



Paleontologic database for the Guadalupe Peak 1:100,000 Quadrangle: A prototype for the National Paleontologic Database, Paleodata

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Open-File Report 2008-1141

U.S. Department of the Interior
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U.S. Geological Survey, Reston, Virginia: 2008

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Suggested citation:
Wardlaw, Bruce R., 2008, Paleontologic database for the Guadalupe Peak 1:100,000
Quadrangle: A prototype for the National Paleontologic Database, Paleodata: U.S.
Geological Survey Open-File Report 2008–1141, 99 p.

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1. [Paleontologic database for the Guadalupe Peake 1:100,000](#)
 [Quadrangle](#) (Available in a separate file)

Conversion Factors

Multiply	By	To obtain
Length		
meter (m)	3.281	foot (ft)

Paleontologic database for the Guadalupe Peak 1:100,000 Quadrangle: A prototype for the National Paleontologic Database, Paleodata

By Bruce R. Wardlaw

Introduction

This report is a compilation of most of the known fossil locality data from Guadalupe Peak 1:100,000 quadrangle, West Texas. The data represent several major collection efforts over the past century by the Smithsonian Institution, the American Museum of Natural History, and the U.S. Geological Survey.

This dataset is not meant to be all inclusive but instead is an attempt to pull together the vast amount of paleontologic data originally collected by Girty (1908) and King (1948), much of which is unpublished and (or) poorly located. The author visited most of the major fossil collection sites to collect for conodonts on a ten-year program funded by the Smithsonian Institution for collaborative research with Richard E. Grant. Guadalupe Mountains National Park occupies the northern part of the quadrangle, and the Park Service has been very helpful over the years in compiling the data and relocating the collection sites.

Localities are given in latitude and longitude in decimal degrees, measured sections have the base of section located and samples are listed in meters above base (mab). Highlighted (in red) fossil units indicate a holotype for the species and that a digital image is available. Age assignments are in the current internationally accepted time scale (Gradstein and others, 2004). All fossil identifications are those of the original authors, unchanged. Locality information for Cooper and Grant's identifications are found in Cooper and Grant (1972), many of which are re-located here. Most of Girty's (1908) localities and all of King's (1948) localities were well located by King (1948, plate 2). In the table AMNH stands for American Museum of Natural History, USNM stands for U.S. National Museum (Smithsonian Institution) and USGS stands for the U.S. Geological Survey in locality and sample numbers. Individual researcher's numbering and sampling identifications vary and are reported here as they appear in the reference or in my fieldbook. Fossil units are identified as the author reported it, and not separated into genus and species to maintain the integrity of the identification.

This dataset serves as the prototype for the National Paleontologic Database, part of the National Geologic Map Database Project. The database is intended to be indexed to 1:100,000 quadrangles of the U.S. The minimum number of fields and information within those fields is shown in the following files.

During the course of developing this test model for a paleontological database, a stack of browned index cards was found in a dark and dank corner of the Smithsonian's Natural History Museum. These cards (fig. 1) had the handwritten identifications of George H. Girty (in pencil) of most of the fossil collections of P. B. King (1948, plate 2). Most of these faunas were never published. The index cards are currently retained at the USGS National Center, Reston, Virginia.

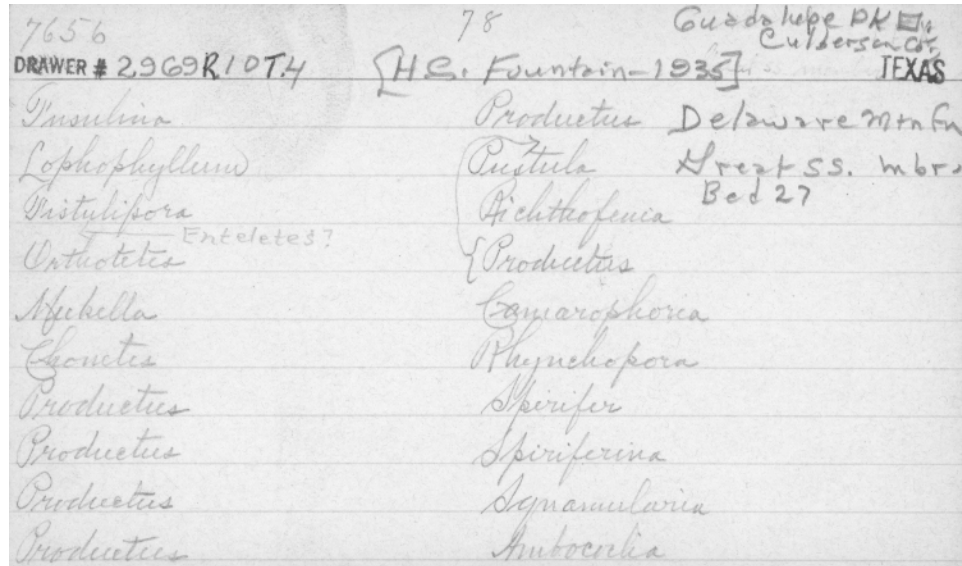


Figure 1. Example of index card with the handwritten identifications of G. H. Girty.

In addition, the few collections reported by Girty (1908) in his Guadalupian monograph were poorly located. King (1948) had located them all in great detail.

In an effort to preserve these data, the fossil collections of Girty (1908) and King (1948) from the Guadalupe Peak 1:100,000 Quadrangle are given here with latitude and longitude and the original designations of Girty. If more than one species of a particular genus was present, but not identified by Girty, it was listed as an additional generic entry (as *Productus* in the above example). Here they are listed as *Productus 1*, *Productus 2* etc. Asterisks by a locality number simply mean Girty or King recollected that locality.

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Table 1. [Paleontologic database for the Guadalupe Peak 1:100,000 Quadrangle.](#)