

# **Important Items**

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- 1. No refunds on registration after the pre-registration deadline unless we are above the break-even point. Registration refunds will only be given upon request.**
- 2. For PA State employees who plan to have their registration paid by the state, our Federal ID # is 25-1592474. Also, all government employees must show government identification at the time of registration.**
- 3. No confirmation of registration acceptance will be sent. You will be notified only if your registration is not accepted.**
- 4. Registration and waiver forms are available and can be completed on-line, using Adobe Acrobat Reader. Please print the waiver form on the back side of the registration form to reduce the amount of paper to be stored.**
- 5. We do not accept credit cards.**
- 6. Registration and payment must be received by Sept. 9 in order to get the reduced registration rates.**

*74<sup>th</sup> Annual Field Conference of Pennsylvania Geologists*

## **History and Geology of the Oil Regions of Northwestern Pennsylvania**

**October 8-10, 2009**

Hosts

Pennsylvania Geological Survey

and

Pittsburgh Geological Society

*Trip Leaders and Contributors*

*Gordon C. Baird, State University of New York at Fredonia, Fredonia, NY*

*Gary M. Fleegeer, Pennsylvania Geological Survey, Middletown, PA*

*John A. Harper, Pennsylvania Geological Survey, Pittsburgh, PA*

*Scott C. McKenzie, Mercyhurst College, Erie, PA*

**Headquarters**

Cross Creek Resort, Titusville, PA

### **PRE-REGISTRATION DEADLINE – SEPTEMBER 9th**

The 74<sup>th</sup> Annual Field Conference of Pennsylvania Geologists returns to northwestern Pennsylvania to celebrate the 150<sup>th</sup> anniversary of the founding of the modern petroleum industry by the successful completion of the Drake Well in Titusville on August 27, 1859. This year the conferees will examine the history of the early oil industry in the Oil Creek Valley area, as well as examine outcrops in Erie and Crawford Counties, and a fascinating Pleistocene esker and kame delta in Butler County.

The first day of the field trip will begin by looking at an excellent outcrop of the uppermost Devonian Berea Sandstone and adjacent rocks in Oil City. From there we'll head north along Oil Creek to relive the history of the early oil days. Stops will include: the McClintock #1 well, the world's oldest producing oil well; Petroleum Centre, the heart of the industry during the early days; an early attempt to mine to the oil reservoirs; Blood Farm, with much of its old oilfield equipment still extant; Pithole, the famous ghost town that provides a sobering look at the rise and fall of an area in the throes of "black gold fever;" and Drake Well Museum where it all started. At the Drake Well, conferees will also have the opportunity to examine an outcrop of the Upper Devonian "Drake Well Formation" (informal name) and search for fossils.

The morning of day two will be spent at a very complete esker-delta-lacustrine plain complex in northern Butler County. The new lidar images clearly show the complex. The story includes a couple of drainage diversions caused by the delta resulting in a stream that flows across and up its valley. In addition to the geomorphic relationships of the complex, we'll also have an opportunity to visit an active sand and gravel pit in the delta, and see the type of sedimentation that occurs in that environment.

The afternoon of the second day of the Field Conference will be devoted to reexamining the long-studied and long-debated end-Devonian stratigraphic succession in northwest Pennsylvania. Advances in global geochronology, recognition of the importance of the Hangenberg mass-extinction event, plus recent discoveries of apparent end-Devonian glacial activity have raised the stakes for improving our knowledge of the stratigraphy and paleontology in this regional time-slice. The results of extensive fieldwork in Crawford County and surrounding areas, as well as a partial review of the extensive and complex history of stratigraphic investigations of area sections will be presented.

Two pre-Conference Trips are planned. Details are listed below.

The speaker at the Friday evening banquet, Neil McElwee, a local historian, will discuss the historical importance of the Funk Well within Oil Creek State Park.

# SCHEDULE OF EVENTS

*Additional and last-minute details are available on-line at <http://fcopg.org/>*

## Thursday, October 8, 2009

- PRE-CONFERENCE FIELD TRIPS-Two Pre-Conference trips are planned. See descriptions and details below.
- CONFERENCE REGISTRATION- 4:00 PM to 9:30 PM in front of the Emerald Room, Cross Creek Resort and Conference Center, Titusville, PA.
- ORIENTATION AND RECEPTION- 8:00 PM - 10:00PM. The orientation will be held in the Emerald Room, Cross Creek Resort and Conference Center, Titusville, PA.

## Friday, October 9, 2009

- REGISTRATION- 6:00 to 7:30 AM in front of the Emerald Room, Cross Creek Resort and Conference Center, Titusville.
- BREAKFAST- 6:00 to 7:00AM-Buffer Breakfast will be available in the Emerald Room, Cross Creek Resort and Conference Center, Titusville.
- FIELD TRIP- 7:30 AM - 5:30 PM- Buses depart from Cross Creek Resort parking lot promptly at 7:30 AM. A box lunch will be served. Coffee, doughnuts and other beverages will be provided.
- RECEPTION- 6:00 PM - 7:00 PM in the Emerald Room of Cross Creek Resort. Hors d'oeuvres and cash bar will be available.
- ANNUAL BANQUET AND BUSINESS MEETING- 7:00 PM - 10:00 PM- Emerald Room of Cross Creek Resort. A buffet dinner will be served. The election of officers will be held at the business meeting.

## Saturday, October 3, 2009

- BREAKFAST- 6:00 to 7:00AM- Buffet Breakfast will be available in Salon D
- FIELD TRIP- 7:30 AM - 5:00 PM- Buses depart from the Cross Creek Resort parking lot promptly at 7:30 AM. A box lunch will be served. Coffee, doughnuts and other beverages will be provided.

**ATTENDANCE** The number of conference attendees is limited to 168 (three 56-passenger buses). If the attendance limit is reached, a waiting list will be developed.

The Field Conference is intended for geologists, earth science teachers and students, including graduate students and undergraduates with a faculty recommendation. ***Please note: in order to encourage student participation, the Field Conference has reduced student registration to \$75.00.*** However, this price is only available to the first 20 student applicants.

## IMPORTANT NOTES

**Several of the field conference stops will require potential stream wading to get to the rocks. Attendees should be prepared to get wet feet and should bring appropriate footwear.**

**TRANSPORTATION-** Transportation is by bus only. **No private cars** are allowed inasmuch as parking space and traffic control require that we limit the number of vehicles.

**PRE-REGISTRATION- Pre-registration is required for all conferees.** To pre-register, fill out and mail the registration form, the original, signed liability release form, and a check or money order for registration fee, made payable to the "Field Conference of Pennsylvania Geologists." **Deadline for receipt of pre-registration is September 9, 2008.** Registrations received after September 9 will require a larger fee for registration.

**A release and hold harmless waiver** is required for this field conference. Failure to sign and return the waiver will result in return of your registration without a reserved space.

**Registrations will be accepted only if accompanied by payment. No reservations will be accepted without prepayment.**

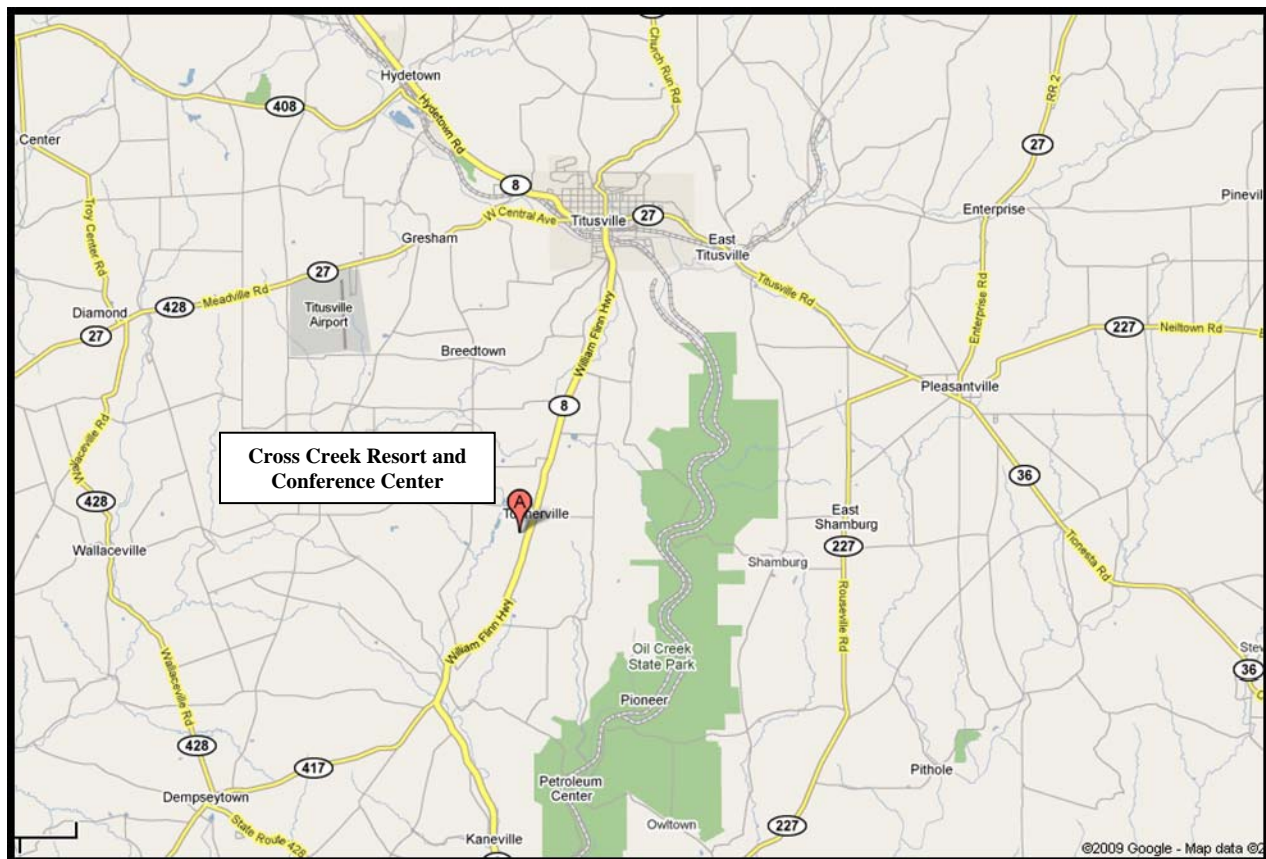
**REFUND POLICY-** Full refunds after September 5 will be honored only if your reserved space can be resold. Otherwise, you may only be able to receive a partial refund for the cost of registration, minus the cost of the guidebook.

**ACCOMODATIONS** The Headquarters for the 2009 Field Conference of Pennsylvania Geologists will be the Cross Creek Resort and Conference Center, 3815 State Route 8, Titusville, PA 16354. It is located on Route 8, four miles south of Titusville (See map below). Direction are available at Cross Creek's website: <http://www.crosscreekresort.com/directions.php>. A block of 90 rooms have been reserved for the Field Conference, and will be held for the nights of October 8 and 9, 2009 **PLEASE BOOK ASAP**. The room rate is \$65.00 for a standard double room or \$85.00 for a suite. **When making your reservation, be sure to indicate that you are with the Field Conference of Pennsylvania Geologists to get the above rate.** The phone number of the Cross Creek Resort is **800-461-3173**. Make your reservations as early as possible.

There are two other hotels located in Titusville, 4 miles south of the FC Headquarters:

Comfort Inn Titusville, 511 West Central Avenue, Titusville, PA. The phone number is **(814) 827-0041**

The Caboose Motel, 407 S Perry St, Titusville, PA 16354. The phone number is **(814) 827-5730**



**74th ANNUAL FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS  
TITUSVILLE, PA –OCTOBER 8-10, 2009  
PRE-REGISTRATION FORM (DEADLINE: SEPTEMBER 9, 2008)**

Please return this form as soon as possible. Registrations will be accepted in the order received.

**Registration must be accompanied by prepayment, and an original signed liability release form.**

**PLEASE PRINT**

NAME \_\_\_\_\_ Daytime telephone no. \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

NAME & AFFILIATION (for name badge)  
\_\_\_\_\_

STUDENT ADVISER'S SIGNATURE \_\_\_\_\_

E-mail \_\_\_\_\_ Fax \_\_\_\_\_

**Signature acknowledging that you have read and accept the conditions on the page entitled "Important Items." Your registration will be rejected if it is not signed.**



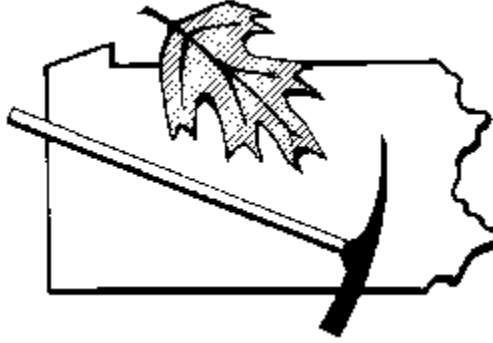
Registration includes <b>guidebook, bus transportation, Thursday evening reception, and admission to the Drake Well Museum</b>	\$ 125.00 through 9/05; \$150.00 after
Student Registration (includes same as above)	\$ 75.00 through 9/05; \$100.00 after for the first 20 student registrants
Friday Meals ( <b>please check</b> )	Breakfast - \$11.00 <input type="checkbox"/>
	Boxed Lunch – \$9.00 <input type="checkbox"/>
	Banquet - \$25.00 <input type="checkbox"/>
Saturday Meals ( <b>please check</b> )	Breakfast - \$11.00 <input type="checkbox"/>
	Boxed Lunch – \$9.00 <input type="checkbox"/>
Total Cost of Meals (\$65.00 for all)	

**PRE-CONFERENCE FIELD TRIPS (free):**  Golf Outing (**Green fees apply**)  
 Weatherford Tour (**free**):

Trips may be cancelled if minimum attendance is not met and they will be filled on a first-come basis. Please indicate preference if you are interested in more than one pre-conference trip.

Make check or money order for total fee payable to: **FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS**

**MAIL TO:** Field Conference of Pennsylvania Geologists, Inc.  
3240 Schoolhouse Road  
Middletown, PA 17057-3534



**FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS, INC**  
**RELEASE AND HOLD HARMLESS WAIVER**

The undersigned, having been fully advised as to the nature and possible dangers and hazards of the field trip *History and Geology of the Oil Regions of Northwestern Pennsylvania*, October 8-10, 2009, which trip is sponsored by the Field Conference of Pennsylvania Geologists, Inc., does hereby assume any and all risks involved in connection with the trip, and does hereby save and hold harmless, the ***FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS, INC., ITS OFFICERS, REPRESENTATIVES, AGENTS, OR MEMBERS, and LANDOWNERS*** from any and all claims, losses, and damages (including attorney's and any cost involved because of said claims), on account of injury, death, property damage, and inconvenience or loss of money due to delay that may arise, by reason of my participation. I understand that my use of alcohol or drugs would impair my judgment and coordination, and will hold the above stated organizations and individuals harmless from claims arising from the use of either. I understand that I am solely responsible for carrying my own life and health insurance.

**SIGNATURE** \_\_\_\_\_

**PRINTED NAME** \_\_\_\_\_

**DATE** \_\_\_\_\_

***THIS FORM MUST BE RETURNED WITH  
YOUR REGISTRATION FORM***

## PRE-CONFERENCE TRIP DESCRIPTIONS

### 1). A Visit to Weatherford Wireline Services

Many of us work with geophysical well logs every day. Have you ever wondered how these logs were made? What goes into logging a gas or oil well? Tom Whitfield of the Pennsylvania Geological Survey will meet a group at Weatherford Wireline Services in Titusville. Here we will get to see a geophysical wireline logging unit, the technology it employs to record and analyze the data, the down-hole acquisition probes, etc. We will also see Weatherford's cased-hole applications. Recent technology advances have allowed for better data acquisition and analysis of wells with installed casing. Weatherford also does other cased-hole work like perforating, bridge plugs, etc.

We will discuss the basics of bore-hole geophysics, open hole logging measurements and parameters, etc. We will also discuss other aspects oil and gas well services operations.

Weatherford is a world-wide leader in energy production services. They have graciously agreed to allow us to visit their district operations in Titusville.

<http://www.weatherford.com/>

Tom Whitfield is a Senior Geologic Scientist with the Pennsylvania Geological Survey. Just out of college (a long time ago) Tom worked as a well log analyst and logging engineer for two different geophysical logging companies.

We will meet at the Weatherford station in Titusville at 1:00pm on Thursday, October 8, 2009. We plan to spend about 2 hours there. The cost is free. There will be a limit of 20-25 persons so reserve early. Directions and details will be sent out later.

A caveat to the trip will be the availability of equipment. This is an operating station and Weatherford is committed to customer service. There will always be the possibility of equipment being out on jobs. We understand this.

### 2) Cross Creek Resort, Golf Outing, Details forthcoming to interested participants.