



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

DEPARTMENT OF BIOLOGY  
THE CAROLINA VEGETATION SURVEY

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To: Participants in the CVS-EEP Vegetation Monitoring Workshop, June 17-18, 2008

From: Robert Peet, Tom Wentworth, Forbes Boyle, Caroline Bernard, Michael Lee and Steve Roberts

Date: July 12, 2008

We write to tell you that we very much appreciated your active and enthusiastic participation in the CVS-EEP Vegetation Monitoring Workshop held June 17-18. We are happy to announce that the PowerPoint presentations are now available online at <http://cvs.bio.unc.edu/workshop2008.htm>.

During the course of the workshop, several suggestions were made for revision or interpretation of monitoring protocols. Below we summarize the changes we propose to make in response to those comments. Please let us know if we have overlooked some proposed changes, or if you would advise against the specific changes we propose. Responses should be directed to [cvs@unc.edu](mailto:cvs@unc.edu).

Again, thanks for your interest and participation.

1. The 'Topographic Position' pick-list on the level 3 plot sheet will be open-ended so as to allow additional categories. A similar open-ended style will be added for several other lists first encountered at level 4.
2. Pre-printed data forms pre-populated with data from the previous year will indicate whether notes were previously made, and will provide these notes (from all previous years) as a list at the end of the set of datasheets. Pre-printed forms will also show the previously reported 'source code' for each of the stems.
3. If plots are revised to upgrade to level 3, the plot sheet will be pre-populated with those data previously reported during level 1 or 2 monitoring. We have placed this on our list of desired features, but have not yet implemented it due to the infrequency of upgrading to level 3.
4. Under the 'Plot placement' field, the 'stratified random' option will be changed to 'stratified' and the capability to check more than one box will be added.
5. Datasheets for planted stems will be modified to better indicate both units and precision of measurement. In particular, coordinates X and Y will read '(0.1m)' to indicate that the units are meters and the expected precision is to the decimeter, ddh will read '(1mm)', Height '(1 cm)', and DBH '(1 cm)'.
6. The Manual will be revised and a note will be added at the bottom of the planted stem page to indicate that stems 2.5-4.0m tall should have their heights measured with decimeter precision and stems > 4m should be measured with half-meter precision.
7. Data confidentiality will no longer be a required field for level 3 as all contract work for EEP is expected to result in public data, with the exception that names of field workers and landowners will not routinely be released.

8. 'Reach' will be added to the level 3 plot sheets to reflect the new EEP emphasis on stratification of monitoring plots by reach.
9. The definition of the category 2 vigor code will change from 'weak' to 'fair'.
10. A new web-based system of delivery to contractors of baseline/previous data (to be inserted into the data tool to generate datasheets) will be developed prior to the 2009 season.
11. On the level 3 plot sheet, the section header 'aquatic vegetation' will be changed to 'water' to better parallel the style of the plot sheet for levels 1 and 2.
12. The intensive modules section will be deleted from the level 3 plot sheet as not being relevant.
13. A simple guide explaining how to record woody stems has been created and is available at <http://cvs.bio.unc.edu/protocol/woodysystems.pdf>.
14. References to source documents for the various sets of constrained vocabulary will be included in the protocol documentation. The sources are approximately as follows.
  - a. Disturbance type (Levels 4-5) – follows Jennings et al. 2008.
  - b. Underlying earth surface; Ground cover (Levels 4-5) – created by CVS, but derive in part from the single ground cover lists of VegBank and Grossman et al. 1998.
  - c. Hydrologic regime (Levels 3-5) – modified from Grossman et al. 1998 (which was adapted from Cowardin et al. 1979); relabeled subset of lists in VegBank and Jennings 2008.
  - d. Landform type (Levels 3-5) – region specific subset of list in Grossman et al. 1998.
  - e. Physiognomy (Levels 4-5) – follows FGDC Vegetation Classification Standard 1997.
  - f. Rock type (Levels 3-5) – follows US FGDC Soil Geographic Data Standards 1997.
  - g. Salinity (Levels 3-5) – follows Grossman et al. 1998.
  - h. Soil drainage (Levels 1-5) – follows the US FGDC Soil Geographic Data Standard 1997; definitions follow Grossman et al. 1998.
  - i. Soil texture (Levels 3-5) – follows the US FGDC Soil Geographic Data Standard 1997.
  - j. Surficial deposits (Levels 3-5) – modified from Jennings et al. 2008.
  - k. Topographic position (Levels 3-5) – follows Grossman et al. 1998.

Grossman, D.H. et al. 1998. International classification of ecological communities: terrestrial vegetation of the United States. Volume 1. The National Vegetation Classification System: development, status, and applications. The Nature Conservancy, Arlington, VA, USA.

Jennings, M.D. et al. 2008. Description, documentation, and evaluation of associations and alliances within the U.S. National Vegetation Classification. Version 5.2. Panel on Vegetation Classification. Ecological Society of America, Washington, DC, USA.

U.S. Federal Geographic Data Committee. 1997. Soil Geographic Data Standards. FGDC-STD-006.

U.S. Federal Geographic Data Committee. 1997. Vegetation Classification Standard. FGDC-STD-005.

VegBank. <http://www.vegbank.org>.

14. Clarity on soil drainage of relatively impermeable soils is needed. The following from Grossman et al. (1998) is consistent with our assertion at the workshop that concrete is very well drained:

[Soil drainage] Identifies the natural drainage conditions of the soil and refers to the frequency and duration of wet periods. The soil drainage classes are defined in terms of (1) actual moisture content (in excess of field moisture capacity) and (2) the extent of the period during which excess water is present in the plant-root zone. Soil drainage class categories conform to the FGDC Soil Geographic Data Standards, September 1997.

Excessively drained: Soils are free from any evidence of gleying throughout the profile. These soils are commonly very coarse textured (e.g., >35% volume of particles >2 mm in size) or soils on very steep slopes. Sometimes described as “very rapidly drained.”

Very poorly drained: Free water remains at or within 12 inches of the surface most of the year. The soils are usually very strongly gleyed. Subsurface horizons usually are of low chroma and yellowish to bluish hues. Mottling may be present but at the depth in the profile. Very poorly drained soils usually have a mucky or peaty surface horizon.