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Front Matter

(Usually includes Dedication, President's Message, & Conference Organizer's Message.)

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Annual NMGS Fall Field Conference Guidebooks

Every fall since 1950, the New Mexico Geological Society (NMGS) has held an annual Fall Field Conference that explores some region of New Mexico (or surrounding states). Always well attended, these conferences provide a guidebook to participants. Besides detailed road logs, the guidebooks contain many well written, edited, and peer-reviewed geoscience papers. These books have set the national standard for geologic guidebooks and are an essential geologic reference for anyone working in or around New Mexico.

Free Downloads

NMGS has decided to make peer-reviewed papers from our Fall Field Conference guidebooks available for free download. This is in keeping with our mission of promoting interest, research, and cooperation regarding geology in New Mexico. However, guidebook sales represent a significant proportion of our operating budget. Therefore, only *research papers* are available for download. *Road logs*, *mini-papers*, and other selected content are available only in print for recent guidebooks.

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Cochise
1823-1874

When I was young I walked all over this country, east and west, and saw no other people than the Apaches. After many summers I walked again and found another race of people had come to take it. How is it? Why is it that the Apaches wait to die --that they carry their lives on their fingernails? They roam over the hills and plains and want the heavens to fall on them. The Apaches were once a great nation; they are now but few, and because of this they want to die and so carry their lives on their fingernails.

—Cochise



FRONTISPIECE: Cochise—chief of the Chiricahuas. *No photograph of Cochise is known to exist. The above rendition (commissioned by the Society) is modeled from a facial photograph of Natchez, Cochise's youngest son, who historical descriptions report, strongly resembled his father—H.L.J.*

New Mexico Geological Society

in cooperation with the

Arizona Geological Society

Twenty-ninth Field Conference

November 9-11, 1978



Land of Cochise

Southeastern Arizona

Editors

J. F. Callender, Jan C. Wilt, R. E. Clemons

Managing Editor

H. L. James



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ART AND DESIGN CREDITS

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PRESIDENT'S MESSAGE

Well, we finally made it! If my memory serves me correctly, the idea for this field conference was born out of a casual conversation with Wes Peirce of the Arizona Bureau of Geology in the fall of 1969 at the Sierra de Samalayuca stop in Mexico. In the years that followed, Wes would always "remind" me of that conversation, and it seemed that the casualness of my words turned out to be a commitment. It did take awhile, but now the *Land of Cochise* is a reality.

Having worked on several field conferences, I believe that this endeavor is one of the Society's better efforts. There are really no great secrets in organizing a successful geologic field conference. First of all, secure a general chairman like Bill King, then get Russ Clemons to say yes to head the road logging committee, followed by Jon Callender to secure manuscripts and edit the guidebook.

This is our third cooperative arrangement with the Arizona Geological Society, having shared excellent trips to Black Mesa Basin (1958) and the Mogollon Rim Region (1962). The Arizona counterparts for this conference were excellent choices: Charles Miller as general co-chairman and Ed McCullough heading the mini-symposium. A very special acknowledgment is due Jan Wilt (co-editor) and Stan Keith, whose road logging services were generously supported by Wes Peirce and the Arizona Bureau of Geology and Mineral Technology. As you read the logs in this book, you will immediately recognize that they are probably the most thorough and informative logs ever published by the Society. Thanks also to Anne Loring (a former N.M.G.S. officer), for handling the registration chores; to Bernice Swanson of the University of New Mexico for excellent drafting in the guidebook; to Robert Mortimer of the University of Arizona for photographic assistance; and to my artist friend, Jack Dietrich, for contributing the watercolor sketches. Furthermore, I would like to direct the reader to the workers on the committee page and to our faithful advertising supporters throughout the guidebook.

I must confess that I am amazed at times that these fall field conferences fall into place each year. The dedication and hard work that it has taken to produce a series of twenty-nine consecutive guidebooks is a record that is unequalled by any other state geological society and one in which the Society should be extremely proud. But to continue this record, we need the support of the membership. The functional level of our activities at the present time is being sustained by the same handful of "annual volunteers." I sincerely urge new people to step forward and become involved, whereby imaginative ideas and new programs will keep the Society fresh and exciting.

A newspaper reporter, having attended a past field conference and upon reviewing the guidebook, once wrote: *One of the best things that can happen to an area is to have it selected for the annual field conference of the New Mexico Geological Society.* So, with that flattering statement in mind, I hope we have "done a job" on southeastern Arizona and that the guidebook will be regarded as an authoritative reference source for years to come.

On behalf of both societies, I welcome you to the twenty-ninth field conference in hopes that it will afford each of you the right combination of geology and good times.

H. L. James
President
New Mexico Geological Society

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FIELD CONFERENCE SCHEDULE

WEDNESDAY, November 8	**REGISTRATION DAY: LA FIESTA CLUB, LORDSBURG, N.M.**
2:00 p.m.-8:00 p.m.	Registration, art show.
5:00 p.m.-7:00 p.m.	Cocktails.
8:00 p.m.- —	Joint dinner meeting; New Mexico-Arizona Geological Society officers, El Charro restaurant.
THURSDAY, November 9	**FIRST DAY*: LORDSBURG, N.M. TO DOUGLAS, ARIZ.**
6:00 a.m.-7:30 a.m.	Breakfast, El Charro restaurant.
7:30 a.m.-8:00 a.m.	Assembly of auto caravan 1 mile west of Bel Shore Motel, west Lordsburg.
5:30 p.m.-6:30 p.m.	Cocktails (no host), Bushmasters Club.
6:30 p.m.-8:00 p.m.	Dinner, Bushmasters Club.
8:00 p.m.- —	Mini-Symposium, Bushmasters Club.
FRIDAY, November 10	**SECOND DAY*: DOUGLAS, ARIZ. TO TUCSON, ARIZ.**
6:00 a.m.-7:30 a.m.	Breakfast, Cochise College Cafeteria, 7.6 miles west of Douglas on U.S. 80.
7:30 a.m.-8:00 a.m.	Assembly of auto caravan, Cochise College.
6:30 p.m.-8:00 p.m.	Cocktails (no host), Marriott Hotel, Tucson.
8:00 p.m.- —	Banquet, Marriott Hotel, Tucson.
SATURDAY, November 11	**THIRD DAY*: TUCSON TO RINCON MOUNTAINS**
7:30 a.m.-8:00 a.m.	Assembly of bus caravan, parking lot, Marriott Hotel.
12:00 noon-1:00 p.m.	Box lunch provided in field.
2:00 p.m.-	Return to Marriott Hotel.

*NOTE: Conferees are responsible for their field lunches on 1st and 2nd Days and breakfast on 3rd Day.

