



**Southern California Association of
Marine Invertebrate Taxonomists**

3720 Stephen White Drive
San Pedro, California 90731

September, 1991

Vol. 10, No. 5

NEXT MEETING: Amphipod Workshop

GUEST SPEAKERS: Elizabeth Harrison-Nelson of the
Smithsonian Institution, Division of
Crustacea in Washington, D.C.

Dr. Jim Thomas of the New Found Harbor
Marine Institution in Big Pine Key,
Florida.

DATE: October 28 & 29, 1991
**Note this is the fourth Monday of the
month.**

LOCATION: Times Mirror Room
Los Angeles Museum of Natural History
Los Angeles, California

AMPHIPOD WORKSHOP:

We will be reviewing Barnard and Karaman's new publication "The Families and Genera of the Marine Gammaridean Amphipods" and its affects on the taxonomy of the local fauna. We will also be examining the local Stenothoides. Plan on attending what promises to be a lively and informative workshop. Bring any unknown specimens of Stenothoides as well as any other mystery amphipods you might have.

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

SCAMIT newsletter is not deemed to be a valid publication for
formal taxonomic purposes.

NOVEMBER MEETING:

The November 18 SCAMIT meeting will be on sea pens. It will be hosted by the Santa Barbara Museum of Natural History in Santa Barbara, California. The guest speaker will be Dr. Eric Hochberg of the Santa Barbara Museum of Natural History. This will be on the third Monday of the month. If possible please send your problem sea pens to Dr. Hochberg before the meeting. If not, bring them with you to the meeting. Accommodations are available at the Mountain View and Vagabond Inns. These are both on or near State Street close to the museum and moderately priced. See the attached map for directions to the museum.

MINUTES FROM SCAMIT MEETING ON SEPTEMBER 23, 1991:

Ron Velarde announced that Dr. Donald Reish has proposed publishing a Barnard memorial volume of amphipod papers. Dr. Reish has volunteered to edit such a publication. All the members present agreed that SCAMIT should be involved. One thing mentioned was the possibility of hosting such a conference under SCAMIT auspices. A final public memorial for Dr. Barnard will be held in the spring; cherry blossom season in Washington D.C.

Ron encouraged all SCAMIT members to write the Chairman of the National Museum and request that Barnard's position be filled with someone with similar interests. Mail your request to:

Dr. Brian Kensley
Invertebrate Zoology Division, M.S. NHB 163
National Museum of Natural History
Washington, D.C. 20560.

Don't forget the SCAMIT Christmas party on December 7 at the Cabrillo Marine Museum from 6:00 to 9:00 pm. Jacqueline Lovell has volunteered to organize the festivities with the help of the "SCAMIT Auxiliary." Call Jacqueline at (619)945-1608 if you would like to help. The food will be Italian. The museum will be open for SCAMIT members and their families.

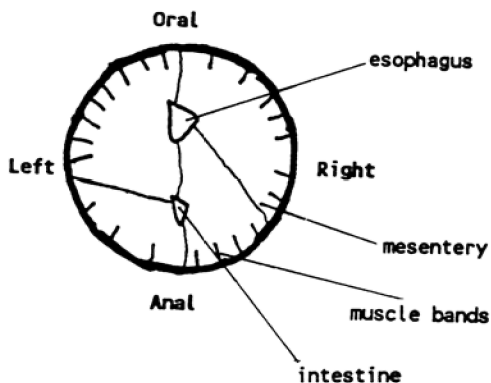


Figure 1 (x-sec.)

Phoronid Workshop: Dr. Russ Zimmer, after a brief review of phoronid morphology, pointed out the difficulty in identifying members of this group. To accomplish this a thin cross-section must be made at about mid-body. The number and placement of longitudinal muscles is diagnostic. A formula is generated consisting of four numbers that corresponds to the number of muscle bands in each of four quadrants created by the mesenteries (Figure 1). In

the example, the formula would be written as: $\frac{8}{3} \frac{7}{4}$.

Dr. Zimmer has not had sufficient time to positively identify the specimens he was given. He will continue to work on them. A list of known west coast species with a brief description of each has been included in the newsletter.

Chone Review: During the afternoon Dr. Kirk Fitzhugh of the Los Angeles County Museum of Natural History continued his review of the Sabellidae. He established that Chone sp. C of Harris (C. nr. duneri of Point Loma) is not C. duneri according to the illustrations in Malmgren. He also identified two separate staining forms of Chone mollis. There is a light and dark form. They all have the same pattern but some take up the stain differently. Dr. Fitzhugh review of Chone and other Sabellides is continuing.

Publication of Interest to SCAMIT Members: "Databases In Systematics" edited by R. Allkin and F. A. Bisby of the Biology Department, The University, Southampton, England. Published for the Systematics Association by Academic Press. A copy of the table of contents has been included in the newsletter.

National Institutes for the Environment Update: Tom Parker of the Los Angeles County Sanitation District recently received a letter and questionnaire from the executive director for the Committee for the National Institutes for the Environment. A copy has been enclosed in this newsletter for those members who are interested.

SCAMIT OFFICERS:

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

President	Ron Velarde	(619)226-0164
Vice-President	Larry Lovell	(619)945-1608
Secretary	Kelvin Barwick	(619)226-8175
Treasurer	Ann Martin	(213)648-5317



WEST COAST SPECIES OF THE PHYLUM PHORONIDA

The following seven species of phoronid adults are known from southern and central California:

Phoronis architecta

Phoronis muelleri

Phoronis pallida

Phoronis psammophila

Phoronis vancouverensis

Phoronopsis californica

Phoronopsis harmeri

With the exception of *Phoronis muelleri* the larvae of the above are also well known here.

An additional nearly cosmopolitan species *Phoronis ovalis* occurs in Washington and two additional widely distributed species *Phoronis australis* and *Phoronis hippocrepia* are reported from our east coast.

Two further "larval species" occur in southern California, a third such form is known from Hawaii, and there may be at least two additional unidentified larvae from east coast waters. There are no described adults to match with these larval forms, so additional adult forms await discovery and description.

Two additional species names may be familiar to California workers: *Phoronopsis viridis* is now considered a synonym of *Phoronopsis harmeri* and *Phoronis pacifica* has never been identified since the inadequate type description

The Genus *Phoronis*

Members of this genus lack the epidermal fold known as the collar which is located at the base of the lophophore in members of the only other genus *Phoronopsis*. Although inconsequential and sometimes inconspicuous, the collar is the only morphological feature separating the genera. Adults of the genus *Phoronis* are usually smaller than those of *Phoronopsis*

Phoronis ovalis: Not yet described from southern California, but probably here. Positive identification is easy since species is **diminutive** (usually less than 1 cm in length), with only about **24 tentacles** which are arranged in a **slightly indented circle**. **Burrows within calcareous substrates** (limestone, mollusc shells, barnacles) in which it forms aggregations by asexual budding.

(gonochoristic?; no spermatophoral or nidamental glands; 125 μ m eggs brooded in tube; composite muscle formula 7-21|7-19, **mean muscle formula 29 = 15|14**)

Phoronis pallida Another species that can be identified with great confidence, this is the second smallest species, usually **about 1 cm in length** (not 15 cm as reported by Emig!) with tubes usually less than 2 cm in length. Three obvious **constrictions caused by sphincter muscles subdivide the muscular region of the trunk into distinctive zones**; such zonation is found in no other phoronid. The tube is densely sand-encrusted except for a short distal portion that is largely sediment-free. A third diagnostic feature is that this species is always (to the best of my knowledge) a **commensal within the burrow walls of thalassinid "ghost" shrimps**. In southern California the host is usually *Upogebia* spp. so this species is usually collected only in shallow water from muddy or sandy embayments.

(gonochoristic; large spermatophoral glands with fleshy lips, no nidamental glands;

60 µm eggs freely spawned; composite muscle formula 17-19 = $\frac{5-6}{4} | \frac{5}{3-4}$, **mean**

muscle formula 18 = $\frac{5}{4} | \frac{5}{4}$)

The four following species -- *Phoronis architecta*, *P. muelleri*, *P. psammophila* and *P. vancouverensis* -- all occur in southern California and are difficult to separate when alive, much less when preserved. All are of intermediate size (about 5-10 cm long when extended), with tentacle numbers around 100 plus. Some of the most critical taxonomic features involve reproductive features and/or internal details so positive identification is always difficult and sometimes impossible. I'll take them in reverse alphabetical order, in part because *Phoronis vancouverensis* has a distinctive habitat and is the only one of the four to occur in clumps, rather than more or less singly.

Phoronis vancouverensis is the only local species which regularly has **tubes made only of chitin** without attached sand grains (*Phoronis australis*, *P. hippocrepia*, and *P. ovalis* are others). This lack of sand grains is associated with their habit of growing **embedded within or attached to limestone outcroppings in shallow, muddy embayments or suspended either from the undersides of logs in bays or floats in marinas**. The individuals commonly occur in **dense tangles**. During the reproductive season (spring and summer), this hermaphroditic species retains its early developmental stages in a **pair of conspicuous embryo masses** within the lophophore, but **lacks conspicuous spermatophoral glands**.

(gonochoristic; small spermatophoral glands, nidamental glands inconspicuous; 100 μm eggs retained in paired egg masses; composite muscle formula $42-59 = \sqrt{F(12-19 \text{ } | \text{ } 5-10, 18-26 \text{ } | \text{ } 5-10)}$, mean muscle formula $51 = \frac{16 \text{ } | \text{ } 22}{7 \text{ } | \text{ } 6}$)

Phoronis psammophila:: This species, *Phoronis architecta* and *P. muelleri* are gonochoristic and mature males have a **paired, large, fleshy spermatophoral glands** within their lophophore during the spring and summer breeding seasons. The latter two species spawn their eggs freely, but *P. psammophila* is a brooder like *P. vancouverensis*, but, but in contrast to it, the **embryos are all of one stage** rather than a full sequence of stages from zygotes to early actinotrochs and are **brooded in one mass**; the nidamental glands that hold the embryos are formed by the **fusion of almost all members of the inner ring of tentacles**. In living specimens, the lophophore has white flecks and **may have yellow, red or green pigmentation**. The species is found from the **intertidal to about 20 m**, usually occurring as single isolated tubes, but sometimes attached with others to shells or rocks.

(gonochoristic; large spermatophoral glands with fleshy lips, nidamental glands involving most of inner tentacles; 60 μm eggs retained in single mass all at same stage; composite muscle formula $25-53 = \sqrt{F(7-9 \text{ } | \text{ } 7-17, 4-11 \text{ } | \text{ } 4-11)}$, mean muscle formula $34 = \frac{11 \text{ } | \text{ } 11}{6 \text{ } | \text{ } 6}$)

Phoronis architecta : This species is so similar to the previous species that it has been synonymized with it, but in fact is more closely related to *Phoronis muelleri* with which it shares numerous similarities (both are gonochoristic with females that shed their eggs freely, and with males that have large fleshy spermatophoral glands during the breeding season; the larvae of the two are nearly identical, both possessing an otherwise unknown second set of tentacles; the lophophore of the juvenile and of both species and of the adults of *P. muelleri* (and of regenerating individuals of these and many other species) produces new tentacles on both sides of the mouth (ventral and dorsal not left and right), resulting in an unusual "oral" notch opposite the indentation of the lophophore on the anal side; as a consequence of this pattern of tentacle formation, the tentacles near the anus are significantly longer than those near the mouth so that the lophophore of fully formed adults appears trapezoidal in side view). In *P. architecta* the translucent lophophore has white flecks in a characteristic pattern, but is otherwise unpigmented. *P. architecta* occurs in shallow water in sandy sediment so that the tubes are usually encrusted with closely fitted sand grains (hence the name *architecta*).

(gonochoristic; large spermatophoral glands with fleshy lips, no nidamental glands; 60 μm eggs freely spawned; composite muscle formula $17-19 = \frac{5-6}{4} \mid \frac{5}{3-4}$, **mean muscle formula 18** $= \frac{5}{4} \mid \frac{5}{4}$)

Phoronis muelleri: As noted above this species shares many features with *P. architecta*. The lophophore, **which may be red to violet**, usually **has only 50-100 tentacles of which those on the oral side are very short**. The species is usually **much more slender** and is found much deeper (**10-50 m**) than either *P. architecta* or *P. psammophila*. Because it normally occurs deeper and therefore in finer sediment than *P. architecta* or *P. psammophila*, the **tubes usually are more poorly encrusted with sand grains**.

(gonochoristic; large spermatophoral glands with fleshy lips, no nidamental glands; 60 μm eggs freely spawned; composite muscle formula $18-30 = \frac{5-13}{2-6} \mid \frac{5-11}{3-6}$, **mean muscle formula 24** $= \frac{9}{3} \mid \frac{9}{3}$)

The Genus *Phoronopsis*

As indicated above, phoronids provided with an epidermal collar at the distal end of the trunk region are placed in the genus *Phoronopsis*.

Phoronopsis californica: Originally described from the intertidal at Newport Bay, this spectacular species is locally common from about 5-35 meters off a number of the Channel Islands. Although the tubes are highly variable, depending on the substrate, specimens can be identified with great confidence: 1. the lophophore (and body) is (are) usually a bright **tangerine or orange color**, varying from red to pale peach, with some white flecks (especially the anal papilla) and 2. the lophophore consists of some **1500 tentacles** that are arranged in a **complex double helix of 4-9 coils**. The body is reported to be up to 5 mm in diameter, which is true, and to reach nearly a half meter in length which is an exaggeration, although the tubes may be that long. The tube may have a distinctive nipple at the proximal end and often contains abundant mucoid material.

(gonochoristic; large spermatophoral glands with membranous lips, no nidamental glands; 60 μm eggs freely spawned; composite muscle formula $180-243 = \frac{53-81}{35-54} \mid \frac{56-79}{29-40}$, **mean muscle formula 211** $= \frac{66}{44} \mid \frac{66}{35}$)

Phoronopsis harmeri (*Phoronopsis viridis*): This species forms dense aggregations at Morro and Bodega Bays (in these regions, the lophophore is often greenish, hence the original trivial name), but is commonly found locally either intertidally or subtidally. All "collared" phoronids which don't key out as *P. californica* are now assigned to this species, but the considerable variation in form, especially between specimens from different localities, may reflect greater taxonomic complexity.

(gonochoristic; large spermatophoral glands with membranous lips, no nidamental glands; 60 μm eggs freely spawned; composite muscle formula

$$75-145 = \frac{14-33}{7-20} \mid \frac{15-33}{7-16} \text{ mean muscle formula}$$

$$72 = \frac{23}{14} \mid \frac{23}{12}$$

Potential Problems for the Would-be Taxonomist:

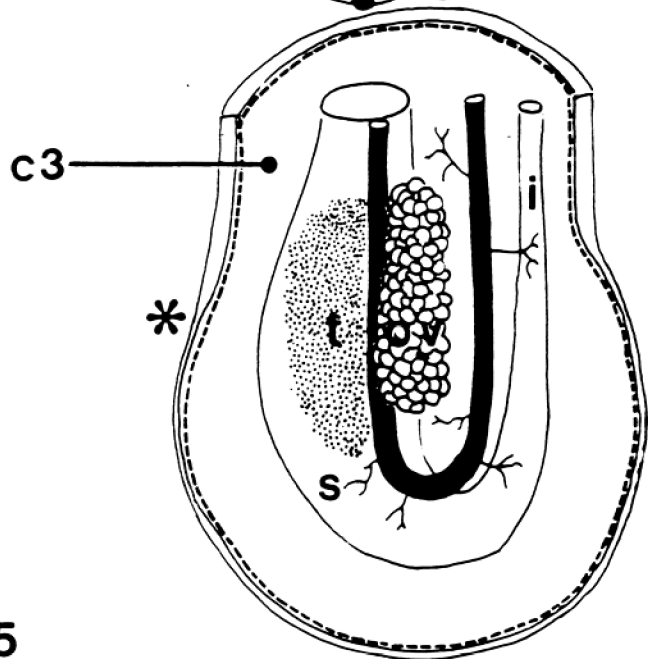
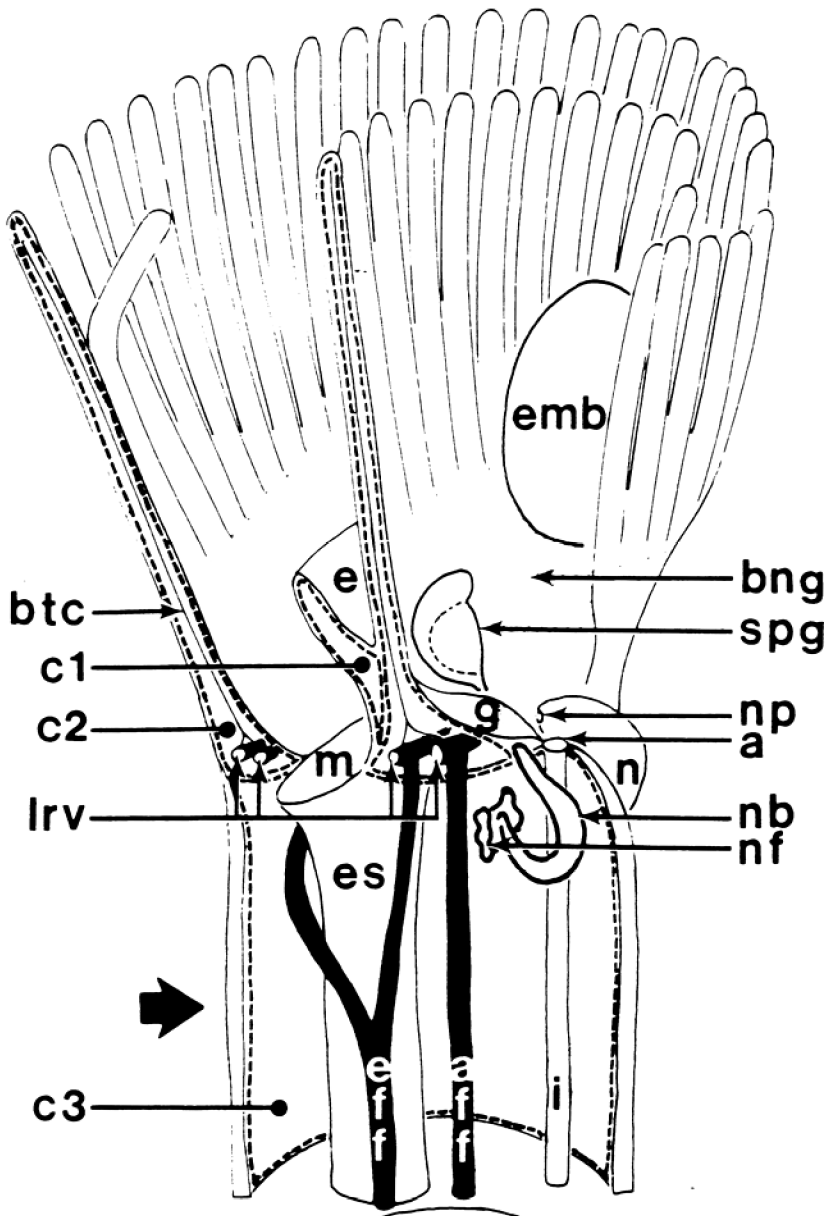
need for sections
morphological variability in muscle formulae, tentacle numbers, tubes, etc.
autotomy and possible confusion with segmentation or body regionation
regeneration with loss of important parts
seasonal reproduction with evanescent accessory sex organs
undescribed species

Bibliography

- Emig, C.C. 1974. The systematics and evolution of the phylum Phoronida. *Z. zool. System. Evol.-Forsch.* **12**: 128-151.
- Emig, C.C. 1979. British and other phoronids. No 13 Synopses of the British Fauna (D.M. Kermack and R.S.K. Barnes, eds.). Academic Press, London, 57 pp.
- Marsden, J. C. 1959. Phoronidea from the Pacific coast of North America. *Can j. Zool.* **37**: 87-111.

Emig placed *Phoronis architecta* in synonymy with *Phoronis psammophila* on the basis of tentacle number, muscle formulae, and other morphological congruences, but the latter species broods its young and the former does not.

Marsden placed *Phoronis vancouverensis* in synonymy with *Phoronis hippocrepia*, but Emig argued against this and placed *P. vancouverensis* in synonymy with a Japanese form *P. ijimai*, retaining *P. hippocrepia* as a valid species. I consider both interpretations incorrect and recognize all three species as valid.



DATABASES IN SYSTEMATICS
Allkin Bisby
Table of Contents

1	Electronic Data Processing in Taxonomy and Systematics V. H. HEYWOOD	1	15	The Viciae Database: An Experimental Taxonomic Monograph M. E. ADEY, R. ALLKIN, F. A. BISBY, T. D. MACFARLANE and R. J. WHITE	175
2	Information Services in Taxonomy F. A. BISBY	17	16	The Use of a Descriptive Database as an Aid to Assessing the Distinctness of Pea Cultivars (<i>Pisum sativum</i> L.) P. J. WINFIELD and F. N. GREEN	189
3	Current Database Design – The User's View D. W. BARRON	35	17	A Chemical Database for the Leguminosae B. V. CHARLWOOD, G. S. MORRIS and M. J. GRENHAM	201
4	The Implementation of Databases on Small Computers M. W. FREESTON	43	18	A Chemotaxonomic Database M. T. BABAÇ and F. A. BISBY	209
5	Management of Almost Flat Files in Systematic Biology using TAXIR R. C. BRILL and G. F. ESTABROOK	53	19	BRASS BAND (The Brassicaceae Data Bank at Notre Dame): An Example of Database Concepts in Systematics T. J. CROVELLO, L. A. HAUSER and C. A. KELLER	219
6	A Concept for a Machine-readable Taxonomic Reference File M. N. DADD and M. C. KELLY	69	20	An Outline for a Database within a Major Herbarium J. M. MASCHERPA and G. BOCQUET	235
7	The European Taxonomic, Floristic and Biosystematic Documentation System – An Introduction V. H. HEYWOOD, D. M. MOORE, L. N. DERRICK, K. A. MITCHELL and J. van SCHEEPEN	79	21	Identification of Toxic Mushrooms and Toadstools (Agarics) – An On-Line Identification Program P. MARGOT, G. FARQUHAR and R. WATLING	249
8	The Database of the IUCN Conservation Monitoring Centre D. C. MACKINDER	91	22	Handling Taxonomic Descriptions by Computer R. ALLKIN	263
9	ISIS – An International Specimen Information System N. R. FLESNESS, P. G. GARNATZ and U. S. SEAL	103	23	Automatic Typesetting of Computer-generated Keys and Descriptions M. J. DALLWITZ	279
10	The Network of Databanks for the Italian Flora and Vegetation P. L. NIMIS, E. FEOLI and S. PIGNATTI	113	24	Implementing Small Database Systems with Specialized Features R. J. WHITE	291
11	Fact Documentation and Literature Database for the Crustacean Order Tanaidacea J. SIEG	125	25	On the Description of Inflorescences R. J. PANKHURST	309
12	PRECIS – A Curatorial and Biogeographic System G. E. GIBBS RUSSELL and P. GONSALVES	137	26	Databases in Systematics: A Summing Up G. LI. LUCAS	321
13	A Review of Herbarium Catalogues R. J. PANKHURST	155		Index of Key Words	325
14	Flora of Veracruz: Progress and Prospects A. GOMEZ-POMPA, N. P. MORENO, L. GAMA, V. SOSA and R. ALLKIN	165		List of Systematics Association Publications	330



COMMITTEE FOR THE
NATIONAL INSTITUTES FOR THE ENVIRONMENT

730 11th Street NW • Washington, DC 20001-4521
202-628-4303 • FAX 202-628-4311

September 9, 1991

Dr. Thomas Parker
Marine Biology Laboratory
LACSD
24501 S. Figueroa Street
Carson, CA 90745

Dear Dr. Parker,

Thank you for inquiring about the upcoming CNIE National Conference. We will be pleased to add your name to our distribution list and appreciate your offer. Please circulate our questionnaire (enclosed among SCAMIT members so that they can help shape the conference.

Plans are well underway for an event that will allow us to broaden our effort and reevaluate the agenda for the proposed NIE. In particular, we need to ensure that our proposal adequately considers the broad disciplines that will be necessary to understand and solve our environmental problems. We expect that the conference will result in working groups to provide more details in our NIE needs statement.

We have teamed up with Resolve, Inc. an environmental mediation group associated with The Conservation Foundation. They will be facilitating the conference and helping us with the planning. We have formed a planning committee, which is headed by Dr. A. Karim Ahmed. The originators of the NIE proposal, Dr. Steve Hubbell and Dr. Henry Howe will co-chair the conference.

Due to the magnitude of the effort and a need for substantial funding for the conference, we have decided to postpone the event until early Spring, 1992. We will let you know the exact date as soon as it is finalized.

Although attendance at the conference will be limited, we encourage you to participate by filling out the enclosed questionnaire. This will help us to form the basis for a revised, improved needs statement and plan for the NIE.

Thank you for your interest. We will keep you updated on additional developments.

Sincerely,

David E. Blockstein, Ph.D.
Executive Director

NIE Questionnaire

Committee for the National Institutes for the Environment • Washington, D. C. July 1991

Name: _____ Title: _____

Address: _____

Telephone: _____ Fax: _____ BITNET: _____

Field: _____ Specialty within field: _____

Note: May we quote you (are your remarks "on the record")? Yes No

Your response to this questionnaire will be very helpful to the Committee for the NIE to make the case for the NIE, so please do send it back so that we can benefit from your insights and experience. Short answers in phrases are fine; use additional space if needed. Thanks very much. Steve Hubbell

1. What federal agencies, if any, are the primary source of funding for your field or problem area?
2. What are the high-priority environmental research problems in your field or area?
3. What existing federal agencies or programs now fund, or are likely to fund, research on these problems?

4. What could a new agency such as the NIE do in your field or environmental problem area that existing agencies have not done, or seem unlikely or unable to do? Be as specific as possible.

5. If existing agencies are not or cannot fill the needs in your field or problem area, what are the reasons in your estimation why these agencies can't do what is required?

6. How could an NIE potentially help existing federal agencies do a better job of meeting your field's needs?

7. Briefly cite one or two of the best examples you know in which environmental research in your field or area led to solutions or amelioration of environmental problems and/or saved money. Citations of published accounts would help.

8. Briefly cite one or two good examples in which a *lack* of environmental research in your field or area has hindered progress toward solving environmental problems, and which cost more money to solve later. Citations would again be helpful.

9. Is there a shortage of environmental scientists in your field? If so, how serious is it?

10. Do you like the NIH as a model for the NIE? Have you any suggestions for NIE structure and function?

Please return to: The Committee for the NIE, 730 11th St. NW, Washington, DC 20001-4521



EMPLOYMENT OPPORTUNITY

MARINE BIOLOGIST I

**SALARY: \$2280 - \$2748, Monthly; \$27,360 - \$32,976, Annually
\$2371 - \$2858, Monthly; \$28,452 - \$46,296, Annually, effective 1/4/92.**

**FIRST DATE TO APPLY: August 23, 1991 LAST DATE TO APPLY: Open. Apply promptly.
May close with 5 days notice.**

REQUIREMENTS:

You may qualify by meeting one of the following:

- 1) Bachelor's degree in Marine Biology or Oceanography.
- 2) Bachelor's degree in a closely related life science field (Biology, Ecology, Environmental Science, Zoology) and a minimum of one upper-division course and lab in Marine Biology or Oceanography and one upper-division course and lab in Invertebrate Zoology or Invertebrate Ecology.
- 3) If you do not meet the educational requirement, you may substitute any combination of full or part-time experience working in an ocean monitoring laboratory for each year of education lacked. **Qualifying experience must include performing ocean monitoring biological studies, including any of the following: collecting and analyzing ocean water, benthic, and fish samples in the field; performing taxonomic identifications of marine invertebrate organisms and fish; or performing statistical analysis of oceanographic data.**

NOTES:

- 1) College transcripts showing degree awarded must be submitted with your application. Transcripts will be made available to the hiring department.
- 2) Graduating seniors in their final semester or quarter of college may apply but will be placed inactive on the eligible list until submitting proof of completing the educational requirement, within the effective life of the list. Graduating seniors must submit transcripts covering courses up to their current term and must indicate their anticipated date of graduation.

License: A valid California Class C (Class 3) driver's license, which permits you to drive an automobile, may be required at the time of hire.

DUTIES:

This is the entry-level professional position into the City's Marine Biologist series. Marine Biologists I work from a 30' - 42' ocean monitoring boat to collect and analyze ocean water, benthic, and fish samples; perform taxonomic identifications of invertebrate marine animals and fish; statistically analyze and interpret oceanographic data; write technical reports; and perform related work as assigned. Career Opportunities may include Marine Biologist II, \$3178 a month maximum.

APPLICATION/ SCREENING PROCESS:

Complete and submit the City's application and Supplemental Application.

All application materials will be made available to the hiring department for use during the selection process. The screening process will consist of a review of the application materials for minimum requirements. All qualified applicants will be placed on the eligible list, which will be in effect for six months. The eligible list will consist of One Category. All candidates will receive written notice of their eligibility expiration date. The hiring department will contact and interview candidates as needed to fill vacancies.

#T1176 Marine Biologist I
August 23, 1991

Pamela Hightower, Assigned Analyst
DOC. 1314

FOR ADDITIONAL INFORMATION SEE REVERSE SIDE

The City has an active Equal Opportunity Program for employment of women, minorities, and persons with disabilities. Disabled applicants who require special testing arrangements may call 236-6358.

Applicant Information

**APPLY: EMPLOYMENT INFORMATION CENTER
CITY ADMINISTRATION BUILDING
LOBBY 202 "C" STREET, SAN DIEGO, CALIFORNIA
24-hour job information: (619) 236-6463
Hearing Impaired For TTY Call (619) 236-6950**

APPLICATION INFORMATION

Application materials must be received at the Employment Information Center NO LATER THAN 5:00 P.M. ON THE FINAL FILING DATE. Postmarks as proof of meeting the final filing date are not accepted.

1. Starting salaries will be determined by the hiring department.
 2. Relevant part-time work will be evaluated towards meeting the required experience.
 3. Unless otherwise stated, relevant experience may be substituted for education.
 4. Eligible lists may be extended by the Civil Service Commission.
 5. Examination requirements and processes may be revised.
 6. Experience, education, and all other information provided by an applicant orally or in writing are subject to verification. Any misrepresentations or false statements may be cause for disqualification or dismissal from employment.
-

GENERAL REQUIREMENTS

Requirements must be met at time of application unless otherwise stated.

The minimum age for most full-time employment is 18, unless you are 17 and a high school graduate. You must have the legal right to work in the U.S. or have U.S. citizenship. Persons hired must present acceptable proof of identity and the legal right to work in the United States and the authenticity of the documents must be verified before starting work. After hire, you will be required to sign a loyalty oath and may be required to live in San Diego County.

A CITY MEDICAL EXAMINATION which may include a drug screen and/or completion of a medical history questionnaire may be required before hire or promotion.

The City of San Diego is committed to a drug and alcohol free workplace.

A CONVICTION RECORD FORM must be submitted before hire.

VETERANS PREFERENCE: Only those persons who have not worked since being discharged from the military and who have served in a period of military draft may be eligible for veterans points. Military retirees are not eligible for veterans points.

EMPLOYEE BENEFITS

Salaried City Employees are eligible to participate in a benefit program including holidays, vacations, savings and retirement plans, health programs, and other benefits. Benefits may change due to employer-employee contract negotiations.

CAREER OPPORTUNITIES are available after six months of service. Employees may qualify to apply for promotional examinations not available to the public.

The provisions of this bulletin do not constitute an expressed or implied contract.

DIVERSITY BRINGS US ALL TOGETHER



**MAILING ADDRESS
JOBS
CITY OF SAN DIEGO
PERSONNEL DEPARTMENT
202 "C" STREET
SAN DIEGO, CA 92101-3861**

ADDRESS CORRECTION REQUESTED