



POST OFFICE BOX 1636, TALLAHASSEE FL 32302

**THE SOUTHEASTERN GEOLOGICAL SOCIETY
FIELD TRIP ANNOUNCEMENT**

July 29-30, 2016

**Geology and Mining Operations of the Central Florida Phosphate District
The Mosaic Company – South Pasture Mine, Bowling Green, Florida**

The Southeastern Geological Society (SEGS) will be hosting a field trip to examine the geology and observe the mining operations of the *Mosaic South Pasture/Fort Green Mine* located just south of Bartow, Florida. *This trip is available to SEGS members only. If you have not, please pay your 2016 dues.* The trip is limited to 30 total participants, if you are bringing a guest, they will be placed on a waiting list. **Be advised that registration is due by Monday, July 25.** If there is space, guests (nonmembers) will be allowed on a first come first serve basis. Registration will close as soon as a total of 30 attendees are reached. **The minimum age for participants in 16 years old due to safety protocol at the mine.** Hotel accommodations can be found in the Bartow area.

The fee for the trip is \$35 (\$25 for students). Please access www.segs.org and go to the membership tab. Use the PayPal function to pay for the trip. Note that the \$35 field trip fee is in addition to the \$35 annual membership fee. Your spot on the trip is guaranteed only when a member has paid the \$35 trip fee and registration forms are received.

Friday July 29:

An informal dinner meeting will be held at Sonny's BBQ located at 5910 S. Florida Ave. Lakeland FL 33813 starting at 6:00 PM. Participants will be responsible to pay for their own dinner. The agenda is as follows:

1. SEGS Business Meeting, Announcements, Field Trip Details.
2. Presentation by Peter Karashay, Geologist of the South Pasture Mine. Peter will discuss the operations and geology of the dragline-operated surface mine.
3. Presentation by Ravi Nalamothu, P.E. of HSW Engineering, entitled "Groundwater Modeling Application for Mine Dewatering Permitting".
4. Sam Upchurch, P.G., Ph.D., will give a presentation entitled "Shallow Depressions in the Florida Coastal Plain: Karst and Pseudokarst."

Saturday July 30:

The field trip will take place near the active mines of the South Pasture and Fort Green areas. The trip will be led by Tom Scott, P.G., Ph.D., and Peter Karashay, the Mine Geologist for Mosaic. Participants can observe and learn about phosphate mining

operations and geology. The trip will likely include a tour of the dragline excavation, washer pits, oversize piles, settling ponds, beneficiation system consisting of flotation and chemical processes, and land restoration/reclamation. Dragline operations consist of an enormous mechanical crane that sports a boom exceeding 300 feet in length supporting a bucket capable of removing 80 cubic yards at a time. **Fossil hunting is a highlight of the trip.** Participants will be able to search for fossils amid the processed debris piles. Fossils encountered will be Miocene and Pliocene-age vertebrae and invertebrate of terrestrial and marine origin. Typical specimens include material from large sharks, dugongs, marine mammals (whales), crustaceans, echinoids, fossilized wood, horses, elephants, sting rays, and mollusks.

Field Trip Participant Instructions:

- Please arrive at the mine site no later than at 8:00AM. The address is: Mosaic South Pasture Mine 6209 N. County Rd. 663, Bowling Green, FL 33834. This location is just north of the intersection of Brewster Road/Fort Green Road and FL-62.
- The morning briefing will include a safety discussion and review/signature of Mosaic protocol and liability forms.
- After a presentation/discussion of mine operations, we will condense into as few vehicles as possible and caravan into the mine for the tour.
- Please bring the appropriate safety equipment: hard hat, boots/sturdy foot wear, eye-protection, rain-gear, sun block and bug-repellant.
- Lunch will be provided by SEGS onsite and consist of sandwiches and drinks. Your trip fee includes an SEGS Guidebook (hard copy), hydration fluids, and lunch.
- The mine tour will end in the mid-afternoon.

The trip will be limited to no more than 30 participants and is available to current SEGS members and their guests (assuming room). If you are interested in attending this trip please register as soon as possible, and, so we can get an accurate head count early. To confirm your attendance please email cnoble@gfnet.com and alawn@hsweng.com. Registration is complete when the payment is received in addition to the following attached forms: SEGS Liability Waiver, Registration Form and Field Trip Guideline Form. Registration will be on a first-come, first-served basis.

We look forward to seeing you in the field!!! If you have any questions feel free to contact me.

Clint Noble, P.G., SEGS Vice President and Field Trip Leader

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