

## **Advanced Training Workshop for Soil Evaluators**

### **Reading Different New England Landscapes T508-0045**

**Central East Region (Littleton/Carlisle, MA)**

**Presented by:**

**Peter C. Fletcher, Certified Professional Soil Scientist 02703 and Soil Evaluator 3027**

**Tuesday, Nov. 8, 2011 (lecture 1 PM to 5 PM) and**

**Friday, Nov. 18, 2011 (field 8:30 AM to 4:30 PM)**

**Bad Weather Date--Field only--Fri. Dec. 9 (field 8:30 AM to 4:30 PM)**

### **Workshop Description**

An important and essential skill for Soil Evaluators is to be able to interpret the landscape and assess the underlying soil/geologic conditions before digging the deep holes. Key to this is identifying the different landforms and understanding the geologic processes (glaciers, rivers, marine, wind, etc.) that formed the underlying sediments. With this knowledge one can visualize the landscape in a three dimensional perspective, alerting the evaluator to underlying restrictive layers, presence of silt and clay, potential for a high water table, altered/disturbed soil conditions, etc.

This workshop is designed for professionals who are seasoned Soil Evaluators. Instruction will include lecture and hands on exercises followed by field exercises. Reference materials for the field site will be posted on the Internet. Participants will be expected to download and review these materials before coming to the workshop. Two or more landscapes with diverse geologic sediments will be studied for this workshop.

### **Workshop Outline**

#### **Day 1 – Lecture and Hands on exercises**

**Date: Tuesday, Nov. 8, 2011**

**Time: 1:30 PM to 5:30 PM**

**Location: Littleton, MA.**

#### **Topics Covered (lecture, hands on exercises using soil samples, and small group activities):**

- ❖ Know the geologic past
- ❖ Identify the different landforms and understand the geologic processes that formed them
- ❖ Learn the characteristics of the different geologic sediments (soil parent materials)
- ❖ Visualize the underlying groundwater system and predict the depth to seasonal high water table
- ❖ Use field method to determine soil textural classes
- ❖ Research and study reference materials: USGS topographic maps, surficial geology reports, published soil surveys, aerial photographs, flood insurance maps, DEP wetland maps, etc.
- ❖ Assess the underlying soil conditions, identify where to conduct deep-hole testing and interpret conditions for on-site sewage disposal.

## **Second Day – Field Exercises**

**Date:** Monday, Nov. 18, 2011 (Bad Weather Date: Fri. Dec. 9, 2010)

**Time:** 8:30 AM to 4:30 PM

**Location:** Great Brook Farm, Carlisle, MA.

### **Field Exercises:**

- ❖ Review Reference Materials
- ❖ Hand dig soil test pits using shovels and soil augers
- ❖ Traverse the landscape and identify the different landforms
- ❖ Assess the underlying geologic sediments
- ❖ Evaluate the landscape for siting on-site sewage disposal systems

**Course Materials:** Each participant will receive handouts and a field guide.

**Field Investigations:** This workshop will be conducted using hand shovels and soil augers. Participants are to bring their own field equipment (soil color book, trowel, water bottle, etc.). Soil shovels and augers will be provided by the instructor. Because this workshop focuses on “keeping your head out of the deep hole” and interpreting the landscape, there will be no excavated deep observation holes and only limited field testing using hand tools.

**Field Conditions:** The field exercises for this workshop are strenuous and require participants to traverse rough terrain, walk long distances, and dig test holes using shovels and augers. Each participant needs to evaluate their own health and physical conditioning before registering for this workshop.

**Weather Conditions:** Participants should come properly dressed for the field and wear appropriate clothing for the weather conditions. If the weather conditions are extreme (driving rain and lightning), participants will be notified via the Internet and the second day of the workshop will be rescheduled.

**Refreshments and Lunch:** Snacks and drinks will be provided. Participants are to bring their own lunches for the field exercises on the second day.

**Driving:** Because challenging field sites are essential for the success of this workshop, participants may be required to drive considerable distances between sites.

**Attendance:** All participants are required to be present during the times stated for the workshop. Attendance will be taken at the start and close of each day.

**Limited Enrollment:** To allow for small group instruction/discussion, enrolment for this workshop is limited to 20 participants.

**Certificate of Completion:** A Certificate will be awarded to each participant who successfully completes the workshop specifying the completion of 10 Training Credit Hours. The New England Interstate Water Pollution Control Commission, the approving authority, will be

notified in writing. **Note: If a Certificate of Completion needs to be reissued, a check for \$35 along with a written request for the Certificate needs to be mailed to Peter C. Fletcher, P.O.Box 141, Bridgewater, MA 02324**

**How to Register: Complete the registration form; read, sign and print your name on the Release of Liability (ROL) form; include check for \$250 and Page 1 and Page 2 mail to the address on the Registration Form.**

**Credit Cards are not Accepted**

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## **Release of Liability Agreement (ROL)**

For Peter C. Fletcher training, workshop, courses, and etc.

In consideration of being allowed participation, I agree, on behalf of myself, my assigns, executors, and heirs, to release and indemnify and hold harmless Peter C. Fletcher from any cause or action, claims or demands, or any nature whatsoever, including but not limited to any claims of negligence, which I, my heirs, representatives, executors, administrators, and assigns may now have, or have in the future against Peter C. Fletcher on account of personal injury, property, damage, death or accident of any kind arising out of or in any way related to my presence at or participation in any activity, event or workshop, including traveling to, training for, being instructed in or participation in any of the above named events, workshops, or activities. I understand that I am releasing Peter C. Fletcher for any and all claims for injuries or damages arising out of Peter C. Fletcher's negligence including, but not limited to the temporary or permanent muscle strain or soreness, sprains, strains, cuts, abrasions, bruises, ligament and/or cartilage damage, fractures, spinal injuries, head injuries, eye injuries, disfigurement, paralysis, internal injuries, organ damage or death. I recognize that there are other risks of injury that may occur by my participation, which are not possible to specifically list. It is the clear intent of this release agreement that the participator is releasing Peter C. Fletcher, his trustees, officers, agents, employees or instructors from any and all liability for any personal injury or property damage caused by Peter C. Fletcher's negligence of any and all agents, employees or instructors. I understand, have read this release and, understand its terms.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print First Name: \_\_\_\_\_ Print Last Name: \_\_\_\_\_

**Registration Form**  
**Reading Different New England Landscapes Workshop**  
**Central East Region (Carlisle)**  
**Tuesday, November 8, 2011 (lecture: 1 PM to 5PM--Littleton)) and**  
**Friday, November 18, 2011 (field: 8:30 AM to 4:30 PM--Carlisle)**  
**Bad Weather Date: Friday, December 9, 2011**

**Name as shown on Official State Soil Evaluator List (please print):**

**Print Name:** \_\_\_\_\_

**Soil Evaluator Number: SE** \_\_\_\_\_

**Organization/Business:** \_\_\_\_\_

**Position/Title:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Town:** \_\_\_\_\_

**State:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_ **Cell** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

I have read the attached Liability Form and agree with the terms stated:

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Fee for workshop is \$250.00**

**Mail Registration Form, Release of Liability Form and Check to:**  
**Peter Fletcher**  
**P.O. Box 141**  
**Bridgewater, MA 02324**