

COMMUNITY STRUCTURE AND DIVERSITY  
Evaluation of Written Report

BIO 2500

A. TITLE (and AUTHOR): Title accurately describes focus of the report. POINTS \_\_\_\_ / 2

B. ABSTRACT – Begins (double-spaced) beneath your title and orients reader as to the following:

1. BACKGROUND and PURPOSE: Uses two or three carefully worded sentences to explain to a reader the “what” (former crop field, now, 34-acre prairie restoration), “where” (of the CU Prairie Restoration Project; approx. 1/8 mile N of Kyle Dr., Cedarville, OH), and “why” (statement of purpose (and/or hypothesis) for the mid-summer mowing experiment).

2. METHODS: Three or four sentences describing the approach used to address the purpose just stated. Brief but sufficient so that reader can visualize how data were collected (e.g. adjacent plots, random placement of transects and quadrats, *etc*); reference *Botany Laboratory Manual* for details.

3. RESULTS: Four or five well written sentences to point out results of your study, to be included as part of your abstract as specified in D. See examples of abstracts in “Lab Resources” of S:\drive.  
Grading Comments:

POINTS (for 1. and 2.) \_\_\_\_ / 12

C. DATA ANALYSIS AND DISPLAY – Completes analysis as described in Manual, page 3.4

\_\_\_\_ / 7 1. Table 1 is complete; raw data in the columns for each sample point are hidden to allow summary data (*i.e.* Frequency, Total Cover, and  $p_i$  for both treatments) to fit onto 1 page. Statistical means can be reported in Table 2. Table has brief title telling “what’s here?”

\_\_\_\_ / 7 2. Figure 1 plots Rank Abundance Curves (combined on one figure or separate) for both experimental treatments; axes appropriately labeled for clear interpretation.

\_\_\_\_ / 7 3. Table 2 – includes correct computation of means and t-values; reports probability ( $p$ ) levels for decision on null hypothesis. Includes statistics for (a) Richness, (b) Plant Ht. Diversity, and c) your choice of three additional response variables pertinent to the purpose of our experiment– *e.g.* cover of selected species, Jaccard Coeff., FQAI, *etc.* Table legend is very brief and “Results” state what happened in more detail (below).

Grading Comments:

POINTS \_\_\_\_ / 21

D. RESULTS – as continuation of Abstract (B. above). Explains to the reader in a concise (4-5 sentences), complete, and accurate manner the “results” of the study– *i.e.* what happened in relation to your hypothesis(es); Refers to Table 1, Figure 1, and Table 2 as necessary to support your interpretations. Use Lab Manual, page 3.5 “Results” as guide to give interpretation of data in C. above.

\_\_\_\_ / 5 a. Statistics – states correct decisions on significance of paired means based upon statistical analyses and probabilities (*e.g.*  $p < 0.01$ ).

\_\_\_\_ / 5 b. Conceptual understanding – communicates evidence of understanding of ecological concepts (*e.g.* species richness, evenness, distribution).

\_\_\_\_ / 5 c. Scientific writing – evidenced in concise sentences that begin with “good subjects” Statistics used in support of interpretation and not used as subject of sentences.

Grading Comments:

POINTS \_\_\_\_ / 15

TOTAL POINTS \_\_\_\_ / 50