

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 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 LTER data package, 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.

ARS #32 GZTX Bite Count

Principal Investigator(s): Daniel Milchunas

Study Objectives: The objective of this study is to examine the density of bites in a grazed area and to determine whether some species of plants show evidence of grazing more so than others.

What to know before you start sampling:

- ✓ ***Have you visited each GZTX site and aware of the treatment areas***
- ✓ ***You have been instructed in which treatment areas are sampled for the Bite Count: GZGZ, UNGZ, and UNUN***
- ✓ ***You have been instructed on how to count a bite***
- ✓ ***You have trained the crew on how to count a bite***

Study Area Locations and Design: please see ARS #32 GZTX site and treatments maps

Sampling Protocol:

In each of the three treatments (GZGZ, UNGZ, and UNUN), you will take data along 5, random 50 m transects. Work in teams of two, with one person recording and the other looking for bites. As you walk along the transect, hold a 10 cm long wire perpendicular to the tape. Look for bites in the area from the edge of the tape to the end of the wire. Take your fingers and pinch the area of the plant that shows evidence of being bitten by a

large mammal. Each pinch should be considered a separate bite. Record the number of bites on each species of plant.

QAQC Instructions:

When starting a site-treatment, one person will be in charge of checking off each of the 5 transects sampled within each of the 3 treatment areas. Each team will call the treatment and transect number from where they have collected data to the person with the check-off sheet. The team member will make sure that all information is complete and correct on the data sheet. The person with the check-off sheet will double check that data have been collected from each and every transect in each treatment area.

All sheets will be given to the call-check person, who will be the last to leave the treatment area. The sheets for a particular site-treatment should be clipped together and placed in the envelope for that site. The check-person should not proceed to the next site before completing the master check form, and verifying the site and treatment code by checking the map for that site. When the site is done, there should be three separate packets of sheets (one for each of the 3 treatments sampled).