



**Southern California Association of  
Marine Invertebrate Taxonomists**

3720 Stephen White Drive  
San Pedro, California 90731

January, 1994

Vol. 12, No. 9

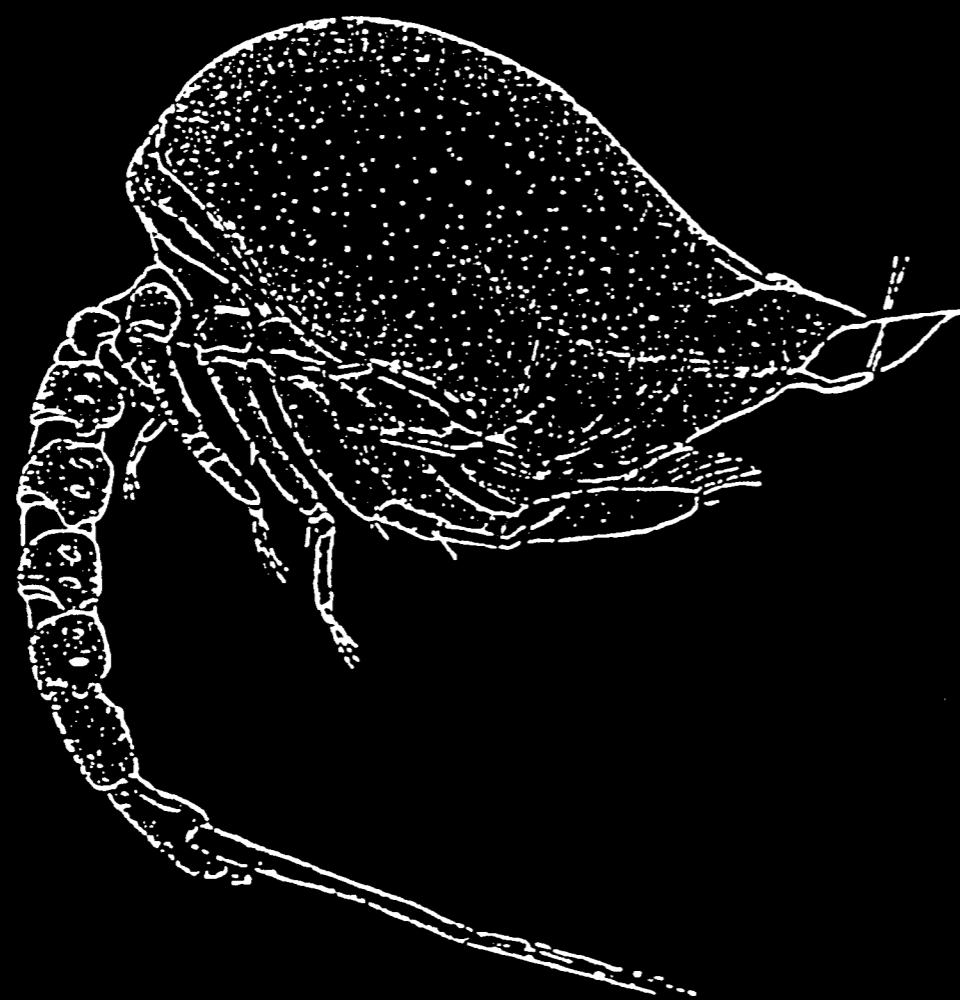
**NEXT MEETING:** Cumaceans

**GUEST SPEAKER:** Dr. Les Watling, Darling Marine Sciences  
Center, Maine

**DATE:** February 28, 1994

**TIME:** 9:30am-3:00pm

**LOCATION:** City of San Diego Marine Biology Laboratory,  
San Diego, CA (map is included)



**FEBRUARY 28**

The meeting in February will be on Cumaceans from the MMS Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Please bring any Cumaceans you need to have identified or confirmed. The workshop will be lead by Dr. Les Watling of Darling Marine Center and will be held at the City of San Diego's Marine Biology Laboratory, San Diego, CA.

*Campylaspis canaliculata*: California Crustacea of the Order  
Cumacea, (Proc. U.S. Nat. Mus. Vol 83, #2992, 1936)

---

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.*

## MINUTES FROM MEETING ON JANUARY 10

Ron Velarde announced that the Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel Volume 1-Introduction, Benthic Ecology, Oceanography, Platyhelminthes, and Nemertea has been finished and is available for \$29 plus tax and shipping. Paul Scott of the Santa Barbara Museum of Natural History will prepare a flyer for the SCAMIT newsletter.

The Southern California Academy of Sciences will be having their 1994 Annual Meeting, May 6-7 at the University of California, Irvine. Included in this newsletter is the symposia and abstract instructions.

The Fourth California Islands Symposium will be on March 23-25, 1994 in Santa Barbara, CA. A photocopy of the registration form, along with the tentative program, has been included in this newsletter.

The X International Symposium on Marine Biology will be in Ensenada, Baja California, Mexico on June 13-17, 1994. The symposium will focus on topics related to: fisheries, marine ecology and resource management. For further information please contact:

Dr. Lon McClanahan  
Southern Calif. Marine Institute  
820 South Sea Ave.  
Terminal Island, CA 90731 USA

An advanced course on Polychaete Autoecology: Evolutionary Trends and Adaptive Significance of Life History Traits is being offered at the Benthic Ecology Laboratory, Ischia (Naples), Italy from the 2-23 July, 1994. The course will be organized to include formal lectures, laboratory and field research training, individual and group research projects. An application form is in this newsletter.

Dr. Gordon Hendler of the Natural History Museum of Los Angeles County is wondering if anyone has any specimens of the shallow-water brittle star, *Ophioderma teres*, from California or elsewhere? The most northerly record is a specimen collected off Corona Del Mar in 1950. The more common *Ophioderma* species in southern California is *O. panamense*, which has banded arms. *O. teres* tends to be uniformly colored, spotted, or decorated with thin loops of dark pigmentation. Dr. Hendler would be grateful for the opportunity to study specimens that are, or might be, *O. teres*. His address is:

Natural History Museum of Los  
Angeles County  
Invertebrate Zoology Section  
900 Exposition Boulevard  
Los Angeles, California 90007  
Tel. (213) 744-6391 FAX (213) 746-2999

Included in this newsletter is a notice of transfer of the Allan Hancock Foundation polychaete collection and the winter 1994 schedule of research seminars at the Natural History Museum of Los Angeles County.

Nominations for 1994-95 SCAMIT officers were taken at the last meeting. The following names were entered for nomination:

Ron Velarde - President  
 Don Cadien - Vice President  
 Cheryl Brantley - Secretary  
 Ann Dalkey - Treasurer

Short biographies of all the nominees along with a ballot have been included with the newsletter. Ballots are due by March 31. They can be either mailed to Larry Lovell or bring them to the February or March meeting. See ballot for the mailing address.

The rest of the meeting was spent examining polychaetes. The following species were examined and no problems with identification were noted. They were *Harmothoe fragilis* (Moore, 1910), *Lepidasthenia berkeleyae* Pettibone, 1948, and *Terebellides* sp. Type C Williams, 1984. Additional specimens were presented and the following problems were noted. *Ampharete* sp. was a juvenile specimen originally identified as *A. gossi* which probably does not occur in our area; Gene Ruff showed a specimen from Alaska. *Praxillella pacifica* was an anterior fragment originally identified as *Euclymeninae* as the staining pattern did not match any species; restained and the pattern showed it was *P. pacifica* and that the staining process needs to be done with concentrated stain and for a long enough period of time. There were several specimens of *Terebellides californica* with long stalked branchia; length of stalk is variable. Also several specimens of Ampharetidae did not match any known species; 15 thoracic setigers, 12 uncinigers, small paleae, 4 pairs of branchia and dark nuchal organs. *Malmgreniella* sp., which was originally identified as *Harmothoe nigralba* will be discussed in more detail at the April SCAMIT meeting on scale worms by Gene Ruff. Finally, the type of *Subadyte mexicana* Fauchald, 1972 was examined by Gene Ruff and Leslie Harris and compared to *Subadyte* sp. A. They concluded that they are synonymous.

## FUTURE MEETINGS

The meeting on March 14 will be in Santa Barbara, CA. which will be lead by Paul Scott and Hank Chaney of the Santa Barbara Natural History Museum (map is included). Paul will be discussing *Parvilucina*, *Cyclopecten* and any problem bivalves. Hank will cover *Bittium* and *Eulimidae*. They would prefer if you could send them specimens of the target taxa ahead of time, if not, bring them to the meeting. Paul has arranged for motel accomodations. A special rate has been provided at:

Colonial Inn  
 206 Castillio St.  
 Santa Barbara, CA 93103  
 (805) 963-4317

The April 11 meeting will be on Polynoidae. The workshop will be lead by Gene Ruff and will be held at the City of San Diego's Marine Biology Lab in Point Loma.

The meeting on May 9 will be on Biological Illustrations with Dr. Jodi Martin leading the workshop. It will be held in the Times Mirror Room at the Los Angeles Natural History Museum, Los Angeles, CA.

## FEBRUARY NEWSLETTER

Please note that because of the short period of time (two weeks), the February newsletter will be included in the March edition. The next newsletter will be arriving in early April.



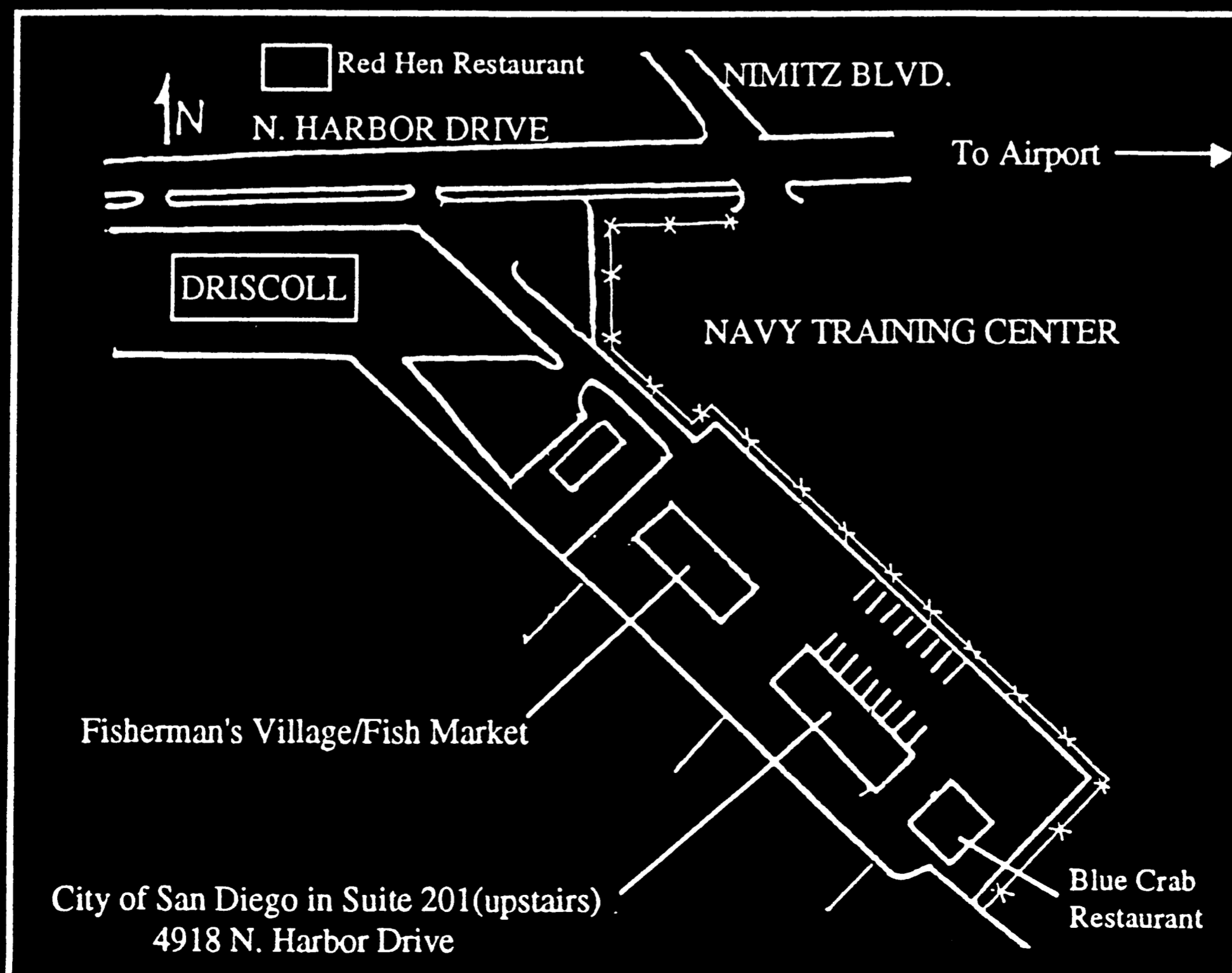
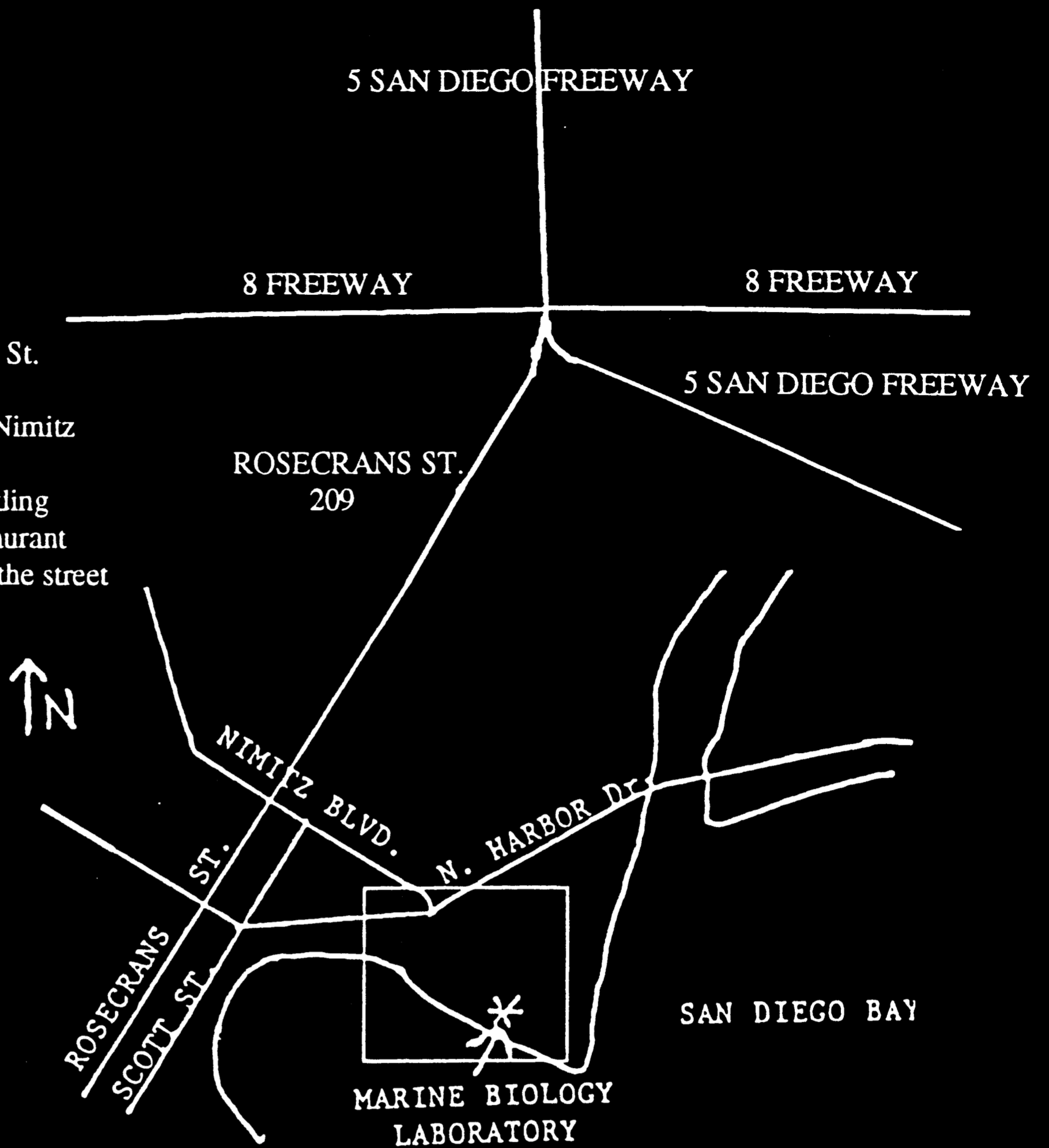
**SCAMIT OFFICERS:**

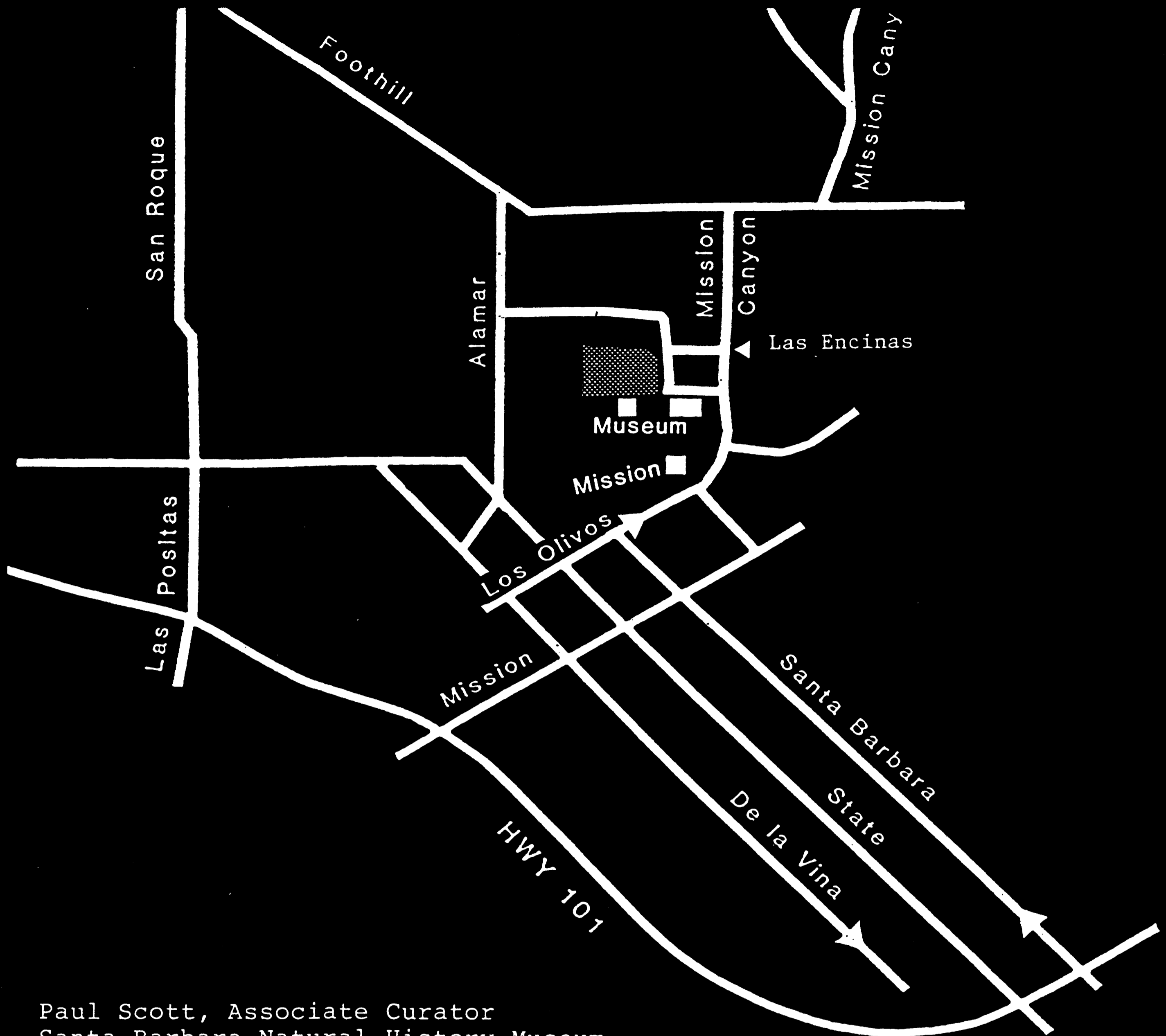
If you need any other information concerning SCAMIT please feel free to contact any of the officers.

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

CITY OF SAN DIEGO'S MARINE BIOLOGY LABORATORY

From North, take 5 South to Rosecrans St. (209)  
 Turn left on N. Harbor Dr. (light after Nimitz Blvd.)  
 The entrance will be after Driscoll building (America III), look for Blue Crab Restaurant sign; the Red Hen Restaurant is across the street





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).

BALLOT FOR SCAMIT OFFICERS 1994-95

Vote for one (1) nominee for each office. Please mail or return completed ballot to Larry Lovell by March 31, 1994. You may return it to the Secretary or other attending officer at the March 14 meeting. The address to mail it to is:

Larry Lovell  
1036 Buena Vista Dr.  
Vista, CA 92083

**President** - The president presides at all meetings and represents SCAMIT in external business affairs.

\_\_\_\_\_ Ron Velarde

\_\_\_\_\_ Write-in: \_\_\_\_\_

**Vice-President** - The Vice-President chairs ad hoc committees, supervises the specimen exchange, tabulates election ballots, edits the newsletter, and fills in for the President as necessary.

\_\_\_\_\_ Don Cadien

\_\_\_\_\_ Write-in: \_\_\_\_\_

**Secretary** - The Secretary keeps minutes of the meetings, is responsible for the newsletter, and preparation of the ballots.

\_\_\_\_\_ Cheryl Brantley

\_\_\_\_\_ Write-in: \_\_\_\_\_

**Treasurer** - The Treasurer collects dues, makes disbursements, keeps financial records, and makes an annual statement of the financial status of SCAMIT.

\_\_\_\_\_ Ann Dalkey

\_\_\_\_\_ Write-in: \_\_\_\_\_

**1994-95 SCAMIT Meeting Topics** - Please suggest any topics you deem worthy of a SCAMIT meeting.

\_\_\_\_\_  
\_\_\_\_\_

## CANDIDATE BIOGRAPHIES

### PRESIDENT

#### **Ron Velarde**

Ron is the current President of SCAMIT and a past Vice-President; he has been a Marine Biologist with the City of San Diego since 1983 and currently is the supervisor of Benthic Taxonomy for the Ocean Monitoring Program. His taxonomic interests include most groups, especially polychaetes and nudibranch mollusks. He earned his B.S. degree in Marine Biology from California State University, Long Beach, in 1976, and did post-graduate research on the systematics and ecology of autolytid polychaetes.

### VICE-PRESIDENT

#### **Don Cadien**

Charter member of SCAMIT, Member-at-large of the SCAMIT Executive Committee. Studied invertebrate taxonomy and biology at California State University, Long Beach, under Dr. D. J. Reish. Worked at Cabrillo Marine Museum, then at the L.A. County Museum of Natural History under Dr. J. H. McLean in Malacology. Spent 15 years at M.B.C. Applied Environmental Sciences as a taxonomist and later also Project Manager, leaving in 1989 as a Senior Marine Biologist to join the L.A. County Sanitation Districts' Marine Biology Lab. Specialties in taxonomy and biology of mollusks (particularly nudibranchs) and peracarid crustaceans. Currently a Research Associate in the Crustacea Section of the L.A. County Museum of Natural History.

### SECRETARY

#### **Cheryl Brantley**

Cheryl Brantley (née Musselwhite) is a marine biologist for the County Sanitation Districts of Los Angeles County. She has worked for the Districts since graduation with her B.A. degree in Aquatic Biology from the University of California, Santa Barbara in 1985. As a taxonomist in the Districts' Marine Biology Laboratory, Cheryl has specialized in polychaetes with emphasis on the Spionida, Eunicida and the Aphroditiformia.



TREASURER

**Ann Dalkey**

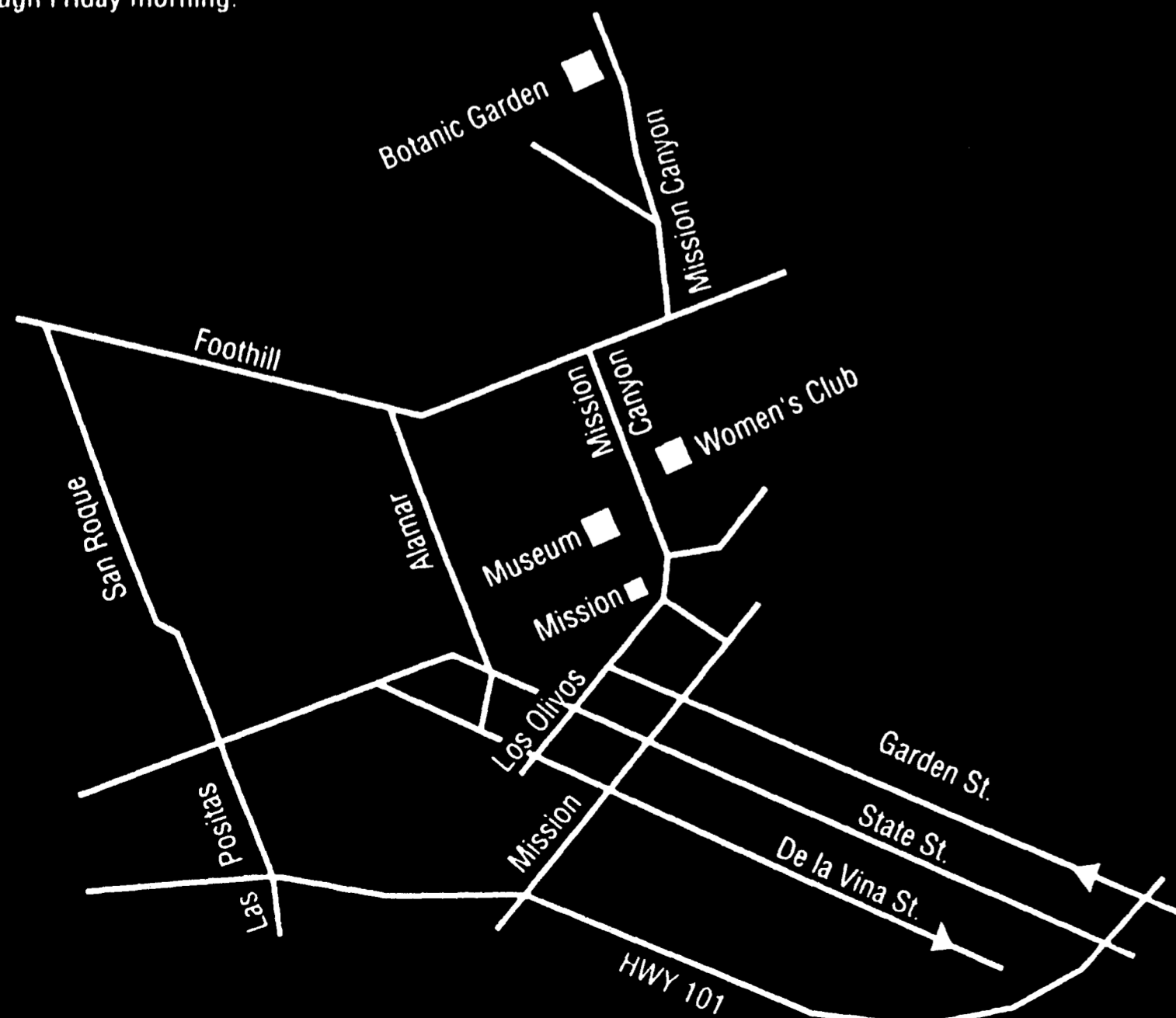
Ann is presently the Treasurer for SCAMIT and has held this position since SCAMIT was founded. Ann is a member of the water biology staff at the Hyperion Treatment Plant where she specializes in the identification of polychaetes and amphipod crustaceans. Prior to working at Hyperion, Ann was a member of the laboratory staff at the County Sanitation Districts of Orange County. She worked there for nearly 10 years, reaching a position of senior laboratory and research analyst. She received her B.S. from California State University Long Beach in Marine Biology in 1974 and her M.S. from the same university in 1982. Her thesis research pertained to polychaete bioassay.

TENTATIVE PROGRAM 23-25 MARCH 1994

NOTE: Please check daily the bulletin board near the registration desk in front of Fleischmann Auditorium for additional information.

	Fleischmann	Women's Club	Farrand Hall	Museum	Other
WEDNESDAY	8:00-8:30				Continental Breakfast
	8:30-9:30	Keynote Address			
	10:00-12:00	Restoration Ecology		Archaeology	Marine Biology
	12:00-1:00				
	1:30-4:30	Restoration Ecology		Archaeology	Marine Biology
Evening					Reception
THURSDAY	8:00-8:30				Coffee
	8:30-12:00	Terrestrial Biology	Marine Biology		
	12:00-1:00				Lunch
	1:00-4:30	Terrestrial Biology	GIS Technology		GIS
	Evening				
FRIDAY	8:00-8:30				Coffee
	8:30-12:00	Terrestrial Biology	Geology	History	GIS
	12:00-1:00				Lunch
	1:00-4:30	Terrestrial	Geology	History	GIS

Poster presentations will be on display in the Paleontology/Geology Hall at the Museum from Wednesday afternoon through Friday morning.



REGISTRATION FORM

FOURTH CALIFORNIA ISLANDS SYMPOSIUM  
23-25 MARCH 1994  
SANTA BARBARA, CALIFORNIA

\*Name: \_\_\_\_\_

\*Institution: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone ( ) \_\_\_\_\_ ( ) \_\_\_\_\_  
business home

\*Indicate exact wording desired on meeting badge.

Preregistration (before 23 February 1994) \$50.00 \_\_\_\_\_  
Includes published proceedings

On-site Registration \$65.00 \_\_\_\_\_  
Includes published proceedings

One-day: \_\_\_ Wed \_\_\_ Thu \_\_\_ Fri \$20.00 \_\_\_\_\_  
Does not include the published proceedings.

Please complete a separate form for each person planning to attend the meeting. Enclose check or money order made payable to the Santa Barbara Museum of Natural History.

Tear out and mail to: Fourth California Islands Symposium  
Santa Barbara Museum of Natural History  
2559 Puesta del Sol Road  
Santa Barbara, CA 93105





FRIENDS OF CABRILLO MARINE AQUARIUM  
3720 Stephen White Drive • San Pedro, California 90731  
Phone 310/548-7563 • Fax 310/548-2649

FOR IMMEDIATE RELEASE

CONTACT: BARBARA TRANSUE  
(213)661-4032  
STEVE VOGEL  
(310)-548-7563

This winter, as Norway hosts the world's athletes at the Olympics, ocean animals also will practice athletic skills unequaled by humans; speed, power, agility and endurance are displayed by many species in their constant struggle for survival in the ocean realm. On January 11, 1994, Cabrillo Marine Aquarium brings back its popular "Aquatic Athletes" exhibit highlighting the olympian efforts sometimes demanded of ocean inhabitants.

CMA is open Tuesdays through Fridays from 12 noon to 5 pm and weekends from 10 am to 5 pm. There is no admission charge, but beach parking cost is \$4.50 per car on weekdays and \$5.50 on weekends from December 1 to February 28 (winter rate); some street parking is available nearby. For further information call 310/548-7562.

Cabrillo Marine Aquarium is located at 3720 Stephen White Drive, San Pedro, and is a facility of the City of Los Angeles Department of Recreation and Parks.

###



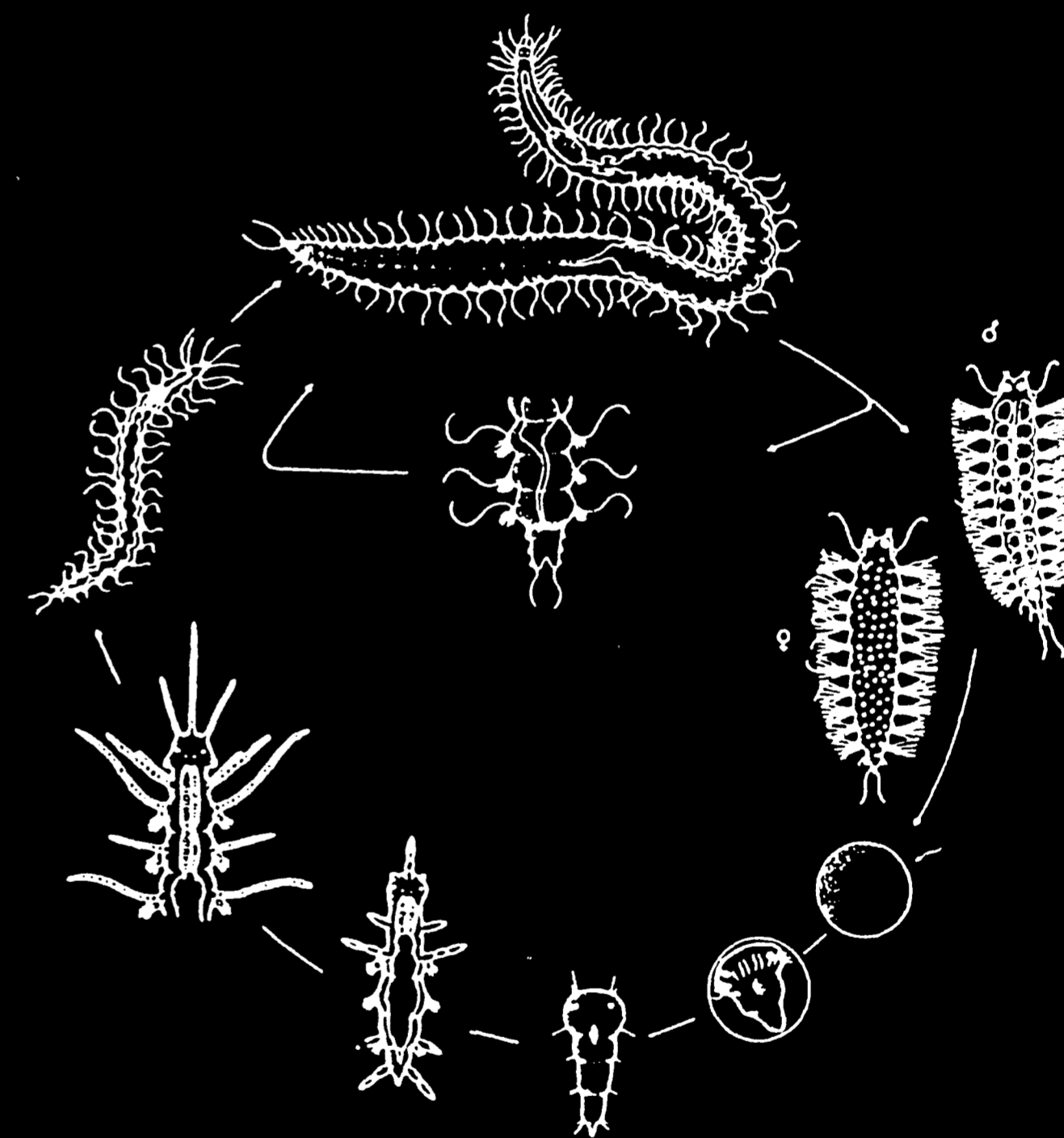
**Polychaete autoecology:  
evolutionary trends and adaptive  
significance of life history traits**

Reproductive biology, life history and  
feeding ecology of Polychaete worms



**Polychaete autoecology:  
evolutionary trends and adaptive  
significance of life history traits**

Reproductive biology, life history and  
feeding ecology of Polychaete worms



Life cycle of *Syllis prolifera* Krohn

For further information and application forms, please contact:

International Service Meeting, via Luigi Mazzella, 36  
80077 Ischia (Napoli, Italy). Tel.: +39 81 983190 - 992813  
Fax: +39 81 982281

or

Maria Cristina Gambi, Laboratorio di Ecologia del Benthos,  
punta S. Pietro, 80077 Ischia (Napoli, Italy).  
Tel.: +39 81 991410 - 5833305; Fax: +39 81 984201

2-23 July 1994

Benthic Ecology Laboratory  
Ischia (Bay of Naples), Italy

**Polychaete autoecology: evolutionary trends and adaptive significance of life history traits**

2-23 July 1994. Benthic Ecology Laboratory, Ischia (Bay of Naples, Italy)

APPLICATION FORM



Name .....

Work address .....

Work tel..... Work fax .....

Home address ..... Tel. ....

Education current level .....

Degrees with years .....

Type of participation: Student ..... Auditor ..... please tick where appropriate

Diving certification: (yes) (no) please tick where appropriate

Date ..... Signature .....

Please send this form by 30 March 1994, together with CV, list of publications and a brief statement of your reasons for attending the course, to:  
Maria Cristina Gambi - Laboratorio di Ecologia del Benthos, punta S. Pietro, 80077 Ischia (Napoli, Italy) – Tel. +39 81 991410 -  
5833305; Fax + 39 81 984201

# TAXONOMIC ATLAS OF THE BENTHIC FAUNA OF THE SANTA MARIA BASIN AND WESTERN SANTA BARBARA CHANNEL

---

**Volume 1** - Introduction, Benthic Ecology, Oceanography,  
Platyhelminthes, and Nemertea



SANTA BARBARA MUSEUM OF  
NATURAL HISTORY

# SOUTHERN CALIFORNIA ACADEMY OF SCIENCES



1994 Annual Meeting  
May 6-7  
University of California, Irvine

**Call for papers** -- PROFESSIONAL and STUDENT -- in all disciplines of the natural and social sciences. Graduate or Undergraduate students are eligible for Best Paper Awards. Co-authored papers are eligible, as long as they are the work of the student(s) presenting.

**Symposia being planned include:** The Impact of Changes in Federal Science Policy on Southern California; Restoration of Wildlands After Fires; Wetlands Restoration; Earthquakes in Southern California; The Effects of Science Policy on Women.

**Abstracts are due March 1, 1994**

Send abstract to:

Program Chair  
Southern California Academy of Sciences  
900 Exposition Boulevard  
Los Angeles, California 90007

Telephone: 213/744-3384

Please see other side for format and instructions -- and be sure to send with your abstract the requested 3 x 5 file card, giving the full name of the presenter, affiliation, title of your paper, and section preferred. Be sure to indicate whether this is a student or professional presentation. This information is vital to plan the sessions and assure a place for your presentation.

## Abstract Instructions

Abstracts will appear exactly as submitted. Consequently, they must be cleanly typed and correct in format. Abstracts which fail to conform to the guidelines or are mailed after the deadline will not appear in the symposium program.

Abstracts must be typed and submitted on an 8½" x 11" sheet. It will be reproduced at 100% of original size, therefore use type that is no smaller than 10 point/12 pitch. If using a word processor, a laser printed copy is preferred. If using a typewriter, type must be clean, so use an electric typewriter with clean keys and a relatively new black or carbon ribbon. Do not erase.

Arrange abstract as follows in a space 6" wide x 4" high (see example below). Do not show the enclosing box.

1. TITLE must be all capital letters. Do **not** italicize, except species names.
2. Underline author(s) name(s), listing the presenter first.
3. List the institution and department for each author.
4. On the next line, begin text with 5 space paragraph indentation. Single space text.
5. List acknowledgements within parentheses following text.

With your abstract submit on a 3" x 5" index card the following:

1. Full name of presenter, affiliation, mailing address and telephone number (with area code).
2. Indicate student or professional.
3. Title of your paper.
4. The subject field in which you wish to present.

Abstract and card are due **MARCH 1, 1994** to: Program Chair  
Southern California Academy of Sciences  
900 Exposition Boulevard  
Los Angeles, CA 90007

## Sample Abstract

6"

MICROBIAL ACTIVITY IN THE DIGESTIVE TRACT OF THE HALFMOON, *Medialuna californiensis*. J.S. Kandel<sup>1</sup>, J.R. Paterek<sup>2</sup> and M.H. Horn<sup>1</sup>. <sup>1</sup>California State Univ. Fullerton, CA 92634 and <sup>2</sup>Agouron Institute, La Jolla, CA 92037.

4" We report the presence of a diverse microbial flora and of microbial fermentation products in the hindgut region of the halfmoon, *Medialuna californiensis*, a seaweed-eating fish from southern California coastal waters. Viable aerobic and anaerobic bacteria were found in all sections of the gut, but were of highest concentration ( $10^5$ - $10^8$ /ml) in the hindgut. Microscopy revealed vibrios, spirilla, rod-shaped bacteria and flagellated protozoa in the midgut and hindgut, but primarily vibrios and rods in the stomach and foregut. Acetic, isobutyric and butyric acids, the volatile products of microbial breakdown of carbohydrates, were found only in the hindgut, as was ethanol, a nonvolatile product. These results provide the first evidence for microbial fermentation and its possible contribution to the energy supply in a north-temperate herbivorous fish.



# NOTICE

## TRANSFER OF ALLAN HANCOCK FOUNDATION POLYCHAETE COLLECTION

In 1988, the University of Southern California donated the Allan Hancock Foundation (AHF) polychaete collection to the Natural History Museum of Los Angeles County (LACM). Subsequently, the LACM hired Leslie H. Harris (collections manager) and Dr. Kirk Fitzhugh (curator) to care for the collection, now referred to as the **LACM-AHF POLYCHAETE COLLECTION**. The physical transfer of the collection to the LACM, however, only began in February 1994. The collection will be housed in the LACM in an environmentally-controlled room, specifically designed for this collection, allowing for ample growth into the future.

The LACM-AHF polychaete collection consists of an estimated 90,000 lots, including over 1,600 type lots. The collection is the second largest of its kind in the United States, and includes the most extensive assemblage of eastern Pacific polychaetes in the world, yet is world-wide in its holdings. An active program of computerizing collection data is underway, and we anticipate publication of a type catalog in the near future. Consistent with its rich history, the collection continues to receive very extensive use by specialists.

During transfer of the collection, specimens will continue to be available for loan. We strongly encourage colleagues to continue utilization of, and depositing specimens into the collection. Similarly, we invite visits to the museum - the polychaete lab offers excellent research space and facilities. For further information on any aspect of the collection, please contact either **Leslie H. Harris** or **Kirk Fitzhugh** at:

**Invertebrates Section  
Natural History Museum of Los Angeles County  
900 Exposition Boulevard  
Los Angeles, California 90007 USA**

# RESEARCH SEMINARS

in History and Earth and Life Sciences

POST

PLEASE POST/CIRCULATE

## WINTER 1994 SCHEDULE: January - March

**TIMES MIRROR CONFERENCE ROOM**  
**Seminar 3:00 - Coffee / Refreshments 2:45**

- 
- |    |          |  |
|----|----------|--|
| 6  | January  | Don Prothero - <i>Occidental College, Los Angeles</i><br>BIOTIC RESPONSE TO THE EOCENE-OLIGOCENE CLIMATIC CRASH  |
| 13 | January  | --- No Seminar ---   |
| 20 | January  | Kathy Dickson - <i>California State University, Fullerton</i><br>THE MINIMUM SIZE FOR ENDOTHERMY IN TUNA FISH  |
| 27 | January  | Leonard Muscatine - <i>University of California, Los Angeles</i><br>CORAL BLEACHING: A CELL BIOLOGICAL PERSPECTIVE   |
| 3  | February | Ron Kaufman - <i>Scripps Institution of Oceanography, La Jolla</i><br>THE INFLUENCE OF SEASONAL PACK ICE ON THE DISTRIBUTION<br>AND ABUNDANCE OF EPPELAGIC FAUNA IN THE NORTHWEST<br>WEDDELL SEA, ANTARCTICA |
| 10 | February | Dan Larson - <i>University of California, Long Beach</i><br>RISK MINIMIZATION THEORY AND CULTURAL EVOLUTION AMONG<br>THE ANASAZI   |
| 17 | February | Eric Swann - <i>University of California, Berkeley</i><br>EVOLUTION OF BASIDIOMYCETES FUNGI: PHYLOGENETIC<br>ANALYSIS OF THE 18S rRNA GENE   |
| 24 | February | Kathleen A. Campbell - <i>University of Southern California, Los Angeles</i><br>PALEOECOLOGY OF FOSSIL COLD SEEPS, WESTERN NORTH<br>AMERICA  |
| 3  | March    | Greg Stanford - <i>University of Southern California, Los Angeles</i><br>PREDATOR-PREY ECOLOGY OF CHIMPANZEES AND COLOBUS<br>MONKEYS   |
| 10 | March    | Gary Pettit - <i>Invertebrates Section, LACMNH</i><br>SYSTEMATICS AND ECOLOGY OF CAPRELLID AMPHIPOD<br>CRUSTACEANS FROM HYDROTHERMAL VENTS   |
| 17 | March    | Bob Wayne - <i>University of California, Los Angeles</i><br>POPULATION STRUCTURE AND HYBRIDIZATION OF WOLF-LIKE<br>CANIDS REVEALED BY ANALYSIS OF HYPERVARIABLE NUCLEAR<br>LOCI                              |
- 

— ALL INTERESTED PERSONS ARE INVITED TO ATTEND —

-- Free admittance through staff entrance --

Seminar suggestions/questions should be directed to Dr. Kirk Fitzhugh, Invertebrates Section (213-744-3233)

X Symposium Internacional de  
**Biología Marina**

X International Symposium on  
**Marine Biology**

Junio / June 13-17, 1994

**Lugar / Place:** Facultad de Ciencias Marinas  
Universidad Autónoma de Baja California  
Km 103 Carretera Tijuana - Ensenada,  
Baja California, México.

**Resúmenes:** Antes del 31 de Marzo, 1994  
Dra. Elizabeth Orellana-Cepeda  
Facultad de Ciencias Marinas  
Universidad Autónoma de Baja California  
Apartado postal 453  
Ensenada, Baja California, México.

**Abstracts:** Due March 31, 1994  
Dr. Lon Mc Clanahan  
Director OSI and  
Southern California Marine Institute  
820 South Sea Side Ave.  
Terminal Island, Ca. 90731, USA.

**Cuota de Inscripción / Registration fee**  
Antes del 31 de Marzo de 1994  
Before March 31, 1994  
Investigadores / Faculty: \$ 75.00 US  
Estudiantes / Students: \$ 40.00 US

Después del 31 de Marzo de 1994  
After March 31, 1994  
Investigadores / Faculty: \$115.00 US  
Estudiantes / Students: \$50.00 US

Segundo y último anuncio  
Second and Final Announcement



X Symposium

Internacional de

**Biología  
Marina**

13-17 de Junio 1994

Ensenada, Baja California.

México.

X International

Symposium on

**Marine  
Biology**

June 13-17, 1994

Ensenada, Baja California

Mexico.

X International Symposium on **Marine Biology**

Facultad de Ciencias Marinas - Universidad Autónoma de Baja California

Ensenada, Baja California, Mexico. June 13 - 17, 1994.

**Registration form**

Name (surname, first, middle) \_\_\_\_\_

Institution \_\_\_\_\_

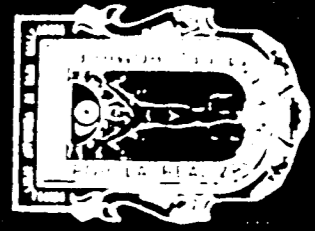
Address \_\_\_\_\_ Zip code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_ Presentation: Oral \_\_\_\_\_ Poster \_\_\_\_\_

Title \_\_\_\_\_

Registration fee: Faculty \_\_\_\_\_ Student \_\_\_\_\_

Send registration fee to M.C. Roberto Millán-Nuñez, Apartado postal 453, Ensenada, Baja California, México. The registration fee includes the "icebreaker", Mexican party and transportation between Corona Hotel and the university campus.



Southern California  
**Marine Institute**

Universidad Autónoma de Baja California  
Southern California Marine Institute  
Universidad Autónoma de Baja California Sur

X Simposium  
Internacional de  
**Biología  
Marina**

13-17 de Junio 1994

Ensenada, Baja California, México

X International  
Symposium on  
**Marine  
Biology**

June 13-17, 1994

Ensenada, Baja California, Mexico

**Fecha límite para entrega de  
resúmenes: 31 de Marzo de 1994**

**Abstracts must be received by March  
31, 1994**

## Forma para presentación de resumen / Abstract form

### X Simposium Internacional de **Biología Marina**

**1.** Los resúmenes deben presentarse en español o inglés. El resumen completo, dentro del rectángulo azul, debe incluir título, nombres de los autores y direcciones. Este resumen se presentará tal como sea enviado. En los artículos o carteles de varios autores, subraye el nombre del autor que hará la presentación.

**2.** Use letra tamaño doce, con espacio sencillo entre líneas y tres espacios de sangría en los párrafos.

**3.** Por favor, haga el resumen lo más informativo y representativo de su artículo que sea posible.

**4.** Para los estudiantes: ¿desean participar en el premio a la mejor ponencia estudiantil? Si \_\_\_ No \_\_\_.

**5.** Para presentaciones, sólo se dispondrá de proyector de transparencias de 35mm y proyector de acetatos.

**1.** All abstracts must be in English or Spanish. The entire abstract including title, authors' names, addresses and text must fit within the blue rectangle. Your abstract will be reported as you submit it. For papers or posters with multiple authors, underline name of presenting author.

**2.** Use 12-pitch type and single spacing between lines. Indent paragraphs three spaces.

**3.** Please make the abstract as informative and representative of your paper as possible.

**4.** For students: do you wish to participate in the award to the best student's presentation? Yes \_\_\_ No \_\_\_.

**5.** There is no special projection equipment available other than a 35mm slide projector and overhead projector.

Por favor, marque abajo la sesión que considere más adecuada para su tema. Su artículo o cartel se agrupará con otros del mismo campo, si es posible.

Please mark your choice of a session most suitable for your subject below. Your paper or poster will be grouped with related papers where scheduling permits.

- Pesquerías  
Fisheries
- Ecología marina  
Marine ecology
- Manejo de recursos  
Resource management

# CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

## **Career Opportunity** for the position of:

## **Director – Center for Regenerative Studies**

---

California State Polytechnic University, Pomona, invites applications and nominations for the position of Director of the Center for Regenerative Studies. Cal Poly Pomona, a public university founded in 1938, is noted for its scenic and historic 1,400-acre campus, once the winter ranch of cereal magnate W. K. Kellogg. The campus is located 25 miles east of downtown Los Angeles in the Inland Valley, one of the fastest growing regions in the country. Cal Poly Pomona's 17,050 students (13,400 FTE'S and 58% ethnic minorities) are enrolled in 55 baccalaureate and 16 master's degree programs with approximately 900 full-time and part-time faculty. The university is committed to diversifying its faculty and staff, and has made educational equity one of its highest priorities.

### **The Center for Regenerative Studies**

The Director will lead the university's new Center for Regenerative Studies, an interdisciplinary university-based setting for education, demonstration and research in regenerative practices and technologies, located on a 16-acre site on the Cal Poly campus. A \$4 million facility has just been completed housing 20 students with a phased construction plan for the remaining 60 students. Its focal point is a community of 80 students who practice the collective means of using solar energy, reusing water, growing a variety of foods without pesticides or chemical fertilizers, reducing their waste stream and living within shelter compatible with existing environments, as an integral part of their daily lives. These students live in a village that includes housing as well as common rooms, seminar and meeting rooms, a kitchen and common dining room, classrooms, a laboratory, office space and accommodations for faculty and visiting scholars.

The common goal of educational and research efforts is life-support practices and systems that model the self-renewing ways of natural ecosystems. Faculty from the university's College of Agriculture, Engineering, Environmental Design, and Science have been involved in the development of the curriculum of the Center and its facility. Courses and research facilities will be open to students, and faculty members from all disciplines, and expertise will be drawn from many parts of the world through programs that sponsor visiting scholars and researchers.

### **The Position**

The Center for Regenerative Studies is currently placed in the College of Environmental Design and in the future will become independent of disciplinary structure. The Director of the Center for Regenerative Studies currently reports to the Dean of the College of Environmental Design, and is charged with providing innovative leadership, vision and direction for the undergraduate and graduate academic programs, the physical facilities and their operation, and the continued support of the Center through advancement and proposal-writing activities. The Director is expected to work collegially and consultatively with an interdisciplinary faculty committee in advancing the goals of the Center. The Director will also work with students, university officials and corporate and community leaders in establishing the Center as an international leader in the study and application of regenerative technologies.

# Director – Center for Regenerative Studies

Page 2

---

---

The position of Director is a twelve-month administrative position and will start no later than September 1, 1994. Depending upon qualifications and appropriate campus consultative procedures, the successful candidate may be awarded teaching return rights in an appropriate academic department.

## **Qualifications**

The successful candidate must demonstrate a desire and proven ability to work in an interdisciplinary environment and be committed to a collegial and consultative form of decision-making involving the faculty team, students and staff. Because the Center is an academic program, candidates must have an established record of scholarship and teaching excellence in sustainable or regenerative technologies or related endeavors. Candidates should also possess administrative experience, preferably in an academic setting including the management of budgets, personnel and academic programs. Successful fund raising and proposal writing is particularly important. The candidate should possess a Ph.D. or an appropriate terminal degree.

Other desirable characteristics include experience working with a residential student/faculty program; experience working with academic program development activities; research for or participation in other environmental/sustainable programs sponsored by national or international government or non-governmental organizations; experience in private industry.

## **Compensation**

Compensation is dependent upon the qualifications and experience of the successful candidate. The position includes a very attractive benefits package.

## **Application**

The search committee will begin reviewing applications on February 14, 1994 and will continue until the position is filled. A complete application will include the University's Application for Academic Employment, a letter of interest which addresses the qualifications described in this announcement, a curriculum vita that includes at least those elements specified on the application form, and the names, titles, addresses and telephone numbers of at least five colleagues who can provide current assessments of the candidates professional experience. Finalists should request application materials from:

Dr. William Stine, Chair, CRS Director, Search Committee  
California State Polytechnic University, Pomona  
3801 W. Temple Avenue  
Pomona, CA 91768-4062  
(909) 869-2597 FAX: (909) 869-4370  
e-Mail: [WBSTINE@CSUPOMONA.EDU](mailto:WBSTINE@CSUPOMONA.EDU)

---

California State Polytechnic University, Pomona  
is an Equal Opportunity, Affirmative Action Employer.  
Women and minorities are strongly encouraged to apply.  
The university hires only individuals lawfully authorized to work in the United States.