

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 Earthwatch Project was motivated by an interest in exploring influences of historic and current land use patterns on nutrient availability in soils in the shortgrass steppe of Colorado. Scientists performed sampling and measurements in areas in recovery after being cultivate unsuccessfully and then abandoned due to the dust bowl in the late 1930s. The data produced for the Earthwatch project were managed within the SGS-LTER local repository and are now being preserved and available within the Digital Collections of Colorado. This work supplemented the efforts of the SGS-LTER program in the early 1990s. Details of the how data values were collected are not available, but methods are described in the following articles:

Ihori, T., Burke, I. C., & Hook, P. B. (1995). Nitrogen mineralization in native cultivated and abandoned fields in shortgrass steppe. *Plant and soil*, 171(2), 203-208.

Burke, I. C., Lauenroth, W. K., & Coffin, D. P. (1995). Soil organic matter recovery in semiarid grasslands: implications for the conservation reserve program. *Ecological Applications*, 5(3), 793-801.