Wetland Delineation and Classification Assignment
WFS 536: Advanced Wetland Ecology

Objective

The objective of this assignment will be to intimately expose students to USACE and USFWS wetland delineation and classification protocol via field experiences.

Instructions

Teams of 2 – 3 students (back of handout) will be required to delineate and classify one wetland. Edges of wetlands should be determined using USACE delineation protocol. After delineating the wetland, you will need to classify it to subclass and indicate the water regime modifiers using the USFWS Classification System (Cowardin et al. 1979). Students must provide evidence of wetland conditions using field indicators or direct measurements of soil, hydrology and plants. It is recommend that at least one transect is traversed per cardinal quadrant (for delineation) and one plot inspected per wetland subclass (for classification) to assess wetland indicators and measure relative dominance of plants. Voucher specimens of each dominant plant species should be mounted and provided with the final report. In addition, a short video (10 minutes maximum) with commentary that illustrates wetland characteristics will be required. Video equipment can be acquired from and video editing assistance provided by the UT Hodges Library Studio (see below). If any deepwater classifications are present, they should be noted. Palustrine, riverine or lacustrine wetland and deepwater systems can be used for this assignment. All teams should assume that delineation is occurring at low annual water level (and this is a drought year). Other assumptions made should be stated also. Lastly, you will need to map and estimate the area of each subclass using GIS technologies or the grid system discussed in class.

Required Products (1 hardcopy and digital copy per team)

1) Vicinity map following specifications in USACE ENG Form 4345.
2) Map of wetland and deepwater classifications with scale, north arrow, and field transects and plots (2 maps recommended). Provide a key to classification codes.
3) Evidence of wetland indicators (USACE Routine Delineation Form, plants, video).
4) Written discussion of wetland location, field methods used for delineation and classification, and the types of wetland and deepwater systems that were present.
5) Table of wetlands and deepwater habitats separated to subclass with acreage and percent coverage estimates.

Field Equipment

You may checkout the following field equipment temporarily (2-3 days) to help make field assessments of wetland conditions and size: soil probe, meter and dbh tape, clinometer, compass and GPS unit. Please see John Laux (jlaux@utk.edu) to check out equipment.

Video Equipment (http://www.lib.utk.edu/mediacenter/studio/)

You can check out (3 days maximum) video equipment (Sony MiniDV Handycams) from The Studio in UT Hodges Library. Prior to checking out, online camera certification needs to be

completed (see website). It is recommended that video equipment is reserved several weeks in advance to ensure availability (website). You will need to purchase a mini-DV tape ($3) for recording. After making video, you should edit it so that only salient portions are included (10 minute maximum). In addition, text can be added to help illustrate features, and faded transitions used between video clips. It is recommended that an introductory course on how to edit video using iMovie is taken through The Studio. You can inspect dates and register for available courses at their website. Some online resources also are available at The Studio website. There are 20 workstations at The Studio for editing video and there is a Help Desk. Storing edited video can be done on a mini-DV tape or external hard drive (CDs and USB drives usually are insufficient). Storage space (15 GB) also can be requested from The Studio for 3-week intervals. Final drafts of video should be exported (.m4v file) and uploaded to the Vocasting website (http://volcasting.utk.edu/) and your group folder (under "Communications") at the Blackboard site (http://online.utk.edu/) for WFS 536. In addition, an electronic copy (MS Word .doc) of your written report should be uploaded to the Blackboard site by the project deadline. Voucher plants can be submitted in class.

Randomly Generated Teams (enrolled students)

Group 1:	Foster, Wirwa	Group 3:	Haislip, Hinnebusch
Group 2:	Campbell, Grayson, Walls	Group 4:	Lashley, McCord

Due Tuesday, 6 November 2007

Uploading to Blackboard:

1. After logging in select "Advanced Wetland Ecology" from course listing
2. Select "Communications" in the Tools Box
3. Select "Group Pages"
4. Select "File Exchange"
5. Click Browse and select file from your desktop.
6. Click OK and log off.

Uploading to Volcast:

1. Click on "Upload your podcast" and enter NETID and password
2. Enter your project title for the podcast.
3. Click on "Choose File" and select the file on your desktop.
4. Enter authors' name (enter last names only).
5. Explicit y/n.
6. Enter a description.
7. "Attach to Course". Select WFS 536 (may be listed as WFS536003_FA07) from the drop down menu.
8. Enter keywords.
9. Copyright disclaimer button.