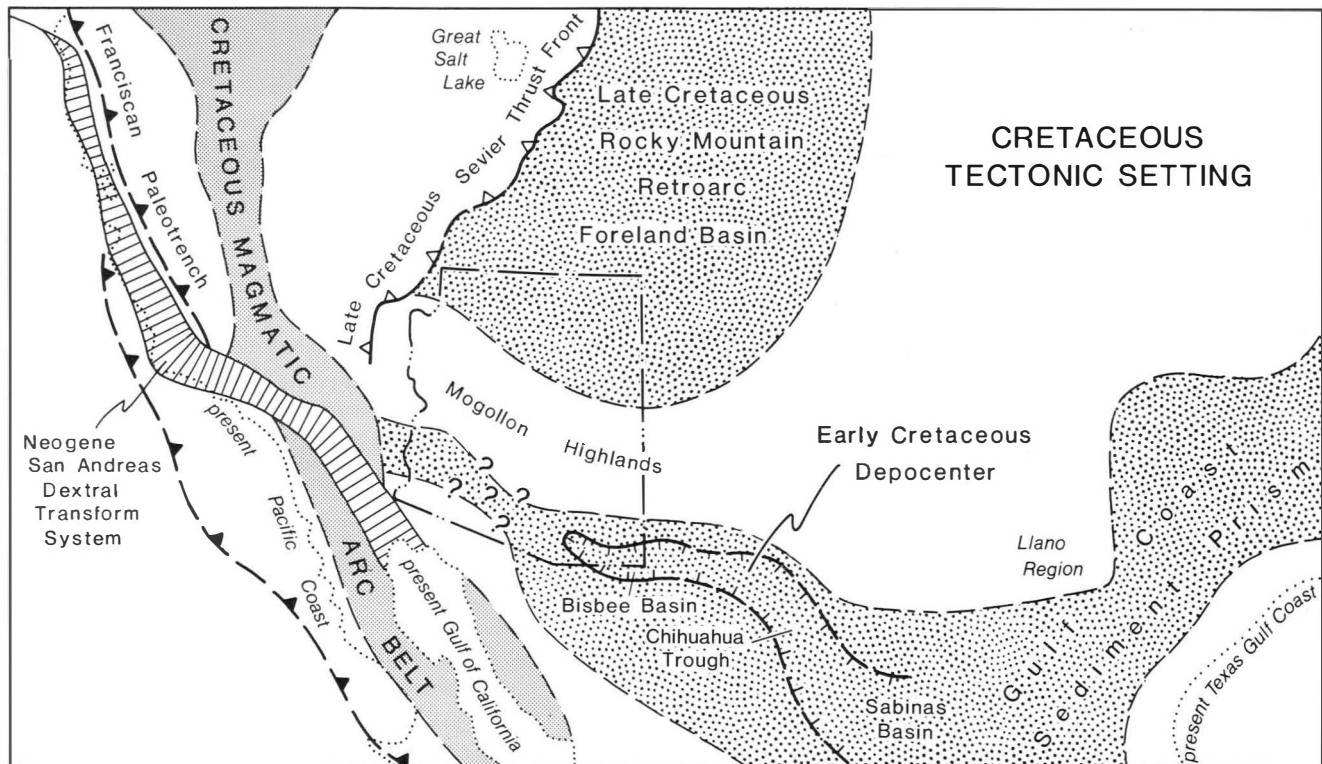


# MESOZOIC ROCKS OF SOUTHERN ARIZONA AND ADJACENT AREAS

Edited by William R. Dickinson and Margaret A. Klute



ARIZONA GEOLOGICAL SOCIETY DIGEST VOLUME 18

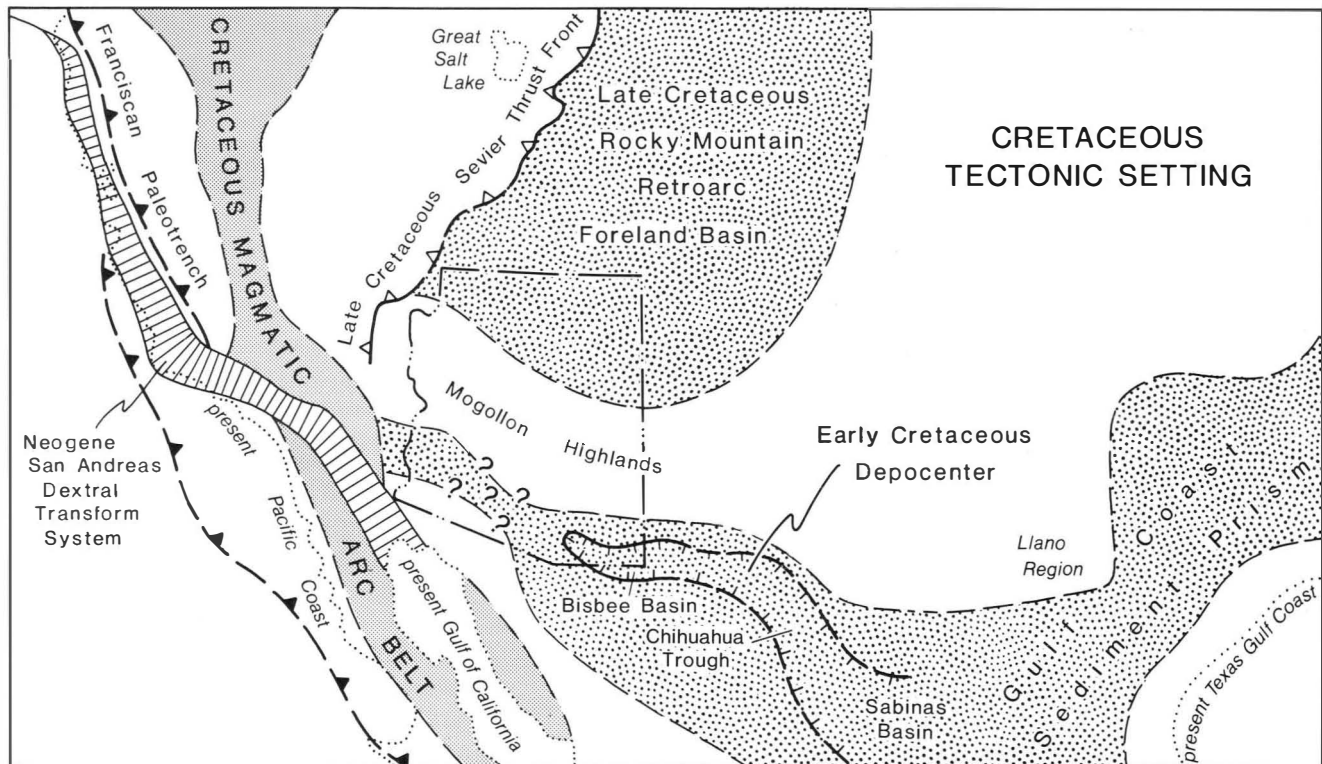
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1987

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## ACKNOWLEDGMENTS

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## FOREWORD

Over the past decade or so, a wealth of new information has been gathered in the field and in the laboratory about the Mesozoic rocks of southern Arizona and adjacent areas of California, Sonora, New Mexico, and Chihuahua. Research groups from the U.S. Geological Survey, the University of Arizona, and several other universities on both sides of the international border have all been active in the effort to understand Mesozoic relations better. The new data have led some workers to postulate significant new interpretations about the Mesozoic geologic history of the region.

Publication of this volume reflects the desire of the officers and members of the Arizona Geological Society to make as much of this new knowledge as possible available to geoscientists everywhere in concise and convenient format. However, no papers published previously in standard journals or other series are repeated here. The contents of the contributions are otherwise accessible only in widely scattered theses and dissertations of unwieldy size, or else are buried in files not accessible at all to the profession at large.

It is a truism that no progress is ever made in geology without standing on the shoulders of those who have gone before. In the present instance, most authors of this volume owe a clear debt to previous pioneering work on the Mesozoic of southeastern Arizona. Without slighting anyone else, we call special attention to the seminal work, lovingly pursued and patiently assembled, of Philip T. Hayes and Harald Drewes. Their maps and publications, cited repeatedly in this volume, constitute a valued resource for all who entered the lists later. Although some papers herein challenge specific conclusions that they or their coworkers have reached, the reader should never lose sight of the fact that the central body of their synthesis remains intact as a valid point of departure for all future workers in the region.

Because little current research is underway on porphyry copper systems, the Laramide episode of latest Mesozoic and earliest Cenozoic time does not command the space in this volume that it might be thought to deserve from its inherent importance. For recent interpretations of Laramide geology in southern Arizona, interested readers are referred to the 1982 book, "Advances in Geology of the Porphyry Copper Deposits, Southwestern North America," edited by Spencer R. Titley and published by the University of Arizona Press.

Other pertinent information on the Mesozoic geology of southern Arizona and adjacent areas is included in the following special volumes published during the last decade:

(a) "Land of Cochise, Southeastern Arizona," the guidebook for the twenty-ninth annual field conference of the New

Mexico Geological Society in 1978 (edited by J.F. Callender, J.C. Wilt, and R.E. Clemons);

(b) "Geology of Northern Sonora," the guidebook for field trip #27 of the 1979 annual meeting of the Geological Society of America in San Diego (edited by Thomas H. Anderson and Jaimie Roldan-Quintana and published jointly by the Instituto de Geologia of the Universidad Nacional Autonoma de Mexico in Hermosillo, Sonora, and by the University of Pittsburgh);

(c) "Studies in Western Arizona," Volume XII of the Arizona Geological Society Digest published in 1980 (edited by Judith P. Jenney and Claudia Stone);

(d) "Mesozoic-Cenozoic Tectonic Evolution of the Colorado River Region, California, Arizona, and Nevada" (the Anderson-Hamilton Volume edited by E.G. Frost and D.L. Martin for Cordilleran Publishers in conjunction with the 1982 meeting of the Cordilleran Section of the Geological Society of America in San Diego);

(e) "Geology and Mineral Resources of North-Central Chihuahua," the guidebook for the 1983 field conference of the El Paso Geological Society (edited by K.F. Clark and P.C. Goodell);

(f) "Frontiers in Geology and Ore Deposits of Arizona and the Southwest," Volume XVI of the Arizona Geological Society Digest published in 1986 (edited by Barbara Beatty and P.A.K. Wilkinson).

Critical investigations of Mesozoic age relationships using several methods of isotopic geochronology are currently underway at several laboratories using rock samples collected within the region treated here. As most of this work was still at an incomplete stage when this volume went to press, few of its fruits could be included. Results expected soon should resolve some of the issues raised by authors of this volume, and will probably also raise new questions not previously suspected.

We hope that geoscientists will see this volume as just one step on the path to better understanding of Mesozoic geology in southern Arizona, and will take the conclusions of its authors as a stimulus to further work leading to yet more definitive interpretations.

W.R.D. and M.A.K.

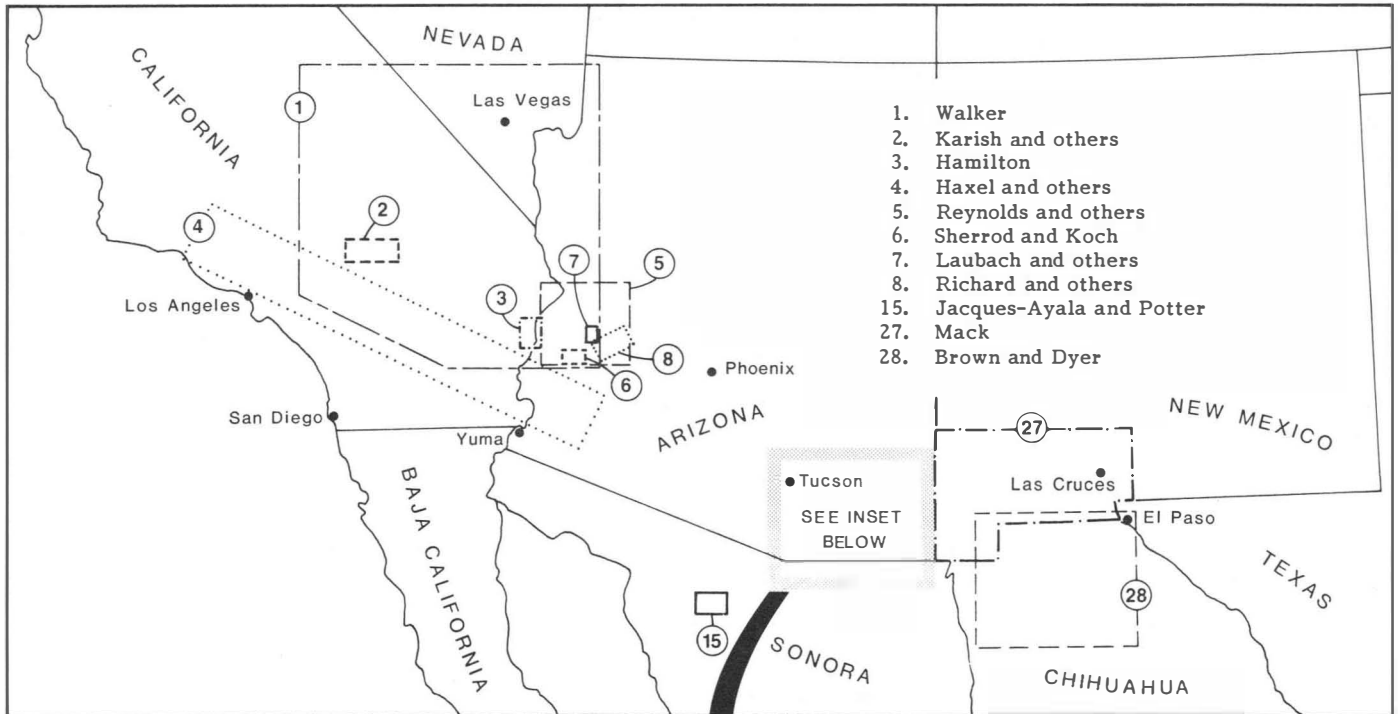
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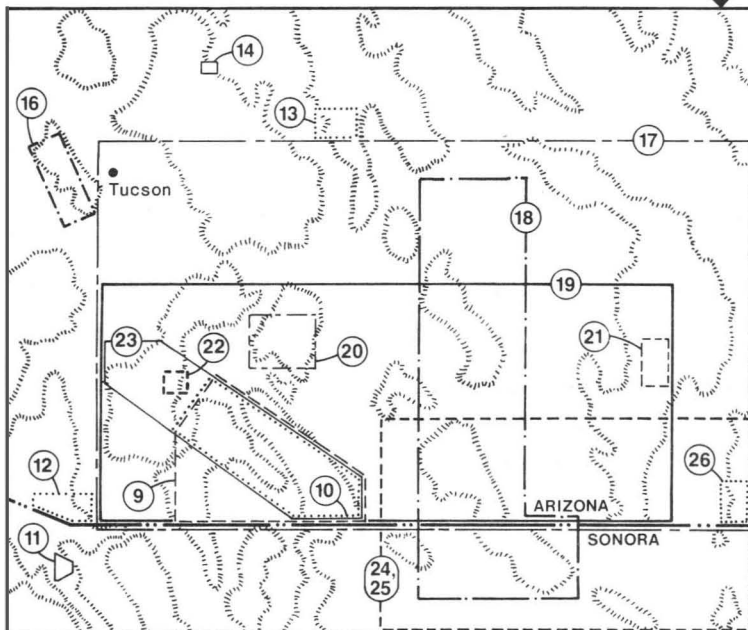
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