



**Southern California Association of
Marine Invertebrate Taxonomists**

3720 Stephen White Drive
San Pedro, California 90731

September 1990

Vol. 9, No. 5

NEXT MEETING: Epitoniidae
GUEST SPEAKER: Helen DuShane
Los Angeles County Museum of Natural History
DATE: Monday, October 15, 1990, 9:30 A.M.
LOCATION: Los Angeles County Museum of Natural History
Times Mirror Conference Room (ground floor)

MINUTES FROM MEETING ON September 10, 1990

Scaleworm Meeting: Ross Duggan, City of San Diego hosted this month's meeting. The purpose of the meeting was to introduce a key to the most common non-aphroditid scaleworms collected between the depths of 20 - 100 meters by monitoring agencies in the Southern California Bight. In addition, four provisional species were discussed.

Unfortunately the scaleworm key and voucher sheets were not complete in time for this newsletter. However, they should be completed before the distribution of next month's newsletter.

Epitoniidae Meeting: For those of you planning to attend next month's meeting on Epitoniidae, remember to bring along your specimens for Helen DuShane to check.

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

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

ICZN Bulletin: Included in this newsletter is a synopsis of the recent meeting (July 4 - 5, 1990) of the International Commission of Zoological Nomenclature (ICZN). The results of this meeting will substantially affect future nomenclature guidelines. SCAMIT is interested in your thoughts on the new guidelines. Please send your comments to:

Ron Velarde
City of San Diego
Marine Biology Laboratory MS 45A
4077 North Harbor Dr
San Diego, CA 92101

Perhaps a SCAMIT meeting in the near future could include a discussion of the changes that will take place.

Biological Criteria Symposium: Larry Lovell, Ron Velarde, Don Cadien and Tom Parker are organizing the paper to accompany SCAMIT's poster at the Biological Criteria Symposium (SCAMIT Newsletter, 9:4). The abstract for the poster is included in this newsletter. If you have any suggestions or concerns please feel free to contact SCAMIT officers who will put you in touch with a committee member.

Spionidae Meeting Schedule Change: The November meeting on Spionidae has been re-scheduled for early next year. Ron Velarde will present a workshop on the Hesionidae for the November meeting.

Larry Lovell has requested species lists from SCAMIT members for the Spionidae meeting. If you have not already contacted Larry you may reach him at the following address.

Larry Lovell
1036 Buena Vista Drive
Vista, CA 92083

Telephone: (619) 945-1608

Nucalanidae Meeting: Paul Scott, Santa Barbara Museum of Natural History has requested species lists and specimens for the Nucalanidae meeting scheduled for Monday, March 11, 1990. The meeting will be held at the Santa Barbara Museum of Natural History. Please send all information and specimens to the following address.

Paul Scott
Associate Curator of Invertebrate Zoology
Santa Barbara Museum of Natural History
2559 Puesta Del Sol Road
Santa Barbara, CA 93105

New Phone Number at the Hancock Worm Lab: As of Saturday, October 13, 1990 the new phone number at the Allan Hancock Worm Lab will be (213) 740-5157.

L.A. County Museum Seminars: A schedule for the research seminars at the L. A. County Museum of Natural History has been included in this newsletter. The seminars take place in the Times Mirror conference room in the museum every Thursday at 3:00.

SCCWRP Keys to Invertebrates: SCAMIT is in possession of 50 to 100 copies of SCCWRP's Invertebrates of Southern California Coastal Waters: II. Nantania. If you are interested in obtaining one or more of these copies please contact Tom Parker at the LACSD (213) 775-2351 X401.

Retraction: There was a misleading statement on an informational bulletin distributed in the July SCAMIT Newsletter (9:3). The statement on the announcement itself implied that SCAMIT was providing the "Barnard Index" in a following newsletter. It was SCAMIT's intention only to provide the address from which you can obtain the index. SCAMIT apologizes for any inconvenience this may have caused.

Reminder: Just a reminder to mark your calendars for the two special events in December. The SCAMIT Christmas party will be held at the Cabrillo Marine Museum on Saturday evening December 8th, and the Barnard Amphipod workshop is scheduled for Monday and Tuesday December 10th and 11th. More information will be available in future newsletters.

Zoological and Natural History Literature: Larry Lovell has recently discovered that Donald Hahn, Natural History Books has a substantial collection of literature that is not listed in his catalog. Mr Hahn has suggested that if you are interested in purchasing some of this literature you can contact him at the address listed below. He will be attending a Booksellers convention in Glendale during April, and he will be happy to bring along the literature you are interested in.

Donald E. Hahn
Natural History Books
Box 1004
Cottonwood, AZ 86326-1004

(602) 634-5016

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

Officers

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



MEETINGS OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

What will doubtless be recorded as the most momentous meeting in the history of the International Commission on Zoological Nomenclature (ICZN) took place July 4-5, 1990, at the International Congress of Systematic and Evolutionary Biology, held at the University of Maryland, USA. At these sessions the Commission developed a series of fundamental principles to be adopted for the preparation of the forthcoming 4th edition of the International Code of Zoological Nomenclature that will revolutionize both the theory and practice of zoological nomenclature. Significantly these principles were first enunciated as the result of an all-day session of the Commission held on America's celebration of the anniversary of the signing of its Declaration of Independence, July 4. Like the statements in that document, these historic changes in the code promise to free systematic biology from the tyranny of the past and provide sound and comprehensive guidance for the future.

Members of the ICZN in attendance at these meetings all contributed to a series exciting and productive exchanges of ideas that led to overwhelming support for the fundamental and revolutionary revisions in the code described below. They included: O. Kranus (FR Germany, President), H.G. Cogger (Australia, Vice-President), W.J. Böck (USA), J.D. Corliss (USA), D. Heppell (UK), P.T. Lehtinen (Finland), A. Minelli (Italy), C. Nielsen (Denmark), W.D.L. Ride (Australia), J.M. Savage (USA), R. Schuster (Australia), and F.C. Thompson (USA). Clearly the Commission undertook the new initiatives for code revision in response to the changing needs of the user community and the burgeoning requirements for stable biodiversity data bases. Their goal was to retain the most essential features of previous codes while designing a foundation for the nomenclature of the future.

Underlying all of the Commission actions were three primary principles. First, that as emphasized in the Preamble to the present Code (3rd ed.) the overriding purpose of the Code is "to promote

stability and universality." The Commission agreed that this goal is best achieved by adopting procedures that validate names in current use rather than through following strict priority. Second, as succinctly stated by both Linnaeus and Strickland (the promulgator of the first Code of Zoological Nomenclature) that the names given to organisms are simply symbols representing taxa that enhance communication about, and allow development of information bases regarding them. Consequently the Commission decided that matters relating to details of orthography, transliteration, strict adherence to the rules of Latin grammar, determinations of gender and spelling are secondary to establishing and maintaining a unique, distinctive and stable name for each valid taxon. Third, that the provisions of the Code must be simplified and designed to insure easy and automatic application of them by practicing systematists, with minimum need to petition the Commission for use of its Plenary Powers.

In the following paragraphs I will mention the most important proposals for change adopted during the Commission's deliberations, including a meeting open to all members of the zoological community on July 5. These matters will be presented below in what I perceive to be their order of significance not in the order in which they were considered. It should be noted that the Commission reaffirmed throughout these meetings that the Linnean classification system, its hierarchy of taxa and the binomial system of nomenclature are fundamental and irreducible bulwarks of the Code.

Without question the most significant and revolutionary changes adopted at these meetings were those that will severely constrain the strict application of priority by giving heaviest weight to the criterion of current usage as the determinant for establishing the validity of names. The first and interim step in this process will be the bringing together of materials in Articles 23c, 79 and 80 of the Code making it mandatory that senior synonyms that have not been used in the 50 years prior to the date of publication of their rediscovery are to be rejected and are not to be used to upset a long

accepted name. No application to the Commission will be necessary (contrary to the present Code) to maintain current usage.

Much more important than this improvement, in what might be called the statute of limitations for the resurrection of old names, are a sequence of decisions that the Commission believes will provide a stable and universal zoological nomenclature for the 21st century. The first of these involves the early establishment by the commission of a List of Available Generic Names in Zoology. The list would be developed substantially from Neave's Nomenclator Zoologicus and the Zoological Record with additions and corrections. At the time of publication (e.g. 1996) the dates in the list (regardless of any subsequent findings) would be the final determinants of priority. In addition and most importantly, only the generic names on this list would be available for use! Any other name, subsequently discovered or not, would not exist for nomenclatural purposes. Obviously new names proposed after 1996 would be available from their date of publication.

A second step in this process will be to ask the appropriate specialist committees (e.g. Nomenclature Committees of the International Congress of various taxonomic groups) to prepare lists of family-group, genus-group and species-group names in current usage. These might be based on up-dated versions of the lists of living mammals and amphibians prepared by the Association for Systematic Collections, for example. After appropriate consideration the Commission would certify such a list as an Official List of Names in Current Use (LNCU). Names not on this list would not be available and would not exist for nomenclatural purposes. Obviously new names proposed for taxa after the publication of the LNCU would become available from their date of publication. This procedure means that for a particular group there will be no necessity to search for any names published prior to the appearance of the LNCU thus completely freeing the systematist from the past. Essentially each LNCU will be a new (although mini-) Systema Naturae and will serve as the new starting point for nomenclature in that particular major group. In poorly known groups it may be sometime before LNCU's will be prepared. For these taxa

the revised Article 23c and the List of Available Generic Names in Zoology will provide maximum stability until LNCU's are available.

In another significant area the Commission recognized the inherent incongruity between the absence of knowledge of classical languages by most practicing systematists and the requirements of the Code. It was agreed that scientific names are only symbols for taxa in themselves carrying no special meaning and under the current Code may even be arbitrary combinations of letters. Consequently, while the Commission believes that names for taxa should continue to be based primarily on words of Latin and Greek derivation, the pertinent articles on name formation in the Code will be re-written without reference to the rules of Latin grammar. Specifically a simple and uniform method will be devised for forming family-group names for the future. The accepted spellings of older family-group names will be established by current usage not Latin grammar!

Two other specific issues in the area of grammar were considered. It was agreed that in the case of species-group patronyms that terminate in -ii or -i, either spelling would be admissible regardless of the original spelling (e.g. petersii or petersi; boylli or boyl). Less clearly resolved was the matter of agreement in gender between generic and species-group names based on adjectives. The idea that generic names should be without gender received considerable support, however, there was no agreement on how to establish fixed spellings for the adjective-based species-group names. One alternative might be to make all generic names feminine for purposes of zoological nomenclature. Certainly it would be best if all members of a particular genus had the same adjectival terminations.

The area of what constitutes publication and the criteria of availability were revisited. Clearly with development of new methods of electronic publication and printing unintentional, accidental, personal or even mischievous proposals of new names for taxa are possible. The Commission favored the notion that to be published for purposes of zoological nomenclature a new name must appear in one of a substantial number of approved scientific journals

or in books from an extensive list of publishers that were registered with the ICZN. Logistics for such a plan are complex and need further investigation but the aim is to insure publication in the primary scientific literature as opposed to privately printed and/or unedited sources. In the area of availability it is proposed that in order to be available (after a certain date) a new name must be accompanied by an abstract and/or diagnosis purporting to distinguish it from other similar taxa in a language using Latin letters, preferably "a language of the Code." A language of the Code being any language so designated in the Code. Candidate languages are to be determined at a later date.

The Commission agreed that provisions should be added to the Code so that in cases where a type genus of a family-group name has been misidentified the first available name for the same taxon is to become the type genus and 2) similarly a misidentified type species of a genus-group name should be replaced by the first available name for the same taxon. Another change would require all future species-group descriptions to include a designation of a holotype, syntypes or hapantotype or in certain cases of ephemeral organisms, an illustration that may be composite (some special designation will be required for these). Such types must be deposited in a museum or similar institution. After a stated date no new species-group name would be available if it does not meet these requirements.

Although the Code does not treat names of order-, class- or phyla-groups the commission is often thought to have authority in this area. There seems to be some advantage to the community if the ICZN could provide a list of such names in current use, with some indication of preference in usage. Consequently the ICZN will undertake the preparation of a list of recommended names in these categories in zoology. Hopefully this will encourage universality of usage of order-, class- and phyla-group names as key words, in titles and in abstracts.

An editorial committee chaired by F. Christian Thompson is in the process of drafting these dramatic changes into definitive form for action at the meetings of the International Union of Biological Sciences at Amsterdam, the Netherlands, in September 1991. It is

important that systematists voice their support of these changes, which are based upon the Commission's response to the demands of both taxonomists and other members of the biodiversity community. Your comments may be directed to the Executive-Secretary, International Commission on Zoological Nomenclature, c/o Museum of Natural History, Cromwell Road, London SW 7 5BD, Great Britain. It is vital to the welfare and future of systematic biology that the progressive and exciting innovations in zoological nomenclature developed by the ICZN at Maryland become implemented. Your individual aid, through endorsement of the major principles described above, in bringing this great enterprise to fruition for the benefit of biologists and biology generally is an essential ingredient in adoption of a Code of Zoological Nomenclature that emphasizes stability based on current usage and is designed for the needs of systematists in the 21st century.

I will conclude by noting specific actions by the Commission, of particular interest to readers of this journal in the case of the three herpetological works on Australian and New Zealand taxa by Wells and Wellington (Case 2531). It was decided that each of the three titles would be considered individually. In addition before any further action is to be taken on these cases the Commission will seek the advice of the Nomenclature Committee of the World Congress of Herpetology for their opinion as to whether or not any or all of the three works in question pose a threat to the stability or universality of scientific nomenclature for the amphibians and reptiles of Australia and/or New Zealand. Of course until the Commission makes a final decision on this matter the nomenclature (existing usage) utilized prior to the Wells and Wellington publications should be followed. - JAY M. SAVAGE, Department of Biology, University of Miami, P.O. Box 249118, Coral Gables, Florida 33124.

RESEARCH SEMINARS

in History and Earth and Life Sciences

NATURAL HISTORY MUSEUM

of Los Angeles County

TIMES MIRROR CONFERENCE ROOM
(ground floor)

PLEASE POST/CIRCULATE

900 Exposition Boulevard
Los Angeles, California 90007

FALL 1990 SCHEDULE

- 20 SEPTEMBER F. G. HOCHBERG - *Santa Barbara Museum of Natural History*
GESTALT OF PATTERN AND TEXTURE IN OCTOPUS SYSTEMATICS
- 27 SEPTEMBER DAVID J. BOTTJER - *Earth Sciences, University of Southern California*
LIFE IN OXYGEN-DEFICIENT MARINE SETTINGS: MODERN AND ANCIENT
- 4 OCTOBER NORMA L. GREENE - *Costume Society of America*
WOMEN AND THE AUTOMOBILE
- 11 OCTOBER CAMM C. SWIFT - *Ichthyology Section, LACMNH*
THE DISAPPEARING FRESHWATER FISH FAUNA OF CALIFORNIA
- 18 OCTOBER THEODORE J. CROVELLO - *California State University, Los Angeles*
KNOWLEDGE BASES IN SYSTEMATICS AND BIOGEOGRAPHY
- 25 OCTOBER PETER C. KELLER - *Public Programs, LACMNH*
PETROGENESIS OF GEM SPECIES UNDER VARYING GEOLOGICAL REGIMES
- 1 NOVEMBER JUDI V. R. ACHJADI - *Indonesian Embassy, Washington, D.C.*
INDONESIAN TEXTILES: THE FABRIC OF LIFE
- 8 NOVEMBER JOSEPH R. JEHL, Jr. - *Hubbs Sea World Research Institute, San Diego*
ORNITHOLOGY OF MONO LAKE
- 15 NOVEMBER ROBERT L. MCKERNAN - *University of California, Riverside*
PEERING INTO DARKNESS: STUDIES ON BIRD MIGRATION IN SOUTHERN CALIFORNIA
- 29 NOVEMBER JOEL W. MARTIN - *Crustacea Section, LACMNH*
INVERTEBRATE ASSOCIATES OF A NEW SPECIES OF JELLYFISH FROM SOUTHERN CALIFORNIA
- 6 DECEMBER JACK D. FARMER - *University of California, Los Angeles*
PALEOECOLOGY AND EVOLUTION OF THE LATE PROTEROZOIC BENTHOS
- 13 DECEMBER ERROL W. STEVENS - *Historic Records Section, LACMNH*
FREDERIC HAMER MAUDE, PHOTOGRAPHER OF CALIFORNIA AND THE SOUTHWEST

TIMES MIRROR CONFERENCE ROOM
Seminar 3:00 Coffee/Refreshments 2:45
--ALL INTERESTED PERSONS ARE INVITED TO ATTEND--



BIOREMEDIATION COORDINATOR - Due to NETAC's role as coordinator of the effort to evaluate technologies to remediate Alaskan beaches resulting from the EXXON Valdez oil spill, NETAC has become a recognized leader in the Bioremediation industry. As a result, NETAC has been designated by the U.S. Environmental Protection Agency as the focal point for the Bioremediation Industry.

Therefore, to increase staff capabilities, NETAC is seeking an individual to coordinate NETAC's technical efforts and to interact with the "EXPERTS" in the Bioremediation field. This individual must demonstrate a proven track record in the bioremediation industry and familiarity with a broad range of bioremediation technologies, laboratory treatability tests, testing protocols and environmental regulations. Minimum of M.S. degree in microbiology or related field preferred. Salary commensurate with experience.

The National Environmental Technology Applications Corporation (NETAC) through a unique cooperative agreement with the U.S. EPA, facilitates the commercialization of priority environmental technologies by providing technical, business development and marketing assistance to entrepreneurs, technology developers, suppliers and technology users from industry and government. NETAC is a dynamic, rapidly growing organization that seeks self-starters with demonstrated technical and communication skills. NETAC offers competitive salaries and benefits.

Please send your resume and salary requirements in confidence to:

NATIONAL Environmental Technology Applications Corporation
Director of Administration
University of Pittsburgh Applied Research Center
615 William Pitt Way
Pittsburgh, Pa. 15238