# american antiquity

JOURNAL OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY

VOLUME 41 NUMBER 2

**APRIL 1976** 

## OFFICERS OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY

President: STUART STRUEVER, Archeological Program, Northwestern University, Evanston, Illinois 60201.

President-elect: RAYMOND H. THOMPSON, Department of Anthropology, University of Arizona, Tucson, Arizona 85721.

Secretary: RICHARD E. W. ADAMS, Department of Anthropology, University of Texas at San Antonio, Texas 78285.

Secretary-elect: ALFRED E. JOHNSON, Department of Anthropology, University of Kansas, Lawrence, Kansas 66045.

Treasurer: FRED WENDORF, Department of Anthropology, Southern Methodist University, Dallas, Texas 75222.

Editor: FRANK HOLE, Department of Anthropology, Rice University, Houston, Texas 77001. Executive Committee Members: RICHARD I. FORD (to 1976), Museum of Anthropology, University of Michigan, Ann Arbor, Michigan 48104; PATTY JO WATSON (to 1976), Department of Anthropology, Washington University, St. Louis, Missouri 63130; W. JAMES JUDGE (to 1977), Department of Anthropology, University of New Mexico, Albuquerque, New Mexico 87106; HESTER A. DAVIS (to 1977), University Museum, University of Arkansas, Fayette-ville, Arkansas 72701.

## EDITORIAL STAFF OF AMERICAN ANTIQUITY

Editor: FRANK HOLE, Department of Anthropology, Rice University, Houston, Texas 77001.

Associate Editor for Memoirs: H. MARTIN WOBST, Department of Anthropology, University of Massachusetts, Amherst, Massachusetts 01002.

Associate Editor for Reviews: CHRISTOPHER S. PEEBLES, Museum of Anthropology, University of Michigan, Ann Arbor, Michigan 48104.

Associate Editor for Current Research: MARY ELIZABETH KING, Texas Tech Museum, P.O. Box 4499, Lubbock, Texas 79409.

Associate Editor for Current Affairs: CHARLES R. McGIMSEY III, Department of Anthropology, University of Arkansas, Fayetteville, Arkansas 72701.

Production Editor: ANNE D. WILLIAMS
Circulation Manager: RONNIE MCDANIEL

American Antiquity: publishes original papers on the archaeology of the New World and closely related subjects. Articles, Reports, and Comments should be submitted to the Editor, memoirs should be submitted to the Associate Editor for Memoirs, publications for review to the Associate Editor for Reviews, and information for "Current Research" to the Associate Editor for Current Research. American Antiquity is not available for exchange.

American Antiquity is published quarterly in January, April, July, and October by the Society for American Archaeology. Second-class postage paid at Washington, D.C. and additional mailing offices. Subscription is by membership in the Society for American Archaeology. Annual dues for individual members are \$15.00; for institutional members, \$20.00. Special membership rates of \$10.00 are available to students and to the members in Latin America and overseas. Spouses of members are eligible for joint membership at \$3.00 per year (subscription to American Antiquity not included). Address requests for individual or institutional membership, instructions for change of address, or complaints about subscription fulfillment to Society for American Archaeology, 1703 New Hampshire Avenue, N.W., Washington, D.C. 20009. See inside back cover for information on ordering back issues of American Antiquity and other publications of the Society that are still in print. Copyright © 1976 by the Society for American Archaeology. All rights reserved. Printed in U.S.A.

#### NOTICE TO AUTHORS

All manuscript material must be typed double-spaced on one side of sheet only. Use white non-corrasable bond. Submit original plus two copies. Include an abstract of less than 150 words that specifically refers to text material. Upon publication, abstracts will be submitted to Abstracts in Anthropology for inclusion in that series. Footnotes are not permitted. Text citations are set in parentheses, e.g., (Author 1970:100). References are listed alphabetically by author and chronologically by year. For details of manuscript organization, form of reference citation, and punctuation, etc., examine this issue. Citations in a review are placed entirely between parentheses in the text. All illustrations must be submitted as black on white drawings or as glossy prints and must not exceed 9x12 in. Number all figures consecutively and provide a caption for each. Tables should be typed on separate pages, numbered in sequence, and given headings. Large tables should be photographically reduced to fit one or more pages. Radiocarbon ages are given in the following forms: 11,950±100 radiocarbon years: 10,000 B.C. (Z-200), if not previously cited; 1,000±100 radiocarbon years: A.D. 950 (Smith 1960), if previously cited. (See American Antiquity 36:246-249 for more detailed information on style.)

# american antiquity

VOLUME 41 NUMBER 2

APRIL 1976

Frank	ι Ho	le, <i>Ed</i>	ditor
-------	------	---------------	-------

Associate Editors: H. Martin Wobst (Memoirs),	Christopher S. Pee	ebles (Reviews), Mary	Elizabeth King (Current
Research), Charles R. McGimsey III (Curre	ent Affairs).		

Production Editor: Anne D. Williams

Circulation Manager: Ronnie McDaniel

#### **CONTENTS**

Society Announcements		130
ARTICLES		
Downslope Movement and Archaeological Intrasite		
Spatial Analysis	John W. Rick	133
Mushrooms, Drugs, and Potters: A New Approach to the Function		
of Precolumbian Mesoamerican Mushroom Stones	Ulrich Köhler	145
Topoxte and Tayasal: Ethnohistory in Archaeology	Arlen F. Chase	154
	James B. Griffin and Volney H. Jones	168
Donald Jayne Lehmer, 1918-1975	W. Raymond Wood	178
REPORTS		
A Trend-Surface Analysis of Central Plains Radiocarbon Dates  Donna C. R		181
Thermally Altered Siliceous Stone from Prehistoric Contexts:	t ii C	100
	hael L. Gregg and Richard J. Grybush	189
New Information on the European Discovery of Yucatan and the	Michael P. Closs	100
Correlation of the Maya and Christian Calendars	Michael F. Closs	192
COMMENT		
The Quintessential Role of Olmec in the Central Highlands of Me	xico:	
-	A. Grennes-Ravitz and G. H. Coleman	196
Vegetational Reconstruction and Climatic Episodes	W. Raymond Wood	206
An On-Campus Alternative to the Archaeological Field School	William A. Turnbaugh	208
CURRENT RESEARCH		213
REVIEWS		236
CONTRIBUTORS		253

AMERICAN ANTIQUITY IS INDEXED IN THE SOCIAL SCIENCES AND HUMANITIES INDEX