

# **Important**

# **Items**

- 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. 2 in order to get the reduced registration rates.**

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

## **Tectonics of the Pennsylvania Piedmont along the Susquehanna River**

**50<sup>th</sup> anniversary update of the 1960 tectonics field trip  
&**

**75<sup>th</sup> anniversary of the founding of the**

### **FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS**

Thursday, September 23, 2010 -- Symposium

Friday and Saturday, September 24-25, 2010 – Field Trips

#### ***Hosts:***

Pennsylvania Geological Survey  
Franklin and Marshall College

#### ***Trip Leaders and Contributors:***

*John Barnes, Pennsylvania Geological Survey, Middletown, PA*  
*Gale Blackmer, Pennsylvania Geological Survey, Middletown, PA*  
*Hal Bosbyshell, West Chester University, West Chester, PA*  
*Rodger Faill, Pennsylvania Geological Survey, Retired*  
*Bob Ganis, Consulting Geologist, Harrisburg, PA*  
*Alec Gates, Rutgers University, Newark, NJ*  
*Jay Parrish, Pennsylvania Geological Survey, Middletown, PA*  
*Frank Pazzaglia, Leigh University, Bethlehem, PA*  
*Bob Smith, Pennsylvania Geological Survey, Retired*  
*Scott Southworth, USGS, Reston, VA*  
*John Taylor, Indiana University of Pennsylvania, Indiana, PA*  
*Roger Thomas, Franklin and Marshall College, Lancaster, PA*  
*Dave Valentino, State University of New York, Oswego, NY*  
*Don Wise, Emeritus, University of Massachusetts at Amherst, Amherst, Massachusetts*

#### **Headquarters**

Marriot Lancaster at Penn Square, Lancaster, PA

#### **PRE-REGISTRATION DEADLINE – SEPTEMBER 2, 2010**

In 1960 the Field Conference of Pennsylvania Geologists trip addressed “Some structural and tectonic problems of the Appalachian Piedmont along the Susquehanna River.” Now on the 75<sup>th</sup> anniversary of the Field Conference and 50<sup>th</sup> anniversary of that trip, it is time to see what a host of geologists and other scientists enlightened by a half-century’s diligent work and several scientific revolutions have done toward solving some of those 1960 problems. Many of those old problems have been largely solved whereas new data and greater sophistication have generated a new array of questions for the next generation. This trip is designed to take a brief look backwards at what has been accomplished, to provide an update of our present understanding of Piedmont tectonics and geology, and perhaps to provide a new set of problems for geologists of the next half century to puzzle over.

A pre-trip symposium on the afternoon preceding the trip will attempt to cover its basic tectonic themes in ten short talks summarizing different aspects of the region. The sequence of presentations is organized into a four-hour lecture series to give an overview through both time and space of the latest thinking and evidence about the tectonics of the Susquehanna Piedmont. A "map blast" and informal poster session will follow the symposium.

<http://fcopg.org>

The first day's trip will be devoted to the early Paleozoic platform and slope deposits near the Susquehanna River. Stratigraphic units will include the Precambrian Accomac (Catoctin) Volcanics, Cambrian Hellam Conglomerate and Chickies Quartzite, the Cambrian transition from platform carbonates of the Ledger Dolomite into the Conestoga slope limestones and olistostromes, the Octoraro (Antietam ?) Schist, and some Beekmantown carbonates. Taconic and Alleghanian-age structures will illustrate several types of cleavage, the infamous Martic thrust zone, enigmatic folds and nappe emplacement mechanics, pirated cleavages at Chickies rock, and boudin mechanics and thick carbonate mylonitic zones produced by the exposed Alleghanian-age Chickies-Oregon Thrust in the Prospect Quarry. That evening the traditional banquet lecture will be given by Damian Nance on "The Rheic Ocean in relation to the Appalachian Orogenic belt."

The second day's trip will focus on the Taconic foreland basin mostly in Dauphin and Lebanon Counties. Recent work by Ganis, Repetski and others has produced about 50 sites with high quality graptolite and/or condont dates. With these constraints, new mapping by Ganis and Blackmer has begun to make sense out of the Martinsburg flysch and its allochthons. These are now named as a separate formation, the sub-Martinsburg Dauphin Formation that has been thrust emplaced onto the carbonate platform and folded along with those carbonates and the overlying flysch into the Lebanon Valley nappe complex. These map relationships are at complete odds to traditional views of the Hamburg klippe as an erosionally isolated part of a late stage thrust sheet and suggest the "Hamburg klippe" term should be abandoned. The stops will demonstrate the stages of evolution of the Cocalico-Dauphin-Martinsburg foreland basin from the Myerstown Formation first disturbances of the platform carbonates, through emplacement from some distant deep sea source of the deep water Dauphin allochthons, to deposition of the overlying Martinsburg flysch and ultimately to gross overturning of it all as part of the Lebanon Valley nappe complex.

## SCHEDULE OF EVENTS

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

### **Thursday, September 23<sup>rd</sup>, 2010**

- PRE-CONFERENCE SYMPOSIUM - 1:00 PM to 5:30 PM - A four-hour lecture series presenting an overview through both time and space of the latest thinking and evidence about the tectonics of the Susquehanna Piedmont. **Commonwealth Salon 1 and 2**, Lancaster Marriott at Penn Square, Lancaster, Pennsylvania.
- CONFERENCE REGISTRATION- 12:00 PM to 9:30 PM - **Commonwealth Prefunction 1 and 2**, Marriott at Penn Square, Lancaster, Pennsylvania.
- ORIENTATION, RECEPTION, AND MAP BLAST - 7:00 PM - 10:00PM - **Commonwealth Prefunction 1 and 2**, Marriott at Penn Square, Lancaster, Pennsylvania.

### **Friday, September 24<sup>th</sup>, 2010**

- REGISTRATION- 6:00 to 7:30 AM - **Commonwealth Prefunction 1 and 2**, Marriott at Penn Square, Lancaster, Pennsylvania.
- BREAKFAST- 6:00 to 7:00AM - Breakfast will be served in **Heritage DE**, Marriott at Penn Square, Lancaster, Pennsylvania.
- FIELD TRIP- 7:30 AM - 5:30 PM- Buses depart from Marriot parking lot, on the **Queen Street** side of the hotel 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 **Heritage DE**. Hors d'oeuvres and cash bar will be available.
- ANNUAL BANQUET AND BUSINESS MEETING- 7:00 PM - 10:00 PM- **Heritage DE**. A buffet dinner will be served. The election of officers will be held at the business meeting.

### **Saturday, September 25<sup>th</sup>, 2010**

- BREAKFAST- 6:00 to 7:00AM- Breakfast will be served in **Heritage DE**.
- FIELD TRIP- 7:30 AM – 5:00 PM- Buses depart from the Marriot parking lot, on the **Queen Street** side of the hotel 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 150 (three 47-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 is offering a reduced student rate.*** However, this price is only available to the first 10 student applicants. The number of student slots is limited so please register early.

**\*\*New for 2010\*\***

**PROFESSIONAL DEVELOPMENT HOURS** – In May 2010 Act 25, amending the Engineer, Land Surveyor and Geologist registration law, was signed into law. The new law clarifies the mandatory continuing education requirements for Professional Geologists. Section 4.5 of Act 25 requires that a licensee complete 24 professional development hour (“PDH”) units during the biennial renewal period as a condition for licensure renewal. The 24 PDH’s must be completed by the September 2011 cycle. **You can earn more than half the required PDH’s for the 2009-2011 renewal period by attending the 2010 Symposium and Field Conference of Pennsylvania Geologists. All participants will be awarded an electronic certificate of participation after the Field Conference.** The breakdown of available PDH’s is as follows:

5.0 hours for Thursday Symposium  
2.0 hours for Thursday evening orientation/map blast  
6.0 Hours for Friday field trip  
5.0 hours for Saturday field trip  
***Total of 18.0 hours available (Full conference participation)***

## **IMPORTANT NOTES**

**REQUIRED EQUIPMENT** – Hardhats will be required at several stops. Please bring your own—they will not be provided. Steel-toe footwear and safety glasses are encouraged at quarry stops.

**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 2, 2010. Registrations received after September 2 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.

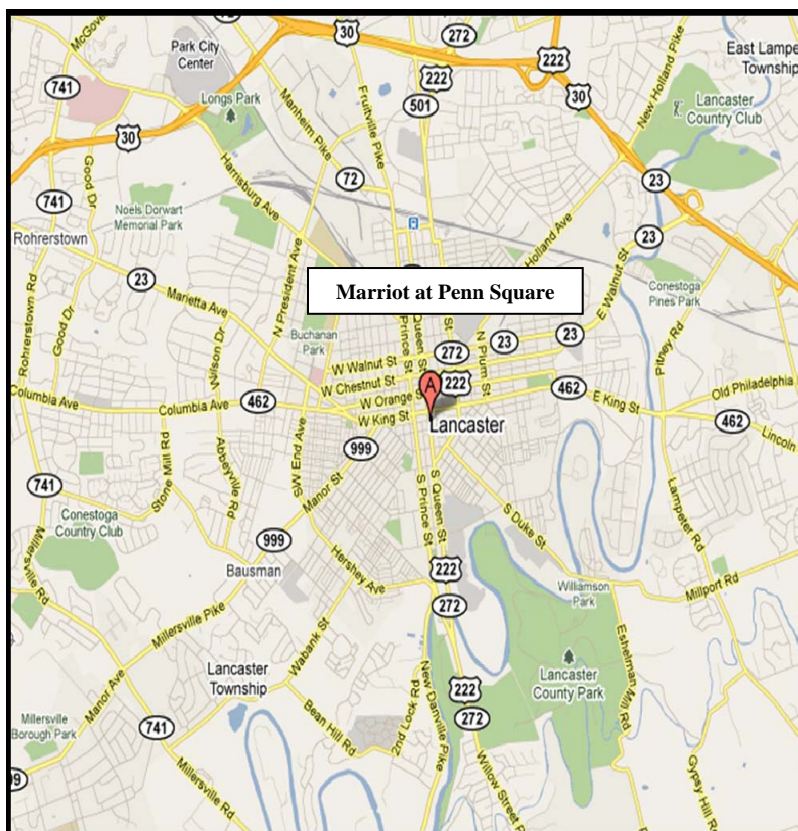
**Registrations will be accepted only if accompanied by payment. No reservations will be accepted without prepayment.**

**REFUND POLICY-** Full refunds after September 2 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 2010 Field Conference of Pennsylvania Geologists will be the Lancaster Marriot at Penn Square, 25 South Queen Street, Lancaster, PA 17603. The hotel is located in downtown Lancaster (see map below) and directions are available from the hotel website at <http://www.marriott.com/hotels/maps/travel/lnsmc-lancaster-marriott-at-penn-square/>. A block of 70 rooms have been reserved for the Field Conference, and will be held for the nights of September 23 and 24, 2010 until **12:00 AM, September 2<sup>nd</sup>, 2010. PLEASE BOOK ASAP.** The room rate is \$99.00 plus 6% state and 3% local occupancy tax. Parking is an additional \$5.00 (+ 6% state tax) per 24-hour period. **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 Marriot is 1-888-850-6146. Make your reservations as early as possible.

**There are many other hotels near the FC headquarters in Lancaster, including:**

- Fairfield Inn Lancaster, 150 Granite Run Drive, Lancaster, PA. The phone number is (717) 581-1800.
- Hilton Garden Inn Lancaster, 101 Granite Run Drive, Lancaster, PA. The phone number is (717) 560-0880.
- Hampton Inn Lancaster Hotel, 545 Greenfield Road, Lancaster, PA. The phone number is (717) 299-1200.
- Homewood Suites by Hilton Lancaster, 200 Granite Run Drive, Lancaster, PA. The phone number is (717) 381-4400.



**75th ANNUAL FIELD CONFERENCE OF PENNSYLVANIA GEOLOGISTS  
LANCASTER, PA –SEPTEMBER 23-25, 2010  
PRE-REGISTRATION FORM (DEADLINE: SEPTEMBER 2, 2010)**

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)  
\_\_\_\_\_

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

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



**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.**

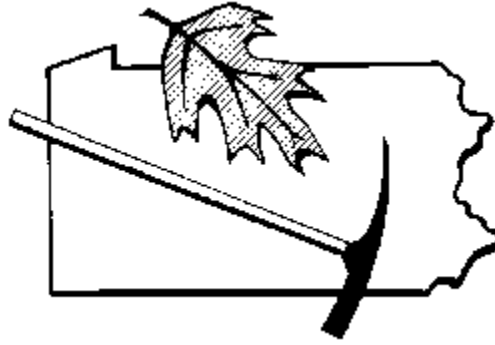


Registration includes <b>guidebook, bus transportation, all meals and beverages</b> (except the Friday evening cash bar)	\$ 240.00 through 9/02; \$265.00 after
Student Registration (includes same as above)	\$ 120.00 through 9/02; \$145.00 after for the first 10 student registrants only
<b>PRE-CONFERENCE SYMPOSIUM (free):</b>	<input type="checkbox"/> Yes, I am attending the symposium
	<input type="checkbox"/> No, I will not be attending the symposium
Please note that this year <b>all meals and beverages</b> (2 breakfast buffets, 2 coffee and doughnuts, soda and water, 2 box lunches, and the banquet) <b>are included</b> in the registration fee.	

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 *Tectonics of the Pennsylvania Piedmont along the Susquehanna River*, September 23-25, 2010, 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***