

New book takes comprehensive look at *The Geology of Mississippi*

By Beverly Pettigrew Kraft

It's been 101 years since the last publication of a comprehensive book about the state's geology. *The Geology of Mississippi*, by David T. Dockery III and David E. Thompson, was published earlier this year.



The authors in their introduction say that the book is a resource for laymen and professionals regarding the state's geology, geography, stratigraphy, paleontology, physiography, ecology and mineral resources.

Gov. Phil Bryant in a foreword said, "This book will serve as the primary source of information about the geology of Mississippi for years to come."

The last comprehensive report was published in 1915 and revised in 1919 and 1925 by State Geologist E.N. Lowe and titled *Mississippi: Its Geology, Geography, Soils, and Mineral Resources*. Numerous reports and bulletins since that time have covered smaller slices of the state's past. Dockery combed all of that research

and combined it with his vast knowledge to produce a meticulously detailed and documented volume.

"This is everything we know up until the day it was published," said geologist James Starnes. "David saw the need to put all of this stuff together. David worked diligently on going through the literature and putting everything into perspective."

Brief newsletter treatment can't do justice to the 751-page tome. Here is a glimpse:

During the plate collisions that formed super-continent Pangea during Pennsylvanian and Permian periods "...Mississippi was in the middle of Pangea with the Ouachita and Appalachian Mountains across its middle. The roots of these mountains are preserved today beneath a cover of Cretaceous and Tertiary strata along a structure known as the Central Mississippi Uplift...."

"Pangea was pulled apart into separate continents in the Triassic and Jurassic periods, forming new seaways. In the Late Jurassic, several thousand feet of salt were deposited in a shallow salty sea that covered southern Mississippi. Today Mississippi has fifty-three salt domes with crests at less than 6000 feet below the surface."

"During the Cretaceous period, volcanic islands came to life in the seaway that covered west-central Mississippi. Today, the throats of two Cretaceous volcanoes extend to within half a mile of the surface at Jackson and at Midnight, Mississippi."

Jackson had an active volcanic island about 75 million years ago. "First to colonize the new Jackson Dome islands would have been Pterosaurs...."

The book is an official publication of the Mississippi Department of Environmental Quality. Dockery is division director of Surface Geology and Thompson is a geologist there. *The Geology of Mississippi*, printed by University of Mississippi Press, is available from MDEQ or on Amazon.com. Price is \$80.