the second largest of its kind in the United States (the USNM collection being the largest). We estimate the LACM-AHF polychaete collection to contain over 90,000 lots, and is most notable for four particular reasons. First, because of the far-reaching AHF expeditionary cruises, the collection represents the most extensive geographic coverage along the eastern Pacific, from intertidal to abyssal depths, allowing investigators to pursue such issues as intraspecific variation and biogeographic/temporal patterns. Our eastern Pacific specimens form the world's largest collection of worms from this region, most of which were identified by Drs. Olga Hartman and Kristian Fauchald. Second, there is excellent representation of taxa from other regions of the world, especially the Indian, Pacific, and Antarctic Oceans, giving the collection world-wide importance as an indispensable resource for monographic studies. Third, the collection holds the results of the most extensive quantitative environmental surveys from the past 40 years, conducted in a wide range of depths along Oregon, California, and

Mexico. And fourth, the type collection is renowned for its size and holdings, representing published works from 1885 to the present.

LOANS

We are happy to furnish colleagues with specimens for their research. There are certain regulations imposed by the museum which define the borrower's obligations and allow us to keep track of material at all times.

Types and other holdings are loaned at the discretion of the curator and collections manager, with each loan approved by the Chief Curator and Registrar. Material is loaned to institutions and organizations, at the request of qualified individuals. Specimens requested by students or associates require faculty or institutional endorsement and are the direct responsibility of that faculty member or institutional representative. Loans may not be transferred, either to another individual or location. If the borrower wishes to take material to another institution, the original loan must first be closed. Another loan will then be opened under the name and address of the new institution. Any labels associated with museum specimens may not be removed or altered. Permission is required for dissection, preparation for SEM, or other special procedures. Specimens must be properly maintained by the borrower and returned in the same condition as received. All taxonomic changes, especially of types, must be reported to the curator or collections manager when the material is returned. If the material is mentioned in a publication, proper acknowledgement must be made in the paper and the museum should be supplied with two copies. Loans of type or important material are sent by registered mail, insured mail, or hand-carried, and should be returned by one of these methods. Loans of extensive series of any one taxon are shipped in several containers, as appropriate. To prevent the loss of a whole type series, the holotype and paratypes of a species are never loaned to the same institution at one time, but may be borrowed sequentially. Loans are made for 6 months, but may be renewed. Periodic reminders are sent to individuals holding outstanding loans.

DEPOSITS

We welcome deposits of both type and general collection specimens. With a strong commitment by the LACM to support the polychaete section, we can assure researchers that their specimens will be well cared for in the years ahead. Also, material deposited into the collection is extensively utilized by both the large group of west coast polychaete taxonomists and scientists world-wide.

Acquisitions are made to augment the systematic and biogeographical strengths of the collection, and to provide a thorough basis for comparative studies of the class Polychaeta on a world-wide scale.

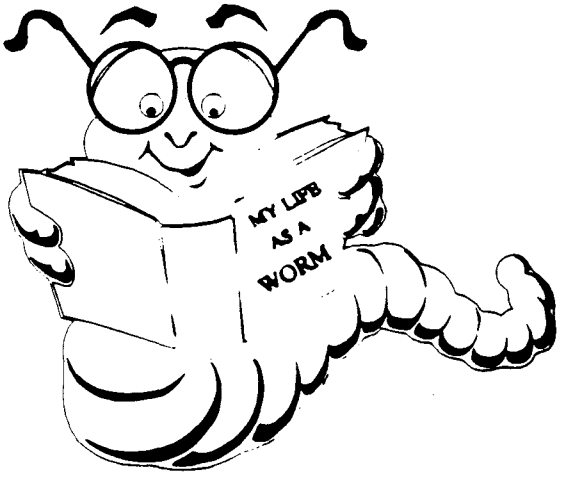
Researchers interested in depositing large collections should first contact either Kirk Fitzhugh or Leslie Harris before sending material. Small collections may be sent at any time. Address packages to Dr. Kirk Fitzhugh, Assistant Curator, Division of Life Sciences, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, California 90007, or to Leslie Harris, Collections Manager, at the same address.

Specimens sent for deposit should be accompanied by a letter clearly stating that the specimens are a gift, with lots itemized. The material must be properly fixed, preserved, and labelled. Fixation in 4 to 10% seawater-formalin followed by preservation in 70% ethanol is preferred. Label paper should be 100% rag, with labelling typed or printed in water-proof black ink. Each label should include type designation (if necessary), taxonomic data, all available locality data, collection date, collector's name, method of collection, depth of collection, and any ecological data available. Typed station data listings may be sent with the specimens, but they should not take the place of adequate donor labels. Please see the attached sample LACM-AHF catalog entries for the kind of specimen information we prefer to receive for our archives.

Cataloging of the entire polychaete collection is scheduled to begin after we move to our new quarters in the LACM. Until then, donated general collection material will not receive LACM-AHF catalog numbers. This material should be identified in publications by putting "LACM-AHF" in parentheses after the station data for each lot. Only type material is currently assigned catalog numbers. Types deposited will be given numbers only if the description of the specimens is in press at the time of deposit. A letter should accompany the deposit of types, stating the title of the article and the name of the publication in which the paper will appear. We request that all donors send reprints of papers citing LACM-AHF material for our sectional library.

VISITORS

All qualified individuals are welcome to visit the LACM-AHF polychaete collection. Visits can be made for any reasonable amount of time, as long as curatorial staff are present. Please notify us several weeks in advance, as space is currently limited. Dissecting and compound microscopes are available. We regret that the museum is not able to offer any financial support to visitors at this time.



LACM example	completed record
LACM-AHF NO. 000000* TAX CODE: * PRES. TYPE	LACM-AHF NO. 000158 TAX CODE: ANT PRES. ALC TYPE HOLO
ORIG. AHF OR HARTMAN NO.: donor's original lot #	ORIG. AHF OR HARTMAN NO.: N11114
GEN. SUBGEN. SP.	GEN. Antonbruunia SUBGEN. SP. viridis
SUBSP. AUTHOR NO. SPEC.	SUBSP. AUTHOR Hartman & Boss 1965 NO. SPEC. 1
OCEAN: COUNTRY: STATE:	OCEAN: Indian COUNTRY: Madagascar STATE:
DIV./ISLAND GRP. Geographic division or island group	DIV./ISLAND GRP. Mozambique Channel
SPEC. LOCAL.:specific locality	SPEC. LOCAL.:northwest of Tulear
HABITAT: sediment type, associated fauna or algae, etc.	HABITAT: commensal in the mantle cavity of Lucina fosteri; sediments of black brown oozy mud & detritus
LAT/LONG	LAT/LONG 23 20′ S, 43 36.3′ E
COLL. collector (individual and/or institution) COLL. DATE	COLL. O. Hartman & K.J. Boss COLL. DATE 12 Aug 1964
EXPEDITION: title of expedition or collection program	EXPEDITION: International Indian Ocean Expedition
VESSEL: CRUISE NO.: STA. NO.	VESSEL: R/V ANTON BRUUN CRUISE NO.: 7 STA. NO. 364 C
DEPTH: GEAR:	DEPTH: 39-45 fm GEAR: Agassiz trawl
DONOR individual or institution DONOR DATE: *	DONOR J. Ryther DONOR DATE:
CAT. DATE: * CAT. BY: *	CAT. DATE: 06 Sep 1991 CAT. BY: L.H. Harris
REMARKS: Location of types. [Data fields marked by an asterisk (*) are filled in by the LACM collections manager.]	REMARKS: Paratypes: 000159,000162, also in paratype lots of Lucina fosteri Hartman & Boss 1965, LACM-AHF 000160-000161, and in USNM. Type species
ORIGINAL REF.:*	ORIGINAL REF.:Hartman & Boss 1965, pp. 177-182, figs. 1-5.
ID BY: ID DATE: ACC. NO. *	ID BY: O. Hartman ID DATE: ACC. NO. A5486

LACM-AHF POLYCHAETE COLLECTION CATALOGUE RECORDS

The above examples show the type of collection data that should be sent along with specimens for deposition into our collection. We have found that museum records with detailed information are invaluable for future researchers. Certain information, such as LACM-AHF no., taxonomic code, catalogue date, donor date, etc., is provided by the LACM polychaete collections manager. The rest of the information should be supplied by the donor.

14 Dec 92 - Leslie handed this out as a reference for future type specimen deposit to AHF

LACM-AHF NO. 000332 TAX CODE: ONU PRES. ALC TYPE HOLO
ORIG. AHF OR HARTMAN NO.:
GEN. Diopatra SUBGEN. SP. farallonensis
SUBSP. AUTHOR Fauchald 1968 NO. SPEC. 1
OCEAN: N. Pacific COUNTRY: Mexico STATE:
DIV./ISLAND GRP. Gulf of California

SPEC. LOCAL.:head of Farallon submarine canyon

HABITAT: silty clay

LAT/LONG 25 29.3'N, 109 24.3' W, to 25 31.9' N, 109 25.2' W
COLL. R.H. Parker COLL. DATE 02 Apr 1959
EXPEDITION:
VESSEL: CRUISE NO.: STA. NO. P 54-59
DEPTH: 90 to 75 fm GEAR: shell dredge
DONOR DONOR DATE:
CAT. DATE: 28 Aug 1991 CAT. BY: K. Fitzhugh
REMARKS: Paratypes: 000333.

ORIGINAL REF.:Fauchald 1968, pp. 7-8, pl. 1, figs. H-N.

ID BY: K. Fauchald ID DATE: ACC. NO. A5486

LACM-AHF NO. 000333 TAX CODE: ONU PRES. ALC TYPE PARA
ORIG. AHF OR HARTMAN NO.:
GEN. Diopatra SUBGEN. SP. farallonensis
SUBSP. AUTHOR Fauchald 1968 NO. SPEC. 11
OCEAN: N. Pacific COUNTRY: Mexico STATE:
DIV./ISLAND GRP. Gulf of California

SPEC. LOCAL.:head of Farallon submarine canyon

HABITAT: silty clay

LAT/LONG 25 29.3'N, 109 24.3' W, to 25 31.9' N, 109 25.2' W
COLL. R.H. Parker COLL. DATE 02 Apr 1959
EXPEDITION:
VESSEL: CRUISE NO.: STA. NO. P 54-59
DEPTH: 90 to 75 fm GEAR: shell dredge
DONOR DONOR DATE:
CAT. DATE: 28 Aug 1991 CAT. BY: K. Fitzhugh
REMARKS: Holotype: 000332.

ORIGINAL REF.:Fauchald 1968, pp. 7-8, pl. 1, figs. H-N.

ID BY: K. Fauchald ID DATE: ACC. NO. A5486

LACM-AHF NO. 000334 TAX CODE: ONU PRES. ALC TYPE HOLO
ORIG. AHF OR HARTMAN NO.:
GEN. Diopatra SUBGEN. SP. papillata
SUBSP. AUTHOR Fauchald 1968 NO. SPEC. 1
OCEAN: N. Pacific COUNTRY: Mexico STATE: Baja California
DIV./ISLAND GRP. Gulf of California

SPEC. LOCAL.:

HABITAT: shelly sand

LAT/LONG 29 20.0' N, 113 00.2' W
COLL. R.H. Parker COLL. DATE 10 Apr 1959
EXPEDITION:
VESSEL: CRUISE NO.: STA. NO. P 71-59
DEPTH: 40 fm GEAR: shell dredge
DONOR DONOR DATE:
CAT. DATE: 28 Aug 1991 CAT. BY: K. Fitzhugh
REMARKS: Paratypes: 000335.

ORIGINAL REF.:Fauchald 1968, pp. 11-12, pl. 2, figs. D-I.

ID BY: K. Fauchald ID DATE: ACC. NO. A5486

LACM-AHF NO. 000335 TAX CODE: ONU PRES. ALC TYPE PARA
ORIG. AHF OR HARTMAN NO.:
GEN. Diopatra SUBGEN. SP. papillata
SUBSP. AUTHOR Fauchald 1968 NO. SPEC. 6
OCEAN: N. Pacific COUNTRY: Mexico STATE: Baja California
DIV./ISLAND GRP. Gulf of California

SPEC. LOCAL.:

HABITAT: shelly sand

LAT/LONG 29 20.0' N, 113 00.2' W
COLL. R.H. Parker COLL. DATE 10 Apr 1959
EXPEDITION:
VESSEL: CRUISE NO.: STA. NO. P 71-59
DEPTH: 40 fm GEAR: shell dredge
DONOR DONOR DATE:
CAT. DATE: 28 Aug 1991 CAT. BY: K. Fitzhugh
REMARKS: Holotype: 000334.

ORIGINAL REF.:Fauchald 1968, pp. 11-12, pl. 2, figs. D-I.

ID BY: K. Fauchald ID DATE: ACC. NO. A5486