

# SAGEBRUSH MONITORING PROJECT MEMO

**To:** Vegetation Analysis Specialists  
**From:** Karen Launchbaugh, Team Leader  
**Subject:** Assessment of Nested Frequency on Sagebrush Meadow  
**Date:** October 2, 2008

As you know the nested frequency method is a powerful way to show change in plant communities over time. During our visit to Ponderosa State Park this fall we laid out 7 transects that radiated from a central monitoring point and we recorded nested frequency on 10 plots in each transect. I would like to ask you to compare this years data to a similar study conducted 10 years ago to determine which plants in the community are increasing or decreasing. I will outline the information I need in a report from you in this memo. Please submit the report by **Friday, October 10<sup>th</sup>**; but please notice below, that I need data by Friday, October 3<sup>rd</sup>.

1<sup>st</sup> - You and a partner collected data only on one transect at the central monitoring point. Please save the excel file I e-mailed you or download it from the class web page: [www.cnr.uidaho.edu/range357/class\\_assignments.htm](http://www.cnr.uidaho.edu/range357/class_assignments.htm). Then, enter the data for the transect you examined. Please e-mail your results to me ([klaunchb@uidaho.edu](mailto:klaunchb@uidaho.edu)) by the end of the day Friday, October 3. I will combine the data from all transects and send it to you so you can prepare the report. I only need one set of data from each team. Please check with your partner on this project and make sure that at least one of you submits the requested data.

2<sup>nd</sup> - After I receive all the data I will e-mail you a full set of data and the results from a similar study in 1998. You will need to do the following:

- Complete a summary of data from 2008. Prepare a table that shows the frequency of all plant encountered in the study.
- Identify the major plant species in the study. Compare the 2008 data with the 1998 data and conduct at least 3 comparisons between years with a chi-square test (more details and guidance about chi-square analysis on the project web page) to determine if plant community composition is changing. Make as many statistical comparisons as you like or describe vegetative change in any way you find useful.

3<sup>rd</sup> - Create a report that does not exceed 2 pages of written text (it could be up to 4 pages including tables or figures) summarizing changes you believe are occurring on the plot. Begin with a general description of the site including anything you know about factors that may have caused community composition change on the site such as climate, grazing, insect damage, fire, etc. Include any graphs or tables you believe necessary to support your conclusions. Also, include a discussion of potential concerns or inadequacies of the procedure or data. You are free to speculate on potential causes of change between years or reasons for lack of change. Please submit this information to me by **Friday, October 10**, by 7:00 p.m. through the Blackboard system (<https://www.blackboard.uidaho.edu>). Your report should not include your calculations, but, it will make it easier for me to evaluate your report if you include your calculations on the last few pages of your report or as a separate file. Please let me know if you have any questions (885-4394, [klaunchb@uidaho.edu](mailto:klaunchb@uidaho.edu)).