# Reading the Isotopic Clocks.

our research in age determination and stable isotopes requires reliable data and custom service. Teledyne Isotopes has the expertise and experience to meet these requirements.

We have been pioneers in the industry since 1955 and are the only commercial laboratory that offers all major age determination techniques.

We can assure you of reliable data because of well-staffed and well-equipped labs, intercalibration with major universities and government facilities, and through use of N.B.S. and international standards.

For the most reliable reading of the isotopic clocks, come to the experts.

### TELEDYNE ISOTOPES

50 Van Buren Avenue Westwood, NJ 07675 201-664-7070 Telex: 134474





### Archaeological Method and Theory 5

Michael B. Schiffer, ed.

This fifth series volume contains a variety of contributions from authors observing and participating in the latest developments in archaeology. Although most of the chapters focus on aspects of production, the approaches vary, including the historical bases of Marxist and feminist theories, the uses of political economy, methods of ascertaining early animal domestication, and physicochemical methodology. In addition, the volume contains an important chapter on the question of archaeologists' responsibility to the descendants of the people and cultures they study.

#### CONTENTS:

- 1. Ethics and Ownership of the Past: The Reburial and Repatriation Controversy, by Shirley Powell, Christina Elnora Garza, and Aubrey Hendricks
- 2. Archaeological Approaches to the Political Economy of Non-stratified Societies, by Charles R. Cobb
- 3. Archaeology and Marxism, by Randall H. McGuire
- 4. Marxism in Contemporary Western Archaeology, by Bruce G. Trioger
- 5. Early Animal Domestication in the Middle East and Europe, by Pam J. Crabtree
- 6. The Analysis of Organic Residues and the Study of Pottery Function, by Carl Heron and Richard P. Evershed

\$40.00

### **Between Desert and River**

## Hohokam Settlement and Land Use in the Los Robles Community

Christian E. Downum — Anthropological Papers, No. 57

Downum's work along the lower Santa Cruz River enlarges our understanding of the Hohokam by describing settlement and land use along secondary streams between the major river basins and the interior desert. The monograph highlights the Cerro Prieto Site, the largest cerro de trincheras site in the United States. Most investigators have presumed a defensive function for cerros de trincheras and have overlooked important evidence regarding their use as habitations and their potential significance as symbolic features on the prehistoric landscape. Downum proposes a new interpretation of cerros de

trincheras that focuses on their role in early Classic period (Soho

\$12.95

# The Missions of Northern Sonora

#### A 1935 Field Documentation

Buford L. Pickens, ed.

phase) Hohokam society.

The "Kino Missions" were surveyed in 1935 by the National Park Service to prepare for the restoration of the mission at Tumacacori, Arizona. This volume reproduces that previously unpublished report in its entirety, focusing on sixteen missions and including two maps, 52 drawings, and 76 photographs.

"This book is a time capsule, indispensable to anyone studying the missions." —James S. Griffith, author of Beliefs and Holy Places

"The entire work is excellent.... The mission drawings will fascinate the public as well as the scholar."

—Charles W. Polzer, S.J., author of Kino Guide II \$12.95p/\$26.95c

#### Now in paperback—

### The Mesoamerican Ballgame

Vernon L. Scarborough and David R. Wilcox, eds.

"This is without any doubt the single most important volume ever written on the hip-ball game of the ancient Mesoamericans."

-Michael D. Coe

"A balanced synthesis of archeological field research and iconographic interpretation." —Science \$18.95

# The Origin and Development of the Pueblo Katsina Cult

E Charles Adams

Examines the concept of the katsina and the religion that developed around it, focusing on what makes katsinas unique, why the concept was developed, and what adaptive value it had for prehistoric Pueblo culture.

"Both in scale and scope, the book is large; the interpretations are adventurous." —Choice \$13.95

### The University of Arizona Press

1230 North Park Avenue, Tucson, Arizona 85719 / I-800-426-3797

# The University of Alabama Press

# Ancient Chiefdoms of the Tombigbee

John H. Blitz

"Readers will welcome Ancient Chiefdoms as a careful rethinking of the political, economic, and religious roles of leaders in small-scale Mississippian societies."—Vernon James Knight, Jr.

The University of Alabama 256pp. 1993 \$24.95, paper

# Prehistoric Peoples of South Florida

William E. McGoun

McGoun outlines a cultural system that maintained an impressive continuity for 10,000 years—before being destroyed by two centuries of European contact.

176pp. 1993 \$19.95, paper

# The Development of Southeastern Archaeology

Jay K. Johnson, ed.

A multifaceted overview from ten scholars, with specialties ranging from ethnohistory to bioarchaeology, who chronicle the changes in the way prehistory in the Southeast has been studied since the 19th century. 352pp. 1993 \$29.95, paper

### Mississippian Village Textiles at Wickliffe

Penelope Ballard Drooker

Drooker presents the first comparative analysis of preserved fabric impressions on Wickliffe pottery and the most inclusive available summary of information on Mississippian textiles. 312pp. 1992 \$29.95, paper

### Early Pottery in the Southeast

Tradition and Innovation in Cooking Technology

Kenneth E. Sassaman

Sassaman questions the value of using technological traits alone to mark temporal and spatial boundaries of prehistoric cultures and shows how social process shapes the prehistoric archaeological record.

312pp. 1993 \$27.95, paper

### The De Soto Chronicles

The Expedition of Hernando de Soto to North America in 1539–1543

Lawrence A. Clayton, Vernon James Knight, Jr., and Edward C. Moore, eds.

A compilation of the surviving De Soto chronicles, some in new translation, of the only eyewitness records of native cultures that vanished in the wake of European contact.

Volume I 464pp. 1993 Volume II 568pp. \$50.00/set,cloth

### **Gardens of Prehistory**

The Archaeology of Settlement Agriculture in Greater Mesoamerica

Thomas W. Killion, ed.

Pre-columbian farmers developed intensive and resilient systems of agricultural production, altering the landscapes they inhabited, and generating a unique archaeological record of the evolution of farming in the New World. 352pp. 1992 \$29.95, paper

#### The University of Alabama Press Box 870380

Tuscaloosa, Alabama 35487-0380

### School of American Research

### NEW ARCHAEOLOGY TITLES

# The Architecture of Arroyo Hondo Pueblo, New Mexico

#### Winifred Creamer

This copiously illustrated volume describes for the first time the architecture of one of the largest fourteenth-century towns in the northern Rio Grande region.

Paper, \$30.00

### The Pottery from Arroyo Hondo Pueblo, New Mexico

Tribalization and Trade in the Northern Rio Grande

#### Judith A. Habicht-Mauche

In the same volume:

The Stone Artifacts from Arroyo Hondo Pueblo, by Carl J. Phagan

Habicht-Mauche's penetrating study of the production and trade of prehistoric glaze wares presents a new model of culture change in the northern Rio Grande area from AD. 1250 to 1400. Paper, \$30.00

# Themes in Southwest Prehistory

Edited by George J. Gumerman

The authors explore and synthesize the most current thinking on key themes in the prehistory of the Southwest, from patterns of land use and prehistoric health to processes of aggregation and abandonment.

A School of American Research Advanced Seminar Book Paper, \$22.50 (August)

# Ideology and Pre-Columbian Civilizations

Edited by Geoffrey W. Conrad and Arthur A. Demarest

Taking a variety of theoretical approaches, the authors seek to understand how ideology interacts with the ecological, economic, and political forces involved in culture change. A School of American Research Advanced Seminar Book Cloth, \$35.00. Paper, \$15.95.

### Also available from SAR Press

# Food, Diet, and Population at Prehistoric Arroyo Hondo Pueblo

Wilma E. Wetterstrom Paper, \$15.00

#### **Prehistoric Pueblo Settlement Patterns**

The Arroyo Hondo, New Mexico, Site Survey **D. Bruce Dickson**, **Jr.**Paper, \$10.00

#### Pueblo Population and Society

The Arroyo Hondo Skeletal and Mortuary Remains **Anne M. Palkovich**Paper, \$12.00.

## The Contemporary Ecology of Arroyo Hondo Pueblo

N. Edmund Kelley Paper, \$10.00.

## The Past Climate of Arroyo Hondo, Reconstructed from Tree Rings

Martin R. Rose, Jeffrey S. Dean, and William P. Robinson Paper, \$10.00.

## The Faunal Remains from Arroyo Hondo Pueblo

Richard W. Lang and Arthur H. Harris Paper, \$15.00.

To order books or receive an SAR Press catalog, call or write:

#### **SAR Press**

P.O. Box 2188, Santa Fe, NM 87504 Phone (505) 984-0741 Fax (505) 989-9809

### ARCHAEOLOGY FROM CAMBRIDGE

#### **Ancient Mesoamerica**

A Comparison of Change in Three Regions Second Edition

Richard E. Blanton, Stephen A. Kowalewski, Gary M. Feinman, and Laura M. Finsten

Between 10,000 years ago and the arrival of the Spanish in 1521, some very significant changes in the evolution of human societies occurred in Mesoamerica. In this revised and updated edition of a book first published in 1981, the authors synthesize recent research, focusing on three intensively studied regions, the Valleys of Oaxaca and Mexico and the Maya lowlands.

New Studies in Archaeology 44053-X Hardcover \$69.95

### The Prehistoric Exploration and Colonisation of the Pacific

Geoffrey Irwin

This book represents a major advance in the knowledge of and models for the settlement of the Pacific by suggesting that exploration was rapid and purposeful, undertaken systematically and that navigation methods progressively improved. Irwin claims that rather than sailing randomly downwind in search of the unknown, Pacific Islanders expanded settlement by the cautious strategy of exploring upwind so as to ease their safe return. The author has tested this hypothesis against the chronological data from archaeological investigation, with a computer simulation of demographic and exploration patterns, and by sailing throughout the region himself. 40371-5 Hardcover \$49.95

# Agriculture and the Onset of Political Inequality Before the Inka

Christine A. Hastorf

Looking at the nature of power and political differentiation in the Andean region of central Peru from AD 200 to the Inka conquest in the fifteenth century, Hastorf argues that no one model or theory can usefully explain all social change, and that archaeologists should instead focus on a specific region in order to understand the context of change. Examining political inequality from different perspectives, Hastorf suggests a series of "cultural" principles that shaped political developments and also traces changes in agricultural production within the region, considered fundamental to its social and political evolution.

New Studies in Archaeology 40272-7 Hardcover \$69.95

#### The Chaco Anasazi

Sociopolitical Evolution in the Prehistoric Southwest

#### Lynne Sebastian

The immense size and beauty of the ruins of the Chaco culture sites in northwestern New Mexico and the apparent social complexity achieved by the people of Chaco, despite the harsh and forbidding environment in which they lived, have given rise to worldwide interest in the "Chaco Phenomenon." The author argues that previous explanations of Chaco do not hold up well under scrutiny and presents a radically different explanation.

*New Studies in Archaeology* 40367-7 Hardcover \$49.95

# Ancient Metallurgy in the USSR

The Early Metal Age

E. N. Chernykh

A leading Russian archaeologist describes the development of ancient mining and metallurgy in the northern half of Eurasia, where significant levels of mining date back to the fifth millennium BC. Professor Chernykh details the successive periods of metallurgical activity in different regions, provides information about the groups of artifacts, analyzes the international metallurgical trade, and documents the final collapse of the socio-cultural systems in these metallurgical centers in the first millennium BC.

New Studies in Archaeology 25257-1 Hardcover \$90.00

Now in paperback...

# Chiefdoms: Power, Economy and Ideology

Timothy Earle, Editor

The study of chiefdoms has moved from a preoccupation with their formal characteristics to a concern with their dynamics as political institutions. These ten case studies look at particular chiefdoms, originating in specific historical conditions.

Contributors: Timothy Earle, Kristian Kristiansen, Richard Bradley, Candelario Saenz, Patrick Kirch, Antonio Gilman, Yale Ferguson, Vincas Steponsitis, Gary Feinman, Robert Drennan 44801-8 Paper \$19.95

Available in bookstores or from



40 W. 20th St., N.Y., NY 10011-4211
Call toll-free 800-872-7423
MasterCard/VISA accepted. Prices subject to change.

# Ground Breaking Titles

New

# The Aztecs, Maya, and Their Predecessors

Archaeology of Mesoamerica THIRD EDITION

#### **Muriel Porter Weaver**

The Third Edition of this highly successful introduction to the archaeology of Mesoamerica includes full coverage of the Aztec and Maya areas in one volume. Beginning with the settling of the New World and continuing through the Spanish conquest of Mesoamerica in 1521, this completely updated textbook contains the latest information on new approaches, theories, sites, and areas of investigation. This information reflects the work of a new generation of researchers whose recent discoveries have shed new light on many of the ideas that have shaped the last 50 years of Mesoamerican archaeology.

#### **Key Features**

- All-in-one textbook covering the Aztecs (central Mexico) and the Maya (Yucatan and Central America) in one volume
- Spans the period from the settling of the New World until the Spanish Conquest of Mexico
- Shows the growth and collapse of the Olmec, Teotihuacan, Maya, Toltec, and Aztec empires
- Includes a chapter on Mesoamerica's relationship to the northeast (southeastern United States) and to the Andean region of South America
- Illustrates the importance of trade, domestication of plants, and the rise of urbanism in relation to other cultures in the New World

CONTENTS: Introduction: Man Finds Mesoamerica. Man Becomes a Farmer. Setting The Mesoamerican Pattern and the Role of the Olmec. Monuments, Wealth and Complex Societies. Codices, Calendrics and Maya Writing. Teotihuacan and Its Neighbors: The Maya Kings and a New Order. Tula and The Toltecs. Final Scenes: The Maya, The Tarascans and the Aztecs. Mesoamerica in Perspective. Glossary. References. Index.

January 1993, 567 pp., \$54.95 ISBN: 0-12-739065-0

### Deciphering A Shell Midden

edited by **Julie K. Stein** 

This book presents the latest research on shell middens—sites that contain shell located near coastal and fluvial settings around the world. The shell imparts certain characteristics to such sites such as complex discontinuous strata, low densities of artifacts, large volumes of deposits, alkaline chemistry, and proximity to fluctuating sea level.

1992, 375 pp., \$89.95/ISBN: 0-12-664730-5

New

### Prehistoric Subsistence on the Southern New England Coast

The Record from Narrangansett Bay David J. Bernstein

This book examines long-term trends in prehistoric subsistence in the Narragansett Bay region of Southern New England. The results suggest that, unlike other areas of Eastern North America, specialized agricultural economies did not develop in this region prior to European contact. It also suggests that subsistence intensification was achieved through diversification and cultural modification of the land-scape. This book incorporates specific observations and raw data in easy-to-use appendices. It also reviews results and features usable summary tables and figures. As such, the book is accessible to both the general reader as well as scholars and students interested in consulting the original data for their own research and analysis.

CONTENTS: Introduction. The Greenwich Cove Site and Narrangansett Bay: Setting and Archaeological Fieldwork. Chronology of Occupation at Greenwich Cove. Initial Exploitation of Shellfish in the Narrangansett Bay. Prehistoric Utilization of Shellfish at Greenwich Cove. Vertebrate Fauna. Prehistoric Use of Plant Foods. History of Land Modification. Seasonality. Summary and Conclusions. List of Tables. List of Figures. Appendices. References.

January 1993, 208 pp., \$55.00 ISBN: 0-12-092870-1

### A Marxist Archaeology Randall H. McGuire

This book is an introduction to marxist theory as it applies to archaeology. It explores long-term historical change and cultural evolution, and advocates a dialectical and historical approach to the study of the past. It will be of interest to students and professionals in archaeology, and to science historians, theoreticians, and philosophers.

1992, 326 pp., \$79.95/ISBN: 0-12-484078-7

### Order from your local bookseller or directly from

#### ACADEMIC PRESS

HBJ Order Fulfillment Dept. **DM**17915 6277 Sea Harbor Drive, Orlando, FL 32887

CALL TOLL FREE

1-800-321-5068 FAX 1-800-336-7377

Prices subject to change without notice. © 1993 by Academic Press, Inc.
All Rights Reserved. KF/CEP/WR — 19043

### 59th ANNUAL MEETING SOCIETY FOR AMERICAN ARCHAEOLOGY

Disneyland Hotel Anaheim, California Wednesday, April 20-Sunday, April 24, 1993

Program Committee Chair: J. Daniel Rogers

Department of Anthropology N.H.B. 112 Smithsonian Institution Washington, DC 20560

#### **GUIDELINES FOR CONTRIBUTIONS**

The privilege of participating in the annual meeting as a presenter, organizer, chair, or discussant is restricted to paid-up members. However, under extraordinary circumstances, representatives of other disciplines, or archaeologists who are not North American residents, may request a waiver of the membership requirement from the Program Chair. Please note that all requests for space for allied meetings should be made in writing and sent to the SAA Office no later than October 1, 1993.

Society policy states that a person may not be the first author of more than one paper, although that person may, at the same meeting, chair a session or serve as junior author of a paper presented by someone else or as a discussant. However, no paper should list more than five authors, and no individual may have more than three roles (author, organizer, chair, or discussant) in the meeting. Under extraordinary circumstances exceptions to these policies may be granted by the Program Chair.

Complete symposia proposals (with abstracts of papers), abstracts of contributed papers, abstracts of research reports, and abstracts for poster sessions must reach the SAA Office no later than September 23, 1993. All proposals and abstracts must be submitted on appropriate SAA forms, which are mailed to

all SAA members with the ballot. Please submit all materials in English.

In case of coauthorship of papers, only the senior author should submit a Participant Information Form containing the information on all of the associated authors. The Participant Information Form is in two parts: Page one (Submission Information) and page two (Short Abstract Information). Copies of the Participant Information Form must be submitted by all participants, including symposia organizers, chairs, and discussants, as well as all senior authors of symposia papers, contributed papers, research reports, and posters.

Because it is no longer possible to accommodate all individuals wishing to make oral presentations at the annual meeting, the Program Committee will evaluate each submission for professionalism, timeliness of receipt, substance of contribution, and redundancy with other submissions. Poster Sessions are especially encouraged and are particularly effective for presentations involving mapping, remote sensing, and various quantitative methods. The Program Committee may request that individual papers or entire symposia be converted to poster format. Symposia organizers and first authors of presentations not in symposia will be notified of the Program Committee's decision to accept or decline the submission by January 15, 1994. Abstracts of all papers, research reports, and posters accepted for presentation will be published in a separate Abstracts volume available at the annual meeting.

SYMPOSIA—A symposium consists of a group of papers on a common theme. Symposia are limited to 4 hours or less. The symposium topic and the individual papers within it will be reviewed. Changes, such as consolidation of two symposia or changes in the individual papers, may be recommended. Symposia organizers should contact the SAA office no later than September 1, 1993 in order that the Guidelines for Symposium Organizers and a special symposium form can be sent to them. Complete symposia proposals must be submitted as a package to the SAA Office by the symposium organizer(s) and must be received by September 23, 1993.

The package must include three (3) copies of the Symposium Proposal Form and one (1) copy of the Participant Information Form for each senior author, discussant, chair, and organizer (whether or not the organizer is chairing the symposium). The package must also include the registration form and fee.

CONTRIBUTED PAPERS (20 minutes)—Contributed papers are distinguished from Research Reports in that they generalize, synthesize, or compare and are addressed to problems of theory, method, culture history, or culture process. Contributed papers must follow the same format as the symposia papers, and each proposed presentation must include one (1) copy of the Submission Information Form and three (3) copies of the Short Abstract Form. Registration form and fee must be included.

RESEARCH REPORTS (10 minutes)—A research report is a presentation that describes the results of a recent field or laboratory research project. Each proposed presentation must include one (1) copy of the Submission Information Form and three (3) copies of the Short Abstract Form. Registration form and fee must be included.

**POSTER SESSIONS**—The poster session is particularly appropriate for research results that can be described graphically. Poster sessions will be listed in the program and will be displayed in prominent locations. Each proposed presentation must include one (1) copy of the Submission Information Form and three (3) copies of the Short Abstract Form. Registration form and fee must be included.

REGISTRATION FEES—All presenters, chairs, and discussants are required to pay the established registration fee for the annual meeting; registration form and fee must accompany all proposals. Under extraordinary circumstances non-North American residents may request waiver of registration fee to present papers or attend meetings. Waiver requests should be sent to the Program Chair. Registration and/or membership fees will be refunded upon written request before the preliminary program goes to press and for any paper that is declined.

ABSTRACTS will be published as a separate volume and will not be included in the registration fee. Participants who wish to receive a copy of the Abstracts when they pick up their badge at the meeting should order and prepay for it on their registration form.

#### **CONTENTS**

Editor's Corner: Concluding Thoughts on Change and Independence  J. Jefferson Reid	199
ARTICLES	
The Dorset-Thule Succession in Arctic North America: Assessing Claims for Culture Contact Robert W. Park	203
Concepts of Time and Approaches to Analogical Reasoning in Historical Perspective  Ann Brower Stahl	235
REPORTS	
NISP vs. MNI in Quantification of Body-Part Representation  Prehistoric Macaw Breeding in the North American Southwest  Fiona Marshall and Tom Pilgram  Prehistoric Macaw Breeding in the North American Southwest	261
Paul E. Minnis, Michael E. Whalen, Jane H. Kelley, and Joe D. Stewart Archaeological Palynology in the United States: A Critique	270
Vaughn M. Bryant, Jr., and Stephen A. Hall	277
Grinding-Tool Design as Conditioned by Land-Use Pattern  Margaret C. Nelson and Heidi Lippmeier	286
Investigations in the Cahokia Site Grand Plaza  George R. Holley, Rinita A. Dalan, and Philip A. Smith	306
A Second-Terrace Perspective on Monks Mound Sourcing Busycon Artifacts of the Eastern United States  James M. Collins and Michael L. Chalfant Cheryl Claassen and Samuella Sigmann	319 333
FORUM	
A Perspective on Ethics and the Reburial Controversy  Anthony L. Klesert and Shirley Powell	348
CURRENT RESEARCH, coordinated by Teresita Majewski	
Siberia, Far North, Northwest, California and the Great Basin	355
REVIEWS AND BOOK NOTES, edited by Diane E. Gelburd and Richard J. Dent	369