STRATIGRAPHY AND DEPOSITIONAL HISTORY OF LATE CRETACEOUS AND PALEogene ROCKS, TRANS-PECOS TEXAS

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Introduction

The last comprehensive review of the stratigraphy and depositional history of Late Cretaceous (Campanian and Maastrichtian) and Paleogene rocks of the Trans-Pecos region was presented by Wilson (1970). Nineteen years of paleontologic, stratigraphic, and geochemical studies since Wilson's report have greatly improved our knowledge of these strata. Investigation of Late Cretaceous and Paleogene stratigraphy is an ongoing project and many problems remain. But a stratigraphic framework and depositional history that is more refined than that presented by Wilson in 1970 is now known, and a summary of these results is warranted.

Late Cretaceous and Paleogene strata in Trans-Pecos, Texas are important because they contain a record of the:

a) northeasterward progradation of the Late Cretaceous strandline and transition to continental deposition;

b) inception and termination of the compressional deformation of the Laramide orogenic period;

c) initiation of Tertiary volcanism; and,

d) southernmost known Paleogene terrestrial large faunas in North America.

My research has focused on the middle to late Eocene rocks of the Trans-Pecos region, so I deserve no credit for the work of the many investigators cited below who have studied the Late Cretaceous through early Eocene strata. Compiling the work of many investigators from several institutions led to the problem of summarizing the results of conflicting studies. For example, in recent years there has been some disagreement as to what is the most useful stratigraphic nomenclature for Late Cretaceous and Tertiary rocks.