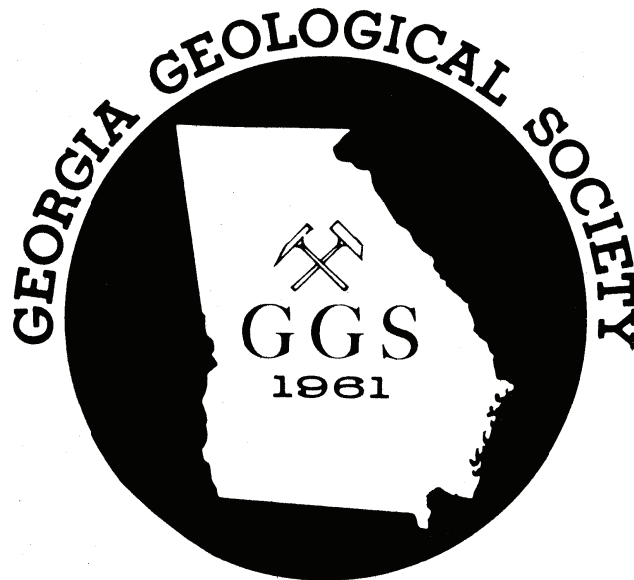


**THE EMERSON-TALLADEGA FAULT, THE GREAT  
SMOKY FAULT, AND ADJACENT FOLDING AND  
FAULTING: GEOLOGY AND HISTORICAL  
INTERPRETATIONS BASED ON DETAILED  
GEOLOGIC MAPPING IN POLK AND BARTOW  
COUNTIES, GEORGIA**

**EDITED BY:**

**RANDY L. KATH**



**43<sup>TH</sup> ANNUAL FIELD TRIP OF THE GEORGIA GEOLOGICAL SOCIETY  
CARTERSVILLE, GEORGIA, OCTOBER 17-19, 2008**

**GEORGIA GEOLOGICAL SOCIETY GUIDEBOOKS  
VOLUME 28, NUMBER 1 OCTOBER 2008**

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**Enjoy the trip!**

## **DEDICATION**

The Georgia Geological Society would like to dedicate this year's annual fieldtrip guidebook to William John McGee, Jr.

John was born in Yokohama, Japan. He lived in Washington State until 1963 when his family moved to Gainesville, Georgia. John received a B.S. in Geology from Georgia Southern in 1971. He began his career with Hall Aggregates which was purchased by Georgia Marble then Blue Circle and finally Lafarge. John was an active member in the Georgia Geological Society and an extremely valuable resource to Lafarge and the geologic community. John's discussions during the Society's fieldtrip social and on the outcrop will be greatly missed.

John was survived by his wife Vickie McGee, daughter Terra Casper and granddaughter Savannah Grace Casper

## **ACKNOWLEDGMENTS**

As always the Society wishes to acknowledge a number of companies and individuals for their support and assistance in preparation for this year's fieldtrip. First, of course, we thank Randy Kath for agreeing to lead and organize the trip and to edit the guidebook. He has been ably supported by the other fieldtrip leaders, especially Tom Crawford and Tim Chowns. The guidebook was printed at the University of West Georgia. Fieldtrip registration and logistics were handled by Randy Kath and Tim Chowns.

Without the support and corporation of many land owners in Polk County we would not have been able to conduct the detailed geologic mapping necessary for this guidebook. We would like to thank all of the land owners for allowing access to properties. Especially we would like to thank Mr. Jerry Jackson and his wife Cornelia. Jerry's appetite for learning was never ending. During my reconnaissance mapping along Jackson Road, Jerry was very inquisitive trying to understand why one would look at rocks. After hours of discussion, Jerry loved to talk about his property, he allowed us unfettered access. Every time we returned to refine our understanding of this area, Jerry allowed us access and was curious what we had found. Thanks again to Jerry and Cornelia for their support.

Other land owners who also allow us access for the fieldtrip include Mr. Eddie Redding, owner of the borrow pit that we will visit at Stop 1. Also, Mr. Dan Simon property, Stop 3, was a necessary and integral part of the geologic puzzle of this area. The Society thanks all of the property owners!

The Friday night social is an important part of the fieldtrip weekend. This year financial support was generously provided by Vulcan Materials Company, through the assistance of Tony Roberts, and by LaFarge Southeast Region, through the assistance of Oliver Costello. The Social and Guidebook are dedicated to John McGee.

We hope everyone enjoys the trip. Several generations of geologists have contributed to the conclusions presented in this guidebook. Many of them will attend this meeting to discuss interpretations. We can all look forward to a stimulating weekend.

## INTRODUCTION

Once again the Georgia Geological Society returns to one of the most complex and enigmatic regions of Georgia geology- the eastern boundary and southern boundary of the Paleozoic sedimentary rocks of northwest Georgia; where they are in a faulted relationship with igneous and metamorphic rocks of the Piedmont/Blue Ridge.

This area was chosen in 1966 for the initial field trip of the newly formed (1961) Georgia Geological Society- to consider “The Cartersville Fault Problem” (Bentley, Robert D. and others, 1966).

In succeeding years, Georgia Geological Society fieldtrips focused either partly or wholly on this same area: in 1970, 1977, 1982, 1989, 1996, 2004, and now in 2008.

Even a casual review of the geologic maps and commentary provided as guides for these field trips shows emphatically that not all of us can be right all of the time. Unfortunately (?) none of the “discussions” on the outcrop were recorded for posterity. These were often intense; always entertaining, especially to the non-participants; and perhaps sometimes, even productive.

Published literature on various aspects of this area is voluminous; and a list of “*disagreements*” would be longer than a list of “*agreements*”.

Considering this history, perhaps you will be pleased to note that, presented here, for the 2008 Georgia Geological Society 2008 Fieldtrip, is the most recent “final word” on the geology of this profoundly intriguing enigma.

From several who have been there- and had to change an interpretation a time or two. Until next time . . .