## INTRODUCTION

This catalog presents the archived documentation files for the datasets currently in the Konza Prairie LTER site database. These datasets are affiliated with LTER scientists associated with the Konza Prairie LTER research program from 1981 to 1992. The purpose of this catalog is to assist scientists in the analysis and synthesis of this database. In addition to this catalog, a detailed methods manual documents the procedures used in collecting these data sets.

The design of the current Konza Prairie LTER database is straightforward. All data sets are in ASCII format (with exception of GIS coverages; See GIS01). The entire database is available at: http://www.konza.ksu.edu. The database is divided into subgroups. The subgroups correspond to the research groups that have developed on Konza or represents the data set. They are: Abiotic, Belowground, Consumer, Nutrient, Organic, Other, and Woody. The first letter of the data set code indicates which subgroup the file is in. The extension of the file name represents the year of the data set. For example the data set associated with prairie precipitation for 1986 (data set code APT01), is found in the subgroup abiotic under the file name of apt011.86. Data sets that do not conform to this naming procedure are listed in the abstract section of their corresponding data set code description. For the most part, these data sets involve data that comes from other sources than LTER investigators (e.g. USGS flow data or NADP). The subgroup woody contains the files of the dataset code PWV01.The subgroup Other is reserved for datasets that do not conform to the naming procedures (for now, datasets from the water supplementation experiment (WAT01) are here).

To have consistent format of LTER data files, most LTER data sets have the first 16 columns of each line organized as:

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |

Thus, each line has the data set code associated with it. Although, this was setup in the "days of computer cards" and it was important to have the data set code on each card, it is now useful to have this information in case of hardware failures (disk crashes, bad tapes, etc.)

All quality control checks are managed by the principal investigator(s) associated with a data set. System backups are executed on a nightly basis on DAT 24 tape cartridges and twice a year on compact disks.

Data requests for data not available online simply require the following information:

1) Formal written request and a statement of intended use.
2) Approval of the investigator and/or the Konza Prairie LTER Principal Investigator.
3) Request must be filed with the Konza Prairie LTER information manager.
4) Release of data (following approval) should include a cover letter specifying that: The data are released for your use only and for the purposes outlined in your request.
5) Manuscripts using the data are to be provided to the Principal Investigator, LTER, Division of Biology, Ackert Hall, Kansas State University, Manhattan, KS 66506 so that he/she may notify the appropriate investigators.
6) Publication of these data are allowed by the expressed permission of Konza Prairie LTER investigators named, who have primary responsibility for the data sets.

7) Acknowledgment should be made to recognize the contribution of data by Konza Prairie LTER. In addition, the format shown below is also to be included with the letter. Citation of a data set should use the following format: "Data from the Konza Prairie Research Natural Area were collected as part of the Konza Prairie LTER program (NSF grants DEB-8012166 and BSR- 8514327, BSR-9011662), Division of Biology, Kansas State University, Manhattan, KS. Data and supporting documentation are stored (Data Set Code(s)=_____) in the Konza Prairie Research Natural Area LTER Data Bank." Additionally, specific investigators might be cited for their contributions to the paper.

**SITE DESCRIPTION**

CLIMATE SYNOPSIS:

Temperate mid-continental climate. Yearly mean temperature is 13C with a range of extremes from 6 to 19C. The January mean temperature is -3²C (range -9 to 3C) and the July mean is 27C (range 20 to 33C). Annual precipitation is 835 mm of which about 75% occurs in the growing season. Mean snowfall for January is 150 mm with an annual total of 521 mm. Mean annual windspeed is 5 meters per second from the south.

NARRATIVE:

Tallgrass or bluestem prairie is one of the major ecosystem types of the conterminous United States (exceeded in area only by eastern deciduous forest). Undisturbed examples of tallgrass prairie are rare because this ecosystem type has been extensively converted to agroecosystems.

Konza Prairie is representative of the Flints Hills, a dissected upland with hard chert- and flint-bearing limestone layers. The ridges are usually flat with shallow, rocky soils, whereas the larger and wider valleys have deep permeable soils. The steep-sided hills are characterized by exposed Permian limestone and shale strata that prevented cultivation.

When acquired in the 1970's, the majority of Konza Prairie was dominated by native prairie species, especially big bluestem, indian grass, little bluestem, and switchgrass. Lowland areas with deep soils now have patches of these and other tallgrasses that grow to 2 to 3 m by late summer. Gallery forests on lower Kings Creek are dominated by bur and chinquapin oaks with green ash, hackberry, elm, and black walnut often common. The KSU herbarium contains more than 450 species of vascular plants collected from Konza Prairie. Woody plants have been mapped according to species and size on some portions of the site. Species lists have also been developed for a number of animal groups including birds, mammals, reptiles, amphibians, and aquatic invertebrates.

Konza Prairie is managed to provide an array of burning and grazing (especially bison) treatments to facilitate research to evaluate the effects of fire and grazing on plant composition, primary production, consumer density and diversity, nutrient dynamics, soil chemistry, and hydrology (Fig. 1). This natural prairie also serves as a reference site from comparison to manipulated agricultural systems.

Fire, started by both lightning and aboriginal man, influenced patterns and processes in the tallgrass prairie. To understand these effects, a series of spring burning treatments (primarily areas burned at 1,2,4,10, and 20 year intervals) are maintained on watershed units. These experimental burns are conducted in April before the dominant warm-season grasses begin active growth. Treatment boundaries follow watershed divides to facilitate analysis of hydrologic and nutrient responses to fire and frequency of fire. An extensive soil water/ground water monitoring system has been installed by the USGS on one of these watersheds.

Bison were introduced into a fenced area of nearly 500 ha encompassing several different burn treatments in 1987. The area affected by bison will be enlarged to 1100 ha in 1991. Bison, free-ranging within the fenced area, are able to choose between burned and unburned prairie and

among sites representing an array of topographic/physiographic conditions. Cattle grazing still occurs sporadically on parts of Konza Prairie but not on the primary LTER research watersheds.

# Table of Contents

# *Abiotic Data*

## Data Set Code--AGW01

Title of Data Set--Belowground Water Chemistry from Wells on N04D

Abstract:

In 1988 and 1990, the U.S. Geological Survey, Lawrence, KS, drilled 35 wells at 16 sites within the N04D watershed at the Konza Prairie Research Natural Area. The wells range in depth from about 2 to 13 meters, and are nested to include wells completed in alluvium/colluvium near the N04D drainage and in two Permian-aged limestone's. These sites comprise four transects running approximately east-west across the drainage, and occupy the lower 10% of the surface area of the watershed. The geology of the area is characterized by patchy, near-stream alluvium/colluvium which overlies bedrock, composed of thin (1-2 meter) limestones alternating with thicker (2-4 meter) shales. The limestones are fractured, and records of water levels in the wells show that in some parts of the watershed water levels are nearly constant, while in others they respond noticeably to precipitation events. Beginning in 1991, water samples for inorganic chemical analysis have been collected every four to six weeks by bailing wells to remove 1-2 well volumes. A bailed sample is then filtered through 0.45µ membrane filters by gravity feed. One 50-mL aliquot is reserved for alkalinity determination by titration with 0.02 N H2SO4. One 250-mL LDPE bottle is filled with 250 mL of sample and 5 mL of concentrated HNO3 for cation analysis by atomic absorption spectrophotometry (Na, K, Ca, Mg). One 250-mL LDPE bottle is filled to the brim for anion analysis by ion chromatography (Cl, SO4, NO3). The latter two samples are stored on ice and later in a refrigerator. Anion determination is completed within 1 to 3 days of collection.

Keywords that describe the data set: Subsurface water chemistry, low-temperature aqueous geochemistry, inorganic ground-water chemistry, chemical hydrogeology.

Date data commenced: 01/19/91

Date data terminated: / /

Principle Investigator: G. L. Macpherson

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | N04D (always) | 13-16 | A4 | |
| 7. Well_loc | Well location | 18-24 | A7 | |
| 8. $N0_3$ | Concentration of $N0_3$ | 26-31 | F5.2 | mg/l |

| | | | | |
|---|---|---|---|---|
| 9. $S0_4$ | Concentration of $S0_4$ | 33-39 | F5.2 | mg/l |
| 10. Cl | Concentration of Cl | 41-44 | F4.1 | mg/l |
| 11. Titralk | Titration alkalinity (as $HC0_3$) | 46-49 | I4 | mg/l |

Codes used:

Well_loc

| Name | Code Value |
|---|---|
| ow | observation well |
| 1-4 | Transects (1-4) , the lowest number in nearest the concrete weir |
| 1-6 | Number unique to the well site (1 is nearest the steam;3 is farthest from the stream on the east or northeast side. Well site number 4-6 are progressively further away from the stream on the west or southwest side of the stream |
| Alpha chara. | Eis=Eiss Limestone<br>Eis1=Lower Eiss Limestone<br>Eis2=Upper Eiss Limestone<br>Mor=Morril Limestone<br>Al=Alluvium-colluvium. |

Note:Files are NOT separated by year.

# Data Set Code--AGW02

Title of Data Set—Depth and Nutrient Content of Groundwater from Wells near Kings Creek

Abstract: Wells were drilled in two sites on Konza Prairie Research Natural Area in April, 1993 approximately 100 m from Kings Creek. The two sites are located in a grassland and an agricultural area. The grassland site is an old field that was planted with brome sometime prior to 1976. It has not been grazed for 15 years and is burned in late spring every 1-2 years. The agricultural site is currently under cultivation and historically has been cultivated from sometime between 1939 and 1950 to the present. It is approximately 1 km downstream in an area geologically similar to the old field. The soil at both sites is mapped as Reading silt loam (fine, mixed, mesic Typic Arguidolls). Samples are taken monthly by PVC bailers following removal of 1-2 well volumes. Samples are analyzed with same methods as stream water chemistry.

Keywords that describe the data set: Organic and inorganic N & P content of groundwater, dissolved organic carbon

Date data commenced: 5/17/96

Date data terminated: ongoing

Principle Investigator: Walter Dodds

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Well Number | A1-A7, P1-P7 | 18-24 | A7 | |
| 8. Well Depth | | | F4.1 | ft from well head |
| 9. Depth to Water | | | F4.1 | ft from well head |
| 10. $N0_3$ | Nitrate-nitrogen | | F6.1 | ug/l |
| 11 NH4 | Ammonium-nitrogen | | F6.1 | ug/l |
| 12. $P0_4$ | Orthophosphate | | F5.1 | ug/l |
| 13. TN | Total N | | F7.1 | ug/l |
| 14. TP | Total P | | F5.1 | ug/l |
| 15. DOC | Dissolved Organic Carbon | | F6.3 | mg/l |
| 16. Comments | | | | |

# Data Set Code--ANA01

Title of Data Set--National Atmospheric Deposition Program

Abstract:

Data set contains results of chemical analysis of wetfall on Konza Prairie. Analysis done by the Central Analytical Lab (CAL), Champaign, IL as part of the National Atmospheric Deposition Program (NADP). Data is coordinated by the NADP/NTN Coordination Office at Fort Collins, CO. Data products from that office include: Annual Data Summaries, Semiannual Data Reports, Annual and Seasonal Averages, Monthly Averages, and Weekly data. Konza Prairie LTER maintains the weekly data in electronic form (file name NADP in subdirectory nutrient) while other summaries are available via hard copy.

Keywords: wetfall, precipitation, precipitation chemistry, NADP, Ca, Mg, K, Na, NH4, NO3, Cl, SO4, PO4, pH, conductance

Date data commenced: 08/17/82

Date data terminated: / /

Principle Investigator: Alan K. Knapp

## Data Format Specification for NADP/NTN Weekly Data File *{The following information comes from NADP/NTN office at Fort Collins, CO.}*

I. Headings

First non-blank line: Program Name

NATIONAL ATMOSPERHIC DEPOSTION PROGRAM/ NATIONAL TRENDS NETWORK

| | Columns | Format |
|---|---|---|
| Second non-blank line: Date printed (yrmoda) | 1-4 | i6 |

Third and Fourth non-blank lines: Columns headings

II. DATA

(One data line for each week reported)

| | | |
|---|---|---|
| CAL Code | 1-4 | c4 |
| Date On (yrmoda) | 6-11 | i6 |
| Date Off (yrmoda) | 13-18 | i6 |
| Summ. Per yrmo | 20-23 | i4 |
| Summ. Per. yrq | 25-27 | i3 |
| Sample No. | 30-34 | c5 |
| Limit of Detection symbol (<) for CA | 36 | c1 |
| Ca concentration | 37-42 | f6.2 |
| Limit of Detection symbol (<) for Mg | 44 | c1 |
| Mg concentration | 45-51 | f7.3 |
| Limit of Detection symbol (<) for K | 53 | cl |
| K concentration | 54-60 | f7.3 |
| Limit of Detection symbol (<) for Na | 62 | c1 |
| Na concentration | 63-69 | f7.3 |

| | | |
|---|---|---|
| Limit of Detection symbol (<) for NH4 | 71 | c1 |
| NH4 concentration | 72-77 | f6.2 |
| Limit of Detection symbol (<) for NO3 | 79 | c1 |
| NO3 concentration | 80-85 | f6.2 |
| Limit of Detection symbol (<) for Cl | 87 | c1 |
| CI concentration | 88-93 | f6.2 |
| Limit of Detection symbol (<) for SO4 | 95 | c1 |
| SO4 concentration | 96-101 | f6.2 |
| Limit of Detection symbol (<) for PO4 | 103 | c1 |
| PO4 concentration | 103 | f7.3 |
| Lab pH | 114-117 | f4.2 |
| Field pH | 120-123 | f4.2 |
| Lab conductance | 125-130 | f6.1 |
| Field conductance | 131-136 | f6.1 |
| Sample volume | 140-146 | f7.1 |
| Precipitation from rain gauge | 148-154 | f7.2 |
| Sub ppt | 157-164 | f8.3 |
| Lab type | 168-169 | c2 |
| Valcode | 174-175 | c2 |
| Invalcode | 180-185 | c6 |
| Notes | 189-197 | c9 |

## DESCRIPTION OF PARAMETERS INCLUDED IN NADP/NTN WEEKLY DATA FILES

Cal code

Alpha-numeric site identification code, first two characters of which are the abbreviation of the state in which the site is located (Konza Prairie Cal code is KS31)

Dates

On - Date sample bucket was installed on the collector, reported in Greenwich mean time (GMT), modayr.

Off - Data sample bucket was removed from the collector, reported in Greenwich mean time (GMT), modayr.

Summ. Per.

yrmo - Month in which the sample is included for the purpose of computing weighed-mean concentrations, depositions and precipitation totals given as the year followed by the month (i.e., 8809 for September, 1988)

yrq - Quarter in which the sample is included for the purpose of computing weighted-mean concentrations, depositions and precipitation totals, given as the year followed by a numeral indicating the specific seasonal period ( 1=winter, Dec-Feb; 2=spring, Mar-May; 3=summer, June-Aug; 4=fall, Sep-Nov.).

Sample No.

Sample number assigned by the Laboratory, given as a sequence letter followed by a 4-digit numeral.

Ion concentrations

Concentrations of Ca, Mg, K, Na, NH4, NO3, Cl, SO4 and PO4 reported in mg/l. Concentrations which are below the detection limit of the analysis are indicated with a "<" preceding the value;the value reported is the actual limit of the detection. (In calculating weighted-mean concentrations and depositions NTN substitutes one-half the reported detection limit for concentrations below the limit of detection.)

pH

pH reported as the negative log of hydrogen ion concentration.

lab - pH of the precipitation sample as measured at CAL

field - pH of the precipitation sample as measured on site (Bushnell Hall)

Conductivity

Conductivity reported in microsiemens/cm.

lab - conductivity of the precipitation sample as measured at CAL.

field - conductivity of the precipitation sample as measured on site (Bushnell Hall).

Sample Volume (Svol)

Volume of sample captured by the sampler bucket in milliliters.

Precipitation from Rain Gauge (RG ppt)

Precipitation amount as measured by the rain gauge in millimeters. Trace amounts are indicated by -7.00.

Sub ppt

Precipitation amount used by NADP/NTN in calculating weighted-mean concentrations, depositions and precipitation totals. In most cases, sub ppt equals the rain gauge reading. Where the rain gage reading is a trace amount, sup ppt is assigned a value of 0.127mm; in cases where the rain gauge is missing or invalid, sub ppt is calculated by converting the sample volume to its equivalent depth. (The area of the sampler bucket used for this conversion is 678.9 square centimeters.)

Lab type

A code indicating the condition of the sample upon arrival at CAL

w - sample volume of approximately 35 mL or more

wa - sample volume less than 35 mL; dilution was required

t - trace amount of less than approx. 10 mL; analyses are incomplete

da - dry sample

qa - quality assurance sample submitted in lieu of a wet-side sample bucket for a week during which no precipitation occurred

Valcode

A code which indicates whether a sample is considered valid according to NADP/NTN data validations rules. In the case of a valid sample, the code indicates how the sample is used in calculations of weighted-mean concentrations, depositions and data completeness estimates.

0 - invalid sample

t - valid trace sample

d - valid dry collection period

w - valid sample of lave type w

wa - valid samples of lab type wa

Only samples of w and wa are used by NADP/NTN in calculating weighted-mean concentrations.

Invalcode

A series of codes assigned to samples which are considered invalid by NADP/NTN for the purposes of computing weighted-mean concentrations, depositions and data completeness estimates. The codes indicate the reason for invalidation.

b - bulk sample (Collector was open continuously)

u - undefined sample (Collector was open for > 6 hours and less than the entire sampling period when no precipitation was occurring.

f - filed protocol departure

c - contaminated sample

v - inadequate volume for analysis

s - short sampling interval (< 6 days)

e - extended sampling interval (> 8 days)
l - lab error
i - incomplete chemical analysis
n - no sample collected
p - precipitation amount unknown
x - reasons other than described above

Notes

Coded summary of the CAL screening codes and remarks written on the Field Observer Report Form by field personnel, CAL staff, and Coordination Office Staff.

bu - bulk sample. Sample was continuously exposed to both wetfall and dryfall. (Collector was open continuously.)

na - Results are not yet available (predominantly dry samples).

nn - Information was never reported and will never be available.

ns - No chemistry data will be reported because of extreme contamination, undefined sampling protocol, leakage, loss in the mail, etc.

sp - Samples was collected at a nonapproved sampling site or with nonapproval equipment.

# Data Set Code--APT01

Title of Data Set--Prairie Precipitation

Abstract:

Data set contains daily records of precipitation on 11 raingauges at 10 sites on Konza Prairie. Three sites (HQ1, 020A and 002C; SE) have 7-day clocks (one revolution per week), while the other 8 have 24-hour clocks (one revolution per day). The Konza headquarters weather station has one of each type and both are operated year-round. The remaining raingauges are operated from April 1 to November 1. Precipitation amounts are recorded in mm. Data from all raingauges are recorded on daily bases (record type 1)while raingauges with one day clocks also have data recorded on 15 minute increment during storm events (record type 4).
Keywords that describe data set: Precipitation

Date data commenced:06/01/82

Date data terminated: / /

Principle Investigator: John M. Briggs

Comments: Headquarters raingauge 1 in operation continuously since June 1982; prairie raingauges at 004B, 020B and 002C (south end) in operation since April 1983. Raingauges at N01B, N04D (flume), N04D (prairie chicken blind) and 020A in operation since 02 April 1986. Raingauge HQ2 has been in operation since 20 August 1986. All raingauges except gauges at Headquarters are to be operated from April 1 to October 31 each year.

RECORD TYPE 1

Data Format Specification

| Variable | Description | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Ppthq | Precip at Headquarters | 14-18 | F5.1 | mm |
| 7. Pptub | Precip at 000B | 20-24 | F5.1 | mm |
| 8. Ppt4b | Precip at 004B | 26-30 | F5.1 | mm |
| 9. Pptse | Precip at 002C | 32-36 | F5.1 | mm |
| 10. Pptn1b | Precip at N01B | 38-42 | F5.1 | mm |
| 11. Pptn4pc | Precip at N04D (p.c. Blind) | 44-48 | F5.1 | mm |
| 12. Pptn4fl | Precip at N04D (flume) | 50-54 | F5.1 | mm |
| 13. Pptk4 | Precip at K04A | 56-60 | F5.1 | mm |
| 14. Pptua | Precip at 020A | 62-66 | F5.1 | mm |
| 15. Pptn2b | Precip at N02B | 68-72 | F5.1 | mm |
| 16. Ppthq2 | Precip at Headquarters (2) | 74-78 | F5.1 | mm |

| | | | |
|---|---|---|---|
| 17. Comments | | 78-80 | A2 |

RECORD TYPE 4

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Time | | 14-17 | A4 | |
| 7. HQ2 | Precip at Headquarters | 19-22 | F4.1 | |
| 8. UB | Precip at 000B | 24-27 | F4.1 | |
| 9. 4B | Precip at 004B | 29-32 | F4.1 | |
| 10. N1B | Precip at N01B | 34-37 | F4.1 | |
| 11. N4PC | Precip at N04D (p.c. blind) | 39-42 | F4.1 | |
| 12. N4-F | Precip at N04D (flume) | 44-47 | F4.1 | |
| 13. K4 | Precip at K04A | 49-52 | F4.1 | |
| 14. N2B | Precip at N02B | 54-57 | F4.1 | |
| 15. Time | Time of day in 2400 hour format | 59-62 | F4.1 | |
| 18. Comments | | 64-80 | A16 | |

RECORD TYPE 5

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 1-5 | A1 |
| 3. Year | | 7-8 | A2 |
| 4. Month | | 9-10 | A2 |
| 5. Day | | 11-12 | A2 |
| 6. Time | | 14-17 | A4 |
| 7. N2wp | Weighted precip at N02B | 19-22 | F4.1 |
| 8. N4wp | Weighted precip at N04D | 24-27 | F4.1 |
| 9. N1wp | Weighted precip at N01B | 29-32 | F4.1 |
| 10. Nuwp | Weighted precip at N20B | 34-37 | F4.1 |
| 11. N2dt | Weighted daily total at N02B | 39-42 | F4.1 |
| 12. N4wp | Weighted daily total at N04D | 44-47 | F4.1 |
| 13. N1wp | Weighted daily total at N01B | 49-52 | F4.1 |
| 14. Nuwp | Weighted daily total at N20B | 54-57 | F4.1 |
| 15. Comment | | 59-80 | A21 |

# Data Set Code--APT02

Title of Data Set--Monthly temperature and precipitation records of Manhattan, KS

Abstract:

Data set contains the monthly values of maximum, minimum and average temperatures and monthly total precipitation for Manhattan, KS since 1985. Data are in three separate files, one for each measurement. Data comes from the Weather Data Library in the computer system office of the Cooperative Extension Service of Kansas State University, Manhattan Kansas. (211 Umberger Hall, (913) 532-6270.
Keywords that describe data set: Temperature, Precipitation

Date Data Commenced: 1985

Date Data terminated:

Principle Investigator: John M. Briggs, Mary Knapp (Weather Data Library)

Data Format Specification: The format is the same for all three files.

1. Year
2. January Value
3. February Value
4. March Value
5. April Value
6. May Value
7. June Value
8. July Value
9. August Value
10. September Value
11. October Value
12. November Value

13 Yearly average for temperature values or yearly total for precipitation values.

Comments: All temperatures values are in degree Centigrade and all precipitation values are in mm. No column or format are given as the data can varied in its form from year to year. Also data files do not follow the LTER file naming procedure.

Filenames (as of 01 March 1993) are:

maxtemp.man--Maximum temperatures, mintemp.man--Minimum temperature, meantemp.man--Average temperatures, precip.man--Monthly precipitation.

# Data Set Code--ASD01

Title of data set--Stream discharge in Kings creek at USGS site

Abstract:

The 1060 hectacre Kings creek watershed (STATION NUMBER 06879650) is a U.S. Geological survey hydrologic benchmark. (cf. Cobb, e.D. and J.E. Beisecker. 1971. USGS circular 460-d) flow is measured continuously with a bubble gage. The period of record started in March, 1979. The hydrologic regime is driven by the mid-continent climate characterized by summer thunderstorms and drought. The stream, at the gaging station, is fourth order in gallery forest. The riparian vegetation in the headwaters (1st & 2nd order) is tallgrass, or true, prairie. Flow occurred in spring and early summer in all years. Late summer, fall and winter records also include periods of no flow, the longest of these was ca. nine months. The time from base flow to peak flow for typical storm flow hydrographs is an hour or so and amplitude of ca. three meters above base flow has been recorded (Data comes from USGS office in Lawrence, Kansas; Contact person:Butch Lawcock, (913) 842-9709).

Keywords that describe data set:stream, discharge, flow

Date data commenced:04/01/79

Date data terminated: / /

Principle Investigator: Walter K. Dodds

The following are the first 10 header lines that describes the data format of the USGS file. The file name is called USGS. Actually data begins on line 11.

UNITED STATES DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY - KANSAS 06/05/92

STATION NUMBER 06879650 KINGS C NR MANHATTAN, KS STREAM SOURCE AGENCY USGS

LATITUDE 390607 LONGITUDE 0963542 DRAINAGE AREA 4.09 DATUM STATE 20 COUNTY 161

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
DAILY MEAN VALUES

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP

# Data Set Code--ASD02,ASD04, ASD05,ASD06

Title of data set--Stream discharge at the flumes on watersheds N04D, N00B, N01B, AND N02B

Abstract:
Discharge is measured on streams draining catchments with annual, 2-year, 4-year and 20-year burns. Measurements are taken at 5 minute intervals at a triangular throated flume. The prairie streams are 3rd-order and are intermittent. Daily and stormflow discharge records are available.
Keywords that describe data set:hydrology, stream, flow, discharge, water

Date data commenced:06/14/85

Date data terminated: / /

Principle Investigator: Walter K. Dodds

Format for file names and documentation.
There are two files for each watershed for each year. One is for daily stream flow and one is for storm flow.
ASD021--storm flow data for watershed N04D
ASD022--daily flow data for watershed N04D
ASD041--storm flow data for watershed N00B
ASD042--daily flow data for watershed N00B
ASD051--storm flow data for watershed N01B
ASD052--daily flow data for watershed N01B
ASD061--storm flow data for watershed N02B
ASD062--daily flow data for watershed N02B

Column format for daily flow files:
datacode (1-6)
date (7-12) (yymmdd)
watershed (13-16)
Day of year (19-22)
mean discharge m3/sec (28-32)
max discharge m3/sec (38-42)
time of max discharge in 2400 hour format (45-48)
min discharge (52-56)
time of min discharge in 2400 hour format (59-62)
Volume (71-74)

Storm flow:
datacode (1-6)
date (7-12) (yymmdd)
watershed (13-16)
day of year (19-22)
hour (2400 hour format) (25-28)
discharge m3/sec (34-38)

stage height in centimeters (44-46)

# Data Set Code--ASM01

Title of data set--Soil moisture

Abstract:

Data set contains measurements of soil moisture (%volume) at various depths (25-200 cm) in deep soils for watersheds burned at 1 and 4 year intervals and unburned watersheds. Soil moisture measured by the neutron probe method.

Keywords that describe data set:soil moisture, neutron probe

Date data commenced:05/01/83

Date data terminated: / /

Principle Investigator: Alan K. Knapp

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Tube # | Access tube number | 21 | I1 | |
| 8. D25 | Value at 25 cm kg/m3 | 23-25 | I3 | kg/m3 |
| 9. D50 | Value at 50 cm kg/m3 | 27-29 | I3 | kg/m3 |
| 10. D75 | Value at 75 cm kg/m3 | 31-33 | I3 | kg/m3 |
| 11. D100 | Value at 100 cm kg/m3 | 35-37 | I3 | kg/m3 |
| 12. D125 | Value at 125 cm kg/m3 | 39-41 | I3 | kg/m3 |
| 13. D150 | Value at 150 cm kg/m3 | 43-45 | I3 | kg/m3 |
| 14. D175 | Value at 1755 cm kg/m3 | 47-49 | I3 | kg/m3 |
| 15. D200 | Value at 200 cm kg/m3 | 51-53 | I3 | kg/m3 |
| 16. Comments | | 55-80 | A26 | |

# Data Set Code--ASR01

Title of data set--Effects of burning on infiltration, overland flow, runoff and sediment and nutrient loss on tallgrass prairie using rainfall simulation.
Abstract:

Rainfall simulation and overland flow experiments were performed on four plots at a single site on Konza from May to August, 1989. Two plots were treated with a late spring burn and two plots were left unburned. Five simulations were performed on burned plots and three simulatons on unburned plots. Each simulation consisted of a “dry run” followed 24 hours later by a “wet run”. The dry run consisted of rainfall applied at an intesity of approximately 60 mm/hour. The wet run was the same as a dry run, except when the rainfall was complete, overland flow was applied directly at the top of the plots to simulate run off coming from upslope. Measurements taken include overland flow velocity, water application rate, runoff, hydrograph, water flow depth, sediment content, nitrogen and phosphorus content and percent ground cover (See A.B. Duell, Effects of burning on infiltration, overland flow, and sediment loss on tallgrass prairie, M.S. thesis, Kansas State University, 82pp. for further details).

Keywords that describe data set:Fire, rainfall, simulation, nitrogen,phosphorus, sediments, over-land flow infiltration, runoff

Date data commenced:89/06/16

Date data terminated:89/08/26

Principle Investigator: James K. Koelliker

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Plot | Burned or unburned | 18 | A1 | |
| 8. Runtype | Dry or wet run | 20 | A2 | |
| 9. Realtime | Time of simulation | 22-26 | F5.2 | hours min. |
| 10. Timesb | Time since beginning of initiation of rainfall | 28-30 | I3 | minutes |
| 11. Rainint | Rainfall intensity | 32-34 | I3 | mm/hour |
| 12. Cumrain | Cummulative rainfall | 36-38 | I3 | mm |
| 13. Rorate | Runoff rate | 40-42 | I3 | mm/hour |
| 14. Cumro | Cummulative runoff | 44-46 | I3 | mm |

| | | | | | |
|---|---|---|---|---|---|
| 15. Turbid | Turbidity of Runoff | 48-49 | I2 | NTU | |
| 16. Tsolids | Total solids in Runoff (inorganic+organic) | 51-54 | I3 | mg/l | |
| 17. Tfsolids | Total fixed solids in runoff (Inorganic solids) | 56-59 | I4 | mg/l | |
| 18. Nitrate | Nitrate-n concentrations in runoff | 61-63 | I3 | µg/l | |
| 19. Totaln | Total nitrogen concentrations in runoff | 65-68 | I4 | µg/l | |
| 20. Totalp | Total phosphorus concentrations in runoff | 70-74 | F5.1 | µg/l | |
| 21. Comments | | 77-80 | A3 | | |

## RECORD TYPE 2--Nutrients in rainfall (well water)

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Tsolids | Total solid (organic + inorganic) | 19-21 | I3 | mg/l |
| 8. Tfsolids | Total fixed solids (Inorganic) | 23-25 | I3 | mg/l |
| 9. Nitrate | Nitrate N concentration | 28-30 | I3 | µg/l |
| 10. Totaln | Total Nitrogen concentration | 32-35 | I3 | µg/l |
| 11. Totalp | Total Phosphorus concentration | 37-40 | F4.1 | µg/l |

Codes used:

| Name | Value | Definition of code value |
|---|---|---|
| Plot | a | burned plot |
| | b | burned plot with overland flow |
| | c | Unburned plot with overland flow |
| | d | Unburned plot |
| Runtype | d | Dry run--application of rainfall to saturate soil |
| | w | Wet run--measure runoff from rain and overland flow |

# Data Set Code--AST01

Title of data set--Long-term monitoring of soil temperature data in tallgrass prairie

Abstract:

Sensors monitor soil temperature at various levels. The sensors take readings in burned, unburned, and burned-clipped conditions. Raw data from a microprocessor is summarized into hourly readings and daily minimum, maximum, and mean temperatures.

Keywords that describe data set:soil, soil temperature

Date data commenced:04/23/87

Date data terminated: 10/01/93

Principle Investigator: John M. Briggs

RECORD TYPE 1:hourly readings

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Time | | 18-21 | I4 | |
| 8. UB2 | Unburned, 2cm depth | 23-27 | F4.2 | deg C |
| 9. UB10 | Unburned, 25cm depth | 29-33 | F4.2 | deg C |
| 10. UB25 | Unburned , 25cm depth | 35-39 | F4.2 | deg C |
| 11. B2 | Burned, 2 cm depth | 41-45 | F4.2 | deg C |
| 12. B10 | Burned, 10cm depth | 47-51 | F4.2 | deg C |
| 13. B25 | Burned , 25cm depth | 53-57 | F4.2 | deg C |
| 14. Comments | | 61-80 | A20 | |

RECORD TYPE 2: Maximun daily temperatures

RECORD TYPE 3: Minimun daily temperatures

RECORD TYPE 2: Average daily temperatures

Data Format Specification: same as for record type 1.

Comments:Only data from 1987 and 1988 are complete and error free for the entire time period. In 1989, the UB25 and B25 were dropped and a burned and clipped (to simulate grazing) were added. Variable number 10 became B2CL (burned and clipped with temperatue probe at 2 cm) and variable 13 became B10CL (burned and clipped with temperature probe at 10 cm). Clipped is done at investigator descrisson and in 1989 only two clipps were done. In 1990, the plots were clipped 5th and 19th of June, 18th of July and 13 August. In 1991, the probes in the clipped plots

malfunctioned and no data was collected in these two treatments. In 1992, no data was collected on clipped plots.

# Data Set Code--AWE01

Title of data set--Meteorological data

Abstract:

The following weather data are included in this data set: hourly -- mean temperature, mean relative humidity, mean wind speed, total precipitation total solar radiation, wind direction, max wind speed (sampled on the hour; record type 1) ; daily -- mean, maximum and minimum air temperature, relative humidity, total precipitation, total solar radiation; mean, maximum and minimum soil temperature, average wind speed (sampled at midnight; record type 2). These data are collectecd by a micrologger at headquarters on Konza Prairie.

Keywords that describe data set: air temperature, soil temperature, relative humidity, windspeed, wind direction, solar radiation, precipitation, temperature, humidity

Date data commenced: 04/22/82

Date data terminated: / /

Principle Investigator: John M. Briggs

RECORD TYPE 1 (Hourly values)

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Hour | | 21-24 | I4 | hours |
| 8. Tair | Air temperature | 28-32 | F6.2 | deg C |
| 9. Rhum | Relative humidity | 36-40 | F5.2 | % |
| 10. Wspeed | Wind speed | 44-48 | F5.3 | m/s |
| 11. Wdir | Wind direction | 52-56 | F5.1 | deg |
| 12. Srad** (reset - to 0) | Solar Radiation | 60-64 | F5.2 | Joules/$cm^2$ |
| 13. Ppt | Precipitation | 72 | I3 | mm |
| **** Caution!!! Hourly ppt. is not precise, use apt01 data instead. Ppt. removed after 1/1/00*** | | | | |
| 14. stemp | Soil Temperature at 25cm | 76-80 | | deg C |
| 15. Wmax | Max wind speed (10 sec. execution interval)* | 84-88 | | m/s |

RECORD TYPE 2 (Daily values)

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 | |
| 2. Rectype | 6 | I1 | |
| 3. Year | 7-8 | I2 | |

| | | | | |
|---|---|---|---|---|
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Day of Year | | 18-20 | | |
| 8. Tmax | Maximum Air Temperature | 22-27 | F6.2 | deg C |
| 9. Tmin | Minimum Air Temperature | 29-34 | F6.2 | deg C |
| 10. Tave | Average Air Temperature | 36-42 | F6.2 | deg C |
| 11. Dhumid | Average Relative Humidity | 44-49 | F4.1 | % |
| 12. Dsrad** | Total daily solar radiation | 51-56 | F6.1 | Joules/$cm^2$ |
| 13. Dppt | Total Daily Precipitation | 58-61 | F6.1 | mm |
| 14. Smax | Maximum soil temp | 63-67 | | deg C |
| 15. Smin | Minimum soil temp | 69-73 | | deg C |
| 16. Save | Average soil temp | 75-80 | | deg C |
| 17. Wave† | Average Wind Speed | 82-86 | | m/s |

*Program execution interval was changed from 60 seconds to 10 on 7/17/00. This change could significantly influence values reported for max wind speed. Caution should be used when comparing max wind speeds across this date.

**Solar radiation collected prior to 7/19/00 are recorded in Langleys.

†Prior to 7/14/00 this parameter was maximum daily wind speed.

# Data Set Code--AWT01

Title of data set--Water temperature - discontinuous measurements in prairie streams

Abstract:

Water temperature is measured on streams draining catchments with annual, 2-year, 4-year, and 20-year burns. Measurements of water temperature (degrees c) are made on irregular basis in each of the four streams where discharge is continuously monitored (see data set ASD02 and AWT02).

Keywords that describe data set:stream, water, temperature

Date data commenced:04/24/85

Date data terminated: / /

Principle Investigator: Walter K. Dodds

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Time | Central Standard Time | 14-17 | I4 | CST |
| 7. TempN1 | Temperature at N01B flume | 20-23 | F4.1 | deg C |
| 8. TempN2 | Temperature at N02B flume | 26-29 | F4.1 | deg C |
| 9. TempN4 | Temperature at N04D flume | 32-35 | F4.1 | deg C |
| 10. TempNU | Temperature at N20B flume | 38-41 | F4.1 | deg C |
| 11. Comments | | 44-80 | A34 | |

# Data Set Code--AWT02

Title of data set--Water temperature - continuous measurements in prairie streams

Abstract:

Water temperature is measured on streams draining catchments with annual, 2-year, 4-year, and 20-year burns. Hourly measurements of water temperature (degrees c) are made in each of the four streams where discharge is continuously monitored (see data set ASD02).
Keywords that describe data set:stream, water, temperature

Date data commenced:04/10/86

Date data terminated: / /

Principle Investigator: Walter K. Dodds

RECORD TYPE 1

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Time | Central Standard Time | 14-17 | I4 | CST |
| 7. TempN1 | Temperature at N01B flume | 20-24 | F4.1 | Deg C |
| 8. TempN2 | Temperature at N02B flume | 27-31 | F4.1 | Deg C |
| 9. TempN4 | Temperature at N04D flume | 34-38 | F4.1 | Deg C |
| 10. TempNU | Temperature at N20B flume | 41-45 | F4.1 | Deg C |
| 11. Comments | | 48-80 | A33 | |

# *Belowground Data*

## Data Set Code--BLGPVC

Title of data set--Vegetation species composition for below ground plots

Abstract:

Two permanent plant composition plots were marked with conduit in each of the 64 plots. Canopy cover was recorded in a 5 $m^2$ circular area surrounding each of the plots. Every 5 years, coverage is assessed in early June before the plots are mowed, and again in August.

Date data commenced: 1989
Date data terminated: / /

Principle Investigators:

RECORD TYPE 1
Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-6 | A6 |
| 2. Year | | 7-8 | I2 |
| 3. Month | | 9-10 | I2 |
| 4. Day | | 11-12 | I2 |
| 5. SP | Starting Plot(x) | 14-15 | I2 |
| 6. EP | Ending Plot(y) | 17-18 | I2 |
| 7. Specode | Species code | 20-22 | I3 |
| 8. Genus | Abbreviation of genus | 24-29 | A6 |
| 9. Speci | Abbreviation of species | 31-35 | A5 |
| 10. Vari | Abbreviation of variety | 37-40 | A4 |
| 11. Cover | Cover in plots listed previously | 42-72 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Spcode | 1-513 | (see species list attached to PVC02 entry) |
| Plot | 1 | 0-1% Cover |
| | 2 | 2-5% Cover |
| | 3 | 5-25% Cover |
| | 4 | 25-50% Cover |
| | 5 | 50-75% Cover |
| | 6 | 75-95% Cover |
| | 7 | 95-100% Cover |

# Data Set Code--BMS01

Title of data set--Belowground plots: Mycorrhizae Spore Density

Abstract:

Spore densities of 14 groups (13 species + unknown) are measured every two years on the 64 belowground plots (record type 1). Effects of burning, mowing, and n + p additions on spore densities (an index of vam infection rates). Community indices a percent root colonization (record type 2). Effects of burning, mowing, and n + p additions on mycorrhizal community composition and root colonization.

Keywords that describe data set: mycorrhizal, spores, vam, burning, mowing, nitrogen, phosphorus, belowground plots

Date data commenced:06/11/87

Date data terminated: / /

Principle Investigator: David C. Hartnett

RECORD TYPE 1 (spore densities)

| | | | | |
|---|---|---|---|---|
| 01. DATACODE | | 1-5 | | A5 |
| 02. RECTYPE | | 6 | | 1 |
| 03. YEAR | | 8 | | I2 |
| 04. MONTH | | 9-10 | | I2 |
| 05. DAY | | 11-12 | | I2 |
| 06. BELO | | 13-16 | | A4 |
| 07. PLOT | Belowground Plot id (1-64) | 18-19 | | I2 |
| 08. BLOCK | Super Plot (block) H A | 21 | | A1 |
| 09. BURN | Burn Treatment | 23 | | A1 |
| 10. MOW | Mow Treatment | 25 | | A1 |
| 11. NUTRIENT | Nutrient Treatment | 27 | | A1 |
| 12. AGGREGAT | # spores Glomus aggregatum | 29-31 | | I3 |
| 13. FUSCICDA | # spores Glomus fuscicdatum | 33-35 | | I3 |
| 14. MOSSEAL | # spores Glomus mosseal | 37-39 | | I3 |
| 15. CLAROIDE | # spores Glomus claroideum | 41-42 | | I2 |
| 16. CONSTRIC | # spores Glomus constrictum | 44-45 | I2 | |
| 17. TORTUOSU | # spores Glomus tortuosum | 47-48 | | I2 |
| 18. ALBIDUM | # spores Glomus albidum | 50-51 | | I2 |
| 19. ETUNICAT | # spores Glomus etunicatum | 53-54 | I2 | |
| 20. UNIDENT | # unidntfd glomus spp. | 56-57 | | I2 |
| 21. GIGPELLU | # spores Gigaspora pellucida | 59-60 | | I2 |
| 22. GIGGIGAU | # spores Gigaspora gigautea | 62-63 | | I2 |
| 23. GIGCALOS | # spores Gaspora calospira | 65-66 | | I2 |
| 24. SCLCOROM | # spores scler. corom. | 68-69 | | I2 |
| 25. ENTOFRAP | # spores entoph. freques | 71-72 | | I2 |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Plot | 1-64 | Plot number |
| Burn treatment | U:B | U=Unburn B=Burn |
| Mow treatment | U;M | U=unmowed M=mowed |
| Nutrient treatment | C,N,P,B | C=control, N=nitrogen P=Phosphorus B=Both |

RECORD TYPE 2 (community indices)

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | A1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-11 | I2 |
| 5. Day | | 12-13 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Plot | Plot number (1-64) | 18-19 | I2 |
| 8. Subplot | Sub plot | 23 | A1 |
| 9. Burn | Burned treatment | 25 | A1 |
| 10. Mow | Mow treatment | 27 | A1 |
| 11. Nutrient | Nutrient treatment | 29 | A1 |
| 12. Myc. spore species richness | | 32-33 | I2 |
| 13. Myc. Spore species eveness | | 35-39 | F1.3 |
| 14. Myc. Spore species diversity | | 42-46 | F1.3 |
| 15. Myc.Spore species total number | | 49-52 | I4 |
| 16. Myc. Root Colonization (%) | | 55-56 | I2 |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Plot | 1-64 | Plot number |
| Burn treatment | U:B | U=Unburn B=Burn |
| Mow treatment | U;M | U=unmowed M=mowed |
| Nutrient treatment | C,N,P,B | C=control, N=nitrogen P=Phosphorus B=Both |

# Data Set Code--BNS01

Title of data set-- Belowground plots: Nematodes
Abstract:

Keywords that describe data set: nematode, mowing, nitrogen, phosphorus, belowground plots

Date data commenced: 1987

Date data terminated: /  /

Principle Investigator: T. Todd

| | |
|---|---|
| 1. Observation number | 1-6 |
| 2. Year | 9-10 |
| 3. Burn | 15 |
| 4. Mow | 20 |
| 5. N | 24 |
| 6. P | 27 |
| 7. Block | 31 |
| 8. Herbivores | 34-44 |
| 9. Fungivores | 46-56 |
| 10. Microbivores | 58-68 |
| 11. Omnivorous/predators | 70-80 |
| 12. Total | 82-93 |
| 13. Herbivores | 37-44 |
| 14. Fungivores | 48-54 |
| 15. Microbial | 58-64 |
| 16. Omnipredators | 68-74 |

# *Consumer Data*

## Data Set Code--CAA01

Title of Data Set--Sweep samples for Selected Aboveground Arthropods (1981)

Abstract:

Data set includes number of individuals and mg of spiders, Homoptera, and phytophagous Hemiptera collected in twelve sets of ten sweeps each at eight sites in June 1981 and twelve sites in August 1981 on Knoza Prairie. The sites were located on the Konza LTER watersheds that are burned at 1 yr and 4 yr intervals or are left unburned for long periods of time.

Keywords that describe data set:Homoptera, Hemiptera, Insects, Spiders, Sweeping

Date data commenced:06/01/81

Date data terminated:09/01/81

Principle Investigator: Edward W. Evans

RECORD TYPE 1

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil type (Tully or Florence) | 21-22 | A2 | |
| 8. Sample | Sample number for individuals | 24-25 | I2 | |
| 9. Nhomop | Number of homoptera per sample | 27-29 | I3 | |
| 10. Nhemip | Number of hemiptera per sample | 31-33 | I3 | |
| 11. Nspider | Number of spiders per sample | 35-37 | I3 | |
| 12. Mghomop | MG of homoptera per sample | 39-41 | I3 | MG |
| 13. Mghemip | MG of hemiptera per sample | 43-45 | I3 | MG |
| 14. Mgspider | MG of spiders per sample | 47-49 | I3 | MG |

Codes used:

| | | |
|---|---|---|
| Soiltype | TU | Tully soil |
| | Fl | Florence soil |

# Data Set Code--CAA02

Title of data set--D-Vac Samples for Aboveground Arthropods, 1981

Abstract:

Data set includes numbers of individuals and mg of Homoptera, Hemiptera, grasshoppers, ants, and spiders collected in D-Vac samples in August 1981 at one site for each of the 12 Konza Prairie LTER treatments ( 3 fire treaments x 2 soils x 2 grazing treatments). Nine D-Vac samples (each covering 640 square cm of ground) were taken at each site.

Keywords that describe data set:Homoptera, Hemiptera, grasshoppers, ants, spiders

Date data commenced:08/03/81

Date data terminated:08/07/81

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil type (Tully or Florence) | 21-22 | A2 | |
| 8. Sttime | Time sampling started | 24-27 | I4 | Hours |
| 9. Endtime | Time sampling ended | 29-32 | I4 | Hours |
| 10. Wind | Wind speed at start of sampling | 34-37 | F4.1 | Km/hr |
| 11. Temp | Air temp at start of sampling | 39-42 | F4.1 | deg C |
| 12. Relhum | Relative humidity at ground level | 44-45 | I2 | % |
| 13. Cloudcov | % Cloud cover directly overhead | 47-49 | I3 | % |

Codes Used

| | | |
|---|---|---|
| Soiltype | TU | Tully soil |
| | FL | Florence soil |

RECORD TYPE 2

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |

| | | | | |
|---|---|---|---|---|
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil type (Tully or Florence) | 21-22 | I2 | |
| 8. Sample | Sample number (Total 9) for sites | 24-25 | I2 | |
| 9. Nhomop | Number of individuals (Homoptera) | 27-29 | I3 | |
| 10. Nhemip | Number of individuals (Hemiptera) | 31-33 | I3 | |
| 11. Ngrshop | Number of individuals (Grasshoppers | 35-37 | I3 | |
| 12. Nant | Number of individuals (Ants) | 39-41 | I3 | |
| 13. Nspider | Number of individuals (Spiders | 43-45 | I3 | |
| 14. Mghomop | MG of Homoptera per sample | 47-49 | I3 | MG |
| 15. Nehemip | MG of Hemiptera per sample | 51-53 | I3 | MG |
| 16. Mggrshop | MG of Grasshoppers (Acrididae) | 55-57 | I3 | MG |
| 17. Mgant | MG of Ants per sample | 59-61 | I3 | MG |
| 18. Mgspider | MG of Spiders per sample | 63-65 | I3 | MG |

Codes used:

| | | |
|---|---|---|
| Soiltype | TU | Tully soil |
| | FL | Florence soil |

# Data Set Code--CAA03

Title of Data Set--D-Vac Sampling of Aboveground Arthropods (1982)

ABSTRACT:

Data set includes number of individuals for spiders and insect orders (Hemiptera and Coleoptera were split into phytophagous and predatory; hymenoptera was split into ants, parasitoid wasps, and all others) collected in d-vac samples in June-July and Aug 1982. On both occasions, eight sites were sampled: two upland and two lowland sites on both an annually burned and an unburned watershed. At each site on each occasion, fifteen d-vac samples (each covering 1570 sq. cm of ground) were taken.

Keywords that describe data set:insects, spiders, d-vac, burning

Date data commenced:06/21/82

Date data terminated:08/04/82

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil type (Tully or Florence) | 21-22 | A2 | |
| 8. Sttime | Time sampling started | 24-27 | I4 | hours |
| 9. Endtime | Time sampling ended | 29-32 | I4 | hours |
| 10. Wind | Wind speed at start of sampling | 34-37 | F4.1 | km/hr |
| 11. Temp | Air temp at start of sampling | 39-42 | F4.1 | deg C |
| 12. Relhum | Relative humidity at ground level | 44-45 | I2 | % |
| 13. Cloudcov | % cloud cover directly overhead | 47-49 | I3 | % |

Code used:

| | | |
|---|---|---|
| 1. Soiltype | TU | Tully soil |
| 2. Soiltype | Fl | Florence soil |

RECORD TYPE 2

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil type (Tully or Florence) | 21-22 | A2 | |
| 8. Repsite | Replicate site for a watershed/soil | 24 | I1 | |
| 9. Gprcode | Group code | 26-27 | I2 | |

| | | | |
|---|---|---|---|
| 10. Group | Abbreviated name of taxon | 29-47 | A19 |
| 11. S1 | Number of indviduals in sample #1 | 49-51 | I3 |
| 12. S2 | Number of indviduals in sample #2 | 53-55 | I3 |
| 13. S3 | Number of indviduals in sample # 3 | 57-59 | I3 |
| 14. S4 | Number of indviduals in sample # 4 | 61-63 | I3 |
| 15. S5 | Number of indviduals in sample # 5 | 65-67 | I3 |
| 16. S6 | Number of indviduals in sample # 6 | 69-71 | I3 |
| 17. S7 | Number of indviduals in sample # 7 | 73-75 | I3 |
| 18. S8 | Number of indviduals in sample # 8 | 77-79 | I3 |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | tu | Tully soils |
| 2. Soiltype | fl | Florence soil |
| 3. Grpcode | 01 | Thysanura |
| 4. Grpcode | 02 | Orthoptera without mantids |
| 5. Grpcode | 03 | Orthoptera mantids only |
| 6. Grpcode | 04 | Psocoptera |
| 7. Grpcode | 05 | Thysanoptera |
| 8. Grpcode | 06 | Hemiptera phytophagous |
| 9. Grpcode | 07 | Hemiptera predatory |
| 10. Grpcode | 08 | Homoptera |
| 11. Grpcode | 09 | Coleoptera phytophagous |
| 12. Grpcode | 10 | Coleoptera predatory |
| 13. Grpcode | 11 | Neuroptera larvaae |
| 14. Grpcode | 12 | Neuroptera adults |
| 15. Grpcode | 13 | Lepidoptera larvae |
| 16. Grpcode | 14 | Lepidoptera adults |
| 17. Grpcode | 15 | Diptera |
| 18. Grpcode | 16 | Hymenoptera ants |
| 19. Grpcode | 17 | Hymenoptera wasps |
| 20. Grpcode | 18 | Hymenoptera bees |
| 21. Grpcode | 19 | spiders |
| 22. Grpcode | 20 | Phalangida |
| 23. Grpcode | 21 | All arthropods (total) |

RECORD TYPE 3

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil Type (Tully or Florence) | 21-22 | A2 |
| 8. Repsite | Replicate site for a watershed/soil type | 24 | I1 |
| 9. Gprcode | Group code | 26-27 | I2 |
| 10. Group | Abbreviated name of taxon | 29-47 | A19 |
| 11. S9 | Number of indviduals in sample # 9 | 49-51 | I3 |
| 12. S10 | Number of indviduals in sample # 10 | 53-55 | I3 |
| 13. S11 | Number of indviduals in sample # 11 | 57-59 | I3 |

| | | | |
|---|---|---|---|
| 14. S12 | Number of indviduals in sample # 12 | 61-63 | I3 |
| 15. S13 | Number of indviduals in sample # 13 | 65-67 | 13 |
| 16. S14 | Number of indviduals in sample # 14 | 69-71 | I3 |
| 17. S15 | Number of indviduals in sample # 15 | 73-75 | I3 |
| 18. Total | Total number of individuals in all samples combined | 76-79 | I4 |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | tu | Tully soils |
| 2. Soiltype | fl | Florence soil |
| 3. Grpcode | 01 | Thysanura |
| 4. Grpcode | 02 | Orthoptera without mantids |
| 5. Grpcode | 03 | Orthoptera mantids only |
| 6. Grpcode | 04 | Psocoptera |
| 7. Grpcode | 05 | Thysanoptera |
| 8. Grpcode | 06 | Hemiptera phytophagous |
| 9. Grpcode | 07 | Hemiptera predatory |
| 10. Grpcode | 08 | Homoptera |
| 11. Grpcode | 09 | Coleoptera phytophagous |
| 12. Grpcode | 10 | Coleoptera predatory |
| 13. Grpcode | 11 | Neuroptera larvaae |
| 14. Grpcode | 12 | Neuroptera adults |
| 15. Grpcode | 13 | Lepidoptera larvae |
| 16. Grpcode | 14 | Lepidoptera adults |
| 17. Grpcode | 15 | Diptera |
| 18. Grpcode | 16 | Hymenoptera ants |
| 19. Grpcode | 17 | Hymenoptera wasps |
| 20. Grpcode | 18 | Hymenoptera bees |
| 21. Grpcode | 19 | spiders |
| 22. Grpcode | 20 | Phalangida |
| 23. Grpcode | 21 | All Arthropods (total) |

# Data Set Code--CBC01

Title of data set--Bird Check-List
Abstract:

Presence, including documented nesting, of all bird species recorded on a weekly basis throughout the year.

Keywords that describe data set:bird, phenology
Date data commenced:01/01/71

Date data terminated: / /

Principle Investigator: John L. Zimmerman

RECORD TYPE 1

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Species | 4 character alphameric code unique for each species | 8-11 | A4 |
| 4. 2 Mar | Status (see codes below) | 13 | A1 |
| 5. 9 Mar | | 14 | A1 |
| 6. 16 Mar | | 15 | A1 |
| 7. 23 Mar | | 16 | A1 |
| 8. 30 Mar | | 17 | A1 |
| 9. 6 Apr | | 18 | A1 |
| 10. 13 Apr | | 19 | A1 |
| 11. 20 Apr | | 20 | A1 |
| 12. 27 Apr | | 21 | A1 |
| 13. 4 May | | 22 | A1 |
| 14. 11 May | | 23 | A1 |
| 15. 18 May | | 24 | A1 |
| 16. 25 May | | 25 | A1 |
| 17. 1 Jun | | 27 | A1 |
| 18. 8 Jun | | 28 | A1 |
| 19. 15 Jun | | 29 | A1 |
| 20. 22 Jun | | 30 | A1 |
| 21. 29 Jun | | 31 | A1 |
| 22. 6 Jul | | 32 | A1 |
| 23. 13 Jul | | 33 | A1 |
| 24. 20 Jul | | 34 | A1 |
| 25. 27 Jul | | 35 | A1 |
| 26. 3 Aug | | 36 | A1 |
| 27. 10 Aug | | 37 | A1 |
| 28. 17 Aug | | 38 | A1 |
| 29. 24 Aug | | 39 | A1 |
| 30. 31 Aug | | 41 | A1 |
| 31. 7 Sep | | 42 | A1 |
| 32. 14 Sep | Status | 43 | A1 |
| 33. 21 Sep | Status | 44 | A1 |

| | | | | | |
|---|---|---|---|---|---|
| 34. 28 Sep | | | | 45 | A1 |
| 35. 5 Oct | | | | 46 | A1 |
| 36. 12 Oct | | | | 47 | A1 |
| 37. 19 Oct | | | | 48 | A1 |
| 38. 26 Oct | | | | 49 | A1 |
| 39. 2 Nov | | | | 50 | A1 |
| 40. 9 Nov | | | | 51 | A1 |
| 41. 16 Nov | | | | 52 | A1 |
| 42. 23 Nov | | | | 53 | A1 |
| 43. 30 Nov | | | | 55 | A1 |
| 44. 7 Dec | | | | 56 | A1 |
| 45. 14 Dec | | | | 57 | A1 |
| 46. 21 Dec | | | | 58 | A1 |
| 47. 28 Dec | | | | 59 | A1 |
| 48. 5 Jan | | | | 60 | A1 |
| 49. 12 Jan | | | | 61 | A1 |
| 50. 19 Jan | | | | 62 | A1 |
| 51. 26 Jan | | | | 63 | A1 |
| 52. 2 Feb | | | | 64 | A1 |
| 53. 9 Feb | | | | 65 | A1 |
| 54. 16 Feb | | | | 66 | A1 |
| 55. 23 Feb | Status | | | 67 | A1 |

Codes used:

| | | |
|---|---|---|
| Status | 0 | not recorded |
| | x | recorded as present |
| | n | nesting |

| | | | | | |
|---|---|---|---|---|---|
| 1. Species | agwt | green-winged teal | | | |
| 2. Species | barn | common barn owl | | | |
| 3. Species | basw | barn swallow | | | |
| 4. Species | bbcu | black-billed cuckoo | | | |
| 5. Species | belt | belted kingfisher | | | |
| 6. Species | bggn | blue-gray gnatcatcher | | | |
| 7. Species | bgwb | black-throated green warbler | | | |
| 8. Species | bhcb | brown-headed cowbird | | | |
| 9. Species | bitt | american bittern | | | |
| 10. Species | blea | bald eagle | | | |
| 11. Species | blgr | blue grosbeak | | | |
| 12. Species | blte | black tern | | | |
| 13. Species | bluj | blue jay | | | |
| 14. Species | blvo | bell's vireo | | | |
| 15. Species | blwb | blackburnian warbler | | | |
| 16. Species | blwt | blue-winged teal | | | |
| 17. Species | bnsw | bank swallow | | | |
| 18. Species | bobk | bobolink | | | |
| 19. Species | bobw | northern bobwhite quail | | | |
| 20. Species | bpwb | blackpoll warbler | | | |
| 21. Species | brbb | brewer's blackbird | 22. Species | brcp | brown creeper |
| 23. Species | brow | barred owl | | | |
| 24. Species | brwh | broad-winged hawk | | | |

| | | |
|---|---|---|
| 25. Species | buff | bufflehead |
| 26. Species | bwrn | bewick's wren |
| 27. Species | bwwb | black-and-white warbler |
| 28. Species | caeg | cattle egret |
| 29. Species | cang | canada goose |
| 30. Species | carn | northern cardinal |
| 31. Species | catb | gray catbird |
| 32. Species | ccos | clay-colored sparrow |
| 33. Species | cfsw | cliff swallow |
| 34. Species | chik | black-capped chickadee |
| 35. Species | chps | chipping sparrow |
| 36. Species | chuk | chuck-will's widow |
| 37. Species | cogr | common grackle |
| 38. Species | coop | cooper's hawk |
| 39. Species | coot | american coot |
| 40. Species | corm | double-crested cormorant |
| 41. Species | crow | american crow |
| 42. Species | cswb | chestnut-sided warbler |
| 43. Species | cwax | cedar waxwing |
| 44. Species | cwrn | carolina wren |
| 45. Species | deju | dark-eyed junco |
| 46. Species | dick | dickcissel |
| 47. Species | down | downy woodpecker |
| 48. Species | eblu | eastern bluebird |
| 49. Species | ekng | eastern kingbird |
| 50. Species | emdl | eastern meadowlark |
| 51. Species | ewpw | eastern wood-pewee |
| 52. Species | ferh | ferruginous hawk |
| 53. Species | fgul | franklin's gull |
| 54. Species | flds | field sparrow |
| 55. Species | flik | northern flicker |
| 56. Species | foxs | fox sparrow |
| 57. Species | gadw | gadwall |
| 58. Species | gbhe | great blue heron |
| 59. Species | gcfc | great crested flycatcher |
| 60. Species | gchk | greater prairie chicken |
| 61. Species | gckt | golden-crowned kinglet |
| 62. Speceis | geye | common goldeneye |
| 63. Species | ghow | great horned owl |
| 64. Species | glea | golden eagle |
| 65. Species | glfh | american goldfinch |
| 66. Species | gosh | northern goshawk |
| 67. Species | gras | grasshopper sparrow |
| 68. Species | greg | great egret |
| 69. Species | grhe | green-backed heron |
| 70. Species | gtgr | great-tailed grackle |
| 71. Species | gthr | gray-cheeked thrush |
| 72. Species | hair | hairy woodpecker |
| 73. Species | hars | harris' sparrow |
| 74. Species | hens | henslow's sparrow |

| | | |
|---|---|---|
| 75. Species | hfnk | house finch |
| 76. Species | hood | hooded merganser |
| 77. Species | hous | house sparrow |
| 78. Species | hthr | hermit thrush |
| 79. Species | hwrn | house wren |
| 80. Species | inbu | indigo bunting |
| 81. Species | kest | american kestrel |
| 82. Species | kill | killdeer |
| 83. Species | kywb | kentucky warbler |
| 84. Species | lapl | lapland longspur |
| 85. Species | lark | horned lark |
| 86. Species | lbun | lark bunting |
| 87. Species | lecs | leconte's sparrow |
| 88. Species | lins | lincoln's sparrow |
| 89. Species | lrks | lark sparrow |
| 90. Species | lshr | loggerhead shrike |
| 91. Species | ltfc | least flycatcher |
| 92. Species | lwth | louisiana waterthrush |
| 93. Species | lyel | lesser yellowlegs |
| 94. Species | macl | mccown's longspur |
| 95. Species | mall | mallard |
| 96. Species | marh | northern harrier |
| 97. Species | mawb | magnolia warbler |
| 98. Species | mdov | mourning dove |
| 99. Species | mdsp | meadowlark sp |
| 100. Species | merl | merlin |
| 011. Species | miss | mississippi kite |
| 102. Species | mock | northern mockingbird |
| 103. Species | mowb | mourning warbler |
| 104. Species | mwrn | marsh wren |
| 105. Species | nawb | nashville warbler |
| 106. Species | nite | common nighthawk |
| 107. Species | none | no birds |
| 108. Species | noor | northern oriole |
| 109. Species | nwth | northern waterthrush |
| 110. Species | ocwb | orange-crowned warbler |
| 111. Species | oror | orchard oriole |
| 112. Species | osfc | olive-sided flycatcher |
| 113. Species | ospr | osprey |
| 114. Species | oven | ovenbird |
| 115. Species | paru | northern parula warbler |
| 116. Species | pbgr | pied-billed grebe |
| 117. Species | pelc | white pelican |
| 118. Species | pere | peregrine falcon |
| 119. Species | phes | ring-necked pheasant |
| 120. Species | phob | eastern phoebe |
| 121. Species | phvo | philadelphia vireo |
| 122. Species | pint | northern pintail |
| 123. Species | plwb | palm warbler |
| 124. Species | pmar | purple martin |

| | | |
|---|---|---|
| 125. Species | poor | common poor-will |
| 126. Species | praf | prairie falcon |
| 127. Species | purp | purple finch |
| 128. Species | rbgr | rose-breasted grosbeak |
| 129. Species | rbwo | red-bellied woodpecker |
| 130. Species | rckt | ruby-crowned kinglet |
| 131. Species | rcrb | red crossbill |
| 132. Species | reds | american redstart |
| 133. Species | revo | red-eyed vireo |
| 134. Species | rgul | ring-billed gull |
| 135. Species | rhwo | red-headed woodpecker |
| 136. Species | rlgh | rough-legged hawk |
| 137. Species | rngd | ring-necked duck |
| 138. Species | rnut | red-breasted nuthatch |
| 139. Species | robn | american robin |
| 140. Species | rock | rock dove |
| 141. Species | rsto | rufous-sided towhee |
| 142. Species | rthb | ruby-throated hummingbird |
| 143. Species | rtlh | red-tailed hawk |
| 144. Species | rubb | rusty blackbird |
| 145. Species | rudy | ruddy duck |
| 146. Species | rwbb | red-winged blackbird |
| 147. Species | rwrn | rock wren |
| 148. Species | rwsw | northern rough-winged swallow |
| 149. Species | saps | yellow-bellied sapsucker |
| 150. Species | saup | lesser scaup |
| 151. Species | savs | savannah sparrow |
| 152. Species | scre | eastern screech owl |
| 153. Species | sctn | scarlet tanager |
| 154. Species | seow | short-eared owl |
| 155. Species | shar | sharp-shinned hawk |
| 156. Species | shov | northern shoveler |
| 157. Species | sisk | pine siskin |
| 158. Species | smil | smith's longspur |
| 159. Species | snbu | snow bunting |
| 160. Species | snip | common snipe |
| 161. Species | snog | snow goose |
| 162. Species | snow | snowy owl |
| 163. Species | sogs | song sparrow |
| 164. Species | solt | solitary sandpiper |
| 165. Species | sora | sora rail |
| 166. Species | spip | sprague's pipit |
| 167. Species | spot | spotted sandpiper |
| 168. Species | spsp | sparrow sp |
| 169. Species | star | european starling |
| 170. Species | stfc | scissor-tailed flycatcher |
| 171. Species | sthr | swainson's thrush |
| 172. Species | stvo | solitary vireo |
| 173. Species | sutn | summer tanager |
| 174. Species | swah | swainson's hawk |

| | | |
|---|---|---|
| 175. Species | swif | chimney swift |
| 176. Species | swms | swamp sparrow |
| 177. Species | swrn | sedge wren |
| 178. Species | thra | brown thrasher |
| 179. Species | tnwb | tennessee warbler |
| 180. Species | tres | american tree sparrow |
| 181. Species | trsw | tree swallow |
| 182. Species | tsol | townsend's solitaire |
| 183. Species | tuft | tufted titmouse |
| 184. Species | turv | turkey vulture |
| 185. Species | upld | upland sandpiper |
| 186. Species | varl | virginia rail |
| 187. Species | very | veery |
| 188. Species | vess | vesper sparrow |
| 189. Species | wavo | warbling vireo |
| 190. Species | wevo | white-eyed vireo |
| 191. Species | wfrg | great white-front goose |
| 192. Species | whcs | white-crowned sparrow |
| 193. Species | whip | whip-poor-will |
| 194. Species | wifc | willow flycatcher |
| 195. Species | wign | american wigeon |
| 196. Species | will | willet |
| 197. Species | wkng | western kingbird |
| 198. Species | wlwb | wilson's warbler |
| 199. Species | wmdl | western meadowlark |
| 200. Species | wnut | white-breasted nuthatch |
| 201. Species | wood | wood duck |
| 202. Species | wpip | water pipit |
| 203. Species | wthr | wood thrush |
| 204. Species | wths | white-throated sparrow |
| 205. Species | wwrn | winter wren |
| 206. Species | ybch | yellow-breasted chat |
| 207. Species | ybcu | yellow-billed cuckoo |
| 208. Species | yhbb | yellow-headed blackbird |
| 209. Species | ylwb | yellow warbler |
| 210. Species | yrwb | yellow-rumped warbler |
| 211. Species | ythr | common yellowthroat |
| 212. Species | ytvo | yellow-throated vireo |

# Data Set Code--CBD01

Title of data set--Bird Dates

Abstract:

Dates of records of occurrence for all bird species reported on Konza Prairie.
Keywords that describe data set:bird, phenology, presence, dates of occurence

Date data commenced: 01/01/71

Date data terminated: 12/31/92

Principle Investigator: John L. Zimmerman

RECORD TYPE 1

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Species | Name of Bird, 4 character Alphameric | 7-10 | A4 |
| 4. Date 1 | 6 digit year, month, day of record | 12-17 | I6 |
| 5. Date 2 | 6 digit year, month, day of record | 19-24 | I6 |
| 6. Date 3 | 6 digit year, month, day of record | 26-31 | I6 |
| 7. Date 4 | 6 digit year, month, day of record | 33-38 | I6 |
| 8. Date 5 | 6 digit year, month, day of record | 40-45 | I6 |
| 9. Date 6 | 6 digit year, month, day of record | 47-52 | I6 |
| 10. Date 7 | 6 digit year, month, day of record | 54-59 | I6 |
| 11. Date 8 | 6 digit year, month, day of record | 61-66 | I6 |
| 12. Date 9 | 6 digit year, month, day of record | 68-73 | I6 |
| 13. Date 10 | 6 digit year, month, day of record | 75-80 | I6 |

Codes used:

Species See CBC01;same alphameric code

# Data Set Code--CBN01

Title of data set--Bird Nest

Abstract:

Dates by species of documented records of breeding -- either nests or dependent, fledged young -- with contents of nest, nest placement information and location on Konza Prairie recorded by grid square.
Keywords that describe data set:bird, phenology, nest record

Date data commenced:01/01/71

Date data terminated: 12/31/92

Principle Investigator: John L. Zimmerman

RECORD TYPE 1

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Species | 4 character alphameric | 14-17 | A4 |
| 7. Grid | KPRNA 200 m2 grid designations | 19-22 | A2 + I2 |
| 8. Eggs | number of eggs in clutch | 24-25 | I2 |
| 9. Cbeggs | number of cowbird eggs in clutch | 27-28 | I2 |
| 10. Young | number of young in nest | 30-31 | I2 |
| 11. Cbyg | number of cowbird young in nest | 33-34 | I2 |
| 12. Comment | to indicate nest placement e.g 2m high in Ulmus americana | 36-80 | A45 |

Codes used:

| | |
|---|---|
| Species | 4 Character alphameric unique for each species; see listing in CBD01 |

# Data Set Code--CBP01

Title of data set--Bird Populations

Abstract:

Records of bird species giving perpendicular distance of sighting from transect line for January, April, June, and October censuses on 16 separate transects. In addition to the watershed representing the LTER grassland treatments, transects are also run in the gallery forest and an upper watershed, forest edge habitat.

Keywords that describe data set:bird numbers, species diversity, species abundance

Date data commenced:06/01/81

Date data terminated: / /

Principle Investigator: Brett Sandercock

RECORD TYPE 1

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 9. Century | | 21 | I1 | |
| 10. Transnum | Transect number (#7 &11 invalid) | 23-24 | I2 | |
| 11. Length | Length of transect | 26-29 | I4 | meters |
| 12. Obsnum | Observation number | 31-33 | I3 | |
| 13. Distance | Perpendicular distance to observed | 35-37 | I3 | meters |
| 14. Specname | Species name | 38-42 | A4 | |
| 15. Sex | Sex of bird m-male f-female u-unknown | 44 | A1 | |
| 16. Status | Residency status code | 46 | A1 | |
| 17. Comment | For obsnum=1, includes start and time | 48-80 | A33 | |

Codes used:

| | | |
|---|---|---|
| Watershed | S00A | Shane Creek |
| | G00A | North branch of Kings Creek |
| | L00A | Lower Kings Creek |
| | (all other codes same as LTER watershed code list) | |
| Century | 1 | 20th century |
| | 2 | 21st century |
| Specname | RWBB | Red-winged Blackbird |
| | (etc. see attached list of species codes from CBC01 | |
| Sex | M | Male |
| | F | Female |

| | | |
|---|---|---|
| | U | Unknown |
| Status | P | Year-round resident |
| | S | Summer resident |
| | W | Winter resident |
| | T | Transient |
| | U | Unknown residency status |

# Data Set Code--CGP01

Title of data set--Gall Insect Populations

Abstract: Long-term monitoring of gall-insect densities on Solidago canadensis, Vernonia baldwinii, and Ceanothus herbaceous. Gall abundances are censused in watersheds burned at one- to twenty- year intervals to asses the role of fire frequency and time since fire on gall-insect population dynamics. The data sets contain the following: Watershed fire frequency, number of growing seasons since last fire, plant species, number of galled stems, and number of censused stems. Censuses conducted for the 1989-1996 growing seasons except 1992 and 1994, next scheduled census is fall 1997. See methods manual pages 64-65 for further sampling details.

Keywords that describe data set: Gall-insects, population dynamics, fire, Diptera, Lepidoptera

Compositae, Rhamnaceae, Ceanothus, Solidago, Vernonia

Date data commenced:10/88

Date data terminated: 1996

Principle Investigator: P.A. Fay/D.C. Hartnett

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Watershed | | 13-16 | A4 | |
| 5. Fire Frequency | | 20-21 | I2 | |
| 6. Last Fire | | 25-26 | I2 | |
| 7. Last Wildfire | | 32-33 | I2 | |
| 8. Species | | 40-50 | A11 | |
| 9. Census Replicate | | 55-56 | I2 | |
| 10. # Galled Stems | | 65-67 | I3 | |
| 11. # Sampled Stems | | 75-77 | I3 | |

# Data Set Code--CGR01

Title of data set--Sweep Samples for Grasshoppers (1981)
Abstract:

Sweep samples were taken for grasshoppers (Acrididae) at one site for each of the 12 Konza Prairie LTER treatments (3 fire treatments x 2 soils x 2 grazing treatments) in June, August, and September. At each site on each occasion, 18 sets of 10 sweeps each (180 sweeps total) were taken. Stored data include for each site on each occasion: total number of each species (all instars combined) collected and total number for each instar for each species (180 sweeps combined).
Keywords that describe data set:grasshoppers, Acrididae, insects, sweep sampling

Date data commenced:04/01/81

Date data terminated:12/01/81

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| Variable | Name | Columns | Format | Units |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil Type (Tully or Florence) | 18-19 | A2 | |
| 8. Time | Time sampling began | 21-24 | I4 | Hours |
| 9. Wind | Wind speed at start of sampling mean of 5 measurements at 30 second intervals 5' aboveground | 26-29 | F4.1 | Km $hr^{-1}$ |
| 10. Temp | Air temp at start of sampling ground level in shade | 31-34 | F4.1 | deg C |
| 11. RelHum | Relative humidity at ground level in shade at outset of sampling; determined by wet/dry bulb psychrometer | 36-37 | I2 | % |
| 12. Cloudcov | % of Cloud cover directly overhead (estimated by eye) | 39-41 | I3 | % |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | Tu | Tully soil |
| 2. Soiltype | Fl | Florence soil |

RECORD TYPE 2

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 | |

| | | | |
|---|---|---|---|
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil Type (Tully or Florence) | 18-19 | A2 |
| 8. Spcode | Species Code | 21-22 | I2 |
| 9. Species* | Abbreviated Species Name | 24-43 | A20 |
| 10. S1 | Number of individuals in sample 1 | 45-46 | I2 |
| 11. S2 | Number of individuals in sample 2 | 48-49 | I2 |
| 12. S3 | Number of individuals in sample 3 | 51-52 | I2 |
| 13. S4 | Number of individuals in sample 4 | 54-55 | I2 |
| 14. S5 | Number of individuals in sample 5 | 57-58 | I2 |
| 15. S6 | Number of individuals in sample 6 | 60-61 | I2 |
| 16. S7 | Number of individuals in sample 7 | 63-64 | I2 |
| 17. S8 | Number of individuals in sample 8 | 66-67 | I2 |
| 18. S9 | Number of individuals in sample 9 | 69-70 | I2 |
| 19. S10 | Number of individuals in sample 10 | 72-73 | I2 |
| 21. Total | Total # of individuals all samples | 76-79 | I4 |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | Tu | Tully soil |
| 2. Soiltype | Fl | Florence soil |
| 3. Species | 01 | brachystol magna |
| 4. Species | 02 | schistocer lineata |
| 5. Species | 03 | paratylotr brunneri |
| 6. Species | 04 | hypochlkora alba |
| 7. Species | 05 | campylacan olivacea |
| 8. Species | 06 | hesperotet speciosus |
| 9. Species | 07 | hesperotet viridis |
| 10. Species | 08 | hesperotet species |
| 11. Species | 09 | phoetaliot nebrascen |
| 12. Species | 10 | melanoplus scudderi |
| 13. Species | 11 | melanoplus sanguinip |
| 14. Species | 12 | melanoplus femurrubr |
| 15. Species | 13 | melanoplus packardii |
| 16. Species | 14 | melanoplus different |
| 17. Species | 15 | melanoplus keel luri |
| 18. Species | 16 | melanoplus bivittatu |
| 19. Species | 17 | melanoplus confusus |
| 20. Species | 18 | melanoplus species |
| 21. Species | 25 | eritettix simplex |
| 22. Species | 26 | syrbula admirabil |
| 23. Species | 27 | orphulella speciosa |
| 24. Species | 28 | mermiria picta |
| 25. Species | 29 | mermiria bivittata |
| 26. Species | 30 | opeia obscura |
| 27. Species | 31 | pseudopoma brachypte |
| 28. Species | 32 | boopedon auriventr |
| 29. Species | 33 | boopedon nubilum |

| | | |
|---|---|---|
| 30. Species | 34 | boopedon gracile |
| 31. Species | 35 | ageneotett deorum |
| 32. Species | 36 | mermiria species |
| 33. Species | 45 | chortophag viridifas |
| 34. Species | 46 | dissosteir carolina |
| 35. Species | 47 | arphia xanthopte |
| 36. Species | 48 | arphia simplex |
| 37. Species | 49 | arphia conspersa |
| 38. Species | 50 | hadrotetti trifascia |
| 39. Species | 51 | hippiscus rugosus |
| 40. Species | 52 | pardalopho apiculata |
| 41. Species | 53 | pardalopho haldemani |
| 42. Species | 54 | pardalopho species |
| 43. Species | 55 | arphia species |
| 44. Species | 90 | unknown |
| 45. Species | 95 | total |

RECORD TYPE 3

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil type (Tully or Florence) | 18-19 | A2 |
| 8. Spcode | Species Code | 21-22 | I2 |
| 9. Species | Abbreviated species name | 24-43 | A20 |
| 10. S11 | Number of individuals in sample 11 | 45-46 | I2 |
| 11. S12 | Number of individuals in sample 12 | 48-49 | I2 |
| 12. S13 | Number of individuals in sample 13 | 51-52 | I2 |
| 13. S14 | Number of individuals in sample 14 | 54-55 | I2 |
| 14. S15 | Number of individuals in sample 15 | 57-58 | I2 |
| 15. S16 | Number of individuals in sample 16 | 60-61 | I2 |
| 16. S17 | Number of individuals in sample 17 | 63-64 | I2 |
| 17. S18 | Number of individuals in sample 18 | 66-67 | I2 |
| 18. Total | Total # of individuals/all samples | 69-71 | I3 |

Codes used: see record type 2

RECORD TYPE 4

Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |

| | | | |
|---|---|---|---|
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil Type (Florence or Tully) | 18-19 | A2 |
| 8. Spcode | Species code | 21-22 | I2 |
| 9. Species | Abbreviated species name | 24-43 | A20 |
| 10. First | # of individuals in first instar | 45-47 | I3 |
| 11. Second | # of individuals in second instar | 49-51 | I3 |
| 12. Third | # of individuals in third instar | 53-55 | I3 |
| 13. Fourth | # of individuals in fourth instar | 57-59 | I3 |
| 14. Fifth | # of individuals in fifth instar | 61-63 | I3 |
| 15. Adults | Total number of adults | 65-67 | I3 |
| 16. Total | Total # of individuals of all stages | 69-72 | I4 |

Codes used:See Record type 2

# Data Set Code--CGR02

Title of data set--Sweep Samples for Grasshoppers

Abstract:

Sweep samples were taken for grasshoppers (Acrididae) at two sites for each of the 12 Konza Prairie LTER treatments (3 treatments x 2 soils x 2 grazing treatment x 2 replicate sites) in June, July and August. At each site on each occasion, 10 sets of 20 sweeps (200 sweeps total) were taken. Stored data include for each site on each occasion: total number of each species (all instars combined) collected and total number for each instar for each species (200 sweeps combined).

Keywords that describe data set:grasshoppers, Acrididae, insects, sweep sampling

Date data commenced:04/01/82

Date data terminated: / /

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Year | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soiltype | Soil Type (Florence or Tully) | 18-19 | A2 | |
| 8. Repsite | Replicate site for a treatment | 21 | A1 | |
| 9. Time | Time sampling began | 23-26 | I4 | Hours |
| 10. Wind | Wind speed at start of sampling<br>Mean of 5 measurements taken a 30 second intervals 5' above ground. | 28-31 | F4.1 | km/hr |
| 11. Temp | Air temperature at start of sampling | 33-36 | F4.1 | deg C |
| 12. Relhum | Relative humidity at ground level in shade at outset of sampling determined by wet/dry bulb psychrometer. | 38-39 | I2 | % |
| 13. Cloudcov | % Cloud cover directly overhead at start of sampling --- estimated by eye. | 41-43 | I3 | % |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | FL | Florence soil |
| 2. Soiltype | TU | Tully soil |
| 3. Repsite | A | Replicate site A for treatment |
| 4. Repsite | B | Replicate site B for treatment |

RECORD TYPE 2

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil type (Tully or Florence) | 18-19 | A2 |
| 8. Repsite | Replication site for a watershed/soil | 21 | A1 |
| 9. Spcode | Species Code | 23-24 | I2 |
| 10. Species | Abbreviated name of species | 26-45 | A20 |
| 11. S1 | # of individuals in sample 1 | 47-48 | I2 |
| 12. S2 | # of individuals in sample 2 | 50-51 | I2 |
| 13. S3 | # of individuals in sample 3 | 53-54 | I2 |
| 14. S4 | # of individuals in sample 4 | 56-57 | I2 |
| 15. S5 | # of individuals in sample 5 | 59-60 | I2 |
| 16. S6 | # of individuals in sample 6 | 62-63 | I2 |
| 17. S7 | # of individuals in sample 7 | 65-66 | I2 |
| 18. S8 | # of individuals in sample 8 | 68-69 | I2 |
| 19. S9 | # of individuals in sample 9 | 71-72 | I2 |
| 20. S10 | # of individuals in sample 10 | 74-75 | I2 |
| 21. Total | Total # of individuals/all samples | 77-79 | I3 |

Codes used:

| | | |
|---|---|---|
| 1. Soiltype | FL | Florence soil |
| 2. Soiltype | TU | Tully soil |
| 3. Repsite | A | Replicate site A for treatment |
| 4. Repsite | B | Replicate site B for treatment |
| 01 brachystol magna | | brachystola magna (girard) |
| 02 schistocer lineata | | schistocerca lineata scudder |
| 03 paratylotr brunneri | | aratylotropidia brunneri scudder |
| 04 hypochlora alba | | hypochlora alba (dodge) |
| 05 campylacan olivacea | | pylacantha olivacea (scudder) |
| 06 hesperotet speciosus | | hesperotettix speciosus (scudder) |
| 07 hesperotet viridis | | hesperotettix viridis pratensis (scudder) |
| 08 hesperotet species | | hesperotettix speciosus or viridis |
| 09 phoetaliot nebrascen (thomas) | | phoetaliotes nebrascensis |
| 10 melanoplus scudderi | | melanoplus scudderi morse |
| 11 melanoplus sanguinip | | melanoplus sanguinipes (fabricius) |
| 12 melanoplus femurrubr | | melanoplus femurrubrum (degeer) |
| 13 melanoplus packardii | | melanoplus packardii scudder |
| 14 melanoplus different (thomas) | | elanoplus differentialis |
| 15 melanoplus keel luri | | melanoplus keeleri luridus (dodge) |
| 16 melanoplus bivittatu | | melanoplus bivittatus (say) |
| 17 melanoplus confusus | | melanoplus confusus scudder |
| 25 eritettix simplex | | eritettix simplex (scudder) |

| | |
|---|---|
| 26 syrbula admirabil | syrbula admirabilis (uhler) |
| 27 orphulella speciosa | orphulella speciosa (scudder) |
| 28 mermiria picta ???? | ermiria picta (walker) |
| 29 mermiria bivittata???? | mermiria bivittata (serville) |
| 30 opeia obscura | opeia obscura (thomas) |
| 31 pseudopoma brachypte | pseudopomala brachyptera (scudder) |
| 32 boopedon auriventr | boopedon auriventris mcneill |
| 33 boopedon nubilum | boopedon nubilum (say) |
| 34 boopedon gracile | boopedon gracile rehn |
| 35 ageneotett deorum | ageneotettix deorum (scudder) |
| 36 mermiria species | mermiria picta or bivittata |
| 45 chortophag viridifas | chortophaga viridifasciata (degeer) |
| 46 dissosteir carolina | dissosteira carolina (linnaeus) |
| 47 arphia xanthopte | arphia xanthoptera (burmeister) |
| 48 arphia simplex | rphia simplex scudder |
| 49 arphia conspersa | arphia conspersa scudder |
| 50 hadrotetti trifascia | hadrotettix trifasciatus (say) |
| 51 hippiscus rugosus | hippiscus rugosus (scudder) |
| 52 pardalopho apiculata | pardalophora apiculata (harris) |
| 53 pardalopho haldemani | pardalophora haldemanii (scudder) |
| 90 unknown species | identity unknown |
| 95 total | all individuals of all species combined |

RECORD TYPE 3

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soiltype | Soil type (Tully or Florence) | 18-19 | A2 |
| 8. Repsite | Replication site for a treatment | 21 | A1 |
| 9. Spcode | Species code | 23-24 | I2 |
| 10. Species | Abbreviated species name | 26-45 | A20 |
| 11. First | # of individuals 1st instar | 47-49 | I3 |
| 12. Secthird | # of individuals 2nd & 3rd instars | 51-53 | I3 |
| 13. Forth | # of individuals 4th instar | 55-57 | I3 |
| 14. Fifth | # of individuals 5th instar | 59-61 | I3 |
| 15. Female | # of individuals of adult females | 63-65 | I3 |
| 16. Male | # of individuals of adult males | 67-69 | I3 |
| 17. Total | Total # of individuals/all samples | 71-74 | I4 |

Codes used:See record type 2.

# Data Set Code--CGR03

Title of Data Set--Effects of Spring Burning on Grasshopper Nymphs (1982)

Abstract:
Sweep samples were taken for grasshoppers (Arcididae) at two upland sites on 5 watersheds at approximately two week intervals, June-Sept 1982. At each site on each occasion, 20 sets of 20 sweeps (400 sweeps total) were taken. Stored data include for each site on each occasion: total number of each species (all instars combined) collected and total number for each instar for each species (400 sweeps combined).
Keywords that describe data set:grasshoppers, Acrididae, insects, sweep sampling

Date data commenced:06/01/82

Date data terminated:09/02/82

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Repsite | Replicate site for a watershed | 18 | A1 | |
| 8. Time | Time sampling began | 20-23 | I4 | Hours |
| 9. Wind | Wind speed at start of sampling (mean of 5 measurements taken at 30 second intervals 5' above ground) | 25-28 | F4.1 | Km/hr |
| 10. Temp | Air temp at start of sampling | 30-33 | F4.1 | (C) |
| 11. Relhum | Relative humidity at ground level in shade at outset of sampling determined by wet/dry bulb psychrometer. | 35-36 | I2 | % |
| 12. Cloudcov | % Cloud cover directly overhead at start of sampling, estimated by eye. ground level in shade | 38-40 | I3 | % |

Codes used:

| | | |
|---|---|---|
| Repsite | A | Replication site A for a treatment |
| Repsite | B | Replication site B for a treatment |

RECORD TYPE 2

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replication site for watershed/soiltype | 18 | A1 |
| 8. Spcode | Species code | 20-21 | I2 |
| 9. Species | Abbreviated name of species | 23-42 | A20 |
| 10. S1 | # of individuals in sample 1 | 44-45 | I2 |
| 11. S2 | # of individuals in sample 2 | 47-48 | I2 |
| 12. S3 | # of individuals in sample 3 | 50-51 | I2 |
| 13. S4 | # of individuals in sample 4 | 53-54 | I2 |
| 14. S5 | # of individuals in sample 5 | 56-57 | I2 |
| 15. S6 | # of individuals in sample 6 | 59-60 | I2 |
| 16. S7 | # of individuals in sample 7 | 62-63 | I2 |
| 17. S8 | # of individuals in sample 8 | 65-66 | I2 |
| 18. S9 | # of individuals in sample 8 | 68-69 | I2 |
| 19. S10 | # of individuals in sample 9 | 71-72 | I2 |

Codes used:

| | | |
|---|---|---|
| Repsite | A | Replication site A for a treatment |
| Repsite | B | Replication site B for a treatment |
| Spcode | e.g. 01 | e.g. Brachystola magna (see attached list) |

RECORD TYPE 3

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replication site for watershed/soil type | 18 | A1 |
| 8. Spcode | Species code | 20-21 | I2 |
| 9. Species | Abbreviated name of species | 23-42 | A20 |
| 10. S11 | # of individuals in sample 11 | 44-45 | I2 |
| 11. S12 | # of individuals in sample 12 | 7-48 | I2 |
| 12. S13 | # of individuals in sample 13 | 50-51 | I2 |
| 13. S14 | # of individuals in sample 14 | 53-54 | I2 |
| 14. S15 | # of individuals in sample 15 | 56-57 | I2 |
| 15. S16 | # of individuals in sample 16 | 9-60 | I2 |
| 16. S17 | # of individuals in sample 17 | 62-63 | I2 |
| 17. S18 | # of individuals in sample 18 | 65-66 | I2 |
| 18. S19 | # of individuals in sample 19 | 68-69 | I2 |
| 19. S20 | # of individuals in sample 20 | 71-72 | I2 |
| 20. Total | | 74-76 | I3 |

Codes used:See Record type 2

RECORD TYPE 4

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replication site for a treatment | 18 | A1 |
| 8. Spcode | Species code | 20-21 | I2 |
| 9. Species | Abbreviated species name | 23-42 | A20 |
| 10. First | # of individuals in 1st instar | 44-46 | I3 |
| 11. Second | # of individuals in 2nd instar | 48-50 | I3 |
| 12. Third | # of individuals in 3rd instar | 52-54 | I3 |
| 13. Fourth | # of individuals in 4th insta | 56-58 | I3 |
| 14. Fifth | # of individuals in 5th instar | 60-62 | I3 |
| 15. Females | # of individuals of adult females | 64-66 | I3 |
| 16. Males | # of individuals of adult males | 68-70 | I3 |
| 17. Total | Total # of ind./all stages 400 sweeps | 72-75 | I4 |

Codes used:

| | | |
|---|---|---|
| Repsite | A | Replication site A for a treatment |
| Repsite | B | Replication site B for a treatment |
| Spcode | e.g. 01 | e.g. Brachystola magna (see attached list) |

# Data Set Code--CGR04

Title of data set--Sampling grasshoppers in tallgrass prairie: night trapping vs. sweeping (1982)

Abstract:

Two techniques, sweeping with a canvas net and night trapping with a portable trap, were compared as means of sampling acridid grasshoppers in burned and unburned tallgrass prairie. Data include number and identity (species and instar) of grasshoppers caught in individual traps on forty nights at each of two sites, and number and identity of grasshoppers caught in sets of 400 sweeps taken at roughly two week intervals at both sites throughout the summer. These data are stored in hard copy only, but have been summarized and analyzed by Evans et al. 1983; Environmental Entomology 12: 1449-1454.

Keywords that describe data set:grasshoppers, Acrididae, insects, sweep sampling, night trapping

Date data commenced:06/01/82

Date data terminated:09/30/82

Principle Investigator: Edward W. Evans

# Data Set Code--CGR05

Title of data set--Effects of fire frequency on composition of grasshopper assemblages (1983)

Abstract:

See CGR02.

Keywords that describe data set:grasshoppers, Acrididae, insects, sweep sampling

Date data commenced:08/05/83

Date data terminated:08/10/83

Principle Investigator: Edward W. Evans

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replicate site for a watershed | 18 | I1 |
| 8. Spcode | Species Code | 20-21 | I2 |
| 9. Species | Abbreviaed species name | 23-42 | A20 |
| 10. S1 | s1-s20 Number of individuals in sample | 44-45 | I2 |
| 11. S2 | #1-20 (20 sweeps) | 47-48 | I2 |
| 12. S3 | | 50-51 | I2 |
| 13. S4 | | 53-54 | I2 |
| 14. S5 | | 56-57 | I2 |
| 15. S6 | | 59-60 | I2 |
| 16. S7 | | 62-63 | I2 |
| 17. S8 | | 65-66 | I2 |
| 18. S9 | | 68_69 | I2 |
| 19. S10 | | 71-72 | I2 |
| 30. Total | Total number of individuals in all samples combined (400 sweeps) | | |

Variable Code Specification Form

RECORD TYPE 2

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |

| | | | |
|---|---|---|---|
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replicate site for a watershed | 18 | I1 |
| 8. Spcode | Species Code | 20-21 | I2 |
| 9. Species | Abbreviated species name | 23-42 | A20 |
| 10. S11 | s1-s20 Number of individuals in sample | 44-45 | I2 |
| 11. S12 | #1-20 (20 sweeps) | 47-48 | I2 |
| 12. S13 | | 50-51 | I2 |
| 13. S14 | | 53-54 | I2 |
| 14. S15 | | 56-57 | I2 |
| 15. S16 | | 59-60 | I2 |
| 16. S17 | | 62-63 | I2 |
| 17. S18 | | 65-66 | I2 |
| 18. S19 | | 68-69 | I2 |
| 19. S20 | | 71-72 | I2 |
| 20. Total | Total number of individuals in all samples | 74-76 | I3 |

RECORD TYPE 3

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Repsite | Replicate site for a treatment | 18 | A1 |
| 8. Spcode | Abbreviated species name | 20-21 | I2 |
| 9. Species | Species code | 23-42 | A20 |
| 10. First | # of individuals in 1st instar | 44-46 | I3 |
| 11. Second | # of individuals in 2nd instar | 48-50 | I3 |
| 12. Third | # of individuals in 3rd instar | 52-54 | I3 |
| 13. Fourth | # of individuals in 4th instar | 56-58 | I3 |
| 14. Fifth | # of individuals in 5th instar | 60-62 | I3 |
| 15. Female | # of individuals of adult female | 64-66 | I3 |
| 16. Males | # of individuals of adult males | 68-70 | I3 |
| 17. Total | Total # of ind/all stages-400 sweeps | 72-75 | I4 |
| 14. Fifth | | | |

Codes used:

| | | |
|---|---|---|
| Repsite | A | Replicate site A for a treatment |
| Repsite | B | Replicate site B for a treatment |
| Spcode e.g. 01 | | e.g. Brachystola magna (see attached list) |

# Data Set Code--CMY01

Title of Data Set—Mycorrhizal Suppression Plots

Abstract: Twenty replicate permanent 2x2 m plots were established in early 1991 along a randomly located transect, with a 2m space between each plot, on the following watersheds: 1B, 1D, annually burned HQB, 10B, 20D and infrequently burned HQB. Ten of the plots were randomly assigned as long-term mycorrhizal suppression plots. In each of these plots, AM fungi were suppressed by the application of the fungicide benomyl as a soil drench (7.5 liters per plot) at the rate of 1.25 $g/m^2$ (active ingredient). The mycorrhizal suppression plots were treated bi-weekly throughout each growing season (April through October) beginning in 1991. The control plots each received no fungicide, but an equivalent volume of water (7.5 liters) was applied bi-weekly. To evaluate the effectiveness of the fungicide, three soil cores (2.5 cm diameter x 14 cm deep) were removed from both fungicide-treated and control plots each October throughout the study. Roots were extracted from the soil, washed free of soil, stained in trypan blue (Phillips and Hayman, 1970), and examined microscopically to assess percentage root colonization by mycorrhizal fungi using a Petri dish scored in 1-cm squares (Daniels et al. 1981).

The vegetation within all plots was sampled in May and September of 1991, 1993, and 1995. In each plot, the cover and frequency of each plant species was estimated using a modified point-frame method (Cook and Stubbendieck, 1986). A frame containing ten 1m long vertical pins arranged in parallel at 10 cm apart was placed systematically at 4 locations (each 25 cm apart) within the central 1 $m^2$ of the plot (4 frames=40 pins per plot). Every contact of the aboveground structures of each plant species with each pin was recorded. From the pin-contact data, the relative cover was calculated for each plant species (total number of pin-contacts mad by individual of species *x*/total number of pin-contacts of all species) for each of the two sample dates each year and for each species the maximum value attained between the two sample dates was retained for analysis. The frequency ( percentage of the 10-pin frames in which species *x* was encountered) also was estimated for each plant species. The total number of pin contacts of all species was used as an index of total canopy density in each plot. Previous use of this pin-contact method on these tallgrass prairie sites showed that the total number of pin contacts of all species is also strongly correlated with total aboveground plant biomass (Hickman, 1996). Plant species richness (mean number of species per plot), species diversity (Shannon's H'), and evenness were calculated using both types of abundance data (frequency and cover).

Keywords that describe data set: Mycorrhizal fungi, plant species composition

Data data commenced: spring 1991
Data data terminated: fall 1999

Principle Investigator: Gail Wilson

RECORD TYPE 1
Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |

| | | | |
|---|---|---|---|
| 2. Rectype | | 6 | A1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-11 | I2 |
| 5. Day | | 12-13 | I2 |
| 6. Transect | | 14 | |
| 7. Burn | u or b<br>u=infrequent b=annual | 16 | |
| 8. Plot | 1-20 | 18-19 | |
| 9. Fungicide | myc=control<br>ben=fungicide | 21-23 | |
| 10. Species# | species abbreviation code<br>(see PVC01 documentation for code list) | 25-27 | |
| 11. Form | growth form | 29 | |
| 12. Sample | repeated measure 1-4 | 31 | |
| 13. Vegetative | # vegetative pin contacts | 33-35 | |
| 14. Reproductive | # reproductive pin contacts | 37-38 | |

Transects:
a=HQB
b=HQB
c=1B
d=10B
e=1D
f=20D

# Data Set Code--CPC01

Title of data set--Census of greater prairie chicken on leks

Abstract:
Location of leks and number of birds per lek are censused during late April and early May across Konza Prairie to document year to year densities of greater prairie chickens. This dataset is continued by CPC02.
Keywords that describe data set:greater prairie chicken, bird, leks

Date data commenced:03/01/81

Date data terminated:04/18/99

Principle Investigator: John L. Zimmerman

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Hour | | 13-16 | A4 |
| 7. Numbirds | Number of birds | 18-20 | I3 |
| 8. Gridloc | Grid location of sighting | 22-24 | I3 |
| 9. Comments | | 26-80 | A54 |

# Data Set Code--CPC02

Title of data set--Census of greater prairie chicken on leks

Abstract:
Location of leks and number of birds per lek are censused during late April and early May across Konza Prairie to document year to year densities of greater prairie chickens.
Keywords that describe data set:greater prairie chicken, bird, leks

Date data commenced:04/19/99

Date data terminated: / /

Principle Investigator: Christopher S. Smith

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed(s) | | 15-28 | A13 |
| 7. Gridloc | Grid location of sighting | 31-33 | I3 |
| 8. Numbirds | Number of birds | 36-38 | I3 |
| 9. Comments | | 41-80 | A40 |

# Data Set Code--CSA01

Title of data set--Soil Microarthropods

Abstract:

Microarthropod densities on annually burned and unburned watersheds of tallgrass prairie were measured in the uppermost 10 cm of litter and soil in spring and autumn, 1981, and spring, 1982. Results indicated that annual burning depressed densities in the top 5 cm of soil, but had no effect below this depth. Densities averaged about 40,000/sq m on burned sites and 70,000 on unburned sites.

Keywords that describe data set:Oribatidae, Prostigmata, Mesostigmata, Collembola, Acari, soil fauna

Date data commenced:04/01/81

Date data terminated:06/01/82

Principle Investigator: Timothy R. Seastedt

RECORD TYPE 1

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Trt | Treatment | 18 | I1 |
| 8. Depth | Depth of sample | 20 | I1 |
| 9. Total | Total number in sample | 22-24 | I3 |
| 10. Oribatid | # of total Oribatids in sample | 26-28 | I3 |
| 11. Mesostig | # of total Mesostigmata in sample | 30-31 | I2 |
| 12. Prostig | # of total Prostigmata in sample | 33-35 | I3 |
| 13. Collemb | # of total Collembola in sample | 37-38 | I2 |
| 14. Protura | # of total Protura in sample | 40-41 | I2 |
| 15. Symphyla | # of total Symphyla in sample | 43-44 | I2 |
| 16. Pauropod | # of total Pauropoda in sample | 46-47 | I2 |
| 17. Japid | # of total Japid in sample | 49-50 | I2 |
| 18. Beetles | # of total Beetles in sample | 52-53 | I2 |
| 19. Larvae | # of total Larvae in sample | 55-56 | I2 |
| 20. Predator | # of total Predator in sample | 58-59 | I2 |
| 21. A-orib | # of total Adult Oribatids | 61-63 | I3 |
| 22. I-orib | # of total Immature Oribatid | 65-67 | I3 |
| 23. F-astig | # of total Astigmatid "Feeding" | 69-70 | I2 |
| 24. H-astig | # of total Astigmatid Hypopi | 72-73 | I2 |
| 25. Other | # of total other (mostly homoptera) | 75-76 | I2 |
| 26. ants | # of total Ants | 77-79 | I2 |

Codes used:

| | | |
|---|---|---|
| 1. Site | UB | Watershed 000b (old format) |
| 2. Site | 1C | Watershed 001C |
| 3. Site | 1D | Watershed 001D (3 and 4 not |
| 4. Site | D1 | Watershed 001D consistent) |
| 5. Site | 4F | Watershed 004F |
| 6. Site | NUD | Watershed N00D |
| 7. Site | N1 | Watershed N01B |
| 8. Site | N4 | Watershed N04D |
| 9. Site | FN2 | Forest transect N2: N branch Kings Cr. |
| 10. Site | FS3 | Forest transect S3: S branch King Cr. |
| 11. Site | [number] | Hulbert's plots |
| 12. Trt | T | Tully |
| 13. Trt | F | Florence |
| 14. Trt | U | Unburned |
| 15. Trt | B | Burned |
| 16. Depth | 0 | 0-5 cm deep |
| 17. Depth | 5 | 5-10 cm deep |

# Data Set Code--CSA02

Title of data set--Soil Macroarthropod Densities and Biomass

ABSTRACT:

Belowground densities and biomass of macroarthropods on annually burned and unburned watersheds were measured by hand-sorting techniques. Total herbivore biomass was greater in soils of annually burned sites, and was composed largely of white grubs (Scarabaeidae).

Keywords that describe data set:soil herbivores, detritivores, predators, Scarabaeidae, Cicadidae

Date data commenced:11/22/81

Date data terminated:04/01/83

Principle Investigator: Timothy R. Seastedt

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | | 21 | A1 | |
| 8. Trt | | 23-24 | I2 | |
| 9. Scarb-L | # of Scarabaeidae beetle larvae | 28-30 | I3 | #/.1m2 |
| 10. Scarb-A | # of Scarabaeidae beetle adults | 32 | I1 | #/.1m2 |
| 11. C-larv | Chrysomelid, Weevil, misc herbivorous larvae | 34-35 | I2 | #/.1m2 |
| 12. Cicada | # of Cicada nymphs | 37-38 | I2 | #/.1m2 |
| 13. Wire | # of Wireworms | 40 | I1 | #/.1m2 |
| 14. Pred-L | # of Predaceous beetle larvae,carabids, etc | 42-43 | I2 | #/.1m2 |
| 15. Millpd | # of Millipedes | 45-46 | I2 | #/.1m2 |
| 16. Centpd | # of Centipede | 48 | I1 | #/.1m2 |
| 17. Meloid | # of Meloidae | 50 | I1 | #/.1m2 |
| 18. Lep-L | # of Lepidoptera larvae | 52 | I1 | #/.1m2 |
| 19. Sow | # of Sow bugs | 54 | I1 | #/.1m2 |
| 20. Pred-A | # of Adult beetles (predators) | 56 | I1 | #/.1m2 |
| 21. Other | # of other (cockroaches, etc. | 58 | I1 | #/.1m2 |
| 22. Mherb | of Misc herbivores (e.g. adult chrysomelids) Start 1983 | 60 | I1 | #/.1m2 |
| 23. Mdet | # of Misc detritivores (e.g. Bibionidae larvae) Start 1983 | 62-63 | I1 | #/.1m2 |
| 24. Earth | # of Earthworms Start 1983 | 65-66 | I1 | #/.1m2 |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Soil | T | Tully |
| TRT | AB | Annually burned |
| | UB | Unburned |
| | 1B | Burned once recently |
| | 2B | Two year burn |
| | M3 | Mowed 3 times a year |
| | M1 | Mowed once a year |

RECORD TYPE 2

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Soil | | 21 | A1 |
| 8. Trt | | 23-24 | I2 |
| 9. Bscarb-L | # of Scarabaedidae beetle larvae | 29-31 | I3 g/.1m2 |
| 10. Bscarb-A | Chrysomelid, Weevil, misc herbivorous larvae | 33-34 | I1 g/.1m2 |
| 11. Bc-larv | # of Scarabaedidae beetel adults | 36-37 | I2 g/.1m2 |
| 12. Bcicada | # of cicada nymphs | 39-40 | I2 g/.1m2 |
| 13. Bwire | # of wireworms | 42-43 | I2 g/.1m2 |
| 14. Bprep-L | # of predaceous beetle larvae (carabids, etc.) | 45-46 | I2 g/.1m2 |
| 15. Bmillpd | # of Millipedes | 48-50 | I3 g/.1m2 |
| 16. Bcentpd | # of Centipedes | 52-53 | I2 g/.1m2 |
| 17. Bmeloid | # of Meloidae | 55-56 | I2 g/.1m2 |
| 18. Blep-L | # of Lepidoptera larvae | 58-59 | I2 g/.1m2 |
| 19. Bsow | # of Sow bugs | 61-62 | I2 g/.1m2 |
| 20. Bpred-A | # of Adult beetles (predators) | 64-66 | I3 g/.1m2 |
| 21. Bother | # of Other (cockroaches, etc.) | 68-69 | I2 g/.1m2 |
| 22. Bmherb | # of Misc. herbivores (e.g. adult chrysomelids) | 71-72 | I2 g/.1m2 |
| 23. Bmdet | # of Misc detritivores (e.g. Bibionidae larvae) | 74-75 | I2 g/.1m2 |
| 24. Bearth | # of Earthworms | 77-78 | I2 g/.1m2 |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Soil | T | Tully |
| TRT | AB | Annually burned |
| | UB | Unburned |
| | 1B | Burned once recently |
| | 2B | Two year burn |
| | M3 | Mowed 3 times a year |
| | M1 | Mowed once a year |

# Data Set Code--CSM04

Title of Data Set--Seasonal summary of numbers of small mammals on the LTER traplines in prairie
Abstract:

Data set contains seasonal summaries (spring, summer and fall) of the number of individuals of each species of small mammal caught (relative density) on each grassland census line. Each record contains trapline, year of last fire and number of individuals per species. These live trap records are based on daily captures during three 4-day trapping peroids, March, July and October, for each of 20 permanent census lines established on 10 fire-grazing treatments (2 lines per treatment). These 10 fire-grazing treatments are one unburned, one annual burn and one 4-year burn site to be grazed by native ungulates and one unburned, one annual burn, four 4-year burn and one 10-year burn site not grazed by ungulates.
Keywords that describe data set: small mammals, rodents, density

Date data commenced:10/01/81

Date data terminated: / /

Principle Investigator: Donald W. Kaufman

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Season | Sampling season | 9-10 | A2 |
| 5. Watershed | | 13-19 | A7 |
| 6. Line | Line number | 21 | A1 |
| 7. PM | Relative density of *Peromyscus maniculatus* | 23-26 | I4 |
| 8. Rmeg | Relative density of *Reithrodontomys megalotis* | 27-30 | I4 |
| 9. PL | Relative density of *Peromyscus leucopus* | 31-34 | I4 |
| 10. BH | Relative density of *Blarina hylophaga* | 35-38 | I4 |
| 11. MO | Relative density of *Microtus ochrogaster* | 39-42 | I4 |
| 12. SH | Relative density of *Sigmodon hispidus* | 43-46 | I4 |
| 13. ST | Relative density of *Spermophilus tridecemlineatus* | 47-50 | I4 |
| 14. SC | Relative density of *Synaptomys cooperi* | 51-54 | I4 |
| 15. Rmon | Relative density of *Reithrodontomys montanus* | 55-57 | I3 |
| 16. MM | Relative density of *Mus musculus* | 58-60 | I3 |
| 17. PH | Relative density of *Perognathus hispidus* | 61-63 | I3 |
| 18. ZH | Relative density of *Zapus hudsonius* | 64-66 | I3 |
| 19. NF | Relative density of *Neotoma floridana* | 67-69 | I3 |
| 20. CP | Relative density of *Cryptotis parva* | 70-72 | I2 |
| 21. MP | Relative density of *Microtus pinetorum* | 73-75 | I3 |
| 22. RN | Relative density of *Rattus norvegicus* | 76-78 | I3 |
| 23. Century | | 79 | I1 |

24. Cardnum 80

Codes used

| | | |
|---|---|---|
| Season | Sp | Spring |
| | Su | Summer |
| | Au | Autumn |
| Line | E | East |
| | W | West |
| | N | North |
| | S | South |

# Data Set Code--CSM07

Title of data set--Seasonal summary of relative density of small mammals in wooded areas
Abstract:

No current description for this data set.

Keywords that describe data set:small mammals, rodents, density

Date data commenced:10/01/81
Date data terminated:03/28/88

Principle Investigator: Donald W. Kaufman

RECORD TYPE 1

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Season | | 9-10 | A2 |
| 5. Watershed | | 13-19 | A7 |
| 6. Line | | 21 | A1 |
| 7. PL | | 23-36 | I4 |
| 8. NF | | 27-30 | I4 |
| 9. BH | | 31-34 | I4 |
| 10. SH | | 35-38 | I4 |
| 11. Rmeg | | 39-42 | I4 |
| 12. MO | | 43-46 | I4 |
| 13. MP | | 47-50 | I4 |
| 14. ST | | 51-54 | I4 |
| 15. ZH | | 55-57 | I3 |
| 16. PM | | 58-60 | I3 |
| 17. SC | | 61-63 | I3 |
| 18. Rmon | | 64-66 | I3 |
| 19. PH | | 67-69 | I3 |
| 20. CP | | 70-72 | I3 |
| 21. MM | | 73-75 | I3 |
| 22. RN | | 76-78 | I3 |
| 23. Century | X | 80 | I1 |

See CSM04 for species codes.

Codes used

| | | |
|---|---|---|
| Season | Sp | Spring |
| | Su | Summer |
| | Au | Autumn |
| Line | L | L1 or L2 line on ledges |
| | X | XP line on "X" grid |
| | G | G line on main grid |

# Data Set Code--CSM10

Title of data set--Seasonal summary of relative density of small mammals in brome fields

Abstract:

No current description for this data set.

Keywords that describe data set:small mammals, rodents, density

Date data commenced:10/01/81

Date data terminated:10/14/86

Principle Investigator: Donald W. Kaufman

RECORD TYPE 1

Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |
| 4. Season | 9-10 | A2 |
| 5. Watershed | 13-19 | A7 |
| 6. Line | 21 | A1 |
| 7. PM | 23-26 | I4 |
| 8. Rmeg | 27-30 | I4 |
| 9. PL | 31-34 | I4 |
| 10. BH | 35-38 | I4 |
| 11. MO | 39-42 | I4 |
| 12. SH | 43-46 | I4 |
| 13. ST | 47-50 | I4 |
| 14. SC | 51-54 | I4 |
| 15. Rmon | 55-57 | I4 |
| 16. MM | 58-60 | I3 |
| 17. PH | 61-63 | I3 |
| 18. ZH | 64-66 | I3 |
| 19. NF | 67-69 | I3 |
| 20. CP | 70-72 | I3 |
| 21. MP | 73-75 | I3 |
| 22. RN | 76-78 | I3 |
| 23. Century | 80 | I3 |

Codes used:See CSM04

# *GIS Data*

## Data Set Code--GIS01

Title of data set--Geographical Information System coverages of Konza Prairie

Abstract:

A variety of coverages exist for Konza Prairie in either ARC/INFO or ERDAS format. For further information on these coverages contact the investigator listed below. These coverages are NOT in the "core" LTER data base, but reside in a different location.
Keywords that describe data set: Geographical Information System

Date data commenced:

Date data terminated:

Principle Investigator: John M. Briggs

Current GIS Coverages (02 March 1993) include:

1) Digital Elevation Map (DEM). It has a horizontal resolution of 25 meters and a vertical scale in tenths of feet.
2) Slope derived from the DEM.
3) Aspect derived from the DEM.
4) Roads, trail, pipelines and powerlines.
5) Boundary Lines
6) Fence Lines
7) Geology
8) Research Treatment Areas
9) Soils
10) Woody trees and shrubs of selected watersheds (See PWV01).
11) Geomorphology
12) Stream drainage patterns
13) Aerial photographs of Konza Prairie showing extent of gallery forest in 1939, 1950,1969 and 1985.

# *Nutrient Data*

## Data Set Code--NBC01

Title of data set--Belowground Studies: Soil Chemistry

Abstract:

Effects of burning, mowing, and N + P additions on soil chemistry are measured on the 64 belowground plots every two years. Variables measured include P, N03, NH4, Mn, Cu, K, Zn, Ca, Fe, Mg, Na, ph, Organic matter and Organic-N.

Keywords that describe data set:soil nutrients, chemistry nitrate, ammonia, phosphorus, belowground plots

Date data commenced:06/01/86

Date data terminated: / /

Principle Investigator: Arthur P. Schwab

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. PN | Plot number | 18-19 | I2 | |
| 8. Suprplot | Super plot number (Block number) | 21 | A1 | |
| 9. Burn | Burned or unburned | 23 | A1 | |
| 10. Mow | Mowed or unmowed | 25 | A1 | |
| 11. Nutrient | Nutrient in Block | 27 | A1 | |
| 12. Depth | | 29-30 | I2 | cm |
| 13. Nitrate | | 32-36 | F5.1 | |
| 14. Ammonia | | 38-42 | F5.1 | |
| 15. Phsphros | | 44-46 | I3 | |
| 16. Total N | | 48-51 | I4 | |
| 17. PH | | 53-55 | F3.1 | |
| 18. Orgncmat | | 57-60 | F4.1 | |
| 19. K | | 62-65 | I4 | |
| 20. ZN | | 67-69 | F3.1 | |
| 21. FE | | 71-73 | I3 | |

| | | |
|---|---|---|
| 22. Lime | 75-78 | I4 |

RECORD TYPE 2

Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |
| 4. Month | 9-10 | I2 |
| 5. Day | 11-12 | I2 |
| 6. Watershed | 13-16 | A4 |
| 7. PN | 18-19 | I2 |
| 8. Suprplot | 21 | A1 |
| 9. Burn | 23 | A1 |
| 10. Mow | 25 | A1 |
| 11. Nutrient | 27 | A1 |
| 12. Depth | 29-30 | I2cm |
| 13. Nitrate | 32-36 | F5.1 |
| 14. Ammonia | 38-42 | F5.1 |
| 15. Phsphros | 44-46 | I3 |
| 16. MN | 48-51 | I4 |
| 17. PH | 53-55 | F3.1 |
| 18. CU | 57-60 | F4.1 |
| 19. K | 62-65 | I4 |
| 20. ZN | 67-69 | F3.1 |
| 21. FE | 71-73 | I3 |
| 22. Lime | 75-78 | I4 |

# Data Set Code--NBS01

Title of data set--Soil Water Chemistry from Lysimeters on Belowground Plots

Abstract:

Soil water nitrogen composition is measured using porous cup lysimeters from samples from nitrogen fertilized and control plots. Measurements include nitrate, ammonium, phosphate, and organic nitrogen and phosphorus.

Keywords that describe data set: Lysimeters, nitrogen, fertilizer, burning, nitrate, ammonium, phosphate, organic N and P, soil water

Date data commenced: 04/18/1991

Date data terminated: / /

Principle Investigator: John Blair

RECORD TYPE 1

Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |
| 4. Month | 9-10 | I2 |
| 5. Day | 11-12 | I2 |
| 6. Watershed | 13-16 | A4 |
| 7. Plot # | 18-19 | I2 |
| 8. Volume | 21-24 | |
| 9. $NO_3$ | 26-33 | |
| 10. $NH_4$ | 35-42 | |
| 11. TPN | 44-51 | |
| 12. TPP | 53-56 | |
| 13. $PO_4$ | 58-62 | |
| 14. Comments | 64-80 | |

# Data Set Code--NPL01

Title of data set--Prairie Litterfall
Abstract:

Litter falling to the soil surface of tallgrass prairie was measured using 5 cm x 100 cm litterfall troughs. Mass, nitrogen, and phosphorus content are measured monthly or seasonally. Variables of interest include burning frequency and soil type.
Keywords that describe data set:litterfall, nitrogen, phosphorus, organic matter

Date data commenced:07/01/81

Date data terminated: 12/11/90

Principle Investigator: John M. Blair

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type | 18-19 | A2 | |
| 8. AD | Accumulation Day | 21-23 | I3 | Days |
| 9. Mass | Oven-dry mass | 25-29 | F5.2 | G/0.5X |
| 10. ID | Collector identification # | 31-32 | I2 | |
| 11. Comments | | 35-80 | | |

Codes used:

| | | |
|---|---|---|
| Soil | TU | Tully |
| Soil | FL | Florence |

RECORD TYPE 2

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type or slope | 18-19 | A2 | |
| 8. Day | Collection days | 21-23 | I3 | Days |
| 9. Mass | Oven-dry mass | 25-29 | F5.2 | |
| 10. N | Nitrogen content | 31-35 | F5.3 1982;F4.2 | |

| | | | |
|---|---|---|---|
| 11. P | Phosphorus content | 37-41 | F5.3 %X |
| 12. Collect | Number of collectors composited | 43-44 | I2 |
| 13. Rep | Ident. of sample groups w/chemistry | 45 | A1<br>Discon. 83 |
| 14. Comments | | 50-80 | A31 |
| 15. Block | Samples proc. togeth. w/=blk nos. | 50 | I1 |

Codes used:

| | | |
|---|---|---|
| Soil | TU | Tully |
| Soil | FL | Florence |

# Data Set Code--NSC01

Title of data set--Soil Chemistry and Bulk Density

Abstract:

Soil bulk density and chemical characteristics were measured on all LTER vegetation plots. Variables measured vary from sampling periods. Sampling is done every five years, thus a separate data format exists for each sampling period.

Keywords that describe data set: nitrogen, organic matter, phosphorus, cations

Date data commenced:10/01/81

Date data terminated: / /

Principle Investigator: Arthur P. Schwab

RECORD TYPE 1

Data Format Specification for 1982.

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | | 18-19 | A2 | |
| 8. Site | | 21 | A1 | |
| 9. Depth | | 23-24 | I2 | cm |
| 10. CEC | Cation exchange capacity | 26-29 | F4.1 | Meq/10 |
| 11. pH | | 31-33 | F3.1 | |
| 12. CACO3 | Calcium carbonate | 35-38 | I4 | LB/Acr |
| 13. P | Phosphorus | 40-41 | I2 | cm |
| 14. Na | Sodium | 43-46 | I3 | ppm |
| 15. K | Potassium | 48-51 | I4 | LB/Acr |
| 16. O.M. | Organic matter | 53-56 | F4.1 | % Dry |
| 17. Ca | Calcium | 58-61 | I4 | ppm |
| 18. Mg | Magnesium | 63-65 | I3 | ppm |
| 19. Totn | Total Nitrogen | 67-70 | I4 | % Dry |
| 20. Bulkd | Bulk Density | 72-76 | F5.3 | g/cm3* |

Data Format Specification for 1987.

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 | |
| 2. Rectype | 6 | I1 | |
| 3. Year | 7-8 | I2 | |
| 4. Month | 9-10 | I2 | |
| 5. Day | 11-12 | I2 | |
| 6. Watershed | 13-16 | A4 | |
| 7. Soil | 18-19 | A2 | |
| 8. Site | 21 | A1 | |
| 9. Depth | 23-24 | I2 | cm |
| 10. pH | 31-33 | F3.1 | |

| | | | | |
|---|---|---|---|---|
| 11. P | Phosphorus | 40-41 | I2 | lb/acr |
| 12. Na | Sodium | 43-46 | I2 | ppm |
| 13. K | Potassium | 48-51 | I4 | LB/Acr |
| 14. O.M. | Organic Matter | 53-56 | F4.1 | % Dry |
| 15. Ca | Calcium | 58-61 | I4 | LB/Acr |
| 16. Mg | Magnesium | 63-65 | I3 | |
| 17. Totn | Total Nitrogen | 67-70 | I4 | % Dry |

Data Format Specification for 1992.

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | | 18-19 | | |
| 8. Transect | | 21 | | |
| 9. Depth | | 23-24 | I2 | |
| 10. CEC | Cation exchange capacity | 26-29 | F4.1 | Meq/10 |
| 11. pH | | 31-33 | F3.1 | |
| 12. CACO3 | Calcium carbonate | 35-38 | I4 | LB/Acr |
| 13. P | Phosphorus | 40-41 | I2 | cm |
| 14. Na | Sodium | 43-46 | I3 | ppm |
| 15. K | Potassium | 48-51 | I4 | LB/Acr |
| 16. O.M. | Organic matter | 53-56 | F4.1 | % Dry |
| 17. Ca | Calcium | 58-61 | I4 | ppm |
| 18. Mg | Magnesium | 63-65 | I3 | ppm |
| 19. Totn | Total Nitrogen | 68-71 | F4.2 | % Dry |
| 20. C | | 73-76 | F4.2 | % |
| 21. %h2o | | 78-81 | F4.2 | % |
| 22. nh4 | | 83-86 | F4.2 | |
| 23. no3 | | 88-91 | F4.2 | |
| 24. lime | | 93-96 | I4 | LB/Acr |
| 25. %sand | | 98-101 | F4.1 | % |
| 26. %silt | | 103-106 | F4.1 | % |
| 27. %clay | | 108-111 | F4.1 | % |

# Data Set Code--NSW01

Title of data set--Soil Water Chemistry

Abstract:

Soil water nitrogen composition is measured using porous cup lysimeters. Measurements include nitrate, ammonia, phosphate, and organic nitrogen and phosphorus. Variables of interest are rainfall patterns, vegetation types, and time since burning.

Keywords that describe data set: lysimeters, nitrogen, nitrate, ammonia, organic, soil, water

Date data commenced: 03/01/82

Date data terminated: 12/01/90

Principle Investigator: John M. Blair

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Lysident | Lysimeter identification number | 21-22 | I2 | |
| 8. Depth | Depth of sample | 24 | I1 | dm |
| 9. Volume | Volume of sample | 26-30 | I5 | ml |
| 10. Nitrate | Nitrate-nitrogen | 32-37 | F6.1 | u/lX |
| 11. Ammonia | Ammonia-nitrogen | 39-43 | F5.1 | u/lX |
| | | End 12/83 | | |
| 12. TPN * | = Organic -N+NH4+N03 | 45-48 | I4 | u/l |
| | | Int. 01/83 | | |
| 13. Kjeldahl | = Organic -N+NH4 | 50-53 | I5 | u/l |
| | | End 12/82 | | |
| 14. PO4 * | | 56-60 | F5. 1 | u/l |
| | | 1986 only | | |
| 15. Comments | | 62-80 | A25 | |

* = on monthly composite samples only

micrograms/liter 0-

# Data Set Code--NTF01

Title of data set--Throughfall

Abstract:
Amounts and nitrogen content of water passing through the canopy of tallgrass prairie are compared to similar measurements of bulk precipitation. Measurements include nitrate, ammonia, phosphate and organic nitrogen and phosphorus content of bulk precipitation and throughfall. Variables of interest include vegetation type and amounts, time of year, and time since burning.

Keywords that describe data set: nitrogen, canopy, throughfall, interception

Date data commenced:03/19/82

Date data terminated: / /

Principle Investigator: John M. Blair

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. ppt | Amount of rainfall | 18-22 | F5.1 | mm |
| 8. ID | Collector identification number | 24-25 | I2 | |
| 9. THR | Amount collected below canopy | 27-31 | F5.1 | mm |
| 10. Comments | | 34-80 | A48 | |

RECORD TYPE 2

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Type | | 18 | A1 | B or T |
| 8. ID | Collector identification number | 20-21 | I2 | |
| 9. Amount | Sample volume | 23-27 | F5.1 | mmX |
| 10. NO3 | Conc. of nitrate-n ppb | 29-33 | I5 | ppb(u) |

| | | | | |
|---|---|---|---|---|
| 11. NH4 | Conc. of ammonia-n ppb | 35-39 | I5 | ppb(u) |
| | | Can. 12/85 | | |
| 12. TPN | Conc. of organic-n | 41-45 | I5 | ppb(u) |
| | | Tkn 83/01 | | |
| 13. PO4 | Conc. of Phosphate | 47-51 | I5 | ppb(ug) |
| | | began 2/86 | | |
| 14. Comment | | 53-80 | A28 | |

Codes used:

| | | |
|---|---|---|
| Type | B | Bulk precipitation collector |
| Type | T | Throughfall collector |

# Data Set Code--NWC01

Title of data set-- Stream Water Chemistry
Abstract:

Nitrate, ammonium, total N, soluble reactive P, total P, and dissolved organic C are monitored in four streams draining watersheds with 1 (N01B), 2 (N02B), 4 (N04D), and 20 (N20B) year target burn frequencies. Bison have grazed these treatments since May 1992. The number of sites sampled has been expanded since 1992 to include sites that may reflect anthropogenic, groundwater, and bison influences on water chemistry. These sites include the south branch of Kings Creek as it leaves watershed N01A (tube), a site immediately below the NO4D weir at Konza Falls that is heavily influenced by groundwater (kzfl), the north fork of Kings Creek draining watersheds without bison (nfkc), the south fork of Kings Creek that drains the watersheds with bison (sfkc), Kings Creek below the USGS gauging station above the first agricultural field (hokn), a small creek that drains into Kings Creek after flowing past the bison handling facilities, two private residences, the site headquarters and an agricultural field (stck), a pristine prairie groundwater site (edlr), and Kings Creek at the bottom of Konza as it leaves the agricultural land in watershed AL (hikx). Early samples were preserved with phenyl mercuric acetate. Future plans to restore agricultural land to prairie may influence downstream nutrient concentrations.

Keywords that describe data set: nitrate, ammonium, total nitrogen, soluble reactive phosphorus, total phosphorus, and dissolved organic carbon, stream, nitrogen, carbon, phosphorus

Date data commenced: 04/01/83
Date data terminated: / /
Principle Investigator: Walter Dodds

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 | |
| 2. Rectype | 6 | I1 | |
| 3. Year | 7-8 | I2 | |
| 4. Month | 9-10 | I2 | |
| 5. Day | 11-12 | I2 | |
| 6. Sample site | 13-16 | A4 | |
| 7. Time | 17-20 | I4 | CST |
| 8. Preservative | 21 | A1 | |
| 9. NO3 | 22-28 | F7.1 | ug/l |
| 10. NH4 | 29-35 | F7.1 | ug/l |
| 11. TN | 36-40 | I5 | ug/l |
| 12. SRP | 41-47 | F7.1 | ug/l |
| 13. TP | 48-51 | I4 | ug/l |
| 14. DOC | 52-57 | F6.3 | mg/l |
| 15. Comments | 58-80 | A27 | |

Codes used:

| **Name** | **Value** | **Code Value** |
|---|---|---|
| Sample site | | see abstract above |
| Preserve | y | preservative added |

| | | |
|---|---|---|
| Preserve | n | no preservative added |

Data Set Code: NWC02

Title of data set-- Stream Water Conductivity

Abstract:

Conductivity was monitored in four streams draining watersheds with 1 (N01B), 2 (N02B), 4 (N04D), and 20 (N20B) year target burn frequencies. Bison grazed these treatments since May 1992. Early samples were preserved with phenyl mercuric acetate.

Keywords that describe data set: conductivity, salinity, stream

Date data commenced: 04/01/83
Date data terminated: 6/21 /93
Principle Investigator: Walter Dodds

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 16. Datacode | | 1-5 | A5 | |
| 17. Rectype | | 6 | I1 | |
| 18. Year | | 7-8 | I2 | |
| 19. Month | | 9-10 | I2 | |
| 20. Day | | 11-12 | I2 | |
| 21. Sample site | | 13-16 | A4 | |
| 22. Type | Type of Sample | 17 | A1 | |
| 23. Timeint | Time interval between bottles | 19-20 | I2 | min |
| 24. Sampool | # of samples/ bottle | 21-22 | I2 | |
| 25. Time | Collection time last bottle | 23-26 | I4 | CST |
| 26. Estcode | e = time estimated | 27 | A1 | |
| 27. Preservative | preserve added | 28 | A1 | |
| 28. Conduct. | Specific conductance | 29-31 | I3 | uS/cm |
| 29. Comments | | 32-80 | A48 | |

Codes used:

| **Name** | **Value** | **Code Value** |
|---|---|---|
| Sample Site | | See abstract above |
| Type | g | Grab sample |
| Type | I | Isco (automatic) sample |
| Estcode | blank | sample time unknown |
| Estcode | e | sample time estimated |
| Preserve | y | preservative added |
| Preserve | n | no preservative added |

# *Producer Data*

## Data Set Code--PAB01

Title of data set--Aboveground primary production

Abstract:

Data set contains estimates of standing crop biomass (grams per square meter) of live, graminoids, forbs and woody plants, current year's dead, and previous year's dead vegetation for 2 soil types (shallow and deep) and various burning-grazing treatments. Estimates made in mid-April, mid-July, and November from 1983-1988 but only at peak standing crop biomass starting in 1989. Twenty quadrats (0.1 square meters) are harvested for each soil/treatment type. In addition, bi-weekly estimates of standing crop biomass are taken on watersheds 001a and 020a.

Keywords that describe data set: aboveground biomass, primary production, graminoids, forbs, current years dead, previous years dead

Date data commenced: 04/01/84

Date data terminated: / /

Principle Investigator: Alan K. Knapp

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type tully, florence, or irwin | 21-22 | A2 | |
| 8. Transect | Transect (A, B, C, D, or X | 24 | A1 | |
| 9. Plotnum | Plot number (1-5 or 1-20 on 001a and 020a) | 26-27 | A2 | |
| 10. Lvgrass | Mass of live grass | 29-34 | F6.2 | G/.1m2 |
| 11. Forbs | Mass of forbs | 36-41 | F6.2 | G/.1m2 |
| 12. Cuyrdead | Mass of current years dead | 43-48 | F6.2 | G/.1m2 |
| 13. Pryrdead | Mass of previous years dead | 50-55 | F6.2 | G/.1m2 |
| 14. Woody | Mass of woody (As of 24 Aug 1992) | 57-62 | F6.2 | |
| | Lead plant (Amorpha canescens Pursh) | | | |
| | Wild rose (Rosa arkansana) | | | |
| | Smooth sumac (Rhus glabra L.) | | | |
| | New Jersey tea (Ceanothus herbaceous) | | | |
| | Dogwood (Cornus drummondii) | | | |
| | Buckbrush (Symphoricarpos orbiculatus Moench) | | | |

Codes usedL

| | | |
|---|---|---|
| Soil | TU | Tully soil |
| Soil | Fl | Florence soil |
| Soil | IR | Irwin soil |

Notes: Due to sorting error, data from 1986-1988, should be used with caution. The peak estimates appear to be okay, but earlier dates appear to overestimate current years dead.

## RECORD TYPE 2

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil Soil Type | | 21-22 | A2 | |
| 8. Transect | Transect (A, B, C, D) | 24 | A1 | |
| 9. Plotnum | Plot number (1-5) | 26 | A1 | |
| 10. Type | (lv, cd, pd, fb) | 29-30 | A2 | |
| 11. Mass | Mass of sample | 32-37 | F6.2 | g/.1m2 |
| 12. Nitrogen | Percent Nitrogen | 40-44 | F5.3 | % |
| 13. Phosphor | Percent Phosphorous | 47-51 | F5.3 | % |
| 14. Box Number | | 54-62 | A9 | |
| 15. Comments | | 64-80 | A16 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Soil | TU | Tully soil |
| | Fl | Florence soil |
| | IR | Irwin soil |
| Type | lv | Live grass |
| | cd | Current Dead |
| | pd | Previous dead |
| | fb | Forbs |

## RECORD TYPE 3--Aboveground biomass (1976-1979)

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. ST Soil type | | 18-19 | A2 | |
| 8. LVM | Mass of clipped sample (live) | 21-24 | F4.1 | g/.1m2 |
| 9. LVVAR | Variance of live mass samples | 26-31 | F6.2 | g/.1m2 |
| 10. DM | Mass of dead clipped vegetation | 32-35 | 4.1 | g/.1m2 |
| 11. DVAR | Variance of dead mass | 37-42 | F6.2 | g/.1m2 |
| 12. TOTM | Mass of total veg. per .1 mxm plot g/.1m2 | 44-48 | F5.1 | g/.1m2 |
| 13. Totvar | Variance of total mass data | 50-55 | F6.2 | g/.1m2 |
| 14. # | Number of clipped plots | 57-58 | I2 | |

# Data Set Code--PAB03

Title of Data Set--Aboveground Primary Production Prior to LTER Clipping

Abstract:

No current description for this data set.

Keywords that describe data set: aboveground biomass, primary production, graminoids, forbs, current years dead, previous years dead

Date data commenced: 1975

Date data terminated: 1983

Primary Investigator: John M. Briggs

# Data Set Code--PAB04

Title of data set--Regional aboveground primary production

Abstract:

Aboveground primary production data from surrounding tallgrass prairie sites are combined with Konza Prairie LTER data. Methods vary slightly among sites, but in general, all aboveground biomass is harvested from quadrants at the time of peak aboveground biomass in burned and/or unburned, ungrazed productive tallgrass prairie sites at The Land Institute (South of Salina, KS), Arrapaho Prairie (in the sandhills of Western Nebraska), Nine-Mile Prairie (in Omaha, Nebraska), and the Ross Natural Area (in SE Kansas, near Emporia). Biomass is sorted into live graminoid, forb and woody plants, current year dead and previous years' dead components.

Keywords that describe data set: aboveground biomass, NPP, regional NPP, graminoids, forbs, current year dead, previous year dead.

Date data set commenced: varies with site

Date data set terminated: / /

Principle Investigator: Alan K. Knapp

Data not yet entered into LTER data base (02 March 1993).

# Data Set Code--PBB01

Title of data set--Aboveground biomass on belowground plots

Abstract:

Peak foliage biomass is measured annually in late summer on the 64 belowground plots. Effects of burning, mowing and N + P additions on aboveground NPP are measured. (1-2 0.1m2 quadrats harvested per plots).

Keywords that describe data set: mowing, nitrogen, phosphorus, belowground plots

Date data commenced: 11/15/86
Date data terminated: / /
Principle Investigator: Charles W. Rice

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | A1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-11 | I2 |
| 5. Day | | 12-13 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Plot # | Plot number (1-64) | 18-19 | I2 |
| 9. Replicate | Code A or B | 21 | A1 |
| 10. Subplot | Sub plot | 23 | A1 |
| 11. Burn | Burned treatment | 25 | A1 |
| 12. Mow | Mow treatment | 27 | A1 |
| 13. Nutrient | Nutrient treatment | 29 | A1 |
| 14. Lvgrass | Live grass (g/0.1m2) | 32-36 | F5.2 |
| 15. Forbs | Forbs (g/0.1m2) | 39-43 | F5.2 |
| 16. Cuyrdd | Current years dead (g/0.1m2) | 46-50 | F5.2 |
| 17. Pryrdd | Previous years dead (g/0.1m2) | 53-57 | F5.2 |
| 18. Woody | (As of 24 Aug 1992)<br>lead plant-Amorpha canescens<br>rose-Rosa arkansas<br>(smooth) sumac-Rhus glabra<br>New Jersey tea-Ceanothus ovatus<br>dogwood-Cornus drummondi<br>buck brush-symphoricarpos orbiculatus | 60-64 | F5.2 |
| 19. Comments | Comments | 66-80 | A14 |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Replicate | A,B | Code A or B |
| Plot | 1-64 | Plot number |
| Burn treatment | U:B | U=Unburn B=Burn |
| Mow treatment | U;M | U=unmowed M=mowed |
| Nutrient treatment | C,N,P,B | C=control, N=nitrogen<br>P=Phosphorus B=Both |

# Data Set Code--PBB02

Title of data set--Biomass of Rhizomes, Nitrogen & Phosphorous Content on Belowground Studies Plots.

Abstract:

Standing crops of live and dead rhizomes (0.1 sq. m2 * 20cm deep samples) are taken in late summer every 5 years from 64 belowground plots. N & P content are determined on live and dead rhizomes. N& P for forb rhizomes are available for some plots in some years. **See archived rawdata files in Rm 215 Bushnell.

Keywords that describe data set: Rhizomes, Belowground Plots, Nitrogen, Phosphorus

Date data commenced:11/15/86

Date data terminated: / /

Principle Investigator: Charles W. Rice

RECORD TYPE 1:

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Plot | Plot Number (1-64) | 18-19 | A2 |
| 8. Live Rhizomes | Mass of Sample | 22-26 | F2.2 |
| 9. % Nitrogen | % N of Live Rhizomes | 29-33 | F1.3 |
| 10. % Phosphorous | % P of Live Rhizomes | 35-39 | F1.3 |
| 11. Dead Rhizomes | Mass of Sample | 42-46 | F2.2 |
| 12. % Nitrogen | % N of Dead Rhizomes | 49-53 | F1.3 |
| 13. % Phosphorous | % P of Dead Rhizomes | 55-59 | F1.3 |
| 14. Live Forbs | Mass of Sample | 62-66 | F2.2 |
| 15. % Nitrogen | % N of Forbs | 69-73 | F1.3 |
| 16. % Phosphorous | % P of Forbs | 75-79 | F1.3 |

Codes Used:

# Data Set Code--PBB03

Title of data set--Biomass of Roots, Nitrogen &Phosphorous Content on Belowground Studies Plots.

Abstract:

Standing crops of live and dead grass roots(0.1 sq. m2 * 20cm deep samples) are taken in late summer every 5 years from 64 belowground plots. N&P content are determined on live and dead grass roots. N&P for forb roots are available for some plots in some year. **See archived rawdata files in Rm 215 Bushnell.

Keywords that describe data set: Roots, Belowground Plots, Nitrogen, Phosphorus

Date data commenced: 11/15/86

Date data terminated: / /

Principle Investigator: Charles W. Rice

RECORD TYPE1:

Data Format Specification

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |
| 4. Month | 9-10 | I2 |
| 5. Day | 11-12 | I2 |
| 6. Watershed | 13-16 | A4 |
| 7. Plot | 18-19 | A2 |
| 8. Live Roots | 22-26 | F2.2 |
| 9. % Nitrogen | 29-33 | F1.3 |
| 10. % Phosphorous | 35-39 | F1.3 |
| 11. Dead Roots | 42-46 | F2.2 |
| 12. % Nitrogen | 49-53 | F1.3 |
| 13. % Phosphorous | 55-59 | F1.3 |
| 14. Live Forbs | 62-66 | F2.2 |
| 15. % Nitrogen | 69-73 | F1.3 |
| 16. % Phosphorous | 75-73 | F1.3 |

Codes Used:

# Data Set Code--PEB01

Title of data set--Primary Production in Grazing Exclosures

Abstract:
To determine long term effects of bison grazing on aboveground primary production.

Keywords that describe data set: aboveground biomass, grasses, forbs, woody species

Date data commenced: / /1992

Date data terminated: / /

Principle Investigator: David Hartnett

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. | (g or u) (g=grazed, u=ungrazed) | 21 | A2 | |
| 8. Cage | | 23-24 | A1 | |
| 9. Plotnum | Plot number | 26-27 | A2 | |
| 10. Lvgrass | Mass of live grass | 30-34 | F6.2 | G/.1m2 |
| 11. Forbs | Mass of forbs | 37-41 | F6.2 | G/.1m2 |
| 12. Cuyrdead | Mass of current years dead | 44-48 | F6.2 | G/.1m2 |
| 13. Pryrdead | Mass of previous years dead | 50-55 | F6.2 | G/.1m2 |
| 14. Woody | Mass of woody | 58-62 | F6.2 | |

# Data Set Code--PFS01

Title of data set--Reproductive effort of Big Bluestem, Indiangrass, and Little Bluestem on Belowground Plots

Abstract:

No current description for this data set.

Keywords that describe data set: flower stem density, flower stem height, big bluestem, little bluestem,indiangrass, belowground plots

Date data commenced: 07/01/86

Date data terminated: 10/15/88

Principle Investigator: David C. Hartnett

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | A1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-11 | I2 | |
| 5. Day | | 12-13 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Plot | Plot number (1-64) | 18-19 | I2 | |
| 8. Subplot | | 21 | A1 | |
| 9. Burn Burn treatment | | 23 | A1 | |
| 10. Mow | Mow treatement | 25 | A1 | |
| 11. Nutrient | Nutrient treatment | 27 | A1 | |
| 12. Species | Species name | 29-32 | A4 | |
| 13. Fstemht | Flower stem height | 34-37 | F4.2 | meters |
| 14. Fsdnsity | Flower density 0.25m squared | 39-41 | I3 | #/M |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Plot | 1-64 | Plot number |
| Burn treatment | U:B | U=Unburn B=Burn |
| Mow treatment | U;M | U=unmowed M=mowed |
| Nutrient treatment | C,N,P,B | C=control, N=Nitrogen P=Phosphorus B=Both |
| Species | Ange | Ange=Andropogon gerardii |
| Species | ANSC | ANSC=Andropogon scoparius |
| Species | SONU | SONU=Sorgastrum nutans |

# Data Set Code--PGL01

Title of data set--Gallery Forest Litterfall

Abstract:

Litterfall of a Kansas gallery forest is measured with 60, deep-dish litterfall collecters. Mass of wood, seeds, and foliage are recorded separately.

Keywords that describe data set: forest, litterfall, wood, seed

Date data commenced: 10/01/81

Date data terminated: / /

Principle Investigator: John M. Briggs

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Branch | Branch of Kings Creek | 18 | A1 |
| 8. ID | Identification number | 20-21 | I2 |
| 9. Mass | Total (include wood & seed) | 23-29 | F7.2 |
| 10. Wood | Woody mass | 31-37 | F7.2 |
| 11. Seed | Seed mass (include husks, hulls | 39-44 | F6.2 |
| 12. Comment | | 48-80 | A33 |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Branch | N | North branch of Kings Creek |
| | S | South branch of Kings Creek |

# Data Set Code--PPH01

Title of data set--Plant Phenology

Abstract:

Twenty-nine selected species of grasses, forbs, and woody vegetation characteristic of a variety of habitats on Konza Prairie are used for phenological measurements. These species are observed weekly for the entire growing season and changes in their phenological states are recorded. The following phenological states are used for this survey: (1) initiation of growth, (2) first anthesis, (3) duration of anthesis, (4) fruits mature, (5) leaves more than 90% dry.

Keywords that describe data set:plant phenology, reproduction, senescence

Date data commenced:06/13/81

Date data terminated:10/31/88

Principle Investigator: John M. Briggs

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | | 13-16 | A4 |
| 7. Site | Soil type of other site code | 21-22 | A2 |
| 8. Burn | Burned or unburned | 24 | A1 |
| 9. Specode* | Species code | 26-28 | I3 |
| 10. Genus | 6-character abbreviation of genus | 30-36 | A6 |
| 11. Species | 5-character abbreviation of species | 37-41 | A5 |
| 12. Variety | 4-character abbreviation of variety | 43-46 | A4 |
| 13. Growth | % of plants that have inititated growth | 48 | I1 |
| 14. Anthesis | % of plants that have newly opened | 50 | I1 |
| 15. Fruit | % of plants that have mature fruit | 52 | I1 |
| 16. Lvsdry | % of plants that have leaves > 90% | 54 | I1 |
| 17. Comments | | 56-80 | A25 |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| 1. Site | Fl | Florence soil |
| 2. Site | Tu | Tully soil |
| 3. Site | Dw | Dwight soil |
| 4. Site | Rs | Rocky slope |
| 5. Site | Gf | Gallery forest (Kings Creek) |
| 6. Site | Hq | Northeast of Headquarters |
| 7. Site | SE | South end |
| 8. Burn | B | Burned |
| 9. Burn | U | Unburned |

| | | |
|---|---|---|
| 10. Specode | 001 | Androp smith |
| 11. Specode | 002 | Androp gerar |
| 12. Specode | 003 | Androp scopa |
| 13. Specode | 004 | Boutel curti |
| 14. Specode | 014 | Dichan oligo scri |
| 15. Specode | 015 | Panicu virga |
| 16. Specode | 017 | Poa prate |
| 17. Specode | 018 | Sorgha nutan |
| 18. Specode | 021 | Sporob asper aspe |
| 19. Specode | 023 | Sporob heter |
| 20. Specode | 032 | Carex gravi lune |
| 21. Specode | 034 | Carex meadi |
| 22. Specode | 040 | Amorph canes |
| 23. Specode | 058 | Aster erico |
| 24. Specode | 061 | Astrag crass cras |
| 25. Specode | 065 | Baptis austr mino |
| 26. Specode | 066 | Baptis bract glab |
| 27. Specode | 091 | Liatri punct |
| 28. Specode | 094 | Lomati foeni |
| 29. Specode | 109 | Dalea purpu purp |
| 30. Specode | 121 | Salvia pitch |
| 31. Specode | 122 | Schran nutta |
| 32. Specode | 128 | Solida misso fasc |
| 33. Specode | 164 | Cornus drumm |
| 34. Specode | 189 | Tripsa dacty |
| 35. Specode | 200 | Celtis occid |
| 36. Specode | 234 | Rhus glabr |
| 37. Specode | 304 | Quercu muehl |
| 38. Specode | 354 | Populu delto moni |
| 39. Growth | 1 | 0-5% plants initiated growth |
| 40. Growth | 2 | 5-20% plants initiated growth |
| 41. Growth | 3 | > 20% plants inititated growth |
| 42. Anthesis | 1 | 0-5% plants w/new open flower |
| 43. Anthesis | 2 | 5-20% plants w/new open flower |
| 44. Anthesis | 3 | 0-5% plants have mature fruit |
| 46. Fruit | 2 | 5-20% plants have mature fruit |
| 47. Fruit | 3 | > 20% plants have mature fruit |
| 48. Lvsdry | 1 | 0-5% plants leaves > 90% dry |
| 49. Lvsdry | 2 | 5-20% plants leaves > 90% dry |
| 50. Lvsdry | 3 | > 20% plants leaves > 90% dry |

# Data Set Code--PRE02

Title of data set--Reproductive effort of Big Bluestem, Indiangrass and Little Bluestem

ABSTRACT:

Data set contains estimates of flowering stem height (m), density (no. per sq. m) and production (grams per sq. m) and total seed weight (grams) and production (grams per sq. m) for big bluestem, indiangrass and little bluestem on 2 soil types (shallow and deep) with 6 burn-grazing treatment combinations. Sampling done once a year in October (end of growing season). (Sampling design slightly altered from pre01.)

Keywords that describe data set:seed weight, flower stem density, flower stem height, big bluestem,little bluestem, indiangrass

Date data commenced:09/01/82

Date data terminated: / /

Principle Investigator: David C. Hartnett

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type Florence or Tully | 18-19 | A2 | |
| 8. Species | Species name | 21-24 | A4 | |
| 9. Transect | Transect (A,B,C,D) | 26 | A1 | |
| 10. Point | Point number (1-20) | 28-29 | I2 | # |
| 11. Flwstht | Flowering stalk height | 31-34 | F4.2 | Meters |
| 12. Seedwt | Seed weight | 36-39 | F4.2 | Grams |
| 13. Seednum | Number of seeds | 41-44 | I4 | |
| 14. Comments | | 46-80 | A35 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Species | ANGE | Andropogon gerardii |
| Species | ANSC | Andropogon scoparius |
| Species | SONU | Sorgastrum nutans |
| Soil | TU | Tully soil |
| Soil | FL | Florence soil |

RECORD TYPE 2

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |

| | | | | |
|---|---|---|---|---|
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type (florence or tully) | 18-19 | A2 | Tu or Fl |
| 8. Species | Species name | 21-24 | A4 | |
| 9. Transect | Transect (A,B,C,D) | 26 | A1 | |
| 10. Plot | Quadrat number | 28-29 | I2 | |
| 11. Stalk | Number of flowering stalks/0.25 sq. m | 31-33 | I3 | #/.25 |
| 12. Flwstht | Flowering stalk weight/0.25 sq m | 35-40 | P6.2 | G/.25 |
| 13. Comments | | 3-80 | A38 | |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Species | ANGE | Andropogon gerardii |
| Species | ANSC | Andropogon scoparius |
| Species | SONU | Sorgastrum nutans |
| Soil | TU | Tully soil |
| Soil | FL | Florence soil |

# Data Set Code--PRW01

Title of data set--Root Windows

Abstract:

Eight root windows (40cm X 40cm) are used to measure root production and decay on a 2 factor-factorial experiment (Burning, Mowing). Root lengths are traced every two weeks during the growing season. Production, disappearance and standing crops (lengths) are calculated by 10 cm increments.

Keywords that describe data set:root lengths, root growth, root, root decomposition, belowground

Date data commenced:02/01/86

Date data terminated:10/ 03 /89

Principle Investigator: Timothy R. Seastedt

NO DESCRIPTION OF DATA FILES!!!!!!

# Data Set Code--PTN01

Title of data set--1D/UB Transect Studies

Abstract:

In 1989, single transects spanning upland-lowland-upland topographic positions were established in a long-term unburned and an annually burned watershed. Standing crop biomass data are collected in late season at 11 sites along each transect and sorted into live graminoids, forbs and woody plants, current year's dead, and previous years dead vegetation. Four 0.1 m2 quadrats are harvested at each of the 11 sites per watershed and all data except previous years' dead are combined to provide an estimate of aboveground NPP. In 1993, soil moisture measurements began along each transect at 15 and 30 cm depths (where possible) with a Time Domain Reflectomerty System. Measurements are made twice a month from March - October and intermittently during the winter months. In 1992, litter bags were also placed along the transect to assess landscape variation in decomposition processes.

Keywords that describe the data set: Aboveground biomass, net primary production, graminoids, forbs, topography, landscape, soil moisture, decomposition.

Date data commenced: 08/15/1989
Date data terminated: 09/00/1996

Principle Investigator: John Blair

Record type 1 -- Aboveground biomass

Data Format Specification for 1989 and 1991

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 8. Transect | Transect (1-11) | 23-24 | I2 | |
| 9. Plotnum | Plot number (a,b,c,d) | 27 | A1 | |
| 10. Lvgrass | Mass of live grass | 29-34 | F6.2 | G/.1m2 |
| 11. Forbs | Mass of forbs | 36-41 | F6.2 | G/.1m2 |
| 12. Cuyrdead | Mass of current years dead | 43-48 | F6.2 | G/.1m2 |
| 13. Pryrdead | Mass of previous years dead | 50-55 | F6.2 | G/.1m2 |
| 14. Comments | | 58-80 | A23 | |

Data Format Specification for 1990

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Transect | Transect (1-11) | 18-19 | I2 | |

| | | | | |
|---|---|---|---|---|
| 8. Lvgrass | Mass of live grass | 21-25 | F5.2 | G/.1m2 |
| 9. Lvgrse | Standard error of live grass | 27-32 | F5.2 | |
| 10. Forbs | Mass of forbs | 33-37 | F5.2 | G/.1m2 |
| 11. Forbse | Standard error of forbs | 38-43 | F5.2 | |
| 12. Cuyrdead | Mass of current years dead | 45-49 | F5.2 | G/.1m2 |
| 13. Cuyrdese | Standard error of currents years dead | 51-55 | F5.2 | |
| 14. Pryrdead | Mass of previous years dead | 57-62 | F5.2 | G/.1m2 |
| 15. Pryrdese | Standard error of previous years dead | 64-66 | F5.2 | |
| 16 Total | Total aboveground biomass (Livegrass + forbs + current years dead) | 70-74 | F5.2 | G/.1m2 |
| 17. Totalse | Standard error of total aboveground biomass | 76-80 | F5.2 | |

Data Format Specification for 1992 on.

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 8. Transect | Transect (1-11) | 23-24 | I2 | |
| 9. Plotnum | Plot number (a,b,c,d) | 27 | A1 | |
| 10. Lvgrass | Mass of live grass | 29-34 | F6.2 | G/.1m2 |
| 11. Forbs | Mass of forbs | 36-41 | F6.2 | G/.1m2 |
| 12. Cuyrdead | Mass of current years dead | 43-48 | F6.2 | G/.1m2 |
| 13. Pryrdead | Mass of previous years dead | 50-55 | F6.2 | G/.1m2 |
| 14. Woody | (As of 24 Aug 1992)<br>lead plant-Amorpha canescens<br>rose-Rosa arkansas<br>(smooth) sumac-Rhus glabra<br>New Jersey tea-Ceanothus ovatus<br>dogwood-Cornus drummondi<br>buckbrush-symphoricarpos orbiculatus | 57-62 | A23 | |
| 15. Comments | | 64-80 | | |

Record Type 2—001d/020b TDR reading.
Data Format Specification:

| | | | | |
|---|---|---|---|---|
| 1: Datacode | | 1-5 | A5 | |
| 2: Rectype | | 6 | I1 | |
| 3: Year | | 7-8 | I2 | |
| 4: Month | | 9-10 | I2 | |
| 5: Day | | 11-12 | I2 | |
| 6: Watershed | | 13-16 | A4 | |
| 7: Depth | 15 or 30 cm | 19-22 | A4 | |
| 8: Tag Number | | 26-28 | I3 | |
| 9: Reading | | 30-37 | I8 | |
| 10: % Volumetric H2O | based on the TOPP equation | 39-47 | I9 | |
| 11: Comments | | 49-80 | A41 | |

# Data Set Code--PVC01

Title of data set--Vegetation species composition (1981)

Abstract:

Canopy coverage and frequency were recorded in 20 circular 10 sq m plots. Six treatments were sampled, three ungrazed and three to be grazed (in the future) by native grazers (bison). In each case, one of the three watersheds was unburned, another burned annually in April, and the third burned every four years in April. In each treatment two soils were sampled: a lower slope deep fertile non-rocky soil (tully silty clay loam) and a shallow rocky soil (florence cherty silt loam) on level to gently sloping ridges.

Keywords that describe data set:canopy coverage, plant species composition

Date data commenced:04/01/81

Date data terminated:09/29/81

Principle Investigator: David C. Hartnett

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Soil | Soil type | 18 | A1 | |
| 8. Specode | Species code | 20-22 | I3 | |
| 9. Genus | Abbreviation of genus | 24-29 | A6 | * |
| 10. Speci | Abbreviation of species | 31-35 | A5 | * |
| 11. Vari | Abbreviation of variety | 37-40 | A4 | * |
| 12. Plot 1-20 | Plot 1-20 Cover class for plots 1-20 | 42-80 (even) | I20 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Soil | F | Florence |
| | T | Tully |
| Spcode | 1 | Agropyron smithii (see attached list) |
| | etc. | |
| Plot 1-20 | 1 | 0-1% Cover |
| | 2 | 2-5% Cover |
| | 3 | 5-25% Cover |
| | 4 | 25-50% Cover |
| | 5 | 50-75% Cover |
| | 6 | 75-95% Cover |
| | 7 | 95-100% Cover |

PVCNAMES: SPECIES LIST for 1981

| | |
|---|---|
| 001 agropy smith | Agropyron smithii |
| 002 androp gerar | Andropogon gerardii |
| 003 androp scopa | Andropogon scoparius |
| 004 boutel curti | Bouteloua curtipendula |
| 005 boutel graci | Bouteloua gracilis |
| 006 boutel hirsu | bouteloua hirsuta |
| 007 buchlo dacty | buchloe dactyloides |
| 008 chlori verti | chloris verticillata |
| 009 elymus canad | elymus canadensis |
| 010 elymus virgi | elymus virginicus |
| 011 eragro spect | eragrostis spectabilis |
| 012 koeler pyram | koeleria pyramidata (k. cristata) |
| 013 muhlen cusp | muhlenbergia cuspidata |
| 014 dichan oligo scri | dichanthelium oligosanthes var scribnerianum (panicum o.) |
| 015 panicu virga | panicum virgatum |
| 016 dichan acumi | dichanthelium acuminatum (panicum praecocius) |
| 017 poa prate | poa pratensis |
| 018 sorgha nutan | sorghastrum nutans (s. avenaceum) |
| 019 sparti pecti | spartina pectinata |
| 020 spheno obtus obtu | sphenopholis obtusata var. obtusata |
| 021 sporob asper aspe | sporobolus asper var. asper |
| 022 sporob crypt | sporobolus cryptandrus |
| 023 sporob heter | sporobolus heterolepis |
| 024 aristi oliga | aristida oligantha |
| 025 bromus japon | bromus japonicus |
| 026 bromus tecto | bromus tectorum |
| 027 festuc octof | festuca octoflora |
| 028 hordeu pusil | hordeum pusillum |
| 029 panicu capil | panicum capillare |
| 030 schedo panic | schedonnardus paniculatus |
| 031 carex brevi | carex brevior |
| 032 carex gravi lune | carex gravida var. lunelliana |
| 033 carex helio | carex heliophila |
| 034 carex meadi | carex meadii |
| 035 carex bland | carex blanda |
| 036 cyperu lupul lupu | cyperus lupulinus subsp. lupulinus (C. filiculmis) |
| 037 cyperu schwe | cyperus schweinitzii |
| 038 eleoch compr | eleocharis compressa |
| 039 eleoch eryth | eleocharis erythropoda |
| 040 amorph canes | amorpha canescens |
| 041 ceanot herba pube | ceanothus herbaceus var. pubescens |
| 042 rosa arkan | rosa arkansana (r. suffulta) |
| 043 sympho orbic | symphoricarpos orbiculatus |
| 044 achill mille lanu | achillea millefolium subsp. lanulosa |
| 045 allium canad | allium canadense |
| 046 ambros psilo | ambrosia psilotachya |
| 047 andros occid | androsace occidentalis |
| 048 anemon carol | anemone caroliniana |
| 049 antenn negle negl | antennaria neglecta var. neglecta (A. campestris) |

| | |
|---|---|
| 050 apocyn canna | pocynum cannabinum (including a. sibiricum) |
| 051 argemo polya | argemone polyanthemos |
| 052 artemi ludov ludo | artemisia ludoviciana var. ludoviciana |
| 053 asclep lanug | sclepias lanuginosa (probably a. viridiflora) |
| 054 asclep steno | asclepias stenophylla |
| 055 asclep verti | asclepias verticillata |
| 056 asclep virds | asclepias viridis |
| 057 asclep tuber | nte asclepias tuberosa subsp. interior |
| 058 aster erico | aster ericoides |
| 059 aster oblon | aster oblongifolius |
| 060 aster seric | aster sericeus |
| 061 astrag crass cras | astragalus crassicarpus var. crassicarpus |
| 062 astrag lotif | astragalus lotiflorus |
| 063 astrag platt | astragalus plattensis |
| 064 astrag canad | astragalus canadensis |
| 065 baptis austr mino | baptisia australis var. minor |
| 066 baptis bract glab | baptisia bracteata var. glabrescens (b. leucophaea) |
| 067 cacali plant | cacalia plantaginea (c. tuberosa) |
| 068 callir alcae | callirhoe alcaeoides |
| 069 callir invol | callirhoe involucrata |
| 070 cirsiu undul | cirsium undulatum |
| 071 conyza canad cana | conyza canadensis var. canadensis (erigeron canadensis) |
| 072 croton monan | croton monanthogynus |
| 073 delphi carol vire | delphinium carolinianum subsp. virescens (d. virescens) |
| 074 descur pinna brac | descurainia pinnata var. brachycarpa |
| 075 draba repta | draba reptans |
| 076 echina angus | echinacea angustifolia (e. pallida var. angustifolia) |
| 077 eriger strig stri | erigeron strigosus var. strigosus |
| 078 euphor margi | euphorbia marginata |
| 079 euphor spath | uphorbia spathulata |
| 080 euphor glypt | euphorbia glyptosperma |
| 081 gerani carol | geranium carolinianum |
| 082 hedeom hispi | hedeoma hispida |
| 083 hierac longi | hieracium longipilum |
| 084 hybant verti | hybanthus verticillatus |
| 085 hymeno scabi cory | hymenopappus scabiosaeus var. corymbosus |
| 086 kuhnia eupat cory | kuhnia eupatoroides var. corymbulosa |
| 087 lactuc serri | lactuca serriola |
| 088 lathyr polym poly | lathyrus polymorphus var. polymorphus |
| 089 lepidi densi | lepidium densiflorum |
| 090 lesped capit | lespedeza capitata |
| 091 liatri punct | liatris punctata |
| 092 linum sulca | linum sulcatum |
| 093 lithos incis | lithospermum incisum |
| 094 lomati foeni | lomatium foeniculaceum |
| 095 micros cuspi | microseris cuspidata |
| 096 coryph misso miss | coryphantha missouriensis var.missouriensis(Mamillaria mis |
| 097 oenoth macro macr | oenothera macrocarpa subsp.macrocarpa (o. missouriensis) |
| 098 artems ludov | artemisia ludoviciana(no var.) see also 52 and 267 |
| 099 oenoth speci | oenothera speciosa |

| | |
|---|---|
| 100 oenoth bienn | oenothera biennis |
| 101 opunti macro macr | opuntia macrorhiza var. macrorhiza |
| 102 oxalis stric | oxalis stricta |
| 103 oxalis viola o | xalis violacea |
| 104 penste cobae coba | penstemon cobaea var. cobaea |
| 105 penste grand | penstemon grandiflorus |
| 106 dalea candi cand | dalea candida var. candida (petalostemon candidum) |
| 107 dalea multi dalea | multiflora (petalostemon multiflorum |
| 108 dalea candi olig | dalea candida var. oligophylla (petalostemon occidentale) |
| 109 dalea purpu purp | dalea purpurea var. purpurea (petalostemon purpureum) |
| 110 lactuc salig | actuca saligna |
| 111 physal pumil | physalis pumila |
| 112 physal virgi | physalis virginiana (no variety)(see 171/207/and 345) |
| 113 cratae molli | crataegus mollis (formerly c. coccinoides) |
| 114 planta rhodo | plantago rhodosperma |
| 115 polyga verti | polygala verticillata |
| 116 psoral escul | psoralea esculenta |
| 117 psoral tenui flor | psoralea tenuiflora var. floribunda |
| 118 ratibi colum | ratibida columnifera |
| 119 rudbec hirta | rudbeckia hirta |
| 120 ruelli humil | ruellia humilis |
| 121 salvia pitch | salvia pitcheri (s. azurea var. grandiflora) |
| 122 schran nutta | schrankia nuttallii |
| 123 seneci platt | senecio plattensis |
| 124 silene antir | silene antirrhina |
| 125 sisyri campe | sisyrinchium campestre |
| 126 solanu carol | olanum carolinense |
| 127 solida canad scab | solidago canadensis var. scabra |
| 128 solida misso fasc | solidago missouriensis fasciculata |
| 129 solida molli | solidago mollis |
| 130 solida rigid humi | solidago rigida var. humilis |
| 131 solida speci rigi | solidago speciosa var. rigiduscula |
| 132 spermo inerm s | permolepis inermis |
| 133 trades bract | tradescantia bracteata |
| 134 tragia beton | tragia betonicifolia (t. urticifolia) |
| 135 tragop dubiu | tragopogon dubius |
| 136 trioda lepto | triodanis leptocarpa (specularia leptocarpa) |
| 137 trioda perfo | triodanis perfoliata (specularia perfoliata) |
| 138 verben bipin | verbena bipinnatifida (glandularia bipinnatifida) |
| 139 verben stric | verbena stricta |
| 140 vernon baldw inte | vernonia baldwinii var. interior |
| 141 viola rafin | viola rafinesquii |
| 142 galium apari | galium aparine |
| 143 lesped viola | lespedeza violacea |
| 144 psoral argop | soralea argophylla |
| 145 desmod illin | desmodium illinoense |
| 146 juncus inter | juncus interior |
| 147 viola pedat | viola pedatifida |
| 148 prunus ameri | prunus americana |
| 149 scutel parvu leon | scutellaria parvula var. leonardii |

| | |
|---|---|
| 150 agrost hyema | agrostis hyemalis |
| 151 lesped stipu | espedeza stipulacea |
| 152 asclep virdf | asclepias viridiflora |
| 153 eupato rugos | eupatorium rugosum |
| 154 comand umbel pall | comandra umbellata subsp. pallida |
| 155 agalin asper | agalinis aspera (gerardia aspera) |
| 156 acalyp virgi | acalypha virginica |
| 157 myosot verna | myosotis verna |
| 158 ulmus ameri | ulmus americana |
| 159 pariet pensy | parietaria pensylvanica |
| 160 ambros trifi | ambrosia trifida |
| 161 asclep syria | asclepias syriaca |
| 162 taraxa offic | taraxacum officinale |
| 163 medica lupul | medicago lupulina |
| 164 cornus drumm | cornus drummondii |
| 165 cyperu spp | cyperus spp. |
| 166 chenop album | chenopodium album |
| 167 panicu perlo | panicum perlongum |
| 168 leptol cogna | leptoloma cognatum |
| 169 capsel bursa | capsella bursa-pastoris |
| 170 stroph leios | strophostyles leiosperma |
| 171 physal virgi sono | physalis virginiana var. sonorae |
| 172 euphor corol | euphorbia corollata |
| 173 | |
| 174 gaura parvi | gaura parviflora |
| 175 zigade nutta | zigadenus nuttallii |
| 176 onosmo molle occi | onosmodium molle var. occidentale |
| 177 rumex crisp r | umex crispus |
| 178 bromus inerm iner | bromus inermis subsp. inermis |
| 179 prunel vulga | prunella vulgaris |
| 180 teucri canad virg | teucrium canadense var. virginicum |
| 181 equise laevi | quisetum laevigatum |
| 182 lotus corni | lotus corniculatus |
| 183 grinde squar squa | grindelia squarrosa var. squarrosa |
| 184 rumex altis | rumex altissimus |
| 185 calyst macou | calystegia macounii (convolvulus sepium) |
| 186 melilo offic | melilotus officinalis |
| 187 verbas blatt | verbascum blattaria |
| 188 silphi integ laev | silphium integrifolium var. laeve (s. speciosum) |
| 189 tripsa dacty | tripsacum dactyloides |
| 190 setari glauc | setaria glauca (s. lutescens) |
| 191 lycopu ameri | lycopus americanus |
| 192 cynanc laeve | cynanchum laeve |
| 193 euphor denta | euphorbia dentata |
| 194 physal heter | physalis heterophylla |
| 195 digita sangu | Digitaria sanguinalis |
| 196 heliop helia scab | heliopsis helianthoides var. scabra |
| 197 carduu nutan | carduus nutans |
| 198 nepeta catar | nepeta cataria |
| 199 gledit triac | gleditsia triacanthos |

200 celtis occid celtis occidentalis
201 silphi integ inte silphium integrifolium var. integrifolium
202 mirabi nycta mirabilis nyctaginea
203 cyperu odora cyperus odoratus (c. ferruginescens)
204 acalyp ostry acalypha ostryaefolia
205 polygo ramos polygonum ramosissimum
206 viola prati viola pratincola (v. missouriensis)
207 physal virgi virg physalis virginiana var. virginiana(see 112,171,345)
208 solanu rostr solanum rostratum
209 setari virid setaria viridis
210 carex spp. carex spp.
211 ambros artem ambrosia artemisifolia(a. elatior)
212 amaran rudis amaranthus rudis(acnida tamariscina)
213 amaran retro amaranthus retroflexus
214 cucurb foeti cucurbita foetidissima
215 amaran graec amaranthus graecizans
216 euphor serpe euphorbia serpens
217 helian annuu helianthus annuus
218 triden flavu tridens flavus (triodia flava)
219 parthe quinq parthenocissus quinquefolia
220 polygo scand (polygonum scandens)
221 sporob negle sporobolus neglectus (s. vaginiflorus var. neglectus)
222 rosa bland rosa blanda
223 hedyot nigri hedyotis nigricans (houstonia nigricans)
224 verben canad verbena canadensis (glandularia canadensis)
225 mentze oligo mentzelia oligosperma
226 euphor stict euphorbia stictospora
227 vicia ameri mino vicia americana var. minor
228 mirabi albid mirabilis albida
229 dicant obtus dicanthelium obtusum (panicum obtusum)
230 sambuc canad sambucus canadensis
231 toxico radic negu toxicodendron radicans subsp. negundo (rhus radicans)
232 menisp canad menispermum canadense
233 planta virgi plantago virginica
234 rhus glabr rhus glabra
235 roripp sinua rorippa sinuata
236 hordeu jubat hordeum jubatum
237 carex annec xant carex annectens var. xanthocarpa
238 juncus dudle juncus dudleyi
239 scirpu linea scirpus lineatus(now included in s. pendulus,297)
240 amorph fruti amorpha fruticosa
241 morus rubra morus rubra
242 juncus torre juncus torreyi
243 eriger spp. erigeron spp.
244 scripu atrov scirpus atrovirens
245
246 chenop berla zsch chenopodium berlandieri var. zschackei
247 lythru alatu alat lythrum alatum var. alatum
248 euphor corol euphorbia corollata(duplicate of 172)
249 melilo alba melilotus alba

250 euphor pubis euphorbia pubiserrate(??)
251 dicant acumi vill dicanthelium acuminatum var.villosum(panicum villosissimum
252 lesped viola lespedeza violacea(duplicate of 143)
253 mirabi linea mirabilis linearis
254
255 monard fistu fist monarda fistulosa var. fistulosa
256 tricho brach trichostema brachiatum(isanthus brachiatus)
257 acalyp monoc acalypha monococca
258 probos louis proboscidea louisianica
259 monard citri monarda citriodora
260 zizia aurea zizia aurea
261 torili arven torilis arvensis
262 rhus aroma arom rhus aromatica var. aromatica
263 rhus aroma sero rhus aromatica var. serotina
264 arisae draco arisaema dracontium
265 asclep sulli asclepias sullivantii
266 krigia oppos krigia oppositifolia
267 artemi ludov mexi artemisia ludoviciana var.mexicana(see also 98 and 52)
268 sonchu asper sonchus asper
269 xanthi strum cana xanthium strumarium var. canadense
270 aster simpl ramo aster simplex var. ramosissimus
271 helian petio peti helianthus petiolaris var. petiolaris
272 dyssod pappo dyssodia papposa
273 lactuc canad (lactuca canadensis)
274 conyza ramos conyza ramosissima
275 silphi lacin silphium laciniatum
276 cynogl offic cynoglossum officinale
277 hackel virgi hackelia virginiana
278 nastur offic nasturtium officinale
279 erysim repan erysimum repandum
280 roripp palus rorippa palustris
281 lobeli cardi lobelia cardinalis
282 campan ameri campanula americana
282 cannab sativ sati cannabis sativa subsp. sativa
284 triost perfo perf triosteum perfoliatum var. perfoliatum
285 silene stell silene stellata
286 euonym atrop euonymus atropurpureus
287 chenop gigan chenopodium gigantospermum
288 chenop palle chenopodium pallescens
289 kochia scopa kochia scoparia
290 commel erect angu commelina erecta var. angustifolia
291 convol arven convolvulus arvensis
292 pentho sedoi penthorum sedoides
293 junipe virgi juniperus virginiana
294
295 carex hyste carex hystericina
296 scirpu valid scirpus validus
297 scirpu pendu scirpus pendulus
298 cyperu acumi cyperus acuminatus
299 euphor prost euphorbia prostrata

300 euphor nutan euphorbia nutans
301 euphor missu euphorbia missurica
302 euphor cyath euphorbia cyathophora
303 croton capit croton capitatus
304 quercu muehl quercus muehlenbergii
305 quercu macro quercus macrocarpa
306 hyperi perfo hypericum perforatum
307 aescul glabr argu aesculus glabra var. arguta
308 sisyri angus (sisyrinchium angustifolium)
309 carya cordi carya cordiformis
310 juglan nigra juglans nigra
311 agasta nepet agastache nepetoides
312 mentha arven mentha arvensis
313 salvia refle salvia reflexa
314 stachy palus (stachys palustris)
315 leonur cardi leonurus cardiaca
316 yucca glauc yucca glauca
317 gymnoc dioic gymnocladus dioica
318 crotal sagit crotalaria sagittalis
319 glycyr lepid glycyrrhiza lepidota
320 desmod gluti desmodium glutinosum
321 desman illin desmanthus illinoensis
322 cassia maril cassia marilandica
323 cassia chama cassia chamaecrista (c. fasciculata)
324 cercis canad cersis canadensis
325 abutil theop abutilon theophrasti
326 hibisc trion hibiscus trionum
327 malvas hispi malvastrum hispidum (sphaeralcea angusta)
328 morus alba morus alba
329 fraxin penns subi fraxinus pennsylvanica var. subintegerrima
330 calylo serru calylophus serrulatus (oenothera serrulata)
331 oenoth villo vill oenothera villosa subsp. villosa(o. strigosa)
332 spiran verna spiranthes vernalis
333
334 phryma lepto phryma leptostachya
335 phytol ameri phytolacca americana
336 planta rugel plantago rugelii
337 planta arist plantago aristata
338 planta patag pata plantago patagonica var. patagonica(p. purshii)
339 platan occid platanus occidentalis
340 muhlen racem muhlenbergia racemosa
341 muhlen frond muhlenbergia frondosa
342 panicu lanug fasc panicum lanuginosum var.fasciculatum(p. villosissimum)
343 aristi purpu purp aristida purpurea var. purpurea
344 cenchr longi cenchrus longispinus
345 physal virgi hisp physalis virginiana var. hispida
346 mimulu glabr frem mimulus glabratus var. fremontii
347 leucos multi leucospora multifida (conobea multifida)
348 bacopa rotun bacopa rotundifolia
349 ribes misso ribes missouriense

350 comman umbel umbe (commandra umbellata subsp. umbellata)(misidentified)
351 salix exigu inte salix exigua subsp. interior
352 salix nigra salix nigra
353 salix amygd salix amygdaloides
354 populu delto moni populus deltoides subsp. monilifera
355 zantho ameri zanthoxylum americanum
356 galium circa galium circaezans
357 geum canad geum canadense
358 fragar virgi fragaria virginiana
359 prunus angus prunus angustifolia
360 prunus besse (prunus besseyi - misidentified)
361 rubus ostry rubus ostryifolia
362 smilax hispi smilax hispida
363 clemat pitch clematis pitcheri
364 thalic dasyc thalictrum dasycarpum
365 nothol dealb notholaena dealbata
366 pellae glabe glab pellaea glabella var. glabella
367 woodsi obtus woodsia obtusa
368 polygo achor polygonum achoreum
369 polygo lapat polygonum lapathifolium
370 polygo pensy polygonum pensylvanicum
371 polygo persi polygonum persicaria
372 polygo punct polygonum punctatum
373 stipa spart stipa spartea
374 sitani hystr brev sitanion hystrix var. brevifolium
375 glycer stria glyceria striata
376 leersi oryzo leersia oryzoides
377 hystri patul hystrix patula
378 paspal setac muhl paspalum setaceum var. muhlenbergii
379 echino crusg echinochloa crusgalli
380 verben bract verbena bracteata
381 verben urtic verbena urticifolia
382 tilia ameri tilia americana
383 typha latif typha latifolia
384 solanu ameri solanum americanum (s. nigrum)
385 physal pubes miss physalis pubescens var. missouriensis
386 veroni caten cate veronica catenata var. catenata
387 verbas thaps verbascum thapsus
388 scroph lance scrophularia lanceolata
389 liatri asper liatris aspera
390 tribul terre tribulus terrestris
391 vitis ripar vitis riparia
392 botryc virgi botrychium virginianum
393 ruelli strep ruellia strepens
394 acer negun acer negundo
395 asimin trilo asimina triloba
396 chaero procu chaerophyllum procumbens
397 sanicu canad sanicula canadensis
398 arctiu minus arctium minus
399 aster drumm aster drummondii

400 aster laevi aster laevis
401 aster subul ligu aster subulatus var. ligulatus
402 bidens bipin bidens bipinnata
403 bidens cernu bidens cernua
404 bidens frond bidens frondosa
405 bidens polyl bidens polylepis
406 chryso canes chrysopis canescens
407 cirsiu altis cirsium altissimum
408 cirsiu vulga cirsium vulgare
409 eriger phila erigeron philadelphicus
410 eupato altis eupatorium altissimum
411 helian tuber helianthus tuberosus
412 liatri mucro liatris mucronata
413 verbes alter verbesina alternifolia
414 ostrya virgi ostrya virginiana
415 lithos arven lithospermum arvense
416 lithos canes lithospermum canescens
417 alliar petio alliaria petiolata
418 cameli micro camelina microcarpa
419 dentar lacin dentaria laciniata
420 draba cunei draba cuneifolia
421 hesper matro hesperis matronalis
422 thlasp arven thlaspi arvense
423 lobeli siphi lobelia siphilitica
424 dianth armer dianthus armeria
425 celast scand celastrus scandens
426 chenop stand chenopodium standleyanum (c. boscianum)
427 monole nutta monolepis nuttalliana
428 evolvu nutta evolvulus nuttallianus
429 ipomoe heder ipomoea hederacea
430 sicyos angul sicyos angulatus
431 cuscut glome cuscuta glomerata
432 astrag misso astragalus missouriensis
433 desmod panic dill desmodium paniculatum var. dillenii
434 desmod sessi desmodium sessilifolium
435 coryda micra corydalis micrantha
436 dicent cucul dicentra cucullaria
437 ellisi nycte ellisia nyctelea
438 ammann cocci ammannia coccinea
439 sida spino sida spinosa
440 maclur pomif maclura pomifera
441 stenos linif stenosiphon linifolius
442 phlox divar laph phlox divaricata var. laphamii
443 polygo amphi emer polygonum amphibium var. emersum (p. coccineum)
444 portul olera portulaca oleracea
445 lysima cilia lysimachia ciliata
446 ranunc abort ranunculus abortivus
447 prunus virgi prunus virginiana
448 penste tubae tuba penstemon tubaeflorus var. tubaeflorus
449 tomant densi tomanthera densiflora (gerardia densiflora)

450 veroni pereg xala veronica peregrina var. xalapensis
451 urtica dioic grac urtica dioica subsp. gracilis
452 lippia lance lippia lanceolata (phyla lanceolata)
453 verben hasta verbena hastata
454 alisma subco alisma subcordatum
455 sagitt latif sagittaria latifolia
456 trades ohien tradescantia ohiensis
457 allium stell allium stellatum
458 aspara offic asparagus officinalis
459 erythr albid erythronium albidum
460 najas guada najas guadalupensis
461 agrost stolo majo agrostis stolonifera var. major (a. alba)
462 androp ischa song andropogon ischaemum var. songaricus
463 erioch contr eriochloa contracta
464 phleum prate phleum pratense
465 potamo folio potamogeton foliosus
466 potamo nodos potamogeton nodosus
467 potamo pusil pusi potamogeton pusillus var. pusillus
468 veroni agres veronica agrestis
469 stroph helvo strophostyles helvola
470 lactuc ludov lactuca ludoviciana

# Data Set Code--PVC02

Title of data set--Vegetation species composition

Abstract:

Canopy coverage and frequency were recorded in 20 circular 10 sq m plots. Six treatments were sampled, three ungrazed and three to grazed by native grazers. In each case one of the three watersheds was unburned, another burned annually in April, the third burned every four years in April. In each treatment two soils were sampled: a lower-slope deep fertile non-rocky soil (tully silty clay loam), and a shallow rocky soil (florence cherty silt loam) on level to gently sloping ridges. In 1983 another ungrazed annual burn area (1c) was added (both tully and florence soils) because original area (1d) appeared aberrant.

Keywords that describe data set:canopy coverage, plant species composition

Date data commenced:04/01/82

Date data terminated: / /

Principle Investigators:David C. Hartnett/Scott L. Collins

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Observer | Number assigned to observer | 17 | I1 | |
| 8. Soil | Soil type (florence or tully) | 18 | A1 | |
| 9. Specode | Species code | 20-22 | I3 | |
| 10. Genus | Abbreviation of genus | 24-29 | A6 | |
| 11. Speci | Abbreviation of species | 31-35 | A5 | |
| 12. Vari | Abbreviation of variety | 37-40 | A4 | |
| 13. A1-A5 | Cover class for plots in transect A | 42-50 | I1 | Even col. |
| 14. B1-B5 | Cover class for plots in transect B | 52-60 | I1 | Even col. |
| 15. C1-C5 | Cover class for plots in transect C | 62-70 | I1 | Even col. |
| 16. D1-D5 | Cover class for plots in transect D | 72-80 | I1 | Even col. |
| 17. E1-E5 * | Cover class for plots in transect E * | 82-90 | I1 | Even col. |

* Transect E only occurred on watershed N20B florence in 1986 and 1987. This transect is the same as the current transect D for this watershed and soil type. The old transect D was abandoned in 1987 prior to bison reintroduction.

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Soil | F | Florence |
| | T | Tully |
| Spcode | 1 | Agropyron smithii (see attached list) |
| | etc. | |

| | | |
|---|---|---|
| Plot 1-20 | 1 | 0-1% Cover |
| | 2 | 2-5% Cover |
| | 3 | 5-25% Cover |
| | 4 | 25-50% Cover |
| | 5 | 50-75% Cover |
| | 6 | 75-95% Cover |
| | 7 | 95-100% Cover |

PVCNAMES: SPECIES LIST for 1982 on.

| | |
|---|---|
| 001 agropy smith | agropyron smithii |
| 002 androp gerar | andropogon gerardii |
| 003 androp scopa | andropogon scoparius |
| 004 boutel curti | bouteloua curtipendula |
| 005 boutel graci | bouteloua gracilis |
| 006 boutel hirsu | bouteloua hirsuta |
| 007 buchlo dacty | buchloe dactyloides |
| 008 chlori verti | chloris verticillata |
| 009 elymus canad | elymus canadensis |
| 010 elymus virgi | elymus virginicus |
| 011 eragro spect | eragrostis spectabilis |
| 012 koeler pyram | koeleria pyramidata (k.cristata) |
| 013 muhlen cuspi | muhlenbergia cuspidata |
| 014 dichan oligo scri | dichanthelium oligosanthes var scribnerianum (panicum o.) |
| 015 panicu virga | panicum virgatum |
| 016 dichan acumi | dichanthelium acuminatum (panicum praecocius) |
| 017 poa prate | poa pratensis |
| 018 sorgha nutan | sorghastrum nutans (s. avenaceum)1 |
| 019 sparti pecti | spartina pectinata |
| 020 spheno obtus obtu | phenopholis obtusata var. obtusata |
| 021 sporob asper aspe | sporobolus asper var. asper |
| 022 sporob crypt | sporobolus cryptandrus |
| 023 sporob heter | sporobolus heterolepis |
| 024 aristi oliga | aristida oligantha |
| 025 bromus japon | bromus japonicus |
| 026 bromus tecto | bromus tectorum |
| 027 festuc octof | festuca octoflora |
| 028 hordeu pusil | hordeum pusillum |
| 029 panicu capil | panicum capillare |
| 030 schedo panic | schedonnardus paniculatus |
| 031 carex brevi | carex brevior |
| 032 carex gravi lune | carex gravida var. lunelliana |
| 033 carex helio | carex heliophila |
| 034 carex meadi | carex meadii |
| 035 carex bland | carex blanda |
| 036 cyperu lupul lupu | cyperus lupulinus subsp. lupulinus (C. filiculmis) |
| 037 cyperu schwe | cyperus schweinitzii |
| 038 eleoch compr | eleocharis compressa |

| | |
|---|---|
| 039 eleoch eryth | eleocharis erythropoda |
| 040 amorph canes | amorpha canescens |
| 041 ceanot herba pube | ceanothus herbaceus var. pubescens |
| 042 rosa arkan | rosa arkansana (r. suffulta) |
| 043 sympho orbic | symphoricarpos orbiculatus |
| 044 achill mille lanu | achillea millefolium subsp.lanulosa |
| 045 allium canad | allium canadense |
| 046 ambros psilo | ambrosia psilotachya |
| 047 andros occid | androsace occidentalis |
| 048 anemon carol | anemone caroliniana |
| 049 antenn negle negl | antennaria neglecta var. neglecta (A. campestris) |
| 050 apocyn canna | apocynum cannabinum (including a. sibiricum) |
| 051 argemo polya | argemone polyanthemos |
| 052 artemi ludov ludo | artemisia ludoviciana var. ludoviciana |
| 053 asclep lanug | asclepias lanuginosa (probably a. viridiflora) |
| 054 asclep steno | asclepias stenophylla |
| 055 asclep verti | asclepias verticillata |
| 056 asclep virds | asclepias viridis |
| 057 asclep tuber inte | asclepias tuberosa subsp.interior |
| 058 aster erico | aster ericoides |
| 059 aster oblon | aster oblongifolius |
| 060 aster seric | aster sericeus |
| 061 astrag crass cras | astragalus crassicarpus var. crassicarpus |
| 062 astrag lotif | astragalus lotiflorus |
| 063 astrag platt | astragalus plattensis |
| 064 astrag canad | astragalus canadensis |
| 065 baptis austr mino | baptisia australis var. minor |
| 066 baptis bract glab | baptisia bracteata var. glabrescens (b. leucophaea) |
| 067 cacali plant | cacalia plantaginea (c. tuberosa) |
| 068 callir alcae | callirhoe alcaeoides |
| 069 callir invol | callirhoe involucrata |
| 070 cirsiu undul | cirsium undulatum |
| 071 conyza canad cana | conyza canadensis var. canadensis (erigeron canadensis) |
| 072 croton monan | croton monanthogynus |
| 073 delphi carol vire | delphinium carolinianum subsp. virescens (d. virescens) |
| 074 descur pinna brac | descurainia pinnata var. brachycarpa |
| 075 draba repta | draba reptans |
| 076 echina angus | echinacea angustifolia (e. pallida var. angustifolia) |
| 077 eriger strig stri | erigeron strigosus var. strigosus |
| 078 euphor margi | euphorbia marginata |
| 079 euphor spath | euphorbia spathulata |
| 080 euphor glypt | euphorbia glyptosperma |
| 081 gerani carol | geranium carolinianum |

| | |
|---|---|
| 082 hedeom hispi | hedeoma hispida |
| 083 hierac longi | hieracium longipilum |
| 084 hybant verti | hybanthus verticillatus |
| 085 hymeno scabi cory | hymenopappus scabiosaeus var. corymbosus |
| 086 kuhnia eupat cory | kuhnia eupatoroides var. corymbulosa |
| 087 lactuc serri | lactuca serriola |
| 088 lathyr polym poly | lathyrus polymorphus var. polymorphus |
| 089 lepidi densi | lepidium densiflorum |
| 090 lesped capit | lespedeza capitata |
| 091 liatri punct | liatris punctata |
| 092 linum sulca | linum sulcatum |
| 093 lithos incis | lithospermum incisum |
| 094 lomati foeni | lomatium foeniculaceum |
| 095 micros cuspi | microseris cuspidata |
| 096 coryph misso miss | coryphantha missouriensis var.missouriensis(Mamillaria mi) |
| 097 oenoth macro macr | oenothera macrocarpa subsp.macrocarpa (o. missouriensis) |
| 098 artems ludov | artemisia ludoviciana(no var.) see also 52 and 267 |
| 099 oenoth speci | oenothera speciosa |
| 100 oenoth bienn | oenothera biennis |
| 101 opunti macro macr | opuntia macrorhiza var. macrorhiza |
| 102 oxalis stric | oxalis stricta |
| 103 oxalis viola | oxalis violacea |
| 104 penste cobae coba | penstemon cobaea var. cobaea |
| 105 penste grand | penstemon grandiflorus |
| 106 dalea candi cand | dalea candida var. candida (petalostemon candidum) |
| 107 dalea multi | dalea multiflora (petalostemon multiflorum |
| 108 dalea candi olig | dalea candida var. oligophylla (petalostemon occidentale) |
| 109 dalea purpu purp | dalea purpurea var. purpurea (petalostemon purpureum) |
| 110 lactuc salig | lactuca saligna |
| 111 physal pumil | physalis pumila |
| 112 physal virgi | physalis virginiana (no variety)(see 171/207/and 345) |
| 113 cratae molli | crataegus mollis (formerly c. coccinoides) |
| 114 planta rhodo | plantago rhodosperma |
| 115 polyga verti | polygala verticillata |
| 116 psoral escul | psoralea esculenta |
| 117 psoral tenui flor | psoralea tenuiflora var. floribunda |
| 118 ratibi colum | ratibida columnifera |
| 119 rudbec hirta | rudbeckia hirta |
| 120 ruelli humil | ruellia humilis |
| 121 salvia pitch | salvia pitcheri (s. azurea var. grandiflora) |

| | |
|---|---|
| 122 schran nutta | schrankia nuttallii |
| 123 seneci platt | senecio plattensis |
| 124 silene antir | silene antirrhina |
| 125 sisyri campe | sisyrinchium campestre |
| 126 solanu carol | solanum carolinense |
| 127 solida canad scab | solidago canadensis var. scabra |
| 128 solida misso fasc | solidago missouriensis fasciculata |
| 129 solida molli | solidago mollis |
| 130 solida rigid humi | solidago rigida var. humilis |
| 131 solida speci rigi | solidago speciosa var. rigiduscula |
| 132 spermo inerm | spermolepis inermis |
| 133 trades bract | tradescantia bracteata |
| 134 tragia beton | tragia betonicifolia (t. urticifolia) |
| 135 tragop dubiu | tragopogon dubius |
| 136 trioda lepto | triodanis leptocarpa (specularia leptocarpa) |
| 137 trioda perfo | triodanis perfoliata (specularia perfoliata) |
| 138 verben bipin | verbena bipinnatifida (glandularia bipinnatifida) |
| 139 verben stric | verbena stricta |
| 140 vernon baldw inte | vernonia baldwinii var. interior |
| 141 viola rafin | viola rafinesquii |
| 142 galium apari | galium aparine |
| 143 lesped viola | lespedeza violacea |
| 144 psoral argop | psoralea argophylla |
| 145 desmod illin | desmodium illinoense |
| 146 juncus inter | juncus interior |
| 147 viola pedat | viola pedatifida |
| 148 prunus ameri | prunus americana |
| 149 scutel parvu leon | scutellaria parvula var. leonardii |
| 150 agrost hyema | agrostis hyemalis |
| 151 lesped stipu | lespedeza stipulacea |
| 152 asclep virdf | asclepias viridiflora |
| 153 eupato rugos | eupatorium rugosum |
| 154 comand umbel pall | comandra umbellata subsp. pallida |
| 155 agalin asper | agalinis aspera (gerardia aspera) |
| 156 acalyp virgi | acalypha virginica |
| 157 myosot verna | myosotis verna |
| 158 ulmus ameri | ulmus americana |
| 159 pariet pensy | parietaria pensylvanica |
| 160 ambros trifi | ambrosia trifida |
| 161 asclep syria | asclepias syriaca |
| 162 taraxa offic | taraxacum officinale |
| 163 medica lupul | medicago lupulina |
| 164 cornus drumm | cornus drummondii |
| 165 cyperu spp | cyperus spp. |
| 166 chenop album | chenopodium album |
| 167 panicu perlo | panicum perlongum |
| 168 leptol cogna | leptoloma cognatum |

| | |
|---|---|
| 169 capsel bursa | capsella bursa-pastoris |
| 170 stroph leios | strophostyles leiosperma |
| 171 physal virgi sono | physalis virginiana var. sonorae |
| 172 euphor corol | euphorbia corollata |
| 173 aster sp | aster species . |
| 174 gaura parvi | gaura parviflora |
| 175 zigade nutta | zigadenus nuttallii |
| 176 onosmo molle occi | onosmodium molle var. occidentale |
| 177 rumex crisp | rumex crispus |
| 178 bromus inerm iner | bromus inermis subsp. inermis |
| 179 prunel vulga | prunella vulgaris |
| 180 teucri canad virg | teucrium canadense var. virginicum |
| 181 equise laevi | equisetum laevigatum |
| 182 lotus corni | lotus corniculatus |
| 183 grinde squar squa | grindelia squarrosa var. squarrosa |
| 184 rumex altis | rumex altissimus |
| 185 calyst macou | calystegia macounii (convolvulus sepium) |
| 186 melilo offic | melilotus officinalis |
| 187 verbas blatt | verbascum blattaria |
| 188 silphi integ laev | silphium integrifolium var. laeve (s. speciosum) |
| 189 tripsa dacty | tripsacum dactyloides |
| 190 setari glauc | setaria glauca (s. lutescens) |
| 191 lycopu ameri | lycopus americanus |
| 192 cynanc laeve | cynanchum laeve |
| 193 euphor denta | euphorbia dentata |
| 194 physal heter | physalis heterophylla |
| 195 digita sangu | digitaria sanguinalis |
| 196 heliop helia scab | heliopsis helianthoides var. scabra |
| 197 carduu nutan | carduus nutans |
| 198 nepeta catar | nepeta cataria |
| 199 gledit triac | gleditsia triacanthos |
| 200 celtis occid | celtis occidentalis |
| 201 silphi integ inte | silphium integrifolium var. integrifolium |
| 202 mirabi nycta | mirabilis nyctaginea |
| 203 cyperu odora | cyperus odoratus (c. ferruginescens) |
| 204 acalyp ostry | acalypha ostryaefolia |
| 205 polygo ramos | polygonum ramosissimum |
| 206 viola prati | viola pratincola (v. missouriensis) |
| 207 physal virgi virg | physalis virginiana var. virginiana (see 112,171,345) |
| 208 solanu rostr | solanum rostratum |
| 209 setari virid | setaria viridis |
| 210 carex spp. | carex spp. |
| 211 ambros artem | ambrosia artemisifolia (a. elatior) |
| 212 amaran rudis | amaranthus rudis (acnida tamariscina) |
| 213 amaran retro | amaranthus retroflexus |
| 214 cucurb foeti | cucurbita foetidissima |
| 215 amaran graec | amaranthus graecizans |

| | |
|---|---|
| 216 euphor serpe | euphorbia serpens |
| 217 helian annuu | helianthus annuus |
| 218 triden flavu | tridens flavus (triodia flava) |
| 219 parthe quinq | parthenocissus quinquefolia |
| 220 polygo scand | (polygonum scandens) |
| 221 sporob negle | sporobolus neglectus (s. vaginiflorus var. neglectus) |
| 222 rosa bland | rosa blanda |
| 223 hedyot nigri | hedyotis nigricans (houstonia nigricans) |
| 224 verben canad | verbena canadensis (glandularia canadensis) |
| 225 mentze oligo | mentzelia oligosperma |
| 226 euphor stict | euphorbia stictospora |
| 227 vicia ameri mino | vicia americana var. minor |
| 228 mirabi albid | mirabilis albida |
| 229 dicant obtus | dicanthelium obtusum (panicum obtusum) |
| 230 sambuc canad | sambucus canadensis |
| 231 toxico radic negu | toxicodendron radicans subsp. negundo (rhus radicans) |
| 232 menisp canad | menispermum canadense |
| 233 planta virgi | plantago virginica |
| 234 rhus glabr | rhus glabra |
| 235 roripp sinua | rorippa sinuata |
| 236 hordeu jubat | hordeum jubatum |
| 237 carex annec xant | carex annectens var. xanthocarpa |
| 238 juncus dudle | juncus dudleyi |
| 239 scirpu linea | scirpus lineatus(now included in s. pendulus,297) |
| 240 amorph fruti | amorpha fruticosa |
| 241 morus rubra | morus rubra |
| 242 juncus torre | juncus torreyi |
| 243 eriger spp. | erigeron spp. |
| 244 scripu atrov | scirpus atrovirens |
| 245 allium sp | allium species |
| 246 chenop berla zsch | chenopodium berlandieri var. zschackei |
| 247 lythru alatu alat | lythrum alatum var. alatum |
| 248 euphor corol | euphorbia corollata(duplicate of 172) |
| 249 melilo alba | melilotus alba |
| 250 euphor pubis | euphorbia pubiserrate(??) |
| 251 dicant acumi vill | dicanthelium acuminatum var. villosum(panicum villosissimu) |
| 252 lesped viola | lespedeza violacea(duplicate of 143) |
| 253 mirabi linea | mirabilis linearis |
| 254 polani dodec trac | polanisia dodecandra subsp. trachysperma |
| 255 monard fistu fist | monarda fistulosa var. fistulosa |
| 256 tricho brach | trichostema brachiatum(isanthus brachiatus) |
| 257 acalyp monoc | acalypha monococca |
| 258 probos louis | proboscidea louisianica |
| 259 monard citri | monarda citriodora |
| 260 zizia aurea | zizia aurea |

| | |
|---|---|
| 261 torili arven | torilis arvensis |
| 262 rhus aroma arom | rhus aromatica var. aromatica |
| 263 rhus aroma sero | rhus aromatica var. serotina |
| 264 arisae draco | arisaema dracontium |
| 265 asclep sulli | asclepias sullivantii |
| 266 krigia oppos | krigia oppositifolia |
| 267 artemi ludov mexi | artemisia ludoviciana var.mexicana (see also 98 and 52) |
| 268 sonchu asper | sonchus asper |
| 269 xanthi strum cana | xanthium strumarium var. canadense |
| 270 aster simpl ramo | aster simplex var. ramosissimus |
| 271 helian petio peti | helianthus petiolaris var. petiolaris |
| 272 dyssod pappo | dyssodia papposa |
| 273 lactuc canad | (lactuca canadensis) |
| 274 conyza ramos | conyza ramosissima |
| 275 silphi lacin | silphium laciniatum |
| 276 cynogl offic | cynoglossum officinale |
| 277 hackel virgi | hackelia virginiana |
| 278 nastur offic | nasturtium officinale |
| 279 erysim repan | erysimum repandum |
| 280 roripp palus | rorippa palustris |
| 281 lobeli cardi | lobelia cardinalis |
| 282 campan ameri | campanula americana |
| 283 cannab sativ sati | cannabis sativa subsp. sativa |
| 284 triost perfo perf | triosteum perfoliatum var. perfoliatum |
| 285 silene stell | silene stellata |
| 286 euonym atrop | euonymus atropurpureus |
| 287 chenop gigan | chenopodium gigantospermum |
| 288 chenop palle | chenopodium pallescens |
| 289 kochia scopa | kochia scoparia |
| 290 commel erect angu | commelina erecta var. angustifolia |
| 291 convol arven | convolvulus arvensis |
| 292 pentho sedoi | penthorum sedoides |
| 293 junipe virgi | juniperus virginiana |
| 294 alopec carol | alopecurus carolinianus |
| 295 carex hyste | carex hystericina |
| 296 scirpu valid | scirpus validus |
| 297 scirpu pendu | scirpus pendulus |
| 298 cyperu acumi | cyperus acuminatus |
| 299 euphor prost | euphorbia prostrata |
| 300 euphor nutan | euphorbia nutans |
| 301 euphor missu | euphorbia missurica |
| 302 euphor cyath | euphorbia cyathophora |
| 303 croton capit | croton capitatus |
| 304 quercu muehl | quercus muehlenbergii |
| 305 quercu macro | quercus macrocarpa |
| 306 hyperi perfo | hypericum perforatum |
| 307 aescul glabr argu | aesculus glabra var. arguta |
| 308 sisyri angus | (sisyrinchium angustifolium) |
| 309 carya cordi | carya cordiformis |

| | |
|---|---|
| 310 juglan nigra | juglans nigra |
| 311 agasta nepet | agastache nepetoides |
| 312 mentha arven | mentha arvensis |
| 313 salvia refle | salvia reflexa |
| 314 stachy palus | (stachys palustris) |
| 315 leonur cardi | leonurus cardiaca |
| 316 yucca glauc | yucca glauca |
| 317 gymnoc dioic | gymnocladus dioica |
| 318 crotal sagit | crotalaria sagittalis |
| 319 glycyr lepid | glycyrrhiza lepidota |
| 320 desmod gluti | desmodium glutinosum |
| 321 desman illin | desmanthus illinoensis |
| 322 cassia maril | cassia marilandica |
| 323 cassia chama | cassia chamaecrista (c. fasciculata) |
| 324 cercis canad | cersis canadensis |
| 325 abutil theop | abutilon theophrasti |
| 326 hibisc trion | hibiscus trionum |
| 327 malvas hispi | malvastrum hispidum (sphaeralcea angusta) |
| 328 morus alba | morus alba |
| 329 fraxin penns subi | fraxinus pennsylvanica var. subintegerrima |
| 330 calylo serru | calylophus serrulatus (oenothera serrulata) |
| 331 oenoth villo vill | oenothera villosa subsp. villosa (o. strigosa) |
| 332 spiran verna | spiranthes vernalis |
| 333 polygo tenue | polygonum tenue |
| 334 phryma lepto | phryma leptostachya |
| 335 phytol ameri | phytolacca americana |
| 336 planta rugel | plantago rugelii |
| 337 planta arist | plantago aristata |
| 338 planta patag pata | plantago patagonica var. patagonica (p. purshii) |
| 339 platan occid | platanus occidentalis |
| 340 muhlen racem | muhlenbergia racemosa |
| 341 muhlen frond | muhlenbergia frondosa |
| 342 panicu lanug fasc | panicum lanuginosum var. fasciculatum (p. villosissimum) |
| 343 aristi purpu purp | aristida purpurea var. purpurea |
| 344 cenchr longi | cenchrus longispinus |
| 345 physal virgi hisp | physalis virginiana var. hispida |
| 346 mimulu glabr frem | mimulus glabratus var. fremontii |
| 347 leucos multi | leucospora multifida (conobea multifida) |
| 348 bacopa rotun | bacopa rotundifolia |
| 349 ribes misso | ribes missouriense |
| 350 comman umbel umbe | (commandra umbellata subsp. umbellata) (misidentified) |
| 351 salix exigu inte | salix exigua subsp. interior |
| 352 salix nigra | salix nigra |
| 353 salix amygd | salix amygdaloides |
| 354 populu delto moni | populus deltoides subsp. monilifera |
| 355 zantho ameri | zanthoxylum americanum |

| | |
|---|---|
| 356 galium circa | galium circaezans |
| 357 geum canad | geum canadense |
| 358 fragar virgi | fragaria virginiana |
| 359 prunus angus | prunus angustifolia |
| 360 prunus besse | (prunus besseyi - misidentified) |
| 361 rubus ostry | rubus ostryifolia |
| 362 smilax hispi | smilax hispida |
| 363 clemat pitch | clematis pitcheri |
| 364 thalic dasyc | thalictrum dasycarpum |
| 365 nothol dealb | notholaena dealbata |
| 366 pellae glabe glab | pellaea glabella var. glabella |
| 367 woodsi obtus | woodsia obtusa |
| 368 polygo achor | polygonum achoreum |
| 369 polygo lapat | polygonum lapathifolium |
| 370 polygo pensy | polygonum pensylvanicum |
| 371 polygo persi | polygonum persicaria |
| 372 polygo punct | polygonum punctatum |
| 373 stipa spart | stipa spartea |
| 374 sitani hystr brev | sitanion hystrix var. brevifolium |
| 375 glycer stria | glyceria striata |
| 376 leersi oryzo | leersia oryzoides |
| 377 hystri patul | hystrix patula |
| 378 paspal setac muhl | paspalum setaceum var. muhlenbergii |
| 379 echino crusg | echinochloa crusgalli |
| 380 verben bract | verbena bracteata |
| 381 verben urtic | verbena urticifolia |
| 382 tilia ameri | tilia americana |
| 383 typha latif | typha latifolia |
| 384 solanu ameri | solanum americanum (s. nigrum) |
| 385 physal pubes miss | physalis pubescens var. missouriensis |
| 386 veroni caten cate | veronica catenata var. catenata |
| 387 verbas thaps | verbascum thapsus |
| 388 scroph lance | scrophularia lanceolata |
| 389 liatri asper | liatris aspera |
| 390 tribul terre | tribulus terrestris |
| 391 vitis ripar | vitis riparia |
| 392 botryc virgi | botrychium virginianum |
| 393 ruelli strep | ruellia strepens |
| 394 acer negun | acer negundo |
| 395 asimin trilo | asimina triloba |
| 396 chaero procu | chaerophyllum procumbens |
| 397 sanicu canad | sanicula canadensis |
| 398 arctiu minus | arctium minus |
| 399 aster drumm | aster drummondii |
| 400 aster laevi | aster laevis |
| 401 aster subul ligu | aster subulatus var. ligulatus |
| 402 bidens bipin | bidens bipinnata |
| 403 bidens cernu | bidens cernua |
| 404 bidens frond | bidens frondosa |
| 405 bidens polyl | bidens polylepis |

| | |
|---|---|
| 406 chryso canes | chrysopis canescens |
| 407 cirsiu altis | cirsium altissimum |
| 408 cirsiu vulga | cirsium vulgare |
| 409 eriger phila | erigeron philadelphicus |
| 410 eupato altis | eupatorium altissimum |
| 411 helian tuber | helianthus tuberosus |
| 412 liatri mucro | liatris mucronata |
| 413 verbes alter | verbesina alternifolia |
| 414 ostrya virgi | ostrya virginiana |
| 415 lithos arven | lithospermum arvense |
| 416 lithos canes | lithospermum canescens |
| 417 alliar petio | alliaria petiolata |
| 418 cameli micro | camelina microcarpa |
| 419 dentar lacin | dentaria laciniata |
| 420 draba cunei | draba cuneifolia |
| 421 hesper matro | hesperis matronalis |
| 422 thlasp arven | thlaspi arvense |
| 423 lobeli siphi | lobelia siphilitica |
| 424 dianth armer | dianthus armeria |
| 425 celast scand | celastrus scandens |
| 426 chenop stand | chenopodium standleyanum (c. boscianum) |
| 427 monole nutta | monolepis nuttalliana |
| 428 evolvu nutta | evolvulus nuttallianus |
| 429 ipomoe heder | ipomoea hederacea |
| 430 sicyos angul | sicyos angulatus |
| 431 cuscut glome | cuscuta glomerata |
| 432 astrag misso | astragalus missouriensis |
| 433 desmod panic dill | desmodium paniculatum var. dillenii |
| 434 desmod sessi | desmodium sessilifolium |
| 435 coryda micra | corydalis micrantha |
| 436 dicent cucul | dicentra cucullaria |
| 437 ellisi nycte | ellisia nyctelea |
| 438 ammann cocci | ammannia coccinea |
| 439 sida spino | sida spinosa |
| 440 maclur pomif | maclura pomifera |
| 441 stenos linif | stenosiphon linifolius |
| 442 phlox divar laph | phlox divaricata var. laphamii |
| 443 polygo amphi emer | polygonum amphibium var. emersum (p. coccineum) |
| 444 portul olera | portulaca oleracea |
| 445 lysima cilia | lysimachia ciliata |
| 446 ranunc abort | ranunculus abortivus |
| 447 prunus virgi | prunus virginiana |
| 448 penste tubae tuba | penstemon tubaeflorus var. tubaeflorus |
| 449 tomant densi | tomanthera densiflora (gerardia densiflora) |
| 450 veroni pereg xala | veronica peregrina var. xalapensis |
| 451 urtica dioic grac | urtica dioica subsp. gracilis |
| 452 lippia lance | lippia lanceolata (phyla lanceolata) |
| 453 verben hasta | verbena hastata |

| | |
|---|---|
| 454 alisma subco | alisma subcordatum |
| 455 sagitt latif | sagittaria latifolia |
| 456 trades ohien | tradescantia ohiensis |
| 457 allium stell | allium stellatum |
| 458 aspara offic | asparagus officinalis |
| 459 erythr albid | erythronium albidum |
| 460 najas guada | najas guadalupensis |
| 461 agrost stolo majo | agrostis stolonifera var. major (a. alba) |
| 462 androp ischa song | andropogon ischaemum var. songaricus |
| 463 erioch contr | eriochloa contracta |
| 464 phleum prate | phleum pratense |
| 465 potamo folio | potamogeton foliosus |
| 466 potamo nodos | potamogeton nodosus |
| 467 potamo pusil pusi | potamogeton pusillus var. pusillus |
| 468 veroni agres | veronica agrestis |
| 469 stroph helvo | strophostyles helvola |
| 470 lactuc ludov | lactuca ludoviciana |
| 471 uniden 1 | unidentified no. 1 |
| 472 uniden 2 | unidentified no. 2 |
| 473 tritic aesti | triticum aestivum |
| 474 gailla pulch | gaillardia pulchella |
| 475 eriger annus | erigerm annus |
| 476 C3annu grass | C3 annual grass |
| 477 C3pere grass | C3 perennial grass |
| 478 C4annu grass | C4 annual grass |
| 479 C4pere tgras | C4 perennial tall grass |
| 480 C4pere mgras | C4 perennial medium grass |
| 481 C4pere sgras | C4 perennial short grass |
| 482 annual forb | annual forb (C3) |
| 483 perren forb | perennial forb (all C3) |
| 484 woody | woody |
| 485 C4forb | C4 forb (all C4) |
| 500 helian rigid | helianthus rigidus |
| 501 ophiog vulga | ophioglossum vulgatum |
| 502 poa compr | poa compressa |
| 503 potent simpl | potentilla simplex |
| 504 chaero taint | chaerophyllum tainturieri |
| 505 desmod canes | desmodium canescens |
| 506 chrysa leuca | chrsanthemum leucanthemum |
| 507 rubus occid | rubus occidentalis |
| 508 scroph maril | scrophularia marilandica |
| 509 lamium ample | lamium amplexicaule |
| 510 ulmus rubra | ulmus rubra |
| 511 robini pseud | probinia pseudo-acacia |
| 512 androp ischa | andropogon ischaemum |

# Data Set Code--PWV01

Title of data set -- Woody vegetation mapping

Abstract: This data set relate effects of soil, grazing intensity and burning treatments on the establishment and subsequent growth of woody plant in prairie communties.The locations of woody vegetation are marked on a mylar overlay on an aerial photograph of the area being surveyed with an unique symbol for each species and a numer for the size. For trees, size is the height to the nearest meter. For shrubs, the number of stems is recorded as a measure of size if the number is less than 25. For large patches of shrubs, the diameter is recorded and the shape of the patch is drawn on the overlay. Two forms of the data are archived. One of them is the actual mylar sheets. The other form is an electronic ascii data that is stored in the subdirectory woody on the lter Novell server. Files are named according to the name of the watershed and year the data was collected (e.g. 004b86.one = first data file for 004b in 1986). For 1986, the files also exist as coverages in PC ARC/INFO files.

Keywords that describe data set: woody vegetation, shrubs

Date data set commenced: 06/01/81

Date data set terminated: / /

Principle Investigator: John M. Briggs

RECORD TYPE 1

Data Format Specification

| | | | |
|---|---|---|---|
| specode | 6-digit code representing species or watershed boundary | 1-6 | A5 |
| x | x coordinate | 8-12 | I5 |
| y | y coordinate | 14-18 | I5 |
| height | Height of tree to nearest meter* | 21-22 | I2 |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| specode | bound | boundary of watershed |
| | amofru | Amorpha fructicosa |
| | celsca | Celastrus scandens |
| | celocc | Celtis occidentalis |
| | cercan | Cercis canadensis |
| | corspp | Cornus species |
| | elaang | Elaeagnus angustifolia |
| | euoatr | Euonymus atropurporeus |
| | frapen | Fraxinus pennsylvanica |
| | gletri | Gleditsia triacanthos |
| | gymdio | Gymnocladus dioicus |
| | junvir | Juniperus virginianus |
| | mencan | Menispermum canadense |
| | morrub | Morus rubra |
| | parqui | Parthenocissus quinquefolia |
| | popdel | Populus deltiodes |

| | | |
|---|---|---|
| | pruang | Prunus angustifolia |
| | quemac | Quercus macrocarpa |
| | quemue | Quercus muehlenbergii |
| | ribmis | Ribes missouriensis |
| | rhugaro | Rhus aromatica |
| | rhugla | Rhus glabra |
| | rosset | Rosa setigra |
| | rosspp | Rosa species |
| | rubspp | Rhus species |
| | salint | Salix interior |
| | salspp | Salix species |
| | samcan | Sambucus canadensis |
| | smihis | Smilax hispida |
| | symorb | Symphoricarpos orbiculatus |
| | toxrad | Toxicodenron radicans |
| | ulmame | Ulmus americana |
| | vitspp | Vitis species |
| | xaname | Xanthoxylm americanum |
| * height | 99 | Used to mark beginning and end of shrub patches |

# *Other Data*

## Data Set Code--KPL01

Title of data set--Konza Prairie Publication List
Abstract:

All publications that involve Konza Prairie are listed in a Word Perfect File (version 5.1). Listing are by year. A copy of the publication should be in the Konza Prairie Office (Room 212; phone # (913) 532-6620). A separate file lists master thesis and Ph.D. dissertations done on Konza Prairie.
Keywords that describe data set:publications, thesis, dissertations

Date data commenced:1972

Date data terminated:

Principle Investigator: John M. Briggs

File name is : bibliogr.wp5 (For Konza Prairie Publication List)

disserta.wp5 (For thesis and dissertations)

# Data Set Code--KFH01

Title of data set--Konza Prairie Fire History

Abstract:
A record of fire history on the Konza Prairie watersheds is in listed in three seperateWord Perfect 5.1 files. It has the date of a fire in a watershed. In addition, information on whether the fire was planned or accidental is noted. Prior to 1988, detailed information on each burn on Konza is available in hard copy from the Konza Prairie Office (Bushnell Room 212; (913) 532-6629.).
Keywords that describe data set:fire history of Konza Prairie

Date data commenced:1972

Date data terminated:

Principle Investigator: John M. Briggs

File Names: burn.one (1972 to 1980) burn.two(1981 to 1987) burn.thr (1988 to present)

# Data Set Code--KIC01

Title of data set--Konza Prairie Insect Collection Species List
Abstract:
Keywords that describe data set: Arthropods, Insects, Pinned-specimens, Species List
Date data set commenced: 1977
Date data set terminated: / /
Principle Investigators: Phil Fay, Valerie Wright, Ted Evans
RECORD TYPE 1--Konza Prairie Insect Collection Species List
Data Format Specification

| | | |
|---|---|---|
| 1. Order | 1-14 | A14 |
| 2. Family | 15-31 | A17 |
| 3. Subfamily | 33-50 | A18 |
| 4. Tribe | 51-72 | A22 |
| 5. Genus | 73-92 | A20 |
| 6. Species | 94-121 | A28 |
| 7. Subspecies | 123-150 | A28 |
| 8. # specimens | 152-156 | I5 |

# Data Set Code--OGD01

Title of data set--Gallery Forest Foliage Decomposition

Abstract:

Decomposition of bur oak and hackberry foliage was measured for two years using litterbag methods. Mass, nitrogen and phosphorus content were measured.

Keywords that describe data set: foliage decomposition, nitrogen, phosphorus

Date data commenced:10/31/81

Date data terminated:10/26/83

Principle Investigator: Timothy R. Seastedt

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Branch | Location on Kings Creek (N or S Branch) | 21 | A1 | |
| 7. Transect | Location (see S3 or N2 on map with data set PGL01 | 22 | I1 | |
| 8. Age | Days in field | 24-26 | I3 | Days |
| 9. IWT | Initial dry weight | 28-31 | F4.2 | gX |
| 10. FWT | Final dry weight | 33-36 | F4.2 | gX |
| 11. Species | Content of litter bag | 38 | A1 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Branch | N | North Branch |
| | S | South Branch |
| Species | H | Hackberry leaves |
| | B | Bur Oak leaves |
| | S | Scarab (larvae) excrement |

RECORD TYPE 2

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 | |
| 2. Rectype | 6 | I1 | |
| 3. Year | 7-8 | I2 | |
| 4. Month | 9-10 | I2 | |
| 5. Day | 11-12 | I2 | |

| | | | | |
|---|---|---|---|---|
| 6. Branch | Location on Kings Creek | 21 | A1 | |
| 7. Transect | Location | 22 | I1 | |
| 8. Age | Days in Field | 24-26 | I3 | |
| 9. Species | Content of Litter bags | 28 | A1 | |
| 10. PCTN | Percent nitrogen | 30-34 | F5.3 | X |
| 11. PCTP | Percent phosphorus | 36-40 | F5.3 | X |
| 12. IWT | Initial weight | 42-45 | F4.2 | gX |
| 13. FWT | Final weight | 47-50 | F4.2 | gX |

Codes used:

| Variable Name | Code Value | Definition of Code Value |
|---|---|---|
| Branch | N | North Branch |
| | S | South Branch |
| Species | H | Hackberry leaves |
| | B | Bur Oak leaves |
| | S | Scarab (larvae) excrement |

# Data Set Code--OMB01 (preliminary!)

Title of data set--Microbial biomass

Abstract:

The purpose of this data set is to monitor long-term changes in microbial biomass on the belowground plots due to the effect on annual burning, mowing and nitrogen and phosphorus fertilization.

Keywords that describe data set: microbial biomass, inorganic N, microbial biomass C and N, soil water content, nitrogen flush

Data data commenced: 89/04/15

Data data terminated: / /

Principle Investigator: Chuck Rice

Data format specification: As of 09 April 1993, data and documentation are in spreadsheet files; contact principle investigator or LTER data manager for details.

RECORD TYPE 1

| | | |
|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |
| 4. Month | 9-10 | I2 |
| 5. Day | 11-12 | I2 |
| 6. Watershed | 13-16 | A4 |
| 7. Plot # | 19-20 | I2 |
| 8. Depth | 23 | I1 |
| 9. Burn | 26 | A1 |
| 10. Mow | 29 | A1 |
| 11. Nutrient | 32 | A1 |
| 12. Soil $H_2O$ (g/g) | 37-42 | I6 |
| 13. C flush (mg C/Kg) | 45-52 | I8 |
| 14. BMC (mg C/Kg) | 56-63 | I8 |
| 15. N flush (mg C/Kg) | 67-74 | I8 |
| 16. BMN (mg N/Kg) | 77-84 | I8 |
| 17. Total Inorganic N ( | 87-93 | I7 |

Codes Used:

| Name | Value | Code Value |
|---|---|---|
| Plot | 1-64 | Plot number |
| Depth | 1,2,3 | 1=0-5, 2=5-15, 3=15-30 |
| Burn treatment | U:B | U=Unburn B=Burn |
| Mow treatment | U;M | U=unmowed M=mowed |

| | | |
|---|---|---|
| Nutrient treatment | C,N,P,B | C=control, N=nitrogen<br>P=Phosphorus B=Both |

# Data Set Code--OPD01

Title of data set--Prairie standing dead and litter Decomposition

Abstract:

Standing dead and litter decomposition of big bluestem foliage and flowering stems were measured for two years using litterbag methods. Mass, nitrogen and phosphorus content were measured.

Keywords that describe data set: standing dead, nitrogen, phosphorus, litterbag

Date data commenced: 10/31/81

Date data terminated: 10/26/83

Principle Investigator: Timothy R. Seastedt

RECORD TYPE 1

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Age | Length of time spent in field-days | 21-23 | I3 | Days |
| 8. IFWT | Initial foliage weight | 25-28 | F4.2 | gX |
| 9. FFWT | Final foliage weight | 30-33 | F4.2 | gX |
| 10. ISWT | Initial stem weight | 35-39 | F5.2 | gX |
| 11. FSWT | Final stem weight | 41-45 | F5.2 | gX |
| 12. Type | Organic matter type (standing dead, or litter) | 47 | A1 | |

RECORD TYPE 2

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 7. Age | Length of time spent in field- days | 21-24 | I3 | Days |
| 8. Type | Dead matter typ e | 26 | A1 | |
| 9. Foln | % nitrogen in foliage | 28-32 | F5.3 | % |
| 10. Folp | % phosphorus in foliage | 34-38 | F5.3 | % |
| 11. Stmn | % nitrogen in stem | 40-44 | F5.3 | % |
| 12. Stmp | % phosphorus in stem | 46-50 | F5.3 | % |
| 13. Ifwt | Initial foliage weight | 52-55 | F4.2 | g |
| 14. Ffwt | Final foliage weight | 57-60 | F4.2 | g |

| | | | | |
|---|---|---|---|---|
| 15. Iswt | Initial stem weight | 62-65 | F4.2 | g |
| 16. Fswt | Final stem weight | 67-70 | F4.2 | g |
| 17. ID | | 72-74 | I3 | |

Codes used:

| Name | Value | Code Value |
|---|---|---|
| Type | L | Litter |
| | S | Standing dead |

# Data Set Code--PHOTO

Title of data set--Aerial Photographs of Konza Prairie

Abstract:

Aerial photographs of Konza Prairie of various scales and years are available. A complete list of photographs is available from the Konza Prairie Office ( Bushnell Room 212; (913) 532-6620). A few of them have been incorporated into the GIS coverages (see GIS01).

Keywords that describe data set:aerial photograph, historical land use

Date data commenced:10/01/39

Date data terminated: / /

Principle Investigator: John M. Briggs

# Data Set Code--WAT01

Title of data set -- Irrigation Transect Studies

Abstract:

In 1991, an irrigation transect was established near the Konza Prairie HQ to assess the effects of supplemental water on ecological processes in tallgrass prairie. The site is burned annually in the spring. The transect spans upland, hillside and lowland topographic positions with irrigation and sampling points (12) located at 10 m intervals. Adjacent control transects are marked on both sides of the irrigation transect. Irrigation is scheduled according to estimates of actual evapotranspiration and measures of plant water status. In 1992, an additional 4 irrigation sprinklers were added to the transect (2 at each end). At the time of peak aboveground biomass (late August), 4 0.1 m2 quadrats are harvested at each of the 12 sites. Biomass is separated into live graminoid, forb and woody plant, and current year's dead biomass. Vegetative species composition was initially measured in 1991 at each site, and continues to be measured at midseason by using a modified Daubenmire canopy coverage technique in a 10 m2 circular plot. At approximately 10 day intervals, predawn and midday plant water potentials are measured in Andropogon gerardii at each site in both irrigated and control transects. In 1992, reproductive effort of the dominant grasses (Andropogon gerardii, Sorghastrum nutans, Andropogon scoparius) was assessed in irrigated and control transects by measuring heights and densities of flowering stalks. In 1993, soil moisture measurements at 15 and 30 cm depths were begun with a Time Domain Reflectometry system. Data set also includes measured natural precipitation and supplemental water added to the site.

Keywords that describe data set: Irrigation, water stress, aboveground biomass, NPP, graminoids, forbs, current year dead, plant species composition, reproductive effort, soil moisture, plant water potential,

Date data set commenced: 06/01/1991

Date data set terminated: / /

Principle Investigator: Alan K. Knapp

RECORD TYPE 1--Natural Precipitation and supplemental water added

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | 1-5 | A5 | |
| 2. Rectype | | 6 | I1 | |
| 3. Year | | 7-8 | I2 | |
| 4. Month | | 9-10 | I2 | |
| 5. Day | | 11-12 | I2 | |
| 6. Watershed | | 13-16 | A4 | |
| 8. Transect | Transect | 24 | A1 | |
| 9. Plotnum | Plot number (1-12) | 26-27 | A2 | |
| 10. Lvgrass | Mass of live grass | 29-34 | F6.2 | G/.1m2 |
| 11. Forbs | Mass of forbs | 36-41 | F6.2 | G/.1m2 |
| 12. Cuyrdead | Mass of current years dead | 43-48 | F6.2 | G/.1m2 |
| 13. Pryrdead | Mass of previous years dead | 50-55 | F6.2 | G/.1m2 |

## RECORD TYPE 2--Species Composition

| Data Format Specification | | | | |
|---|---|---|---|---|
| 1. Datacode | | | 1-5 | A5 |
| 2. Rectype | | | 6 | I1 |
| 3. Year | | | 7-8 | I2 |
| 4. Month | | | 9-10 | I2 |
| 5. Day | | | 11-12 | I2 |
| 6. Watershed | Always HQ | | 13-14 | A2 |
| 7. Transect | i or c | | 18 | A1 |
| *1991&1992 | w or c | | | |
| 8. Species Number | | | 20-22 | I3 |
| 9. Genus | | | 24-29 | A6 |
| 10. Species | | | 31-35 | A5 |
| 11. Variety | | | 37-40 | A4 |
| 12. Plot Number | (1-31) Skip plot #9 | | 42-100(even) | I59 |
| *1991&1992 | 12 sampling locations skip plot #9 | | 42-64 | |

## RECORD TYPE 3--Aboveground Biomass

| Data Format Specification | | | | |
|---|---|---|---|---|
| 1. Datacode | | | 1-5 | A5 |
| 2. Rectype | | | 6 | I1 |
| 3. Year | | | 7-8 | I2 |
| 4. Month | | | 9-10 | I2 |
| 5. Day | | | 11-12 | I2 |
| 6. Watershed | Always HQ | | 13-14 | A2 |
| 7. Transect | i or c | | 18 | A1 |
| 8. Plot Number | (1-8)(10-31) | (1993-on) | 20-21 | I2 |
| * | (1-8)(10-13) | (1991&1992) | | |
| 9. Replicate(a-f) | | | 24 | A1 |
| 10. Mass of Livegrass | | | 26-31 | I6 |
| 11. Mass of Forbs | | | 33-38 | I6 |
| 12. Mass of Current Year's Dead | | | 41-46 | I6 |
| 13. Mass of Previous Year's Dead | | | 48-53 | I6 |
| 14. Mass of woody (As of 24 Aug 1992) | | | 55-60 | I6 |
| | lead plant-Amorpha canescens | | | |
| | rose-Rosa arkansas | | | |
| | (smooth) sumac-Rhus glabra | | | |
| | New Jersey tea-Ceanothus ovatus | | | |
| | dogwood-Cornus drummondi | | | |
| | buckbrush-Symphoricarpos orbiculatus | | | |
| 15. Comments | | | 63-80 | I18 |

## RECORD TYPE 41--Water Potential Measurements of Big Bluestem(1991-1993)

| Data Format Specification | | | | |
|---|---|---|---|---|
| 1. Datacode | | | 1-5 | A5 |
| 2. Rectype | | | 6 | I1 |

| | | | | |
|---|---|---|---|---|
| 3. Year | | | 7-8 | I2 |
| 4. Month | | | 9-10 | I2 |
| 5. Day | | | 11-12 | I2 |
| 6. Watershed | Always HQ | | 13-14 | A2 |
| 7. Treatment | i or c | | 18 | A1 |
| 8. Time | a for AM, p for PM | | 20 | A1 |
| 9. Plot Number | (1-8)(10-13) | 99=hack (1991&1992) | 22-23 | I2 |
| * | (1-15) | (1993-on) | | |
| 10. Rep1 | | | 25-29 | I6 |
| 11. Rep2 | | | 31-35 | I5 |
| 12. Rep3 | | | 37-41 | I5 |
| 13. Rep4 | | | 43-47 | I5 |
| 14. Rep5 | | | 49-53 | I5 |
| 15. Rep6 | | | 55-59 | I5 |
| 16. Rep7 | | | 61-65 | I5 |
| 17. Comments | | | 68-776 | A9 |

*1993-present uses only Reps 1-3.

## RECORD TYPE 42--Water Potential Measurements of Big Bluestem(1994-present)

Data Format Specification

| | | | | |
|---|---|---|---|---|
| 1. Datacode | | | 1-5 | A5 |
| 2. Rectype | | | 6 | I1 |
| 3. Year | | | 7-8 | I2 |
| 4. Month | | | 9-10 | I2 |
| 5. Day | | | 11-12 | I2 |
| 6. Watershed | Always HQ | | 13-14 | A2 |
| 7. Treatment | i or c | (i=irrigated, c=control) | 18 | A1 |
| 8. Transect | (1 or 2) | (1=first transect, 2=second transect) | 20 | A1 |
| 9. Location | (up or lw) | (up-=upland, lw=lowaland) | 22-23 | I2 |
| 10. Plot | (1 or 2) | (1=first plot sampled) | 25 | I6 |
| | | (2=second plot sampled) | | |
| 11. Time | (all p) | (a=AM, p=PM) | 27 | I5 |
| 12. Rep1 | | | 29-33 | I5 |
| 13. Rep2 | | | 35-39 | I5 |
| 14. Rep3 | | | 41-45 | I5 |
| 15. Rep4 | | | 47-51 | I5 |
| 16. Rep5 | | | 53-57 | I5 |
| 17. Rep6 | | | 59-63 | I5 |
| 18. Rep7 | | | 65-69 | I5 |
| 19. Rep8 | | | 71-75 | I5 |
| 20. Comments | | | | |

## RECORD TYPE 5--Reproductive Effort of Three Grasses

Data Format Specification

| | | | |
|---|---|---|---|
| 1. Datacode | 1-5 | A5 |
| 2. Rectype | 6 | I1 |
| 3. Year | 7-8 | I2 |

| | | | | | |
|---|---|---|---|---|---|
| 4. Month | | | 9-10 | I2 | |
| 5. Day | | | 11-12 | I2 | |
| 6. Watershed | Always HQ | | 13-14 | A2 | |
| 7. Transect | i or c | | 18 | A1 | |
| 8. Plot Number | (1-8)(10-13) skip #9 | (1991&1992) | 20-21 | I2 | |
| * | (1-8)(10-31) skip #9 | (1993-on) | | | |
| 9. Quadrant | (1-4) | | 24 | I1 | |
| 10. Species | | | 26-29 | A4 | |
| 11. Number of Flowering Stalks | | | 31-32 | I2 | |
| 12. Height #1 | | | 34-37 | I4 | meters |
| 13. Height #2 | | | 39-42 | I4 | |
| 14. Height #3 | | | 44-47 | I4 | |
| 15. Height #4 | | | 49-52 | I4 | |
| 16. Height #5 | | | 54-57 | I4 | |
| 17. Height #6 | | | 59-62 | I4 | |
| 18. Height #7 | | | 64-67 | I4 | |
| 19. Height #8 | | | 69-72 | I4 | |
| 20. Height #9 | | | 74-77 | I4 | |

RECORD TYPE 6--Irrigation transect studies (HQ TDR Readings)

Data Format Specification:

| | | | |
|---|---|---|---|
| 1. Datacode | | 1-5 | A5 |
| 2. Rectype | | 6 | I1 |
| 3. Year | | 7-8 | I2 |
| 4. Month | | 9-10 | I2 |
| 5. Day | | 11-12 | I2 |
| 6. Watershed | Always 00HQ | 13-16 | A4 |
| 7. Depth | 15 or 30 cm | 19-22 | A4 |
| 8. Tag Number | | 26-28 | I3 |
| 9. Reading | | 32-37 | I8 |
| 10. % n2o | | 41-47 | A41 |
| 11. Comments | | 49-80 | |