QUATERNARY RESEARCH



EDITORS

Derek B. Booth
Nicholas Lancaster
Lewis A. Owen



QUATERNARY RESEARCH

SENIOR EDITORS

Derek B. Booth Nicholas Lancaster Lewis A. Owen

ASSOCIATE EDITORS

Patrick J. Bartlein, Robert Booth, Louisa Bradtmiller, Aaron Diefendorf, John Dodson, Tyler Faith, Jaime Fucugauchi, Vance T. Holiday, Kathleen Johnson, Terri Lacourse, Pete Langdon, Thomas Lowell, Curtis W. Marean, Barbara Mauz, James O'Connor, Michael A. O'Neal, W. Wyatt Oswald, Jeff Pigati, James Shulmeister, Ashok K. Singhvi, Xiaoping Yang

EDITORS EMERITI

A. Lincoln Washburn
Estella B. Leopold
Stephen C. Porter
Eric J. Steig
Alan R. Gillespie

MANAGING EDITOR

Karin Perring

Quaternary Research Center Box 351360 University of Washington Seattle, WA 98195-1360

EDITORIAL BOARD

ZHISHENG AN

Institute of Earth Environment, Chinese Academy of Sciences Quaternary geology, monsoon and global change, dust and aerosols

GAIL ASHLEY

Rutgers University Paleoenvironments, paleohydrology of springs, wetlands and rivers, geoarchaeology

JULIE BRIGHAM-GRETTE

University of Massachusetts Stratigraphy, sedimentology, chronology of Arctic climate and sea level

JOHN DODSON

Institute of Earth Environments, Xi'an, China Australia, Pacific Islands, China, vegetation history, human impacts

YEHOUDA ENZEL

Hebrew University of Jerusalem Desert geomorphology, palaeohydrology of lakes and streams

DAVID FINK

Australian Nuclear Science and Technology Organisation

Cosmogenic dating

SHERI FRITZ

University of Nebraska–Lincoln Paleoclimate, paleolimnology, diatom ecology of North and South America

ALAN R. GILLESPIE

University of Washington Glacial geology, paleoclimate, megaflooods, Central Asia

LISA GRAUMLICH

University of Washington paleoclimatology, paleoecology, climate change, mountain ecosystems

DONALD K. GRAYSON

University of Washington Archeology and vertebrate paleontology: North America and Western Europe

RICHARD G. KLEIN

Stanford University

Human origins, Quaternary paleontology

MELANIE LENG

British Geological Survey, University of Nottingham Stable isotope geochemistry, climate and environmental change

DANIEL R. MUHS

U.S. Geological Survey
Quaternary sea level history, Eolian
stratigraphy, soils North America, Pacific,
Atlantic, and Caribbean Islands

COLIN V. MURRAY-WALLACE

University of Wollongong Coastal evolution, neotectonism, geochronology, Quaternary sea-level changes

JAY QUADE

Department of Geosciences, University of Arizona geochemistry, paleoclimatology, Quaternary geology

MARIA SOCORRO LOZANO-GARCIA

Universidad Nacional Autónoma de México Tropical paleoecology, paleoclimatology, human impact on ecosystems

CATHY L. WHITLOCK

Montana State University Paleoecology and vegetation history: North and South America

YURENA YANES

University of Cincinnati Isotope geochemistry, paleoclimatology, Quaternary mollusks, taphonomy, paleoecology

LIPING ZHOU

Peking University

Land-sea correlation, loess, geochronology, geomorphology, Central Asia, East Asia

Cover photo. View of Mt. Potts on the north side of the Rangitata Valley, near the junction with the Potts River, South Island New Zealand. The Rangitata Valley in this area provides an outstanding opportunity to investigate pre-LGM phases of glaciation, as thick packages of glacial and paraglacial sediments are preserved along the valley flanks. Outcrops demonstrate at least six phases of glaciation extending back to before 50,000 years ago. In the photo, the valley flank in the middle distance displays numerous kame terraces reflecting a series of marginal drainages flowing along the flank of the former Rangitata Glacier as it receded from its last glacial maximum position. The upper kames are disrupted by the lateral moraines of a glacier that re-advanced from the Mt. Potts cirque at the end of the last glaciation. Photo credit: J. Shulmeister. (See article by Shulmeister et al. pages 375–393 this issue).