ADVANCED WETLAND ASSESSMENT METHODS

Course Instructor: John J. Mack
Course location: James H. Barrow Field Station, Hiram College, Hiram, Ohio
Cost: $995 ($895 government)
Class size: 20
Dates: Summer 2010

Description: Wetland regulation is moving beyond the stage of delineation (quantity) and into the realm of assessing the condition of wetlands (quality). Many states are developing scientifically based wetland assessment methods including Ohio, Pennsylvania, Delaware, Maine, California, North Carolina, Minnesota, and Arkansas.

This intensive field-based course will explore the tiered approach to wetland assessment advocated by the U.S. EPA: Level 1 landscape level assessments, Level 2 on-site rapid assessments, and Level 3 intensive assessments. Illustrating this approach, the course will provide in several rapid assessment methods including the Delaware Rapid Assessment Method, the California Rapid Assessment Method and the Ohio Rapid Assessment Method. Level 3 methods explored will include vegetation-based wetland biological assessment methods and functional assessment approaches. This course begins (day 1) with an overview of 123 approach followed by an intensive review rapid assessment approaches. Day 2 is an all day field exercise on rapid assessment approaches. Day 3 begins with an overview of the development of Level 3 assessment methods including IBI, HGM, and the NatureServe Scorecard approaches. The afternoon of day 3 is a field exercise on quantitative vegetation sampling illustrated. Day 4 includes intensive data exercises for reducing level 3 data. Finally, Day 5 brings it all together showing the interplay between all three assessment levels with applications for mitigation performance monitoring, ambient condition assessments, and development of wetland tiered aquatic life uses.

Location: The course is taught at the James H. Barrow Field Station Hiram College, Hiram, Ohio, and at other wetlands located nearby. The field station has numerous wetlands and the largest remaining old growth beech-maple forest in Ohio. Hiram is located in picturesque Portage County, which is home to numerous fens, bogs, vernal pools, forests, and marshes. Hiram is only 10 minutes from Ohio Turnpike (I80) exit 193 and is less than 45 minutes from the Cleveland-Hopkins and Akron-Canton Airports.

Lodging is available on campus (contact rosejp@hiram.edu), B&B's in Hiram (http://www.hiram.edu/visitors/gettingtohiram.html), in nearby Streetsboro (http://streetsborooh.cu.myareaguide.com/hotels.html) and Punderson State Park (http://www.dnr.state.oh.us/parks/parks/punderson.htm) in Newbury. Go to http://www.hiram.edu/visitors/gettingtohiram.html for information on local food and lodging. Lunch is available at the Hiram Food Court http://home.hiram.edu/dining/pages/foodcourt.html or in nearby Garrettsville or Mantua.

Course materials: Copies of multiple manuals and technical documents will be provided as well as outlines, data exercises, and PowerPoint slides.

FOR MORE INFORMATION e-mail ets2@sbcglobal.net or call 440-666-5949. TO REGISTER on-line go to www.ecologicaltrainingservices.com or www.culturetechnologies.com or call 512-656-7518. Undergraduate or graduate credit can be obtained through Hiram College. Contact Jane Preston Rose at rosejp@hiram.edu, 330-569-5163.

Course schedule

Day 1
Location: James H. Barrow Field Station

9:00 Registration
10:00 Welcome, Course Logistics
10:15 Overview: Level 123 Approach
10:30 Level 1 Assessments
11:00 Level 1 Assessment Data Exercise
11:45 Lunch
1:00 Overview of Level 2 Assessment Approach
3:00 Break
3:30 Continue review of Level 2 Assessment Methods
4:30 Finish Day 1

Day 2
Location: Field Exercise at nearby wetlands

8:30 Meet at James H. Barrow Field Station for Field Exercise
9:00 Travel to first wetland
12:00 Lunch in field or nearby towns
1:00 Continue field exercise
4:00 Return to Hiram
4:30 Finish Day 2

Day 3
Locations: James H. Barrow Field Station

9:00 Data exercise: comparison of Level 1 and 2 Assessments
9:30 Overview of Level 3 Assessment Approach: Arkansas, Ohio, Pennsylvania; Comparison of IBI versus HGM approaches, NatureServe Scorecard Approach
10:15 Break
10:30 Review of Vegetation-Based Biological Assessments
11:45 Lunch
1:00 Prepare for Field Exercise
1:30 Level 3 Field Exercise
4:30 Finish Day 2

Day 4
Locations: James H. Barrow Field Station

9:00 Data Reduction and Analysis
10:15 Break
10:30 Data Reduction and Analysis
1:00 Prepare for Field Exercise
1:30 Level 3 Field Exercise
4:30 Finish Day 4

Day 5
Locations: James H. Barrow Field Station

9:00 Data exercise: comparison of Level 1, 2, and 3 data
9:30 Bringing it all together: the Level 1, 2, and 3 Assessment approach (Mitigation performance, ambient assessments, Tiered Aquatic Life Uses, etc.
12:00 Finish Course