



P·A·P·G

Pittsburgh Association of
Petroleum Geologists

An AAPG Affiliated Society

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**PAPG is excited to announce plans for the spring 2009 Fieldtrip
“CRAZY ABOUT THE CATSKILL”**

**FACIES AND SEDIMENTARY ENVIRONMENTS OF THE CATSKILL SYSTEMS
TRACT IN CENTRAL PENNSYLVANIA**

The purpose of this PAPG field trip is to examine the depositional history of the central Appalachian Basin. This trip is intended to provide an overview of Appalachian history including mountain building events that resulted in deposition of the petroleum-bearing sediments of the Upper Devonian as well as the creation of geologic structures that influence the distribution of petroleum reservoirs. Stops will focus on outcrops of the various members of the Lock Haven and Catskill Formations in Central Pennsylvania whose stratigraphic equivalents are found in the gas and oil fields of Western Pennsylvania. (see attached sheet for more information)

SCHEDULE: The bus will depart from Pittsburgh at 7:00 AM on Friday, **May 1st, 2009** and travel to State College, Pennsylvania, where we will check into the hotel. This leg of the trip will take approximately 4 hours. After hotel check in, we will break for lunch then meet up with the trip leaders and attend a brief lecture at the Penn State Geosciences Department on Appalachian Basin geologic history with an overview of the outcrops before heading to the field. Most of the outcrops for this field trip are near State College, in Centre and Clinton counties. We will stay overnight in State College and return to the field the next morning. Plan to arrive back in Pittsburgh by 6 or 7 PM on Saturday, **May 2nd, 2009**.

Because of lack of parking space for buses at many of the localities, attendance is limited to 50 registrants (one bus).

COST: Total cost of the field trip is **\$275 per person for PAPG members, \$325 for nonmembers and \$100 for students (limit 5)**. This price includes bus transportation, lodging, two box lunches, snacks and beverages, and field trip guidebook.

HOTEL: A block of rooms has been reserved at the Days Inn in down town State College. The cost of lodging is included in the registration.

TRIP LEADERS: Rudy Slingerland, Mark Patzkowski & Dan Peterson, Pennsylvania State University.

TRIP COORDINATOR: Eric Ober, Texas Keystone Inc.

Facies and Sedimentary Environments of the Catskill Systems Tract in Central Pennsylvania

Rudy Slingerland, Mark Patzkowski, Dan Peterson
May 2009

This field trip will illustrate the facies and environments of the Late Devonian Lock Haven and Catskill Formations along the Allegheny Front in central Pennsylvania. Sedimentation at this time was dominated by a westward prograding shoreline complex with three deltaic depocenters, one of which occupied the center of the state. These were fed by rivers that arose in the Acadian Highlands to the east (present coordinates), and flowed westward across a proximal alluvial plain onto a vast low gradient coastal plain where sediments were deposited within an upper deltaic or lower alluvial plain setting. The low palaeolatitude (less than 20°) resulted in a tropical climate with alternating wet and dry seasons along the southern edge of the Euramerican landmass. Sedimentation occurred on a muddy shelf ramp and in tide-dominated deltaic and interdeltatic environments, the latter exhibiting features of an open as well as a barred coastline.

The strategy of this trip will be to compare facies within and between the various members of the Lock Haven and Catskill Formations at the Milesburg and Port Matilda sections, and will include outcrops and wireline logs of the Council Run Sands. The trip will finish at the famous Red Hill tetrapod locality near Heiner, PA where a diverse penecontemporaneous community including terrestrial invertebrates and a wide range of vertebrates were living within aquatic habitats. Among the vertebrates are several limbed tetrapodomorphs that took advantage of the burgeoning shallow water habitats on the floodplain.

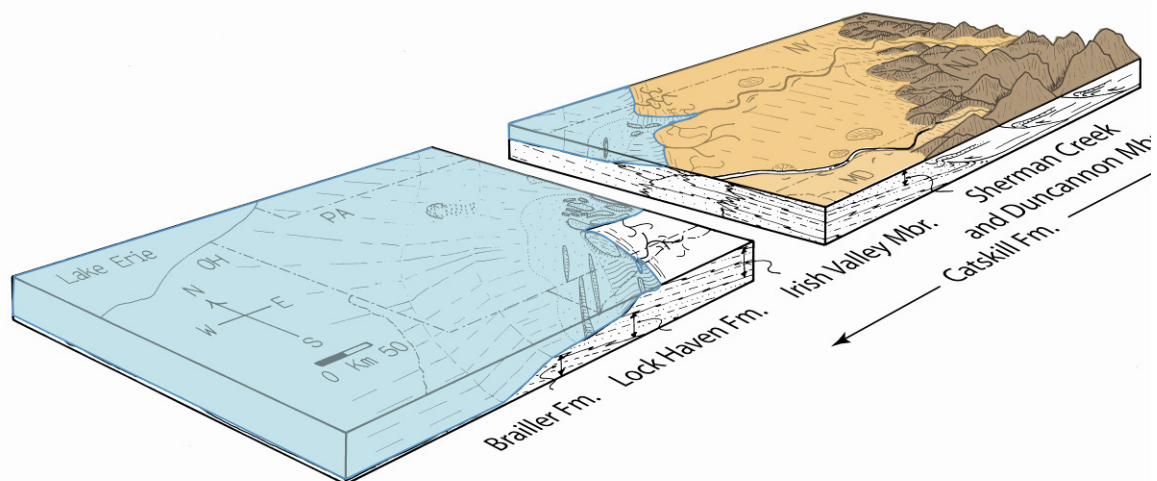


Figure 1. Block diagram of Pennsylvania in the early Late Devonian (Slingerland).