# JOURNAL OF THE SOUTHWEST

Volume 49, Number 2 Summer 2007

ф

Edited by Joseph Carleton Wilder

THE SOUTHWEST CENTER UNIVERSITY OF ARIZONA TUCSON

### Assistant Editor

Jeff Banister

#### Production

DESIGN & TYPOGRAPHY: WILLIAM BENOIT, Simpson & Convent

#### Editorial Advisors

BARBARA BABCOCK University of Arizona

Donald M. Bahr University of Arizona

LARRY EVERS University of Arizona

Bernard L. Fontana Tucson, Arizona

JACQUES GALINIER CNRS, Université de Paris X

CURTIS M. HINSLEY Northern Arizona University

MARIO MATERASSI Università degli Studi di Firenze MARTIN PADGET University of Wales, Aberystwyth

Sylvia Rodriguez University of New Mexico

THOMAS E. SHERIDAN University of Arizona

CHARLES TATUM University of Arizona

FRANCISCO MANZO TAYLOR Hermosillo, Sonora

RAYMOND H. THOMPSON University of Arizona

DAVID J. WEBER Southern Methodist University

Journal of the Southwest is published in association with the Consortium for Southwest Studies: Austin College, Colorado College, Fort Lewis College, Southern Methodist University, Southwest Texas State University, University of Arizona, University of New Mexico, and University of Texas at Arlington.

## Science on Desert and Lava: A PINACATE CENTENNIAL, PART I

Edited by Bill Broyles

Publishing the Southwest		v
Introduction: A Century of Science in t	he Pinacate	
	BILL BROYLES	129
Hornaday, Lumholtz, and the Grandeu	r of Nature	
	Exequiel Ezcurra	135
Desert on the March	RAYMOND M. TURNER	141
The "Lost" 1907 Pinacate Diary of Godfrey G. Sykes		
	DIANE BOYER	165
Geologic Studies in the Pinacate Volcanic Field		
-	James T. Gutmann	189
The Sykes Crater Saguaro: Photo Folio	Richard Laugharn	245
Pinacate Recon	Larry A. May	259
Gumersindo Esquer of Sonoyta: A Mexic	an Jules Verne	
in the Footsteps of William Hornaday William K. Hartmann, Gayle	Harrison Hartmann.	
	ermo Munro Palacio	305

#### DEDICATED TO

Bunny and Hazel Fontana Merv and Peggy Larson Bob and Naomi Lenon

With special thanks to Kirsteen E. Anderson, Jeff Banister, Diane Boyer, Sally Ortega Bravo and Alberto Bravo Celaya, Lupita Cruz, Henry F. Dobyns, Luke Evans, Richard S. Felger, David J. Griffin, Steve Hayden, Madelon Ezell Heatherington, Kevin Horstman, Phyllis La Farge Johnson (American Museum of Natural History), Pamela "Pipp" Piatchek (Special Collections and Archives, Cline Library, Northern Arizona University), Joan E. Scott, Morten A. Strøksnes, Mike Walker, Joseph C. Wilder, and our reviewers.

Readers interested in visiting the Pinacate Biosphere Reserve can obtain information on permits, regulations, and current conditions from

Director Federico Godínez Leal Carretera Sonoyta-Peñasco km. 52 CP Apartado Postal 125 Puerto Peñasco, Sonora, Mexico Telephone: 01-638-38-49-007 Email: pinacate@conanp.gob.mx