

An Introduction to Basic Soil Science

August 13 and 14, 2007

Holiday Inn Express, 2801 Plank Road, Fredericksburg, Virginia

Sponsored By:

*Virginia Association of Professional Soil Scientists (VAPSS)
Virginia Tech Department of Crop and Soil Environmental Sciences*

This intensive two-day short course focuses upon understanding soil physical, chemical and morphological properties in natural and managed landscapes. The course will stress relationships among basic soil properties, water quality and various land use issues. Day one will focus upon understanding soil formation, morphology and other properties essential to managing soils for various uses. Day two will stress practical applications of soil science including understanding and utilizing soil maps, dealing with problem soils (acid sulfate and urban), soil properties important for waste disposal, and wetland soil related issues.

Instructors: *W. Lee Daniels and others*

W. Lee Daniels is Professor of Soil Environmental Science at Virginia Tech. He has taught basic soils, geomorphology, and related soil-environmental courses Virginia Tech for over 20 years. His extensive research and outreach programs include mined land reclamation, wetland restoration, land-application of wastes, right-of-way management, and manufactured soils. Dr. Daniels has cooperated in research-demonstration programs with Australia, China, Brazil and Poland. Other faculty from Virginia Tech will assist.

Location, Fees and CEUs:

The course will be offered at the Holiday Inn Select in Fredericksburg. The hotel is located at 2801 Plank Road, Fredericksburg, Virginia - 540-786-7321. A block of lodging rooms is available at \$105 for August 13 under the VAPSS name. The hotel is located in the NW quadrant of the intersection of Route 3 and I-95.

The fee for the two-day short course is \$200, which includes the mandatory CEU fees (\$25) to Virginia Tech for issuance of 1.6 CEUs, two coffee/snack breaks each day, and duplication of hard copy (black & white) and CD (color) versions of all teaching materials and slides. Registration deadline is August 6th. Registration will be limited to 75 attendees. This course will be offered again in mid-November, 2007, if you are unable to register for these dates.

For Further Information:

Sue Brown – 540-231-5741 – suebrown@vt.edu

W. Lee Daniels – 540-231-7175 – wdaniels@vt.edu

Monday, August 13 - Basic Soil Science

<u>Time</u>	<u>Topic</u>
8:00 am	Registration and Coffee
8:30 am	Introduction to Soils and Soil Forming Factors
9:00 am	Basic Soil Morphology; Profiles and Horizons
10:00 am	Break
10:15 am	Virginia Soil - Parent Material – Geologic Relationships
11:45 am	Lunch (on your own)
1:00 pm	Soil Physical Properties – Texture/Structure/Density
2:15 pm	Soil Water Relations - Basics
3:00 pm	Break
3:15 pm	How Water and Solutes Move in Soils
4:00 pm	Soil Mineralogy and Sources of Charge
5:00 pm	Adjourn

Tuesday, August 14 – Applications and Interpretation of Soil Properties

<u>Time</u>	<u>Topic</u>
8:00 am	Coffee and Conversation
8:30 am	Soil Chemical Properties – Charge/Acidity/Fertility
9:45 am	Soil Biology and Organisms
10:15 am	Break
10:30 am	Soil Redox Process and Soil Color Patterns
11:00 am	Basics of Soil Classification
11:45 am	Lunch (on your own)
1:00 pm	Understanding Soil Maps
2:00 pm	Acid-Sulfate, Urban and Other Problem Soils
3:00 pm	Break
3:15 pm	Soils Issues in Revegetation and Constructed Wetlands
4:00 pm	Interpreting Soil Morphology for Waste Disposal & Application
5:00 pm	Adjourn

Registration Form

VAPSS and Virginia Tech

August 13 and 14, 2007

**An Introduction to Basic Soil Science
1.6 CEUs**

PLEASE PRINT CLEARLY OR TYPE:

Name _____

Work Phone _____

Firm/Org. _____

Fax _____

Address _____

E-mail: _____

City _____

State _____ **Zip** _____

Amount enclosed \$ 200⁰⁰

Registration deadline is August 6. Registration maximum is limited to 75 attendees.

. We suggest that you register as soon as possible in order to assure seating space.

We will accept credit card payments after July 23rd. Please contact Sue Brown by email for more information.

Payment must be made prior to the meeting to ensure space.

Make checks payable to VAPSS

Mail check with registration form to:

Sue Brown

VAPSS

Virginia Tech/CSSES

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