**Fall 2010 Wetlands Training**

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**Wetland Delineation Certificate Series**

Vegetation Identification (South and Winter)

**VEGETATION IDENTIFICATION - SOUTH**

September 14 and 15, 2010  
Course Code: EH0201CA11  
$515 before 8/31/10; $525 after; $495 multiple

Plants are the most obvious clues to wetland boundaries. Our two-day combination classroom and field course will teach you how to draw a wetland line by identifying a variety of wetland plant species.

Consultants Joseph Arsenault and Theodore Gorden provide a unique perspective to field identification methods for southern New Jersey vegetation cover types. Learn to identify the area's most common wetland types and their constituent trees, shrubs and herbaceous plants by studying communities found along coastal plains. Plant distributions will be explained on the basis of geology, soils and hydrology.

**Required Textbooks**

- A Field Guide to Wildflowers: Northeastern and North-Central North America (Peterson Field Guides) [ISBN 0395911729], $25

**VEGETATION IDENTIFICATION - WINTER**

SAVE THE DATE! January 13 and 14, 2010

Increase your expertise by learning to identify vegetation during the winter season. Most vegetation species remain available for identification throughout the cold, winter months. With the right clues and tips on what to look for, you can gain the expertise of winter plants in throughout northern AND southern New Jersey environments.

**Required Textbook**

- Munsell Soil Color Chart - $125

**NOTE:** The Corps Regional supplements for the Atlantic Coastal Plain and Northeast-Northcentral Regions will not be covered in this class.

**METHODOLOGY FOR DELINEATING WETLANDS**

October 13, 14 and 15, 2010  
Course Code: EH0401CA11  
$1,030 before 9/29/10; $1,050 after; $990 multiple

Learn the methods of the experts! This four-day course will introduce you to delineating wetlands using the Federal Interagency Wetland Delineation Manual, which is required for use in New Jersey. Techniques taught will also be applicable to individuals interested in using the 1987 Corps of Engineers Wetland Delineation Manual as well.

Recognize the key indicators of wetlands, hydrophytic vegetation, hydric soils and wetland hydrology) while expert instructors Ralph Tiner and Dr. Peter Veneman show you how to use them in following proper delineation methods. Immediately apply criteria learned in the classroom by performing wetland determinations during team field exercises.

**SOILS:** Identify sandy and non-sandy hydric soils based on the National List of hydric soil field indicators

**HYDROLOGY:** Recognize direct and indirect indicators

**Required Textbook**


**Recommended Textbook**

- Munsell Soil Color Chart - $125

**NOTE:** The Corps Regional supplements for the Atlantic Coastal Plain and Northeast-Northcentral Regions will not be covered in this class.

**If you are not familiar with wetlands, hydrology, or vegetation, we strongly recommend that you complete an introduction to Wetlands prior to the series. Please see inside for course details.**
INTRODUCTION TO WETLAND IDENTIFICATION

When you delineate wetlands without the proper training or experience, you run the risk of regulatory and career repercussions. Wetlands training can be difficult to acquire if you start your education in an advanced course. Don’t make the mistake of jumping into the Methodology for Delineating Wetlands course without first being exposed to the basic principles of wetland delineation in this course!

This one-day combination classroom and field course, led by wetland expert, Ralph Tiner will teach you the basics of wetland identification and introduce you to the practice of wetland delineation. It will provide the essential background material needed for further study in the field of wetland delineation. Come see the skills you need to begin to identify wetland types - wetland classification, wetland maps, wetland vegetation, hydrophytic plant indicators, wetland hydrology indicators, wetland delineation, hydric soil recognition, wetland plant identification, wetland soil - soils of wetland indicators, wetland types - wetland classification, wetland wetlands floor, review of wetland plant characteristics.

FIELD EXERCISES:
- wetland plant identification
- hydric soil recognition
- wetland vegetation - hydrophytic plant indicators
- Wetland Soils - soil color, soil texture, soil indicators
- Wetland Types - wetland classification, wetland wetlands floor
- Review of wetland plant characteristics

FEATURED TOPICS:
- Wetland definitions and concepts
- Wetland hydrology - hydrophytic plant indicators
- Wetland vegetation - hydrophytic plant indicators
- Wetland hydrology indicators
- Wetland delineation
- Hydric soil recognition
- Wetland plant identification
- Wetland soil - soils of wetland indicators
- Wetland Types - wetland classification, wetland wetlands floor
- Review of wetland plant characteristics

SOILS AND SITE EVALUATION FOR SEPTIC DISPOSAL SYSTEMS AND STORMWATER BMP’S

Course Code: ES0301CA11

Objectives:
- Learn to make the decisions so that you do not end up “bet between a rock and a hard place” - let alone a fragipan! This three-day course will provide the necessary training and information for you to meet the suitability requirements for placement of a septic system. See how natural soil factors help or hinder your design and the infiltrative capacity of your soil for lake runoff Best Management Practices (BMPs). Learn about the soil testing methods for septic and updated details on choosing a site to introduce you to the practice of wetland delineation. It will provide the essential background material needed for further study in the field of wetland delineation. Come see the skills you need to begin to identify wetland types - wetland classification, wetland wetlands floor, review of wetland plant characteristics.

FIELD EXERCISES:
- wetland plant identification
- hydric soil recognition
- wetland vegetation - hydrophytic plant indicators
- Wetland Soils - soil color, soil texture, soil indicators
- Wetland Types - wetland classification, wetland wetlands floor
- Review of wetland plant characteristics

FEATURED TOPICS:
- Soil Physical Properties: Soil Texture and the Textural Triangle
- Soils and Geology of New Jersey
- New Jersey Regulatory Requirements for Site Evaluation
- New Jersey Best Management Practices (BMPs)
- County Soil Survey Reports and Web Soil Survey
- Soil Physical Properties: Soil Structure, Texture and Color
- Soil Physical Properties: Coarse Fragments and Consistence
- Permeability Testing and Unique Local Soil Formations
- Leached Water and Indicators of Seasonal High Water Tables
- Soil Morphology of Septic Efficient: Soil Suitability and Pit Safety
- Permeability Testing: What Works and What Doesn’t
- Field Determination of Mottling (Redoximorphic Features)
- Horizon Nomenclature / Restrictive Horizons
- Tips for Writing and Reviewing Soil Logs

Get a jump start on completing the Wetland Delineation Series and register for the Winter Vegetation Identification course upon completion of this program!

LAKE MANAGEMENT 

Course Code: EW0301CA11

Objectives:
- Introduction to the Ecology of Lakes, Ponds and Reservoirs
- Cost-Efficient Water Sampling and Monitoring Programs
- Development of a Lake Restoration Plan
- Identification of Problem Aquatic Weeds and Algae
- Aesthetic and Ecological Benefits of Shoreline Aquascaping
- Harvesting and Other Physical Means of Weed Control
- Aeration: Options and Benefits
- Dredging: Design, Cost and Implementation
- Cons and Pros of Algae and Herbicides
- Proper Use of Algaecide and Herbicides

From defining diagnosing to choosing a path of action, this course [Lake Management] and approach is excellent! From defining diagnosing to choosing a path of action, this course [Lake Management] and approach is excellent!

ARCGIS INTRODUCTION

Course Code: EG0914CA10

Objectives:
- You may withdraw from these courses with a full refund to be admitted to the class (purchase order, check, money order or purchase order with your registration). Beyond that time, registrations may be eligible for the full registration fee.

Refunds - You may withdraw from these courses with a full refund minus a processing fee provided our office is notified at least five (5) full working days prior to the start of the course. In the case that time, registrations may be eligible for the full registration fee.

Substitutions - Substitutions are welcomed.

NOTE: Continental breakfast and lunch are included in your registration fee. Textbooks are not included. You may obtain copies on your own, or through our office with your registration.

All courses in this brochure have been submitted for recertification through the NJAES Continuing Professional Education Program. Please visit our website at: www.cpe.rutgers.edu/credits for approval status.

www.cpe.rutgers.edu