

Information on Data Collection and Organization from the SGS-LTER

This data package was produced by researchers working on the Shortgrass Steppe Long Term Ecological Research (SGS-LTER) Project. This project was supported by National Science Foundation from 1982-2014. This data package includes one or more tab-delimited data tables, tab-delimited files that denote header definitions and data types for each column, and detailed metadata within an Ecological Metadata Language document (i.e. XML). Example image files of plots, digital datasheets, or schematics of the experimental design may also be included when applicable.

Background information on the SGS-LTER project is contained in related series of objects within the Digital Collections of Colorado and the Colorado State University archives. Together data packages and other background information, and items such as images, proposals, and reports contribute to a comprehensive SGS-LTER collection.

The data tables and associated EML documents represent components of the data package and SGS-LTER collection, which may be discovered and accessed through secondary repositories serving specific ecosystem science domains (e.g. PASTA (LTER Network Repository), DataONE, or The Knowledge Network for BioComplexity).

The following information is copied from the SGS-LTER field protocols to provide specific details on how these data were collected.

N-Harvest

Principal Investigator(s): Dan Milchunas

Study Objectives: monitor fluxes in N content of three SGS plant species over time and between different sites.

What to know before you start sampling

- ✓ ***You are familiar with GUSA, BOGR, and SPCO***
- ✓ ***You have been shown the harvest locations***

Study Area Location and Design: These samples are collected at the catena (section 24) and ESA (ecosystem stress area). The site manager collects samples from the catena and ESA in October, December, and February).

Sampling Protocol: Clip small amounts of new growth from random plants in each pre-defined sampling area. Place the plant material in the pre-labeled coin envelope and return to the drying oven at the field station. The total mass of plant matter should be no less than 3 grams each harvest.

Equipment:

Pre-labeled coin envelopes
Clippers
Rubber bands
Coffee can

Example Label:

At the catena the envelopes are labeled:
N-Harvest
Day-Mo-Yr

Ridge 1, 2, 3 for each species GUSA, BOGR, SPCO

Mid-Slope (same as above)

Swale (same as above)

At the ESA:

N-Harvest

Day-Mo-Yr

ESA 1, 2, 3 for each species GUSA, BOGR, SPCO

QAQC Instructions: Check that all envelopes have been filled with enough plant sample, at least 3 grams before leaving that study site. Make sure that each envelope is labeled with correct and complete information. Be sure to put all the samples from that date in a medium size paper bag in the drying oven set to 55 degrees C and label the medium bag with:

N-Harvest

Day-Mo-Year