AMERICAN NTIQUITY

VOLUME 60 NUMBER 1 JANUARY 1995



SOCIETY FOR AMERICAN ARCHAEOLOGY https://doi.org/10.1017/S0002731600056419 Published online by Cambridge University Press

EDITORIAL STAFF OF AMERICAN ANTIQUITY

- Editor: MICHAEL W. GRAVES, Department of Anthropology, 2424 Maile Way, Porteus 346, University of Hawaii, Honolulu, HI 96822. Email: MGRAVES@UHUNIX.UHCC.HAWAII.EDU
- Managing Editor: JANET WALKER, Society for American Archaeology, 900 Second Street, N.E., Suite 12, Washington, DC 20002. Telephone: 202/789-8200
- Associate Editors for Reviews and Book Notes: GEORGE T. JONES and CHARLOTTE BECK, Department of Anthropology, Hamilton College, Clinton, NY 13323. Telephone: 315/859-4473
- Associate Editor for Obituaries and History of Archaeology: DOUGLAS R. GIVENS, Department of Behavioral Sciences, St. Louis Community College at Meramec, 11333 Big Bend Boulevard, St. Louis, MO 63122. Telephone: 314/984-7500
- Consulting Editors for Mathematics and Statistics: CHRISTOPHER CARR, Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402; HECTOR NEFF, Missouri University Research Reactor, Columbia, MO 65211.
- Coordinator for Current Research: TERESITA MAJEWSKI, Department of Anthropology, University of Arizona, Tucson, AZ 85721-0030. Email: TMAJEWSKI@ANTHRO.ARIZONA.EDU

EXECUTIVE BOARD OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY

Officers

President: BRUCE D. SMITH, Department of Anthropology, Mail Stop NHB 112, National Museum of Natural History/National Museum of Man, Smithsonian Institution, Washington, DC 20560.

President-elect: WILLIAM LIPE, Department of Anthropology, Washington State University, Pullman, WA 99164-4910.

Secretary: BRUCE E. RIPPETEAU, South Carolina Institute of Archaeology and Anthropology, 1321 Pendleton Street, University of South Carolina, Columbia, SC 29208.

Secretary-elect: KEITH KINTIGH, Department of Anthropology, Arizona State University, Tempe, AZ 85287.

Treasurer: W. FREDERICK LIMP, Center for Advanced Spatial Technologies, 12 Ozark Hall, University of Arkansas, Fayetteville, AR 72701.

Board Members-at-Large

ROGER ANYON, Zuni Archaeology Program, P.O. Box 339, Zuni, NM 87327.

CATHERINE CAMERON, Advisory Council on Historic Preservation, 7279 W. Kentucky #B, Lakewood, CO 80226.

DIANE GIFFORD-GONZALEZ, Department of Anthropology, University of California, Santa Cruz, CA 95064.

JOHN W. RICK, Department of Anthropology, Stanford University, Stanford, CA 94305-2145.

BARBARA L. STARK, Department of Anthropology, Arizona State University, Tempe, AZ 85287. JULIE K. STEIN, Department of Anthropology, DH-05, University of Washington, Seattle, WA 98195.

Ex-officio Executive Board Members

Executive Director: RALPH JOHNSON, Society for American Archaeology, 900 Second Street, N.E., Suite 12, Washington, DC 20002.

Editor, American Antiquity: MICHAEL W. GRAVES, Department of Anthropology, 2424 Maile Way, Porteus 346, University of Hawaii, Honolulu, HI 96822.

Editor, Latin American Antiquity: DAVID M. PENDERGAST, Department of New World Archaeology, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6.

Editor, SAA Bulletin: MARK ALDENDERFER, Department of Anthropology, University of California, Santa Barbara, CA 93106.

1995 Annual Meeting Program Chair: PAUL MINNIS, Department of Anthropology, University of Oklahoma, Norman, OK 73019.

American Antiquity (ISSN 0002-7316) is published quarterly in January, April, July, and October. Subscription is by membership in the Society for American Archaeology. For further information on membership, see last page of this issue. A portion of annual membership dues is allotted for the subscription to American Antiquity. Institutional subscriptions are available at \$150 annually. American Antiquity is not available for exchange. Requests for individual memberships or institutional subscriptions, instructions for changes of address, and orders for back issues should be sent to SAA at the address below. Claims for nonreceipt and for damaged copies must be made within 90 days (U.S.) or 180 days (non-U.S.) of the publication date for free replacement. Non-U.S. deliveries cannot be guaranteed; non-U.S. members and subscribers may purchase replacement copies at a 20% discount. American Antiquity is printed by Allen Press, Lawrence, Kansas.

Second class postage paid at Washington, D.C., and additional mailing offices. POSTMASTER: Send address changes to American Antiquity, % Society for American Archaeology, 900 Second Street, N.E., Suite 12, Washington, DC 20002.



VOLUME 60 NUMBER 1 JANUARY 1995

5 Editorial

ARTICLES

- 7 Stylistic Variation in Evolutionary Perspective: Inferences from Decorative Diversity and Interassemblage Distance in Illinois Woodland Ceramic Assemblages Fraser D. Neiman
- 37 Heartlands and Hinterlands: Alternative Trajectories of Early Urbanization in Mesopotamia and the Southern Levant

 Steven E. Falconer and Stephen H. Savage
- 59 Migration in Prehistory: The Northern Iroquoian Case Dean R. Snow

REPORTS

- Vermilion Lakes Site: Adaptations and Environments in the Canadian Rockies During the Latest Pleistocene and Early Holocene

 Daryl W. Fedje, James M. White, Michael C. Wilson, D. Erle Nelson, John S. Vogel, and John R. Southon
- 109 Maize Pollen of 3500 B.P. from Southern Alabama Miriam L. Fearn and Kam-biu Liu
- 118 Cation-Ratio Dating of Varnished Artifacts: Testing the Assumptions Karen G. Harry

FORUM

- 131 The GE Mound: An ARPA Case Study
 Cheryl Ann Munson, Marjorie Melvin Jones, and Robert E. Fry
- 160 REVIEWS AND BOOK NOTES

Reviews

- 160 A Community of Culture: The People and Prehistory of the Pacific, edited by Matthew Spriggs, Douglas E. Yen, Wal Ambrose, Rhys Jones, Alan Thorne, and Ann Andrews Melinda S. Allen
- 161 Pottery in Archaeology, by Clive Orton, Paul Tyers, and Alan Vince Dean E. Arnold
- 162 Investigations of Ancient Human Tissue: Chemical Analyses in Anthropology, edited by Mary K. Sandford Norman C. Sullivan
- 163 Environmental Change, by Andrew Goudie Bruce G. Gladfelter

- 165 Interpreting the Axe Trade: Production and Exchange in Neolithic Britain, by Richard Bradley and Mark Edmonds Chris Gosden
- Before Lascaux: The Complex Record of the Early Upper Paleolithic, edited by Heidi Knecht, Anne Pike-Tay, and Randall White Paul A. Mellars
- 167 Time and Space: Dating and Spatial Considerations in Rock Art Research, edited by Jack Steinbring, Alan Watchman, Paul Faulstich, and Paul S. C. Tacon John Clegg
- 168 Hernando de Soto and the Indians of Florida, by Jerald T. Milanich and Charles Hudson John F. Scarry
- 169 Archaeology of Precolumbian Florida, by Jerald T. Milanich Rochelle A. Marrinan
- 171 The People Who Discovered Columbus: The Prehistory of the Bahamas, by William F. Keegan Charles A. Hoffman
- 172 The Archaeology of William Henry Holmes, edited by David J. Meltzer and Robert C. Dunnell Don D. Fowler
- 174 Early Stages in the Evolution of Mesopotamian Civilization: Soviet Excavations in Northern Iraq, edited by Norman Yoffee and Jeffery J. Clark

 Richard L. Zettler
- 175 The Emergence of Civilization: From Hunting and Gathering to Agriculture, Cities, and the State in the Near East, by Charles Keith Maisels

 John R. Alden
- 176 Ancient Chiefdoms of the Tombigbee, by John H. Blitz David G. Anderson

Book Notes

- Archeological Resource Protection/Interpreting the Past: Research with Public Participation/Data Recovery at Nine Archaeological Sites at Antelope Point Coconino County, Arizona/Archaeology of the Pueblo Grande Platform Mound and Surrounding Features, Volume 1/The Chimney Rock Archaeological Symposium: 1990 October 20–21/Papers on the Early Classic Prehistory of the Pajarito Plateau, New Mexico/A Village of Outcasts: Historical Archaeology and Documentary Research at the Lighthouse Site
- 183 Information on Current Research Submissions

ANNUAL BUSINESS MEETING

184 Society for American Archaeology 59th Annual Business Meeting

On the cover: The cover art was prepared by Brigid Sullivan from examples of White Mountain Redware bowls of the American Southwest. The styles are Fourmile (center), Holbrook (bottom right), Puerco (left), and Wingate (top right).

American Antiquity is abstracted or indexed in Abstracts in Anthropology; Academic Search; America: History and Life; Anthropological Literature; Art Index; ASTIS Bibliography; ASTIS Current Awareness Bulletin; Book Review Index; Ceramic Abstracts; Ethnoarts Index; Expanded Academic Index; GeoRef; Hispanic American Periodicals Index; Historical Abstracts; Humanities Index; International Bibliography of Social and Cultural Anthropology; International Bibliography of the Social Sciences; Middle East, Abstracts and Index; Social Sciences Citation Index, and SportSearch. Copyright © 1995 by the Society for American Archaeology. All rights reserved. ISSN 0002-7316

LOST CITIES OF THE ANCIENT SOUTHEAST

Mallory McCane O'Connor

Site photographs by Barbara B. Gibbs

"Excellent for both the general public and the general scholarly audience. . . . Lively, lucid prose."—Janet Catherine Berlo,

University of Missouri, St. Louis

- "Provides concise art historical analysis of works of art that have never been subjected to such analysis before. It's a huge task and O'Connor has done it well."—Amelia M. Trevelyan, Gettysburg College
- Exploring twenty sites of Mississippian culture, from the metropolis of Cahokia to the island stronghold of the Florida Calusa, O'Connor examines the significance of these prehistoric cultures, bringing together scholarship from classics in architecture, archaeology, and iconography. Lost Cities of the Ancient Southeast captures the timeless beauty and technical sophistication of the art and architecture of pre-Columbian America.

February. 192 pp. 7×10 . 32 color, 73 b & w iillustrations, 3 maps, bibliography, index. ISBN 0-8130-1350- \times Cloth, \$49.95

PUERTO REAL THE ARCHAEOLOGY OF A SIXTEENTH-CENTURY SPANISH TOWN IN HISPANIOLA

Edited by Kathleen Deagan

"A superb presentation of a critically important archaeological site. It's a seamless synthesis of Hispanic historical sources [that] effectively ties the events played out at Puerto Real to the fifteenth- and sixteenth-century global geopolitical scene."—David Hurst Thomas, American Museum of Natural History March. 560 pp.165 figures, 62 tables, glossary, references, index. ISBN 0-8130-1334-8 Cloth, \$75.00

Above: Drawing of animal gargoyle unearthed at Puerto Real, 1974.

Now in paper!

TACACHALE ESSAYS ON THE INDIANS OF FLORIDA AND SOUTHEASTERN GEORGIA DURING THE HISTORIC PERIOD

Edited by Jerald T. Milanich and Samuel Proctor "Well researched and well written, and with a skillful combination of the techniques of ethnohistory and archaeology. . . . Though ten separate authors were involved in this book, one detects no unevenness in the presentations."

—American Indian Quarterly 232 pp. 0-8130-1297-X Paper, \$18.95

FORT CENTER AN ARCHAEOLOGICAL SITE IN THE

LAKE OKEECHOBEE BASIN

William H. Sears

"A landmark publication by one of the great American archaeologists, it should be read not only by southeastern specialists but by all concerned with agriculture and ceremonial life in the precolumbian New World."—Michael D. Coe, Peabody Museum of Natural History, Yale University

224 pp. 20 b&w photographs. 0-8130-1298-8 Paper, \$18.95

Recently published!

ARCHAEOLOGY OF PRECOLUMBIAN FLORIDA

Ierald T. Milanich

"A comprehensive and compelling archaeological Baedeker to Precolumbian Florida that addresses a complex subject in straightforward, no-nonsense language that both scholars and lay readers will find refreshing."

—Peter A. Young, editor-in-chief, Archaeology
"A vivid and thoughtful interpretation of twelve
millennia of human experience in the Sunshine
State."—David Brose, Royal Ontario Museum and
University of Toronto

496 pp. 109 b&w photographs, 31 maps, bibliography, index. ISBN 0-8130-1272-4 Cloth, \$49.95. ISBN 0-8130-1273-2 Paper, \$24.95

POTTERY FROM SPANISH SHIPWRECKS, 1500-1800

Mitchell W. Marken

"A classic whose quality will meet the test of time. No doubt this book will become a standard reference for students of the early modern archaeology of the Spanish empire, be their focus under the ground or under the sea."—Russell Skowronek, Santa Clara University

263 pp. 44 b&w photographs, 122 drawings, glossary, bibliography, index. ISBN 0-8130-1268-6 Cloth, \$39.95

Through full-service bookstores or order with VISA or M/C toll free: I-800-226-3822.

University Press of

FLORIDA

Gainesville, Tallahassee, Tampa, Boca Raton, Pensacola, Orlando, Miami, Jacksonville

