

HYDRIC SOILS

An In-Depth, Two-Part, Short Course for Wetland Professionals

I. Basic Processes in Hydric Soils

September 21-22, 2009

II. Advanced Problems in Hydric Soil Evaluation

September 23-24, 2009

Raleigh, North Carolina

Sponsors

North Carolina State University
Department of Soil Science
Raleigh, NC

And

Soil Science Society of North Carolina



Register On-line at
www.areg.caes.uga.edu
Or call 706-583-0347
Or fax 706-583-0348



www.soil.ncsu.edu/wetlands

About the Course

The Hydric Soils Short Course is designed as a two-part program. Participants will get an in-depth look at basic processes, learn how to solve advanced evaluation problems, and get extensive field experience during four full days of intensive training on state of the art technologies.

Participants are strongly encouraged to attend all workshops, but may choose to attend only one if preferred.

I. Basic Processes in Hydric Soils, September 21-22, 2009

Get a thorough introduction to the concepts of hydric soils and wetlands. Emphasis is placed on normal situations, and topics include soil descriptions, wetland chemistry, redoximorphic features and field indicators, wetland hydrology, and problems with sandy soils. You will learn to use the NRCS hydric soil indicators under field conditions.

II. Advanced Problems in Hydric Soil Evaluation, September 23-24, 2009

Build on what you learned in the first workshop by studying evaluation problems and atypical situations. Topics include USDA-NRCS technical standards for confirming hydric soils, monitoring soil hydrology, interpreting rainfall data, relating hydric soil field indicators to groundwater characteristics, and evaluating sites with altered hydrology.

Both the Basic and Advanced workshops will include classroom discussion, fieldwork, and homework. You will spend half of the total training time in the field gaining practical, hands-on experience in soil description and identification of hydric soil indicators.

Who Should Attend

The Hydric Soils Short Course is designed for:

- Biologists
- Soil Scientists
- Environmental Consultants
- Wetland Delineators
- Government Agency Employees
- Foresters
- Wetland scientists
- Others wanting to learn more about hydric soils

What others are saying:

"Excellent program-very well organized and informative."

*Michael DeRuyter
Kjolhaug Environ. Services, Inc.
Shorewood, MN*

"Well presented material by experts in the field of soil science."

*David O'Brien
College of William and Mary
Gloucester Point, VA*

Program Faculty

Dr. Mike Vepraskas is a William Neal Reynolds Professor of Soil Science at North Carolina State University where he conducts research on hydric soils and teaches a semester-long course on wetland soils. Mike has over 25 years experience conducting research on hydric soils at three universities. Mike authored *"Redoximorphic Features for Identifying Aquic Conditions"* as an outgrowth of his work for the NRCS in revising Soil Taxonomy. Mike also helped develop the NRCS's *"Field Indicators of Hydric Soils of the United States"*, and he is a featured lecturer at the NRCS's Advanced Hydric Soils Workshop taught throughout the US. Mike currently works with consultants and government agencies to solve unique hydric soils problems throughout the US, including the development of a technical standard for hydric soil identification for the National Technical Committee for Hydric Soils.

Dr. Dave Lindbo is an Associate Professor and Extension Specialist of nonagricultural soil science in the Soil Science Department, North Carolina State University. David has over 16 years experience conducting research on soil morphology and environmental relationships in several states He has developed many training courses in basic soil science, soil morphology hydric soils, and onsite wastewater issues for extension agents and consultants. His research interests include soil morphology-landscape hydrology-vegetation relationships, onsite wastewater systems, NPS water quality issues related to septic systems, and soil variability. David is a North Carolina Licensed Soil Scientist and an ARCPACS Certified Professional Soil Scientist.



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Agenda

I. Basic Processes in Hydric Soils, September 21-22, 2009

Day 1

7:30am Registration
Hampton Inn, Cary, NC

8:00am-12:00pm

Classroom Lectures and Discussion

- Concepts of jurisdictional wetlands, hydric soils, and wetland hydrology
- Soil evaluation for hydric soils: soil color, horizons, texture, and organic C determinations
- Soil chemical reactions in hydric soils
- Hydric soil features: redoximorphic features and field indicators
- Site evaluation procedures

12:00-1:00pm Lunch

1:00-6:00pm

Field Sites

- Identify and describe redoximorphic features
- Identify hydric soil field indicators in loams and clays

Day 2

8:00am-12:00pm

Classroom Lectures and Discussion

- Wetland hydrology
- Hydric soil field indicators in sands
- Describing problems soils: E horizons, finding the surface, split textures, filled land, flood plains

12:00-1:00pm Lunch

1:00-6:00pm

Field Sites

- Identify hydric soil field indicators in sands
- Identify and describe soil in seeps
- Hydric soils on flood plains
- Organic hydric soil features

II. Advanced Problems in Hydric Soil Evaluation, September 23-24, 2009

Day 1

7:30am Registration
Hampton Inn, Cary, NC

8:00am-12:00pm

Classroom Lectures and Discussion

- Definition of hydric soil and wetland hydrology
- Technical standards for hydric soil identification
- Monitoring hydrology
- Using and interpreting rainfall data

12:00-1:00pm Lunch

1:00-6:00pm

Field Sites

- Install monitoring equipment to evaluate hydric soils

Day 2

8:00am-12:00pm

Classroom Lectures

- Relating field indicators to reduction and saturation
- Evaluating hydric soils on sites with altered hydrology

12:00-1:00pm Lunch

1:00-6:00pm

Field Sites

- Effect of drainage on hydric soil morphology
- Hydric soil identification in fill materials
- Use of transects for hydric soil evaluation

Register Early

Class size is limited.

The full registration fee must accompany the registration form in order to reserve a place in the course.

Cancellations will be refunded (minus a \$50 processing fee) if written notification (fax acceptable) is received 5 days prior to the start date of the workshop.

Notifications made less than 5 days prior to the start date of the workshop will not be refunded.

Professional Development Hours:
7 hours per day

Looking for Directions?

The Hydric Soils Short Course will be held at the:

Hampton Inn & Suites-Raleigh/Cary I-40 (RBC Center)

111 Hampton Woods Lane
Raleigh, NC 27607

Tel: 1-919-233-1798

Fax: 1-919-854-1166

Rooms held under "NCSU Hydric Soil" until August 31

"It's about time someone started teaching soils classes in the field where the soil actually is! This is the program to attend."

*Kevin Martin
Soil & Environmental Consultants
Raleigh, NC*

A map to the hotel is available at:

<http://www.soil.ncsu.edu/wetlands/training.htm>

Registration Information

Register for the complete, two-part course and save \$55.

- I. Basic Processes: \$575
- II. Advanced Problems: \$575
- I & II. Basic plus Advanced: \$1095

Register online at:
www.ereg.caes.uga.edu
Or call: 706-583-0347
Or fax: 706-583-0348

The registration fee includes lunch and break service, course materials, and a certificate of attendance.

Lodging is NOT included in the registration fee.

Hotel Accommodations: A block of rooms has been reserved at the: **Hampton Inn & Suites-Raleigh/Cary I-40, Raleigh, NC 27607**. All rooms include a continental breakfast in the rate. Please make your reservation as soon as possible:

Call before: **August 31, 2009**. Group Name: **NCSU Hydric Soils**. Phone Number: **1-919-233-1798**.

Rate: **\$89.00 per night plus tax**.

Registration form – Hydric Soils
Please indicate your choice below:

- I – Basic Processes (Sept. 21-22): \$575
- II – Advanced Problems (Sept. 23-24): \$575
- I & II – Basic Plus Advanced (Sept. 21-24): \$1095

Method of Payment: Please check one

- Check (payable to University of Georgia)
- Charge my Visa MasterCard

Card # _____

Exp. Date _____ Amount _____

Name of cardholder _____

Signature (required) _____

Please provide the following contact information:

Name _____

Job Title _____

Firm/Org. _____

Address _____

City _____ State _____

Zip _____

Email _____

Work Phone _____

Fax _____

CAES Conference Office
ATTN: Carla Wood
202 Hoke Smith Building
Athens, GA 30602

