

JOURNAL OF PALEONTOLOGY

(ISSN 0022-3360)
JPALAZ 65(2) 175-346

Volume 65 MARCH 1991 Number 2

175 E. Boltovskoy, D. B. Scott, and F. S. Medioli
Morphological variations of benthic foraminiferal tests in response to changes in ecological parameters: a review

186 Guy M. Narbonne, Paul Myrow, Ed Landing, and Michael M. Anderson
A chondrophorine (medusoid hydrozoan) from the basal Cambrian (Placentian) of Newfoundland

191 Dong-Jin Lee and Robert J. Elias
Mode of growth and life-history strategies of a Late Ordovician halysitid coral

200 Marcus M. Key, Jr.
The halloporid trepostome bryozoans from the Ordovician Simpson Group of Oklahoma

213 Joseph F. Pachut, Roger J. Cuffey, and Robert L. Anstey
The concepts of astogeny and ontogeny in stenolaemate bryozoans, and their illustration in colonies of *Tabulipora carbonaria* from the Lower Permian of Kansas

234 William P. Elder
Mytiloides hattini n. sp.: a guide fossil for the base of the Turonian in the Western Interior of North America

242 Louie Marincovich, Jr. and William J. Zinsmeister
The first Tertiary (Paleocene) marine mollusks from the Eureka Sound Group, Ellesmere Island, Canada

248 Claes F. Bergman
Revision of some Silurian paulinitid scolecodonts from western New York

255 Franciszek J. Adamczak
Kloedenellids: morphology and relation to non-myodocopide ostracodes

267 Victor A. Zullo and Ray T. Perreault
Arcoscalpellum toulmini Weisbord and *Zeugmatolepas* sp. (Cirripedia, Thoracica) from the lower Paleocene of Alabama

271 Victor A. Zullo and Roger W. Portell
A new species of *Eoceratoconcha* Newman and Ladd, 1974 (Cirripedia, Archaeobalanidae) from the Pliocene of Florida

276 Pierre J. Lespérance
Vincular furrows in some Early Silurian and Devonian Phacopidae (Trilobita), predominantly from North America

294 Gregory D. Edgecombe
The Silurian dalmanitid trilobite *Glyptambon* Holloway: new species from Tennessee and Illinois

300 Russell L. Hall
Seiocrinus subangularis (Miller, 1821), a Pliensbachian (Lower Jurassic) crinoid from the Fernie Formation, Alberta, Canada

308 David K. Elliott and David L. Dineley
Additional information on *Alainaspis* and *Boothiaspis*, cyathaspidids (Agnatha: Heterostraci) from the Upper Silurian of Northwest Territories, Canada

314 Robert L. Carroll, Paul Bybee, and William D. Tidwell
The oldest microsauro (Amphibia)

322 Sidney Ash
A new Jurassic *Phleboteris* (Plantae, Filicales) from the Wallowa Terrane in the Snake River Canyon, Oregon and Idaho

COMMENTS

329 Cesare Emiliani
Planktic/planktonic, nektic/nektonic, benthic/benthonic

330 A. Seilacher
"Medusoid" salt pseudomorphs

REPLY

331 Raymond C. Gutschick and Joaquin Rodriguez
Comment on: "medusoid" salt pseudomorphs

PALEONTOLOGICAL NOTES

332 George C. H. Chaproniere
Discospirina (Miliolina, Foraminiferida) from the Coral Sea off northeastern Australia: a new record

334 Standley E. Lewis and Mark A. Carroll
Coleopterous egg deposition on alder leaves from the Klondike Mountain Formation (Middle Eocene), northeastern Washington

335 Heyo Van Iten
Repositories of and additional comments on Permian sponge specimens containing molds of *Paraconularia*

337 Donald L. Wolberg
Fourth notice of transfer of specimens figured by Rousseau H. Flower

338 Donald L. Wolberg
Fifth notice of transfer of specimens figured by Rousseau H. Flower

339 Donald L. Wolberg
Sixth notice of transfer of specimens figured by Rousseau H. Flower

TAXONOMIC NOTES

341 C. J. Brown and R. D. Hoare
Patellilabia laevigata (Girty) (Mollusca, Gastropoda?) from the Mississippian (Chesterian) of Arkansas

342 David R. Lawrence
The neotype of *Crassostrea gigantissima* (Finch, 1824)

ANNOUNCEMENT

343 Opinions and applications published by the International Commission on Zoological Nomenclature

185 Carnegie Museum of Natural History Inventory Reduction Sale

SOCIETY RECORDS AND ACTIVITIES

344 Minutes of 1990 Midyear Paleontological Society Council Meeting

GENERAL INFORMATION

The JOURNAL OF PALEONTOLOGY is published bimonthly by The Paleontological Society, Inc.

The dues and subscriptions for members of The Paleontological Society are \$49.00 per year. The nonmember subscription price is \$85.00 per year, including postage, both domestic and foreign. For information on prices of back issues of the JOURNAL, please contact: SEPM Business Office, P.O. Box 4756, Tulsa, OK 74159, for vols. 1 (1927) through 59 (1985) or Paleontological Society Business Office, 1261 Trumansburg Road, Ithaca, NY 14850, for vol. 60 (1986) and following.

Communications about the JOURNAL, notices, subscriptions, rates, changes of address, and nonreceipt of preceding numbers should be addressed to: JOURNAL OF PALEONTOLOGY Subscriptions Office, 1261 Trumansburg Road, Ithaca, NY 14850. Claims for nonreceipt of preceding numbers must be submitted within three months (six months if foreign) of the date of publication in order to be filled gratis. Communications about membership and requests for blanks for nomination of new members in The Paleontological Society should be directed to the Secretary: Donald L. Wolberg, Secretary, The Paleontological Society, New Mexico Bureau of Mines, Socorro, NM 87801.

Editors for the JOURNAL are: Don C. Steinker, Managing Editor, and Richard D. Hoare, Technical Editor, Department of Geology, Bowling Green State University, Bowling Green, OH 43403; Christopher G. Maples, Associate Editor, Kansas Geological Survey, Lawrence, KS 66047; Ronald R. West, Technical Editor, Department of Geology, Kansas State University, Manhattan, KS 66506; David K. Elliott, Technical Editor, Department of Geology, Northern Arizona University, Flagstaff, AZ 86011; Patricia H. Kelley, Technical Editor, Department of Geology and Paleontology, National Science Foundation, Washington, D.C. 20550; Daniel B. Blake, Technical Editor, Department of Geology, University of Illinois, Urbana, IL 61801; Ellen Compton-Gooding, Technical Editor, Virginia Museum of Natural History, Martinsville, VA 24112; J. Thomas Dutro, Jr., U.S. Geological Survey, Rm. E-308 Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.

Address manuscripts to:

Don C. Steinker, Managing Editor
JOURNAL OF PALEONTOLOGY
Department of Geology
Bowling Green State University
Bowling Green, Ohio 43403

Contributors should read the inside-back cover for instructions on preparation of manuscripts.

By decision of the Council of the Society (*Journal of Paleontology*, 1985, No. 3, p. 789), "At least one author of a paper must be a member of The Paleontological Society. Otherwise full page costs must be paid. The editors should use their judgment in setting this rule aside for outstanding papers by authors who can neither join the Society nor pay page charges."

COPYRIGHT STATEMENT

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per-copy fee through the Copyright Clearance Center, Inc., P.O. Box 765, Schenectady, New York 12301, for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

THIS PUBLICATION IS PRINTED ON ACID-FREE PAPER.

JOURNAL OF PALEONTOLOGY

A publication of THE PALEONTOLOGICAL SOCIETY

VOLUME 65

MARCH 1991

NUMBER 2

OFFICERS OF THE SOCIETY

For the year ending November, 1991

President

THOMAS E. BOLTON, Ottawa, ON, Canada

President-Elect

ROGER L. KAESLER, Lawrence, KS

Past-President

JOHN POJETA, JR., Reston, VA

Secretary

DONALD L. WOLBERG
New Mexico Bureau of Mines
Socorro, NM 87801

Treasurer

JUNE R. P. ROSS
Dept. of Biology
Western Washington University
Bellingham, WA 98225

Program Coordinator

PETER M. SHEEHAN, Milwaukee, WI

Managing Editor

DON C. STEINKER, Bowling Green, OH

Associate Editor

CHRISTOPHER G. MAPLES, Lawrence, KS

Technical Editors

RICHARD D. HOARE, Bowling Green, OH
RONALD R. WEST, Manhattan, KS
DAVID K. ELLIOTT, Flagstaff, AZ
PATRICIA H. KELLEY, Washington, D.C.
DANIEL B. BLAKE, Urbana, IL
ELLEN COMPTON-GOODING, Martinsville, VA
J. THOMAS DUTRO, JR., Washington, D.C.

Paleobiology Co-Editors

RICHARD COWEN, PHILIP W. SIGNOR,
and GEERAT J. VERMEIJ
Davis, CA

Special Publications Co-Editors

S. J. CULVER, R. S. SPENCER, and C. F. KOCH
Norfolk, VA

Councilors

STEVEN M. STANLEY, Cleveland, OH
THOMAS E. BROADHEAD, Knoxville, TN

Section Chairpersons

North-Central: ARNIE I. MILLER
Cincinnati, OH
Northeastern: GORDON C. BAIRD
Fredonia, NY
Pacific Coast: MATTHEW J. JAMES
Rohnert Park, CA
Rocky Mountain: SPENCER G. LUCAS
Albuquerque, NM
Southeastern: JOSEPH G. CARTER
Chapel Hill, NC
South-Central: PATRICK K. SUTHERLAND
Norman, OK

The *Journal of Paleontology* (ISSN 0022-3360) is published bimonthly by The Paleontological Society, Inc., 1261 Trumansburg Road, Ithaca, NY 14850; second-class postage paid at Ithaca, NY, and additional mailing offices. POSTMASTER: Send address changes to *Journal of Paleontology* Subscriptions Office, 1261 Trumansburg Road, Ithaca, NY 14850.

The *Journal of Paleontology* is printed offset by Allen Press, Inc., Lawrence, KS 66044.

Copyright © 1991, The Paleontological Society

ALLEN PRESS, INC., LAWRENCE, KANSAS

JOURNAL POLICY

The *Journal of Paleontology* publishes original articles and notes on all aspects of paleontology that use fossils as a data base, including micropaleontology, invertebrate paleontology, vertebrate paleontology, paleobotany, and ichnology. Papers may emphasize any aspect of paleontology, including taxonomy, stratigraphic paleontology, paleobiogeography, paleoecology, paleobiology, evolution, taphonomy, and actualistic paleontology. In addition, comments on articles and replies, as well as comments on paleontological subjects of general interest, are considered for publication in the *Journal*. Book reviews may be submitted on topics of wide general interest. Memorials are considered on an individual basis. Manuscripts being considered for publication elsewhere are not to be submitted to this journal.

Paleontological and taxonomic notes are short contributions that do not include an abstract. Articles are longer papers that include an abstract. The Memoirs of The Paleontological Society are occasional publications consisting of major works that are too extensive for inclusion in the *Journal of Paleontology* as part of regular issues. Memoirs are published as supplements to regular issues of the *Journal* and full page costs must be provided by the author.

All manuscripts are submitted to the Managing Editor. The Technical Editors work with authors to produce final copy. The basic editorial structure for the *Journal* was described in 1986 (*Journal of Paleontology*, 60:2–3). By decision of the Council of the Society (*Journal of Paleontology*, 1985, 59:789), “At least one author of a paper must be a member of The Paleontological Society. Otherwise full page costs must be paid. The editors should use their judgement in setting this rule aside for outstanding papers by authors who can neither join the Society nor pay page charges.” All authors are requested to provide page charges if they can do so. Authors are charged for changes they make in proof and for original mistakes that must be corrected in proof.

Instructions for the preparation of manuscripts are published in each issue of the *Journal* and more detailed instructions were published in Hoare and Steinker (1987, *Journal of Paleontology*, 61:1289–1295). All manuscripts must adhere to the prescribed format.