VOLUME 39 / NUMBER 2 / 1997

Radiocarbon

An International Journal of Cosmogenic Isotope Research



Editor AUSTIN LONG

Consulting Editor A. J. T. JULL

Managing Editor RENEE S. KRA

Acting Managing Editor DAVID R. SEWELL

Assistant Editor KIMBERLEY TANNER ELLIOTT

DC 798 D3 A48 Sci Current Journal

Irtment of Geosciences Jniversity of Arizona East Ft. Lowell Road on, Arizona 85712-120**1 US**A

ISSN: 0033-8222

RADIOCARBON

An International Journal of Cosmogenic Isotope Research

Editor:-AUSTIN LONG Consulting Editor: A. J. T. JULL Managing Editor: RENEE S. KRA Acting Managing Editor: DAVID R. SEWELL Assistant Editor: KIMBERLEY TANNER ELLIOTT Published by Department of Geosciences The University of Arizona

Published three times a year at The University of Arizona, Tucson, AZ 85712-1201 USA.

© 1997 by the Arizona Board of Regents on behalf of the University of Arizona. All rights reserved.

Subscription rate (1997): \$115.00 (for institutions), \$55.00 (for individuals). Foreign postage is extra. A complete price list, including Proceedings of International Conferences, special publications and 1997 subscription categories, appears in the back of this issue. Back issues may be obtained by contacting *RADIOCARBON*.

All correspondence and manuscripts should be addressed to the Managing Editor, *RADIOCARBON*, Department of Geosciences, The University of Arizona, 4717 East Ft. Lowell Road, Tucson, AZ:85712-1201 USA: Tel: (520) 881-0857; Fax: (520) 881-0554; Internet: c14@packrat.aml.arizona.edu

Offprints. The minimum-offprint order for each article will be 50 copies without covers. No offprints will be furnished free of charge unless page charges are paid (see below). Covers are also available.

Page charges. For 1997, each institution sponsoring research reported in a technical paper or a date list will be asked to pay a charge of \$50.00 per printed page. Institutions or authors paying such charges will be entitled to 50 free offprints without covers. No charges will be made if the author indicates that the author's institution is unable to pay, and payment of page charges for an article will, in no case, be a condition for its acceptance.

Missing issues will be replaced-without charge only if claim is made within three months (six months for India, New Zealand and Australia) after the publication date. Claims for missing issues will not be honored if non-delivery results from failure by the subscriber to notify the Journal of an address change.

Illustrations should include explanation of symbols used. Copy that cannot be reproduced cannot be accepted. Whenever possible, reduce figures for direct publication. Line drawings should be in black India ink on white drawing board, tracing cloth, or coordinate paper printed in blue and should be accompanied by clear ozalids or reduced photographs for use by the reviewers. Photographs should be positive prints. We can also print from many computer graphics file formats; please request our guide to graphics files for details. Figures (photographs and line drawings) should be numbered consecutively through each article, using Arabic numerals. Tables may be accepted as camera-ready copy.

Citations. A number of radiocarbon dates appear in publications without laboratory citation or reference to published date lists. We ask authors of research articles and date lists to include proper citation (laboratory number and date-list citation) in all publications in which radiocarbon dates appear.

List of laboratories. Our comprehensive list of laboratories is published in the third issue of each volume, and is also available on the WWW at http://packrat.aml.arizona.edu/Info/lablist.txt. We are expanding the list to include additional laboratories and scientific agencies with whom we have established contacts. The editors welcome information on these or other scientific organizations. We ask all laboratory directors to provide their laboratory code designation, as well as current telephone and fax numbers, and e-mail addresses. Changes in names or addresses, additions or deletions should be reported to the Managing Editor. Conventional and AMS laboratories are now arranged in alphabetical order by country and we include laboratories listed by code designation.

RADIOCARBON on the World Wide Web: http://packrat.aml.arizona.edu/

Vol. 39, No. 2	RADIOCARBON	202728	1997
		123272820 1	λ.
CONTENTS		4	Ì
FROM THE EDITOR		Received	
Austin Long			. ili
		1. Sec. 1. Sec	
Distribution of Sites and Rac Prospecting	diocarbon Dates in the Sierra Nevada: Implications	for Paleoecological	
R. Scott Anderson, Sus	an J. Smith and Peter A. Koehler		121
River	in the Gulf of California: Roles of Upwelling and I nd Karl W. Flessa		120
•			139
Measurements	n Colonization of New Zealand: University of Waik G. Hogg.		149
	oth Curve to Radiocarbon Calibration Data		
F. B. Knox and B. G. M	lcFadgen		193
	c ¹⁴ CO ₂ Observations at Schauinsland Station, Gerr rnd Kromer	•	205
BOOK REVIEW			
	and C. D. Litton, Bayesian Approach to Interpretin cott	0	219
LETTER TO THE EDITOR			221
RADIOCARBON UPDATES			223

ASSOCIATE EDITORS

EDOUARD BARD J. WARREN BECK OWEN K. DAVIS ELLEN R. M. DRUFFEL DOUGLAS D. HARKNESS CALVIN J. HEUSSER SHEELA KUSUMGAR STEVEN W. LEAVITT ANN P. McNICHOL ANDREW M. T. MOORE PAVEL POVINEC

MICHAEL B. SCHIFFER E. MARIAN SCOTT JOHANNES VAN DER PLICHT JOHN S. VOGEL WEIJIAN ZHOU Aix-en-Provence, France Tucson, Arizona, USA Tucson, Arizona, USA Irvine, California, USA East Kilbride, Scotland Tuxedo, New York, USA Ahmedabad, India Tucson, Arizona, USA Woods Hole, Massachusetts, USA New Haven, Connecticut, USA Bratislava, Slovakia Monaco Tucson, Arizona, USA Glasgow, Scotland Groningen, The Netherlands Livermore, California, USA Xi'an, China

RADIOCARBON wishes to acknowledge the generosity of High Voltage Engineering Europa B.V. of Amersfoort, The Netherlands, in making a donation to help subsidize the printing of this issue.