

**Fall Zone Geomorphology, Heavy Mineral Mining,
and Prime Farmland Reclamation**

Virginia Association of Professional Soil Scientists (VAPSS)

Annual Meeting and Fall Technical Session

**October 16 and 17, 2006
Old Hickory Firehouse, Dinwiddie County**

Program Overview

The VAPSS Fall Meeting and Technical Session for 2006 will be held on Monday October 16th and Tuesday the 17th at the Old Hickory Firehouse and surrounding area in Dinwiddie County. On Monday afternoon, the technical presentations will focus on Upper Coastal Plain geomorphology with an emphasis on recent discoveries of how extensive faulting through Upper Coastal Plain sediments and Piedmont basement saprolites may have affected soil and landscape development processes. The geologic history of heavy mineral sands (ilmenite, rutile and zircon) deposition in the region will be discussed and related to the region's geomorphic history. Finally, the current mineral sands mining and reclamation technologies employed at Old Hickory will be detailed.

On Tuesday the 17th, from 9 am to 3:00 pm, we will tour the Old Hickory area observing a range of natural soils and associated geologic conditions. The tour will then review Iluka Resources' active mining operations, which are similar to those currently being proposed for Greensville County to the south. The field trip will conclude at Virginia Tech's Carraway-Winn mined land reclamation research farm where new protocols are being developed for return of mineral sands mines to prime farmland levels of productivity.

Directions:

From I-95: Take Route 40 west from Stony Creek (Exit 31) approximately 11 miles to Route 619. Turn left at crest of hill (store on right), and take 619 (Courthouse Rd) south approximately 2 miles and bear left through Bolster's Store intersection. Old Hickory firehouse will be immediately in front of you within the fork of the intersection of 619 with Rt. 617 (Bolster's Rd).

Safety Provisions: All field trip participants will be required to wear sturdy boots, approved hard hats, and safety glasses. We will provide safety glasses to all, and hard hats to those who need them. **Please indicate on your registration form whether or not you will bring a hard hat!**

Detailed Program and Schedule
Monday, October 16

9:00 – 12:00 am VAPSS Business Meeting (O.H. Firehouse)
12:00 – 1:00 pm Lunch for VAPSS Business Meeting

VAPSS Technical Session – Old Hickory Firehouse

1:00 – 1:30 pm Registration

1:30 – 2:15 pm Geological framework and history of the Virginia Coastal Plain
Randy McFarland – Geologist, USGS Richmond

2:15 – 3:00 pm Detailed geologic framework and history of the Old Hickory area
Andrew Romeo – Geologist, Iluka Resources

3:15 – 4:00 pm Heavy mineral mining and processing at Old Hickory
Chuck Stilson – Mining Engineer, Iluka Resources

4:00 – 4:45 pm Soil landscape relationships and reclamation of prime farmland
soils at Old Hickory
W. Lee Daniels – Professor, Virginia Tech

5:00 pm Adjourn

6:00 pm VAPSS Social and BBQ dinner provided – Neal Spiers’ farm.

Tuesday, October 17

9:00 am to 3:30 pm Field Trip – Departs from O.H. Firehouse

Natural soils, active mining, mineral processing, mine pit closure,
mine reclamation, mine soil morphology, experimental soil
reconstruction, land use interactions. Lunch will be provided.

*Please read safety equipment statement on page 1. Van
transportation provided; no private vehicles allowed!*

Virginia Tech will grant 1.0 CEU for full program participants

Cost: \$150.00 for VAPSS members
\$175.00 for non-members
A CEU certificate is available for an additional \$10.

Registration includes Monday dinner, Tuesday lunch, van transport and CEU fees.

No on-site registration will be allowed for this meeting.

**Registration Form
Annual Meeting and Fall Technical Session
Monday and Tuesday,
October 16 and 17, 2006
Old Hickory Firehouse, Dinwiddie County**



Attendee name:

Company (optional):

Mailing Address:

City, state, and zip code:

Phone:

Email:

Indicate amount enclosed: \$150.00 VAPSS member \$175.00 nonmember \$10 CEU certificate

Social Security Number (for CEUs):

I Will Bring a Non-Metal Hardhat:

Make checks payable to VAPSS. **Registration must be received by October 10, 2006**

Please mail your check and this form to:

VAPSS/Attn: Sue Brown
Virginia Tech/CSES
238 Smyth Hall – 0404
Blacksburg VA 24061

Sorry, no credit cards.

E-mail: suebrown@vt.edu; Ph: 540.231.5741; Fax: 540.231.7630

Lodging Information

October 15, 2006:

Neal Spiers will also host a Social Gathering Sunday from 2pm on. Primitive camping will also be available at Neal Spiers Farm for Sunday and Monday nights, October 15-16, 2006. Guests must provide tents/campers, chairs, beverage of choice and supper/breakfast. Neal can provide supper for Sunday night and breakfast for Monday morning if arrangements are made ahead.

Please contact Neal directly if you are interested in the camping and/or the social gathering. Neal can be reached by phone at 804.733.7000 or 804.586.4096.

October 16, 2006:

A room block has been arranged at the Stony Creek Sleep Inn for the night of October 16, 2006. Please call to reserve your room, ask for the rooms reserved for "VAPSS" October 16th. The room cost is \$54.99 plus tax. The cut-off for the room block is October 10, 2006.

**Sleep Inn & Suites
Route 301 & I-95, exit 33
11019 Blue Star Hwy
Stony Creek, VA
(434) 246-5115/5100**