On the Road to the Roadside Geology of Oklahoma

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ABSTRACT

Mountain Press Publishing Company is perhaps best known amongst geologists for its Roadside Geology series. To date, guidebooks for 37 states are available, but Oklahoma isn't one of them. I am working on the Roadside Geology of Oklahoma and plan to publish it in 2019. Like most of the books in the series, the first part will cover some basic geology – geologic time periods, rock types, structures, economic geology, and history. I will summarize the role petroleum has played in the state's development and describe some very fundamental oil and gas geology and drilling and production practices (e.g., pumpjack vs. Christmas tree). The history will include the development of Oklahoma's basins and mountain ranges as well as a description of its marine shelves and shorelines. The story will start with the state's attempt to split apart in the Cambrian and end with its Pleistocene rivers and dune fields. Everything will be geared to the layman interested in what they see as they drive across the state.

The book will describe the geology along about 3900 miles of Oklahoma's major highways and will consist of four major parts – the Eastern Mountains and Hill Country, the Arbuckle and Wichita Mountains, the Red Bed Plains and Sandstone Hills, and the High Plains. Some smaller parts will include more detailed geology of the Mesozoic near Kenton, the Wichita Mountains Wildlife Refuge, the Arbuckles along I-35, and the Oklahoma City and Tulsa metro areas.

The highway logs will also include "blurbs" or "asides" describing unique (or almost unique) features of Oklahoma's geology or human interactions with it. Some examples are: Claremore's radium baths, the Ames impact structure, hourglass selenite crystals at Great Salt Plains, the Miami-Picher lead-zinc district, the Midco insect beds, the Wichita Mountains "gold" rush, coal miners' union activity in McAlester, state parks, Bartlesville and Phillips Petroleum, Optima Dam and its non-reservoir, the Oklahoma – Texas non-border along part of the Red River, and of course, dinosaurs in the Morrison and Antlers formations. Researching and writing the "blurbs" has been a tremendous amount of fun and how many of the nearly 70 I am planning Mountain Press will allow me to include in the book is anyone's guess.