



**102 N. College Street, Suite 1200  
Tyler, Texas 75702**

The East Texas Geological Society will be hosting a one day combination seminar/luncheon on November 15, 2017. Our speaker for both functions will be Dr. Jeff Dravis (biography attached). Most of you are familiar with Dr. Dravis and his carbonate geology work. He has spoken here before and many of you have attended his short courses and field trips.

The seminar will be "Overview of the Austin Chalk in South Texas and Louisiana", an outline of which is attached. Many of our members are aware of the new Austin chalk horizontal activity in Karnes County and the huge new wells (in an old play) that are being made. The leasing/activity that has ensued runs from South Texas on into South Louisiana. Come hear how this play can be made in East Texas!! The seminar will run from 9 a.m. – 11 a.m., then break for the luncheon meeting, then continuing the Austin Chalk seminar from 1:15 p.m. to 3 p.m. and for as long as there are questions or comments. Cost for the seminar and luncheon meeting will be \$80.00.

The luncheon meeting topic, also by Dr. Dravis, will be "Influence of Strong Easterly Trade Winds on Carbonate Plays" (see attached abstract). Reservations for the luncheon only can be made on the ETGS website.

If you would like to attend the Seminar, please send in the bottom of this letter along with \$80.00. The fee includes the luncheon talk and meal plus an Austin Chalk seminar book prepared by Dr. Dravis. It will help ETGS greatly if you can make an early reservation. If there are any questions, please call Russell Jackson at 903-593-3071

---

\_\_\_\_\_ will be attending the November 15 Austin Chalk Seminar and luncheon. Enclosed is \$80 per person.

Mail to: ETGS  
102 N. College Ave., Suite 1200  
Tyler, TX 75702

**OVERVIEW OF THE AUSTIN CHALK IN SOUTH TEXAS AND LOUISIANA:  
Depositional Setting, Diagenesis and Porosity Evolution, and Play Development**

**Jeffrey J. Dravis Ph D**  
Dravis Interests, Inc.  
Houston, Texas

**INTRODUCTION**

Depositional Chalks Defined  
Controls On Porosity Evolution In Chalks  
Classical North Sea Chalks – The Standard for Comparison

**AUSTIN CHALK TREND IN TEXAS**

Introduction And Paleogeography  
Structural Framework  
Depositional Facies  
Porosity Evolution  
Role Of Fractures  
Play Types And Case Studies

**AUSTIN CHALK TREND IN SOUTH LOUISIANA**

Introduction and Paleogeography  
Structural Framework  
Play Types And Case Studies  
Contrasts With The Austin Chalk In Texas

**QUESTIONS AND DISCUSSION**

# **Influence of Strong Easterly Trade Winds on Carbonate Plays:**

## **Relationships Developed from Caicos Platform (Southeastern Bahamas) and Applied to the Cretaceous of the Gulf of Mexico**

JEFFREY J. DRAVIS

Geological Consultant

Dravis Interests, Inc., and Dravis Geological Services, Houston, Texas

Adjunct Professor, Rice University, Houston, Texas

Strong and persistent easterly trade winds define Holocene patterns of carbonate sedimentation across the Caicos Platform in the southeastern Bahamas. Resultant sedimentary facies models have wider applicability to the exploration for subsurface carbonate plays than existing oceanic models, based on the northern Bahamas, because most ancient basins were intracratonic and uninfluenced by oceanic processes. Excitingly, these newer, alternative models offer the opportunity to explore in areas previously considered nonprospective by northern Bahamian standards. The Caicos models have equal application to both carbonate platforms and ramps in the rock record, as well as to broad cratonic epeiric seas not connected to an open ocean.

The grainstone-dominated Caicos Platform exhibits reservoir potential over much of its surface, in contrast to northern Bahamian platforms, where oceanic tidal currents or swells and gentle easterly trade winds limit reservoir potential to platform margins. Strong easterly trade winds across Caicos Platform produce widespread Holocene platform-interior oolitic, skeletal and grapestone sand bodies on this platform. Orientations of the ooid sand bodies depend on preexisting topography and water depth, a relationship applicable to the rock record. Strong trade winds further permit reefs and ooids to coexist in many settings, allow isolated linear reefs to flourish on certain leeward platform margins, and promote effective off-bank transport of carbonate sands to create onlapping grainstone wedges.

Models gleaned from Caicos Platform better explain the occurrence of Cretaceous reef and/or oolitic reservoirs well inboard of platform margins (Black Lake Field in Louisiana; Fairway Field in East Texas) than do the existing northern Bahamian models. Caicos Platform models also better explain the origin of the thick onlapping wedge of skeletal sand at Poza Rica oilfield (Mexico).

Caicos Platform easterly trade wind models apply equally to any subsurface basin or basin portion that developed 5-22 degrees north or south of the paleoequator. Future carbonate exploration or exploitation now should factor in not only the geological age of a sequence of interest, but also its physiographic and climatic setting at a global and local scale.

## **JEFFREY J. DRAVIS**

Dravis Interests, Inc. and Dravis Geological Services  
Houston, Texas (<http://www.dravisinterests.com>)

Jeff Dravis is a consulting carbonate geologist, primarily focused on aiding in the discovery of oil and gas deposits, or enhancing their development once they are discovered. He also conducts applied training seminars for industry.

Jeff received his Bachelor of Science degree in Geology from St. Mary's University in San Antonio, Texas in 1971. He received a Master of Science degree in Marine Geology in 1977 from the University of Miami's Rosenstiel School of Marine and Atmospheric Sciences, where Dr. Harold R. Wanless was his thesis supervisor. His thesis was entitled "Holocene Sedimentary Environments on Eleuthera Bank, Bahamas." In the summer of 1976, Jeff entered Rice University, Houston, Texas, to begin work on deep-water carbonates under the direction of Dr. James Lee Wilson. In 1980, he was awarded a Ph D in Geology; his dissertation was entitled "Sedimentology and Diagenesis of the Upper Cretaceous Austin Chalk Formation, South Texas and northern Mexico."

In 1978, Dr. Dravis began his professional career with Exxon Production Research Company in Houston. There, he conducted applied research on carbonate facies, diagenesis and porosity evolution, and also headed up Exxon's worldwide training efforts in carbonates. This training included teaching in-house seminars, as well as leading combined modern (Bahamas and Florida) and ancient (Texas and New Mexico) carbonate field seminars.

In 1986, Jeff started his own consulting practice in Houston. In 1988, he founded Dravis Interests, Inc. to provide technical expertise and training in applied carbonate petroleum geology to the oil and gas industry. In May of 2000, Dravis Geological Services was created to handle all technical consulting projects. Jeff has been involved in 179 technical projects worldwide, working sequences ranging in age from Cambrian to upper Tertiary. He has presented 254 in-house and field seminars to industry, both on a public and private basis, including dozens of seminars to Caicos Platform in the southeastern Bahamas. His clients are domestic and foreign oil companies, both majors and independents.

Jeff has been an adjunct Professor of Geology at Rice University since 1987, where he teaches parts of courses, takes students into the field, and periodically serves on thesis committees. For the past two years, he has taught the carbonate geology segment of the University of Houston's Professional Master's Program in Petroleum Geology.