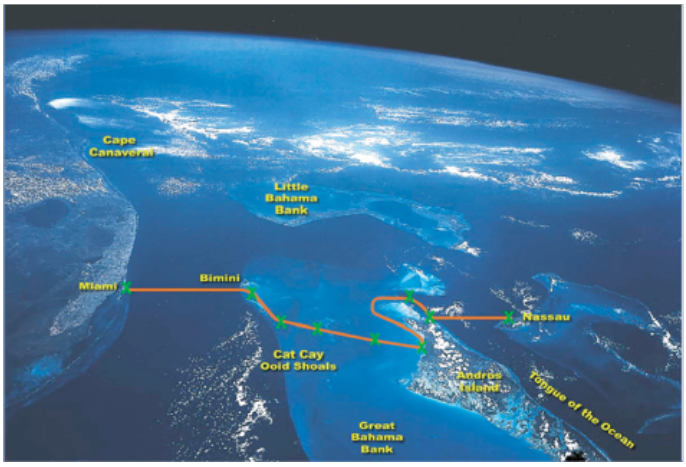

CSL
University of Miami

1. Bahamas Field Seminar

CSL – Center for Carbonate Research

FACIES SUCCESSIONS ON GREAT BAHAMA BANK

Implications for Exploration and Reservoir Characterization

Core, seismic workshop and 6 days field seminar

Leaders: Gregor P. Eberli and Paul M. (Mitch) Harris

Location: Begins and ends in Miami, Florida. The first day we fly to Bimini, to board the chartered Research Vessel Coral Reef II that will provide our lodging and food as we cross Great Bahama Bank for a series of key field stops. We will fly from Nassau to Miami on the last day.

Objectives:

1. **Illustrate the depositional processes and dimensions of facies belts** on an isolated platform.
2. **Improve the interpretation of subsurface data** of carbonate systems.
3. Relate filling of **accommodation space and facies heterogeneities** to reservoir models.

Who Should Attend: Petroleum geologists, geophysicists and reservoir engineers who are working in carbonates and need to understand facies heterogeneities and porosity distribution at exploration and production scales.

Content: This seminar explores the vertical and lateral facies successions and resultant heterogeneities of Great Bahama Bank.
The seismic and core workshop on day 1 illustrates the architecture of the prograding western margin of Great Bahama Bank. Cores across the platform margin provide a unique opportunity to examine the sequence stratigraphic distribution of facies and diagenetic modification in platform carbonate reservoirs.

Log and laboratory data from these cores provide insights into porosity/velocity relationships and permeability distribution in platform carbonates.

Days 2 – 6 are spent in the Bahamas. The facies belts on Great Bahama Bank display the depositional variation that may occur in ancient hydrocarbon reservoirs. We explore this spatial heterogeneity on several scales, on the large carbonate platform scale but also within each facies belt such as ooid shoals and reef. Simultaneously we explore the fundamental controlling processes and the sedimentary structures that record these processes. Together, the sedimentary structures, dimensions and lateral variability of classic reservoir facies are examined during the seminar. Field stops include the leeward platform margin (Cat Cay Ooid Shoal), the platform interior, the tidal flats of Andros, the ooid shoals of Joulters Cay, patch reefs, and the Andros Island barrier reef. Pleistocene outcrops on Bahamian islands graphically show how these facies are preserved in the ancient rock record.

In the water at Joulters Cay ooid shoal

In the tidal channel of Andros Island

Cost: ~$7,500 - Transportation to and from the Bahamas, all ground transportation, on-board boat accommodation in the Bahamas, meals, and course notes are included.

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