



THE ECDYSIAST

Newsletter of the Crustacean Society

NUMBER 2--Edited and Produced in the Business Office--AUGUST, 1982

Subscriptions to The Journal of Crustacean Biology

Members of the Crustacean Society are again reminded of the need to increase library subscriptions in order to strengthen the financial base of the Society. We ask that each member insure that his or her institutional library has entered a subscription to the journal.



New Publication

Some members might be interested to learn of the publication in Argentina of Atlas of the Zooplankton of the Southwestern Atlantic Ocean, and Methods in Marine Zooplankton Research, edited by Demetrio Boltovskoy, and published by INIDEP, C.C. 175, 7600 Mar del Plata, Argentina, at a cost of \$40. Orders should be placed directly with INIDEP.



Annual Meeting, Louisville, KY, 27-30 December 1982

Abstract and transmittal forms for contributed papers or poster sessions are included below. Members planning to give papers at the Louisville meeting are reminded that these forms must be submitted to the ASZ by 27 Aug., and probably should be mailed by 20 Aug.

Members from outside the US who would like to receive application forms for housing at the Louisville meeting should request these forms via air mail from the Business Office of the Crustacean Society rather than from the ASZ. We will send them by air mail as soon as they are available.

Dues

This year renewal notices will be sent as the mailing label for Volume 2(3) of the Journal during August. We hope to collect all dues for 1983 by November 30, 1982. This will simplify some accounting procedures and will give us a much better idea of funds available for operation during 1983. Please make a note of this and look for the dues envelope with your next issue of the journal. It is extremely expensive for the Society to send second and third notices of dues.

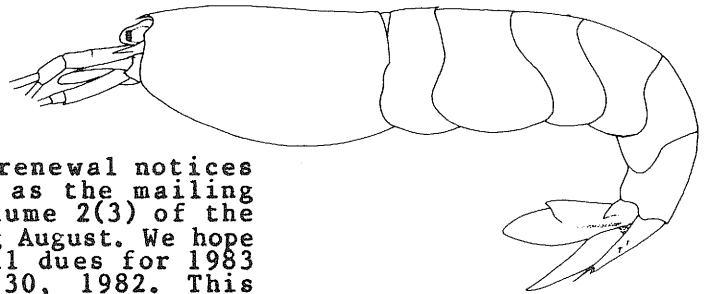
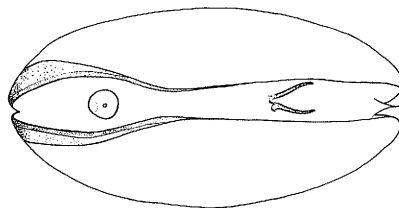


Best Student Paper Award at Louisville

Student members interested in having a paper presented at the annual meeting judged for the Society's Best Student Paper Award should request the appropriate forms from:

Mary Wiley, Business Mgr.
American Soc. of Zoologists
Box 2739
Calif. Lutheran College
Thousand Oaks, CA 91360

(Applications for the award will be due on 1 Nov. 1982.)



A Journal for Systematic Biologists

Members interested in crustacean systematics might wish to join the Biological Society of Washington, which, despite its provincial name, is a society of international scope; membership is open to anyone interested in systematics. The Proceedings of the Biological Society of Washington is a refereed journal in which 108 original papers totalling more than 1300 pages were published in 1981 alone. In that volume there were 34 papers dealing with crustaceans, and 49 new crustacean taxa were described.

The Proceedings is indexed in Current Contents, Biosis, and Aquatic Sciences and Fisheries Abstracts (ASFA).

Memberships are reasonable, \$10 per year. Library subscriptions to the Proceedings are \$18 per year in the US and \$23 elsewhere. Applications for membership may be made by letter, and applications and subscription orders should be sent to:

Biological Society of Washington
c/o R. B. Manning
NHB Stop 163
Smithsonian Institution
Washington, DC 20560

Address:

Business Office, The Crustacean Society, IZ-NHB-W323,
Smithsonian Institution, Washington DC 20560

Membership in ASZ

Although membership in the American Society of Zoologists is not required for participation in the annual meeting, members may wish to support the ASZ and participate in its activities by joining it. An application form is included below. Each year volume 4 of the American Zoologist includes abstracts of papers to be presented at the annual meeting; these may be helpful in selecting papers to attend at the meeting.



The Philadelphia meeting, 1983

The Society will sponsor two symposia at the Philadelphia ASZ meeting:

Biogeography of the Crustacea, organized by Robert H. Gore,

and

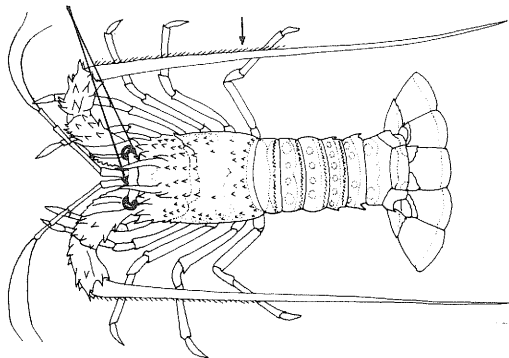
Frontiers of Crustacean Endocrinology, organized by Thomas C. Jegla.

Threatened Crustaceans -- A Request for Information

Ms. Susan M. Wells, IUCN Species Conservation Unit, 219(c) Huntington Road, Cambridge CB3 0DL, U.K., is compiling the first volume of the IUCN Invertebrate Red Data Book in which a number of crustaceans will be included. Reports on Anaspides tasmaniae, several crayfishes, and Birgus latro have been drafted. Ms. Wells would welcome information from members on other crustaceans that might be threatened. Please write to her directly at the address given above.

Additional Book to be Available at 25% discount

Studies in Adaptation: The Behavior of Higher Crustacea, by Steven Rebach, Univ. of Maryland, Eastern Shore, is scheduled for publication by John Wiley and Sons in January, 1983. The volume draws together reviews of behavior research with higher crustaceans in the several fields that are most active today, describing ongoing areas of investigation, and draws the reader's attention to topics of potential value that have thus far received little of no attention from scientists but are prime targets for future research. Each aspect of the ecology and behavior was reviewed and contributed by an authority in the field. Order forms for this volume will be included in the January 1983 Ecdysiast.



Meeting of The Crustacean Society with the
American Society of Zoologists
December 27-30, 1982, at Louisville, Kentucky

Items of Interest

Symposium: Crayfish Distribution Patterns, 27 December

Luncheon in honor of Horton H. Hobbs, Jr., 27 December

Meeting of The Crustacean Club, 27 December

Workshop: Crayfish Culture, 28 December

Crustacean Society Social: A gala shrimp and crayfish boil, 28 December

Symposium: Factors Influencing Crustacean Growth, 30 December

Contributed Papers: Sessions to be scheduled after abstracts are submitted

Information Coupon

Please send me the following material:

_____ Complete Announcement/Schedule for the Louisville Meeting

_____ Housing and registration forms

Name and address _____

Mail to: Mary Wiley, ASZ, Box 2739, California Lutheran College, Thousand Oaks, CA 91360. Or call (805) 492-3585.

**Annual Meeting of the American Society of Zoologists, American Microscopical Society,
Animal Behavior Society, Crustacean Society, International Association of Astacology
and Society of Systematic Zoology
December 27-30, 1982 in Louisville, Kentucky**

INSTRUCTIONS FOR CONTRIBUTING A PAPER (POSTER OR ORAL PRESENTATIONS)

Meeting Rules. Members of any of the participating societies may submit one abstract which shall be for a paper to be presented in person. (Note that the introduction of a non-member preempts the member's time.)

Except when specifically invited or required to present a major address, an individual shall be entitled to no more than fifteen minutes for the oral presentation of a paper. (Five additional minutes are allotted for discussion.) If an individual is unable to orally present a paper accepted on the program, a substitute should read the paper, and the session chairperson must be informed of the change. Dr. John Just (School of Biological Sciences, Univ. of Kentucky, Lexington, Ky. 40506, phone 606-257-3255 office or 606-277-5975 home) should be informed of changes in the poster program.

A member who sponsors a paper by a student member shall not have normal allotment of time curtailed by such sponsorship. (A student who is not a student member is classified as a non-member.)

A non-member may present a paper if (1) a joint author with a member, or (2) introduced by a member, or (3) a member of an organization which is sponsoring a joint session with the Society or one of its Divisions or (4) a member of an organization in another nation which has extended privileges to the Society or to any one of its Divisions.

Deadline. The abstract must reach the ASZ Business Office on or before August 27, 1982. Therefore, it should be sent by first class mail no later than August 20; mail earlier outside of U.S. Abstracts arriving after August 27 are not guaranteed a place on the program.

Preparation of abstracts. Follow instructions on abstract form exactly. Abstracts will be photographed and appear in the *American Zoologist* 22(4) in November 1982. **Submit original plus one photocopy.**

Reprints of abstract. Order reprints using the form at the bottom of this sheet. **Submit original** (photocopy not required).

Transmittal form. Complete transmittal form (reverse side of this sheet). Be certain that the title and author(s) are given correctly in the box at the bottom of the page, since that information will be used in preparing the published program. Designate ONE division or special session to receive the paper. **Submit original plus one photocopy.**

Publication Fee. The Society is obliged to ask each author to pay a charge of \$22 for the printing of the abstract. A published abstract is required for the presentation of a paper at the meeting.

Check list: Submit original plus one photocopy of the abstract and original plus one photocopy of the transmittal form (with check attached). If reprints are desired, fill in the blanks in the next section and submit original reprint order (photocopy not required).

Address for submitting papers: Ms. Mary Wiley, American Society of Zoologists, 104 Sirius Circle, Thousand Oaks, Ca. 91360. This address is for abstract mailings only. The ASZ's official mailing address continues to be Box 2739 California Lutheran College, Thousand Oaks, Ca. 91360. Telephone number for questions: 805-492-3585.

ABSTRACT REPRINT ORDER FORM

100 Reprints of the abstract may be ordered for \$16.00 including postage and insurance. This charge is in addition to the \$22 abstract publication fee. Orders must accompany the transmittal form, and cannot be accepted after the abstracts have been printed.

Author(s) _____

Title _____

Name and Address for Mailing of Reprints: _____

Attach check or money order to the upper lefthand corner of the transmittal form to cover the \$16 charge for reprints plus the \$22 abstract publication fee (total of \$38).

**Annual Meeting of the American Society of Zoologists, American Microscopical Society,
Animal Behavior Society, Crustacean Society, International Association of Astacology
and Society of Systematic Zoology
December 27-30, 1982 Louisville, Kentucky**

TRANSMITTAL FORM

1. **Classification: Designate one division or special session**

Divisions

- Animal Behavior
- Comparative Endocrinology
- Comparative Immunology
- Comparative Physiology & Biochemistry
- Developmental Biology
- Ecology
- Invertebrate Zoology
- Systematic Zoology
- Vertebrate Morphology
- History and Philosophy of Biology

Special Sessions

- Alternative Reproductive Tactics
- Evolution of Endocrine Systems in Lower Vertebrates
- Cellular Mechanisms of Ion Regulation in Arthropods
- Vertebrate Lymphocyte Evolution
- Gastrulation
- Molecular Aspects of Early Development
- Crustacean Growth
- Biomechanics
- Crayfish Distribution Patterns
- Phylogenetic Relationships of Lizards
- Evolution of Neural Systems in Vertebrates

ASZ
Office
Use Only

N _____

R _____

A _____

P _____

2. **Contributed Paper:** oral presentation only or oral presentation preferred
 poster presentation only or poster presentation preferred
 either oral or poster presentation (no preference)

3. Name and complete mailing address of the presenting author: _____

4. Telephone number of presenting author: area code () _____

5. Membership. If a single author, please check as many of the following spaces as appropriate. The author is:

- A member or student member of the American Society of Zoologists
- A member or student member of Animal Behavior Society
- A member or student member of Crustacean Society
- A member or student member of International Association of Astacology
- A member or student member of Society of Systematic Zoology

If multiple authors, please list those who are members or student members and give the appropriate society name(s). _____

If no authors are members, list the member sponsor for the paper _____
This person may not present his or her own paper.

6. If interested in chairing a session, check here:

7. Visual aids. A projector for 2 x 2" slides will be available; 16 mm movies can be accommodated **upon request**. Will you need a 16-mm movie projector? Yes No. **Audio visual equipment cannot be ordered after August 27.** Note that 3-1/4 x 4" projectors and overhead projectors will not be provided.

8. Publication Fee. Staple check or money order to the upper left-hand corner of this form to cover the abstract publication fee of \$22 plus reprint cost of \$16 (if ordered). See abstract reprint order form (reverse side of this sheet). Make check payable to the American Society of Zoologists in **U. S. Funds**.

9. Author(s) and Title of Abstract. Type the author(s), institution(s) and title of the paper in the box provided **as the following examples indicate**. Do **not** include the department name, the city or state when it is part of the institutional name or the zip code in listing the address of the author(s). **Capitalization and punctuation must be as shown below.** The final program copy will be prepared from this information.

EXAMPLES: CAREY, C., S. GARBER, and E. THOMPSON. Univ. of Colorado, Boulder. Modification of pore area of avian eggs at altitude.

SHICK, J. M., E. G. DOLLIVER and S. R. KAYAR. Marine Biological Lab., Woods Hole, Ma. and Univ. of Maine, Orono. Aerial respiration and diffusion limitations in a sea anemone.

ABSTRACTS SHOULD BE OF THE INFORMATIVE TYPE, CONTAINING:

1. A sentence statement of the study's specific objective, unless this is given by the title.
2. Brief statement of methods, if pertinent.
3. A summary of the results obtained.
4. A statement of the conclusions. It is not satisfactory to state "the results will be discussed".

SAMPLES TO SHOW STYLE:

SPATIAL AND TEMPORAL VARIATIONS IN MACRO-INVERTEBRATE COMMUNITY STRUCTURE IN A LOUISIANA ESTUARY. T. C. Shirley and W. B. Stickle. Louisiana State Univ., Baton Rouge.

Benthic macroinvertebrates were collected quantitatively at monthly intervals from 9 stations for . . .

MECHANICS AND ENERGETICS OF FLUID FEEDING IN INSECTS. J. G. Kingsolver and T. L. Daniel (intro. by S. A. Wainwright). Univ. of Wisconsin, Madison.

Mechanistic models are developed to describe the mechanics and energetics of nectar-feeding butterflies and . . .

CORRELATED SCANNING AND TRANSMISSION ELECTRON MICROSCOPY OF DEVELOPING CHICK NEUROEPITHELIAL CELLS. G. W. Kalmus, R. G. Nagele, M. W. Goldstein* and H. Lee. East Carolina Univ., Greenville, and Rutgers Univ., Camden, N.J.

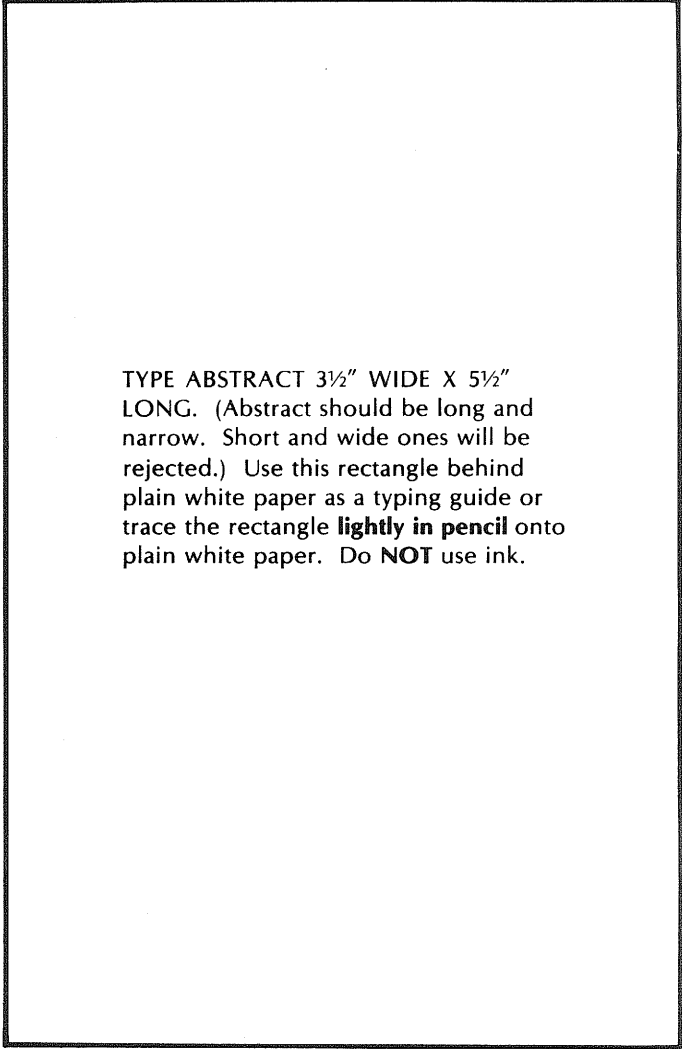
Most interphase cells are elongated and wedge-shaped with highly folded luminal surfaces. As the . . .

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and Society of Systematic Zoology
December 27-30, 1982 in Louisville, Kentucky

ABSTRACT FORM

DEADLINE FOR RECEIPT OF ABSTRACT: AUGUST 27, 1982
SUGGESTED MAILING DATE: BEFORE AUGUST 20, 1982
USE FIRST-CLASS MAIL SERVICE

1. **Original plus one copy of transmittal form and abstract required. THESE INSTRUCTIONS MUST BE FOLLOWED PRECISELY - READ ALL DIRECTIONS BEFORE TYPING.** See examples on reverse side. Use a typewriter, preferably electric with ELITE type. Clean the type thoroughly before using. Use a carbon ribbon or a new black silk ribbon.
2. Type the abstract in a rectangle $3\frac{1}{2}$ " wide and $5\frac{1}{2}$ " long. Abstract should be long and narrow. Short and wide ones will be rejected. Use the sample rectangle on this sheet **behind** plain white paper as a typing guide or trace the rectangle **lightly in pencil** onto plain white paper before typing. **Do not use ink.** Your entire abstract, including title, author(s), location, text and acknowledgments **must be within the rectangle.** Leave no top or left margins within the rectangle. Letters exceeding the $3\frac{1}{2}$ " x $5\frac{1}{2}$ " limitation will not be printed.
3. Single space all typing. Place entire abstract in one paragraph starting with a 3-space indentation. Hand print in black ink, Greek letters and symbols not on your typewriter.
4. Make neat corrections. Abstract will be photographed and appear in the *American Zoologist* just as you prepare it. A light typewriter ribbon **will not** produce a copy satisfactory for publication.
5. Type title of paper using all capital letters. Underline names and initials of author(s). Place * after each non-member's name. If all authors are non-members do NOT use a * but include (intro. by) after last author. The introducer is the sponsor who signs the abstract. **The abstract must be signed by the member or sponsor.** The top of the signature should appear at least 1 inch below the abstract. **DO NOT FOLD, CUT OUT, STAPLE OR TAPE ABSTRACT.** Insert cardboard backing to avoid damage in mail. Submit the entire page in 9" x 12" envelope.
6. Mail original plus one copy of **transmittal form and abstract** to: Ms. Mary Wiley, American Society of Zoologists, 104 Sirius Circle, Thousand Oaks, CA 91360. This address is for the abstract mailing only. The ASZ's official mailing address continues to be Box 2739 California Lutheran College, Thousand Oaks, CA 91360. Telephone number for questions: 805-492-3585. Abstracts should be in the mail by **August 20** for receipt in the Business Office by **August 27, 1982.** Mail earlier outside of U.S.



TYPE ABSTRACT $3\frac{1}{2}$ " WIDE X $5\frac{1}{2}$ " LONG. (Abstract should be long and narrow. Short and wide ones will be rejected.) Use this rectangle behind plain white paper as a typing guide or trace the rectangle **lightly in pencil** onto plain white paper. Do **NOT** use ink.

JOIN



THE AMERICAN SOCIETY OF ZOOLOGISTS WITH DIVISIONS
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- ANNUAL MEETINGS — DECEMBER 27-30:

1982 — LOUISVILLE, KENTUCKY

1983 — PHILADELPHIA, PENNSYLVANIA

1984 — DENVER, COLORADO

1985 — BALTIMORE, MARYLAND

HOW TO JOIN

- COMPLETE THE MEMBERSHIP APPLICATION (REVERSE SIDE OF THIS SHEET)
- ASK A MEMBER TO SIGN AS A SPONSOR
- MAIL FORM TO: MARY WILEY, BUSINESS MANAGER
AMERICAN SOCIETY OF ZOOLOGISTS
BOX 2739
CALIFORNIA LUTHERAN COLLEGE
THOUSAND OAKS, CA 91360
- DO IT TODAY

*SYMPOSIA TO BE PUBLISHED IN THE AMERICAN ZOOLOGIST IN 1982/83 INCLUDE: (1) PRINCIPLES AND PROBLEMS OF PATTERN FORMATION, (2) ALTERNATIVE HYPOTHESES IN BIOGEOGRAPHY, (3) EVOLUTIONARY MORPHOLOGY AND INTERRELATIONSHIPS OF THE ACTINOPTERYGIAN FISHES, (4) FROM INDIVIDUAL TO SPECIES RECOGNITION: THEORIES AND MECHANISMS, (5) ROLE OF UPTAKE OF ORGANIC SOLUTES IN NUTRITION OF MARINE ORGANISMS, (6) THE INTERFACE OF QUANTITATIVE GENETICS, LIFE-HISTORY EVOLUTION, AND WHOLE-ORGANISM ONTOGENY, (7) CHROMATOPHORES AND COLOR CHANGES, (8) ADAPTIVE RADIATION WITHIN A HIGHLY SPECIALIZED SYSTEM: THE DIVERSITY OF FEEDING MECHANISMS OF SNAKES, (9) DEVELOPMENTAL BIOLOGY OF THE ASCIDIANS, AND (10) OPTIMIZATION OF BEHAVIOR. ALSO: THE ABSTRACTS FOR THE NEXT ANNUAL MEETING, ASZ PAST-PRESIDENTIAL ADDRESS AND BUSINESS ITEMS.

AMERICAN SOCIETY OF ZOOLOGISTS

APPLICATION FOR: _____ STUDENT MEMBERSHIP, \$20.00 DUES
_____ FULL MEMBERSHIP, \$35.00 DUES
_____ CHANGE FROM STUDENT TO FULL MEMBERSHIP

NAME _____
_____ DR.
_____ MR.
_____ MISS
_____ MRS.
_____ MS.

POSITION _____ INSTITUTION _____

MAILING ADDRESS _____

TELEPHONE NUMBER _____ AREA CODE _____

DEGREES _____
(INSTITUTIONS AND DATES)

SEVERAL SPECIALIZED AREA DIVISIONS HAVE BEEN ORGANIZED WITHIN THE FRAMEWORK OF THE AMERICAN SOCIETY OF ZOOLOGISTS. PLEASE CHECK THE DIVISION(S) OF THE SOCIETY WITH WHICH YOU WISH FORMAL AFFILIATION. IN GENERAL, IT IS BELIEVED THAT MOST MEMBERS WILL BE INTERESTED IN ONE OR TWO OF THE DIVISIONS.

- | | |
|---------------------------------|------------------------------|
| ANIMAL BEHAVIOR _____ | DEVELOPMENTAL BIOLOGY _____ |
| COMPARATIVE ENDOCRINOLOGY _____ | ECOLOGY _____ |
| COMPARATIVE IMMUNOLOGY _____ | INVERTEBRATE ZOOLOGY _____ |
| COMPARATIVE PHYSIOLOGY & _____ | SYSTEMATIC ZOOLOGY _____ |
| BIOCHEMISTRY _____ | HISTORY AND PHILOSOPHY _____ |
| | OF BIOLOGY _____ |

REQUIREMENTS FOR MEMBERSHIP. ARTICLE II, SECTIONS 2 AND 3 OF THE CONSTITUTION READ, IN PART, AS FOLLOWS: "ANY INDIVIDUAL WHO HAS HAD SCIENTIFIC TRAINING EQUIVALENT TO THE DOCTORATE, WHO IS ACTIVELY ENGAGED IN THE FIELD OF ZOOLOGY, AND WHO HAS BEEN NOMINATED BY A MEMBER OF THE SOCIETY SHALL BE ELIGIBLE FOR MEMBERSHIP. ANY POST-GRADUATE STUDENT IN BIOLOGICAL SCIENCE WHO HAS COMPLETED SUCCESSFULLY AT LEAST ONE FULL YEAR OF STUDY TOWARD AN ADVANCED DEGREE AND WHO HAS BEEN NOMINATED BY A MEMBER OF THE SOCIETY SHALL BE ELIGIBLE FOR STUDENT MEMBERSHIP".

I, _____, A MEMBER OF THE AMERICAN SOCIETY OF ZOOLOGISTS,
(PLEASE PRINT OR TYPE)
NOMINATE THE ABOVE NAMED PERSON FOR MEMBERSHIP IN THE SOCIETY.

(SIGNATURE)

(Date)

_____ DUES CHECK ATTACHED OR _____ PLEASE BILL

MAIL THIS FORM TO:
MARY WILEY, BUSINESS MANAGER, AMERICAN SOCIETY OF ZOOLOGISTS,
BOX 2739, CALIFORNIA LUTHERAN COLLEGE, THOUSAND OAKS, CA 91360.