US Army Corps
of Engineers
Construction Engineering
Research Laboratories

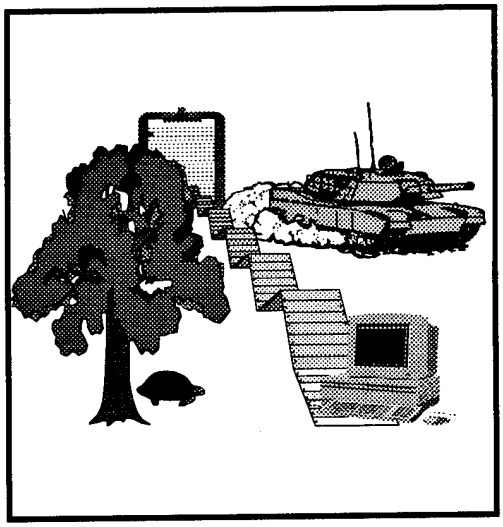
USACERL ADP Report EN-95/03
April 1995

Land Condition Trend Analysis (LCTA) Program Data Dictionary: Version 1.0

by
William L. Sprouse and Alan B. Anderson

This data dictionary is a logically organized repository of information describing all relevant land condition trend analysis (LCTA) data, including data characteristics, relationships, and usage. The data dictionary contains detailed information required to interface effectively and use LCTA databases.

This document provides a complete description of each LCTA database entity and relationship, structured query language (SQL) commands to construct a new LCTA database, a database scheme diagram to help visualize the information structure, and SQL commands to migrate early versions of the database into the current structure.



DTIC
ELECTE
JUN 2 2 1995
S D
F

19950620 162

DTIC QUALITY INSPECTED 5

Approved for public release; distribution is unlimited.

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products. The findings of this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

DESTROY THIS REPORT WHEN IT IS NO LONGER NEEDED

DO NOT RETURN IT TO THE ORIGINATOR

USER EVALUATION OF REPORT

REFERENCE: USACERL ADP Report EN-95/03, *Land Condition Trend Analysis (LCTA) Program Data Dictionary: Version 1.0*

Please take a few minutes to answer the questions below, tear out this sheet, and return it to USACERL. As user of this report, your customer comments will provide USACERL with information essential for improving future reports.

1. Does this report satisfy a need? (Comment on purpose, related project, or other area of interest for which report will be used.)

_____

_____

_____

2. How, specifically, is the report being used? (Information source, design data or procedure, management procedure, source of ideas, etc.)

_____

_____

3. Has the information in this report led to any quantitative savings as far as manhours/contract dollars saved, operating costs avoided, efficiencies achieved, etc.? If so, please elaborate.

_____

_____

4. What is your evaluation of this report in the following areas?

   a. Presentation: _____

   b. Completeness: _____

   c. Easy to Understand: _____

   d. Easy to Implement: _____

   e. Adequate Reference Material: _____

   f. Relates to Area of Interest: _____

   g. Did the report meet your expectations? _____

   h. Does the report raise unanswered questions? _____

i. General Comments. (Indicate what you think should be changed to make this report and future reports of this type more responsive to your needs, more usable, improve readability, etc.)

_____

_____

_____

_____

_____

_____

5. If you would like to be contacted by the personnel who prepared this report to raise specific questions or discuss the topic, please fill in the following information.

Name: _____

Telephone Number: _____

Organization Address: _____

_____

_____

6. Please mail the completed form to:

Department of the Army
CONSTRUCTION ENGINEERING RESEARCH LABORATORIES
ATTN: CECER-IMT
P.O. Box 9005
Champaign, IL 61826-9005

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY *(Leave Blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	April 1995	Final

4. TITLE AND SUBTITLE
Land Condition Trend Analysis (LCTA) Program Data Dictionary: Version 1.0

5. FUNDING NUMBERS
MIPR
E87930242

6. AUTHOR(S)
William L. Sprouse and Alan B. Anderson

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Army Construction Engineering Research Laboratories (USACERL)
P.O. Box 9005
Champaign, IL 61826-9005

8. PERFORMING ORGANIZATION REPORT NUMBER
EN-95/03

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Assistant Chief of Staff (Installation Management)
ATTN: DAIM-ED-N
7701 Telegraph Road
Alexandria, VA 22310-3862

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES
Copies are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

This data dictionary is a logically organized repository of information describing all relevant land condition trend analysis (LCTA) data, including data characteristics, relationships, and usage. The data dictionary contains detailed information required to interface effectively and use LCTA databases.

This document provides a complete description of each LCTA database entity and relationship, structured query language (SQL) commands to construct a new LCTA database, a database scheme diagram to help visualize the information structure, and SQL commands to migrate early versions of the database into the current structure.

14. SUBJECT TERMS
Land Condition Trend Analysis (LCTA)
dictionary
natural resource management

15. NUMBER OF PAGES
232

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	SAR

Foreword

This work was performed for the Office of the Directorate of Environmental Programs (DAIM), Assistant Chief of Staff (Installation Management) (ACS(IM)), under Military Interdepartmental Purchase Request E87930242, "Land Condition Trend Analysis Database Management." The technical monitor was Dr. Victor E. Diersing, DAIM-ED-N.

The work was performed by the Natural Resources Division (EN), of the Environmental Sustainment Laboratory (EL), U.S. Army Construction Engineering Research Laboratories (USACERL). The USACERL principal investigator was William L. Sprouse. Dr. William D. Severinghaus is Chief, CECER-EN. William D. Goran is Chief, CECER-EL. The USACERL technical editor was Agnes E. Dillon, Information Management Office.

LTC David J. Rehbein is Commander and Acting Director, USACERL. Dr. Michael J. O'Connor is Technical Director.

Accesion For	
NTIS CRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and / or Special
A-1	

Contents

SF 298 1

Foreword 2

1 Introduction 5
Background 5
Objective 6
Mode of Technology Transfer 6

2 Database Description 7
LCTA Field Methodology 9
Document Syntax and Terminology 9
Plot Information 10
Land Use Data 11
Vegetation Data 13
Supplementary Information 23
Summary Data 24
Validation Tables 24
Relational Constraints 25
Legacy Components 30

3 Database Schema Updates 31
New Tables 31
Modified Tables 33
Discontinued Tables 34
Modified Data 34

4 Database Migration Strategy 35

References 83

Appendix A: Database Schema 84

Appendix B: Entity (table) Information 87

Appendix C: Data Element Information 99

Appendix D: Data Definition Language (DDL) 197

Distribution

1 Introduction

Background

The U.S. Army Construction Engineering Research Laboratories (USACERL) developed the Land Condition Trend Analysis (LCTA) Program to provide standardized data for natural resources management and land stewardship on military installations. The LCTA program is a standardized method of natural resources data collection, analysis, and reporting designed to meet multiple goals and objectives. LCTA uses information on topographic features, soil characteristics, climatic variables, vegetation, and wildlife resources to characterize an installation's natural resources in a cost- and time-effective manner. The information will (1) assist installation managers with making decisions on best use of land, scheduling of military activities, protection of threatened and endangered species, and long-term environmental planning; (2) provide officials at all levels with standardized natural resources inventory information for installations across the continental United States and overseas.

LCTA is an Information Management System (IMS). LCTA IMS is a series of Army-developed executable programs, data storage schemes, and commercial off-the-shelf (COTS) products that span two operating systems (MS-DOS/Windows and UNIX). This is the system for Army Conservation Pillar natural resources information and processing capabilities. The object of the LCTA IMS is to provide user friendly automated programs to collect, analyze, interpret, and report natural resources data and land use impacts for decision making.

Components of the LCTA IMS include:

- automated data collection techniques
- imagery processing for remotely sensed images and spatial data
- multimedia and hypermedia applications
- global electronic networking between installations headquarters and a natural resources support center
- relational database management system
- LCTA users interface.

Automated data collection techniques provide improved data accuracy. Imagery processing is beneficial to data extrapolation. Multimedia and hypermedia applications provide textural and graphics information. Global electronic networking simplifies update distribution, lessons learned, and data standards. The LCTA users interface program documentation enables land managers to automate data analysis tasks and provide easy integration with other COTS programs currently in use at government installations.

An information system is "A system that consists of people, machines, and methods for organizations to accomplish specified operations on data that represent information. An information system may include data devices, office machines, communications equipment, peripheral equipment, and associated data media and accessories" (Newton and Wahl 1993). The LCTA IMS is designed to give installation environmental personnel the equipment, resources, and methods to meet the natural resources management and land stewardship issues on the installation. LCTA IMS utilizes commercially available software to reduce program development costs. Army developed software is used where specific needs are not met from other COTS software.

Objective

The objective of this manual is to provide the necessary information for users of the LCTA database to initiate, understand, and interpret the data contained in the database.

Mode of Technology Transfer

The LCTA database is provided to installations that have initiated or plan to initiate LCTA field sampling methodology. In addition to the database, the LCTA users interface program documentation, which facilitates use of the data, and the standard commercial database management software also are provided. The Office of the Directorate of Environmental Programs (DAIM), Assistant Chief of Staff (Installation Management) (ACS(IM)), sponsors annual LCTA training workshops conducted by USACERL staff, for military resource management personnel. The LCTA database is supported by newsletters, documentation, training programs, user support center, and hands-on experience.

2 Database Description

The main text of this document provides a general overview of the database structure for each of the major field sampling data groupings. Each portion of the database structure is described in terms of the field sampling methodology associated with the data and the relationships of the data with other data. Quality assurance quality control (QAQC) features incorporated into the database also are discussed.

A migration strategy to convert earlier versions of the database into the current structure also are described in the main text of this document. The migration strategy is a series of SQL commands that convert existing LCTA databases to the current structure. These commands implement the QAQC features discussed in this document.

Appendix A contains an entity relationship (ER) diagram showing the LCTA database schema. This diagram helps the reader visualize the database structure described elsewhere in the document.

Appendix B contains a detailed description of each data base entity (table). Entity descriptions are in alphabetical order for easy access. Appendix C contains an alphabetical list of each LCTA database data element. Detailed information on each data element includes a description of the data, the data type, if data is required, if the data is derived from other data, and valid data values. These detailed entity and element descriptions and the ER diagram in Appendix A allow the reader to incorporate detailed database information into the general descriptions in the main text as needed to more fully understand certain aspects of the database.

Appendix D contains a series of SQL commands that completely describe the LCTA database. These statements allow a database manager to construct a new database from only these SQL statements, and they also define the data interface for software developers, systems maintainers, and data managers.

A relational database model, or a Relational Data Base Management System (RDBMS), represents data as tables, with records stored as rows (observations) and data elements (variables) stored as columns of the rows. Tables also may have relationships with other tables. These relationships can have two forms: join

relationship and referential integrity constraints. Tables with join relationships have data elements in common and allow common data to be joined by use of a Structured Query Language (SQL) statement. Tables with referential integrity constraints can be defined as parent and child tables. A parent table controls the entry of data into the child table. Specific data must be present in the parent table before it is allowed in the child table. In relational theory the parent table has a primary key and the child table has a foreign key. An example can help to explain this issue. When point data is collected on an LCTA plot information about the location, type of vegetation and measurement date are recorded. To eliminate the need of repeating this information for every observation of point data for ground vegetation, a relationship is defined between the two tables PLOTSURV and GNDCOVER. The plot number and the recording date are defined as the primary key variables. A well designed RDBMS structure will eliminate redundant data and ensure data integrity. This document discusses the LCTA database and includes enhancements to the current database design to take full advantage of relational database theory and protect the integrity of the data.

The LCTA database can be divided into nine distinct components:

- plot information data
- land use data
- vegetation data
- wildlife data
- climate data
- soils data
- supplementary information
- summary data
- validation tables.

These components reflect information about the natural resources of the installation collected at LCTA plots. To simplify the understanding of the LCTA database data dictionary, the database will be represented first as its distinct components with little mention of the relationships between tables. The database then will be brought together to show the overall structure. The following description of the LCTA database consists of the database schema released with version 1.0 of the LCTA user's interface. In addition, changes to the database to enhance the usability and data integrity have been added. For a list of the changes refer to Chapter 3, Database Schema Updates. The migration strategy for making the changes to the database will be discussed later.

A brief description of the collection methodology will precede each section. This will give the reader a better understanding of the LCTA data. This information has been

taken from *U.S. Army Land Condition-Trend Analysis (LCTA) Plot Inventory Field Methods* (Tazik et al., February 1992), which gives more detailed information about the LCTA data collection techniques. A complete LCTA data dictionary will be presented at the end of the database discussion.

LCTA Field Methodology

The structure of the LCTA data dictionary is largely controlled by the types of data collected and the manner in which the data was collected. To make use of LCTA data properly and to understand the structure of the LCTA data dictionary, a thorough understanding of the field methodology is required. It is beyond the scope of this document to describe the LCTA field data collection methodology completely; however, a brief description of the collection methodology precedes each data dictionary section. This condensed description provides the reader with sufficient understanding of the LCTA data for the purposes of this document; the level of description provided is sufficient only to understand and interpret the database structure. Detailed information describing standard field methodology is given in *U.S. Army Land Condition-Trend Analysis (LCTA) Plot Inventory Field Methods* (Tazik et al., February 1992). See this publication for detailed information about LCTA data collection techniques.

Document Syntax and Terminology

The following syntax conventions are used:

Entities (tables) names are in uppercase.
Data element names are uppercase.

The following terminology is used throughout this publication:

Entity : An entity, or table, stores data within a relational database management system. Data in an entity is represented by rows of data elements. Entities allow like data to be stored separately, for example, ground vegetation data is in GNDCOVER and land use data is in LANDUSE.

Data Element: Data elements make up the columns of an entity. Data elements have a name, data type, data length, nullity, and rules. INSTALID is the name of the column that stores the

installation identification code. It is a character field of length 3 and requires data.

Nullity: A column constraint that sets the data requirement rule for a data element. Data is required if a data element has a nullity rule of not null.

Referential Integrity: Tables with referential integrity constraints can be defined as parent and child tables. A parent table controls the entry of data into the child table. Specific data must be present in the parent table before it is allowed in the child table.

Join Relationship: Entities with join relationships have data elements in common, and common data can be joined by use of a SQL statement.

Primary Key: Used in referential integrity constraints. The controlling data element of the parent table.

Foreign Key: Used in referential integrity constraints. The data element of the child table controlled by the primary key of the parent table.

Plot Information

To ensure that the LCTA plots can be relocated, accurate site descriptions and maps must be prepared and photographs taken. Most of the descriptive information and maps are recorded during the initial inventory. The maps and site descriptions provide instructions so someone without prior knowledge of the site can relocate the beginning stake and resurvey the plot. The photographs also document the condition of the plot over time.

Initial inventory plot information is stored in the plot master table (PLOTMAST). Subsequent monitoring dates for each plot and other plot information is stored in the plot survey (PLOTSURV) table. These two tables will contain such information as the installation training area number, UTM coordinates, and USGS 7.5-minute quadrangle map name. Only information that should not change over time is stored in the PLOTMAST table; specific information for each measurement date is found in the PLOTSURV table.

To take full advantage of the current database system, a plot maps (PLOTMAP) table has been created. This table allows for the storage of plot location maps and photographs in digital form. For information on storing these images and the accepted formats, refer to the LCTA users interface program documentation and your vendor's database system manual.

Table	Purpose
PLOTMAST	master plot table [one per LCTA plot]
PLOTSURV	table identifying all inventories on each plot
PLOTMAP	map images for each plot

Land Use Data

The land use data documents recent land uses and maintenance activities, as well as evidence of wind and water erosion that can be observed within the boundaries of the 100 x 6-m plot. These data are used to relate land use and maintenance activities to changes in vegetation and soil erosion rates.

Conditions observed on areas adjacent to, but not within, the plot proper are not checked on the land use form. However, if noteworthy, these conditions may be recorded under the notes column of each table.

The tables storing land use data are LANDUSE, MAINTACT, and EROSEVID. LANDUSE_CODE, MAINT_CODE, and EROS_CODE are validation tables. Codes for each valid type of land use, maintenance activity, and observed erosion are defined in the appropriate validation table. Data is entered into the data tables as codes that are checked by the database against the validation tables. This allows for data integrity and simplified program interfacing. The valid land use, maintenance, and observed erosion categories are:

Military Land Uses

MB	BIVOUAC
MD	DEMOLITION
ME	EXCAVATION
MF	FOOT
MN	NO MILITARY USE
MO	OTHER MILITARY USE
MT	TRACKED
MW	WHEELED

Non-Military Land Uses

NF	FORESTRY
NG	GRAZING
NGC	GRAZING-CATTLE
NGO	GRAZING-OTHER
NGS	GRAZING-SHEEP
NH	HAY
NN	NO NON-MILITARY USE
NO	OTHER NON-MILITARY USE
NR	ROW CROP

Maintenance Activities

BA	ACCIDENTAL BURN
BAL	ACCIDENTAL BURN > 1 YEAR
BAS	ACCIDENTAL BURN < 1 YEAR
BP	PRESCRIBED BURN
BPL	PRESCRIBED BURN > 1 YEAR
BPS	PRESCRIBED BURN < 1 YEAR
C	CHEMICAL APPLICATION
M	MOWING
N	NO MAINTENANCE
O	OTHER MAINTENANCE
P	PLANTING
S	SEEDING
T	TILLAGE

Observed Water Erosion

WAA	ACTIVE GULLY
WAD	DEBRIS DAM
WAN	NO WATER EROSION
WAP	WATER PEDESTAL PLANT
WAS	SHEET/RILL

Observed Wind Erosion

WID	DRIFTING
WIN	NO WIND EROSION
WIP	WIND PEDESTAL PLANT
WIS	SCOURING

Table	Purpose
EROSEVID	erosion evidence data from land use data
LANDUSE	military and non-military land use data
MAINTACT	maintenance activity data
EROS_CODE	observed erosion code validation table
LANDUSE_CODE	land use code validation table
MAINT_CODE	maintenance activity code validation table

Vegetation Data

The line transect documents ground cover, canopy cover, and surface disturbance. Data are recorded using a modified point intercept method. Uses of these data include evaluating soil erosion status, military concealment cover, wildlife habitat, botanical composition, and for ground-truthing remotely sensed imagery.

One hundred points are sampled along the line transect beginning at the 0.5-m point and continuing at 1-m intervals along the measuring tape. The 1-m measuring rod is placed plumb to the ground at each point to determine ground cover, surface disturbance, and vertical distribution of vegetation up to 1 m. Canopy cover above 1 m is measured using the telescoping range pole.

Surface Disturbance

If a point has been disturbed, the nature of the disturbance is determined and the appropriate category selected. The categories of disturbance are stored in DISTURB_CODE. A point is considered disturbed if there is physical evidence of disruption of the soil surface or if the vegetation has been obviously crushed at that point. The fact that a site is in poor condition does not constitute evidence of disturbance. With vehicle tracks, the ability to distinguish a general direction of travel is a prerequisite to establishing evidence of disturbance.

Disturbance

N	NO DISTURBANCE
NR	NOT RECORDED
O	OTHER DISTURBANCE
P	PASS
R	ROAD
T	TRAIL
U	UNKNOWN

Disturbance data is entered into the GNDCOVER table under the column DISTURB. To ensure that only defined categories are used, the DISTURB_CODE table contains all valid disturbance categories. This table is a validation table for GNDCOVER, which is enforced through the use of primary and foreign keys.

GNDCOVER	ground data from line transect inventory
DISTURB_CODE	disturbance code validation table

Initial Inventory and Long-term Monitoring Ground Cover

The next data recorded for each point on the line is ground cover. Only material in contact with the ground at the tip of the measuring rod is recorded, i.e., the point at the center of the rod. This data is entered into the GNDCOVER table under the column VEGID. In many instances the data entered here will not be a plant code but one of the valid ground cover categories. However, to make this table compatible with other tables containing plant codes, the column has been named VEGID.

Table	Purpose
GNDCOVER	ground data from line transect inventory

Initial Inventory and Long-term Monitoring Canopy Cover

The vertical distribution and composition of canopy cover is recorded on the line by recording vegetation contacts within each decimeter interval on the 1-m measuring rod as it is held plumb to the ground. For vegetation above 1 m, the rod is replaced by a telescoping range pole.

Canopy cover is recorded in decimeter intervals to a height of 2 m. Above 2 m, it is recorded in 0.5-m intervals up to 8.5 m. Canopy cover contact is recorded only if vegetation appears as though it would be intercepted by the center of the rod or pole. Canopy cover above 8.5 m also is recorded as present if an imaginary extension of the range pole above 8.5 m would contact vegetation.

Only one intercept is recorded per interval. If two or more species or categories contact the rod in the same interval, only the one at the highest point within the interval is recorded. If more than one species is present over 8.5 m, only the topmost species is recorded.

Canopy cover data is stored in the AERCOVER table. Line transect location VEGLOC, height interval VEGHT and cover category VEGID are entered for each observation. Canopy cover above 8.5 m has a VEGHT of 8.6.

Table	Purpose
AERCOVER	aerial data from line transect inventory

Short-term Monitoring Line Transect Data

During a short-term monitoring season, data are gathered on the line transect using the point-intercept method as in the initial inventory, except in lesser detail. At 1-m intervals, beginning at the 0.5-m point, the tip of the 1-m measuring rod is used to determine the presence and type of disturbance. Ground cover is recorded using the valid codes listed here. Plant species identification is not necessary for short-term monitoring. The presence or absence of canopy cover at any height is determined for each point and recorded as shown in the valid aerial cover categories.

Short-term Monitoring Ground Cover Categories

B	BARE GROUND
L	LITTER
M	MICROPHYTE
NR	NOT RECORDED
P	PLANT
R	ROCK
U	UNKNOWN

Short-term Monitoring Canopy Cover Categories

A	ANNUAL
AP	ANNUAL/PERENNIAL
N	NO AERIAL COVER
NR	NOT RECORDED
P	PERENNIAL
U	UNKNOWN AERIAL COVER

Because the short-term monitoring data collection method is an abbreviated version of initial inventory, ground disturbance, ground cover, and canopy cover can be stored in the LINEMON table. Plant species identification is not necessary, so a defined set of categories exists for both ground cover and canopy cover. Ground disturbance uses the same categories defined for the initial inventory. To ensure that only defined categories are used for these data the DISTURB_CODE, GNDCOV_CODE, and AERCOV_CODE tables contain all valid disturbance, ground cover, and canopy cover

categories, respectively. These tables are validation tables for LINEMON and are enforced through the use of primary and foreign keys.

Table	Purpose
LINEMON	line transect monitoring data
AERCOV_CODE	monitoring aerial cover code validation table
DISTURB_CODE	disturbance code validation table
GNDCOV_CODE	monitoring ground cover code validation table

Initial Inventory and Long-term Monitoring Belt Transect Data

The belt transect is intended to characterize species composition, density, and height distribution of woody and succulent vegetation. The belt transect extends the length of the 100-m line transect. Although the belt has a standard width of 6 m (3 m to either side of the line transect), the width may be reduced for high density species. Any adjustments in the belt transect width are noted in the BELTSURV table. In addition, the default belt width and the minimum height used for each plot is recorded.

The locations of all woody plants above a predetermined minimum height are mapped, and the coordinates, species, and height are entered into the BELTTRAN table.

All rooted shrubs and trees are recorded regardless of whether they are live or dead. All cacti, regardless of height, are recorded. Individual plants with heights greater than 8.5 m are in general entered as 8.6 m.

Some woody plants tend to produce multiple stems from a common root system. Although they may appear to be separate plants, these multistemmed plants are recorded as a single individual. For plants that form dense stands by means of root sprouts, adventitious roots, or rhizomes, the entire clump (motte) is regarded as one individual. The beginning and ending line location of the clump are recorded in the BELTTRAN table as CLUMPBEGIN and CLUMPEND. The area of the clump is recorded as CLUMPAREA. The height of the clump is determined by measuring the tallest stem within the clump.

Table	Purpose
BELTSURV	parameters for inventory and monitoring belt transects
BELTTRAN	belt transect inventory data

Short-term Monitoring Belt Transect Data

Rather than recording the location and height of each woody plant as in the initial inventory, short-term monitoring of the belt transect entails only a tally of each species by 1-m height classes up to 4 m, and a single class for plants higher than 4 m. This data is stored in the BELTMON table.

BELTSURV	parameters for inventory and monitoring belt transects
BELTMON	belt transect monitoring data

Plant Species Information

All vegetation data stored in the database are checked against the master plant species table (PLANTS) in the SPECIES database for valid information. For each valid unique species found in the database corresponding information is placed in the PLNTLIST table by the LCTA user's interface.

Table	Purpose
PLNTLIST	master list cataloging each plant code

Floristic Inventory

A primary goal of the LCTA program is to assemble a complete collection of all vascular plants that occur on an installation and to produce a comprehensive, annotated list of all taxa present, including threatened and endangered species. Three specimens of each taxon are collected. One specimen is accessioned to a public herbarium to serve as a voucher. The remaining two specimens are laminated in plastic with a label and included in a reference collection to be housed at the installation. The laminated specimens can be taken into the field to aid in species identification by LCTA crew and natural resources personnel. Though the majority of taxa are collected in 1 to 3 years by a plant taxonomist contracted specifically for this task, species not yet included in the collection may be added any time by the field crew leader.

Nomenclature and classification conform to the *National List of Scientific Plant Names* (USDA 1982).

Floristic inventory data is stored in the HERBRIUM table. In addition to the many elements in this table, the Federal and state threatened, endangered, and sensitive category (FEDSTAT,STATESTAT) is recorded where appropriate. The FED_STATUS

and STATE STATUS tables contain the valid codes for these fields and are enforced through referential integrity constraints.

Table	Purpose
HERBRIUM	floristic inventory data
FED STATUS	Federal status validation table
STATE STATUS	state T&E status validation table

Wildlife Inventory

A variety of wildlife data may be collected on or near LCTA plots. Only song bird and small mammal data are required as a standard. These taxa are useful as bioindicators and are easy to sample at the scale of the LCTA plot.

Standard wildlife inventories are conducted on a subsample of approximately one-third of the core plots, up to a total of about 60. Core wildlife plots are selected in a stratified random fashion from among all the established core plots to represent the major soil and land cover types in proportion to their occurrence on the installation. This constitutes the minimum sampling required. More core plots are added as necessary to represent all soil and land cover types with at least one wildlife plot.

Birds (Standard)

Birds are censused at each plot using a modified point-count transect technique. Each plot is censused once in the morning and once in the evening (denoted by a.m. or p.m.) by slowly walking the length of the LCTA plot in 6 minutes, recording all birds seen or heard within 100 m of the plot (Line Out). On reaching the end of the plot, the observer stops for 8 minutes and again records all birds seen or heard within 100 m (End Point). The observer then walks back to the starting point in 6 minutes, again recording any birds detected within 100 m of the plot (Line In). All morning censuses are conducted between 0.5 hour before and 4 hours after sunrise on relatively calm, rainless days. The evening census is conducted during the 4 hours prior to sunset. The time of the survey is entered in the BIRDS table under the PERIOD column. The locations of the line from which the observations were taken are entered in the MEASURE PT column as a code. Valid locations are stored in the POINT CODE table, which is a validation table for BIRDS and is enforced through the use of primary and foreign keys. All plot and survey information is entered in the BIRDSURV table.

All birds detected are recorded using standard common names and species codes. Numbers of each species are recorded for each segment of the survey using the codes for mated status. The MATED_STATUS column uses valid codes from the MATED_STATUS_CODE table. This information is used to infer the number of pairs present on the plot. A singing male, male/female pair, or adult accompanied by young indicates one pair present. Presence of additional pairs can be inferred only if additional singing males, male/female pairs, or same sex adults accompanied by young are observed. An individual nonsinging male, lone female, or individual of unknown sex or age indicates presence of the species but may not indicate a second pair. Flyovers of birds not using the plot and other birds observed outside the plot limits are recorded the same as those observed, plus a "Y" is entered in the FLYOVER column. All flyover data should be entered as a new observation with a "Y" in the FLYOVER column.

The field methods suggest that max pair data be recorded as the maximum number of pairs observed among the three segments of the survey. Max pairs information is not entered into the database because it can be derived from the available data in the table. This would be redundant data.

Bird Mated Status Codes

*	Singing male
PR	Adult male/female pair
M	Nonsinging male
F	Female only
U	Unknown sex and age
Y	Young of the year
FL	Flock
C	Combined (all statuses were totaled and entered as one observation)
NR	Not recorded

Measurement Point Codes

LO	Line Out
LI	Line In
EP	End Point
C	Combined (all points were totaled and entered as one observation)
U	Unknown
NR	Not recorded

Table	Purpose
BIRDS	bird data from wildlife inventory
BIRDSURV	table identifying all inventories for birds on each plot
MATED_STATUS_CODE	bird mated status validation table
POINT_CODE	bird data collection line location validation table

Small Mammals (Standard)

Small mammals are surveyed by setting two rows of 20 museum special traps and five rat traps parallel to the long axis of each LCTA plot. Trap stations are spaced approximately 7.5 m apart; trap lines are spaced 30 m apart. Snap traps are baited with a mixture of rolled oats and peanut butter and run for two nights for a total of 100 trap nights per plot. Traps are set during the late afternoon or evening of the first day, checked early the next morning, reset during the late afternoon or evening of the second day, and checked and collected on the following morning.

The MAMMALS table stores data for the standard 100 trap nights using the date of the first night in the RECDATE column. For each method of observations, listed here, the species (VERTID), sex (SEX), method (METHOD), and number (NUM) are recorded. If any retraps are known, this number is entered in the RETRAP column. NUM represents the total number of species, including the number of retraps. The METHODS_CODE and GENDER_CODE tables are validation tables for the METHOD and SEX columns of the MAMMALS table. Referential integrity for these tables is enforced using primary and foreign keys. All plot and survey information is stored in the MAMSURV table.

Gender Codes

M	Male
F	Female
U	Unknown
C	Combined (all genders were totaled and entered as one observation)
NR	Not recorded

Method Codes

O	Observed
S	Signs
T	Trapped
C	Combined (all methods were totaled and entered as one observation)
U	Unknown
NR	Not recorded

Table	Purpose
MAMMALS	mammal data from wildlife inventory
MAMSURV	table identifying all mammal inventories
METHODS_CODE	mammal and herpetologic methods validation table
GENDER_CODE	gender code validation table

Reptiles and Amphibians (Optional)

Reptiles and amphibians are censused using a pitfall trapping array with optional box traps in association with the LCTA transects. The central bucket of each pitfall array is located approximately 75 m from the origin of the LCTA line transect, and at a random azimuth within a 180 degree arc opposite the azimuth of the transect. The array must be in the same soil type and landcover category as the LCTA transect. The 100 m point may be used as the point of origin if necessary to keep the array within the correct soil type and landcover category. The four 5-gallon plastic buckets are buried so the lip is flush with the soil surface. A cover is placed above the bucket, supported by rocks or wood blocks, to provide shade to any trapped animals. Aluminum drift fences 8 to 12 in. high, buried 2 to 3 in. in the ground and held in place by wooden or metal stakes, are used to funnel animals into the buckets. The fence should be painted to blend with surroundings to make it less conspicuous and less prone to disturbance. The fence must overlap the lip of the bucket by about 1 in. to force the animals into the bucket and prevent them from moving around the end of the aluminum.

The HERPS table stores data for the standard 100 trap nights using the date of the first night in the RECDATE column. For each method of observations, listed here, the species (VERTID), sex (SEX), method (METHOD), and number (NUM) are recorded. If any retraps are known, this number is entered in the RETRAP column. NUM represents the total number of species, including the number of retraps. The METHODS_CODE and GENDER_CODE tables are validation tables for the METHOD and SEX columns of the HERPS table. Referential integrity for these tables is enforced using primary and foreign keys. All plot and survey information is stored in the HERPSURV table.

Table	Purpose
HERPS	herpetologic data from wildlife inventory
HERPSURV	table identifying all inventories for amphibians and reptiles on each plot
METHODS_CODE	mammal and herpetologic methods validation table
GENDER_CODE	gender code validation table

Species List

All wildlife data stored in the database are checked against the main wildlife species table (VERTS) in the SPECIES database for valid information. For each valid unique species found in the database, corresponding information is placed in the VERTLIST table by the LCTA user's interface. This information includes order, class, family, species, genus, subspecies, variety, and common name. Refer to the LCTA user's interface manual for details on running this procedure.

Table	Purpose
VERTLIST	master list cataloging each vertebrate code

Climate Data

Climate data is collected from Scott Air Force Base for weather stations on and near LCTA installations. This data is collected as daily values for rain, temperature, and pan evaporation. Information about the weather station is stored in the CLIMATESTATIONS table. To ensure that the weather station information data is known, CLIMATESTATIONS table is a parent table to CLIMATEDATA.

Table	Purpose
CLIMATEDATA	climate data
CLIMATESTATIONS	climate station information

Soil and Topographic Information

Soil Depth Estimation. Soil depth can have a significant effect on plant productivity and botanical composition. Shallow soils are generally less productive, more susceptible to damage, and more difficult to reclaim than deeper soils. An estimate of soil depth is made for each LCTA plot by noting how deep it was possible to drive each of the steel rods into the soil. The average depth is recorded.

Soil Samples. A composite soil sample is taken at each plot. Five small samples are taken approximately 1 m from the line transect at the 0, 25, 50, 75, and 100-m points. All litter is removed from the surface. With a narrow spade or mattock, a small pit approximately 15 cm deep is dug. A vertical slice comprising approximately 0.2 L of soil is taken from the side of each pit, and roots and plant crowns are removed. The samples are combined in a sealable plastic bag, and a double-faced aluminum tag is inscribed with the installation name or abbreviation and plot number. Sealed bags are boxed and shipped to the USDA National Soil Survey Laboratory in Lincoln, NE, for analysis of selected physical and chemical soil characteristics that affect site

erodibility, productivity, and botanical composition. This information is stored in the SOILSMPL table.

Aspect

Aspect, which can influence soil moisture, botanical composition, and vegetation cover, is determined for plots while standing at the 50 m point and estimating the general direction that water would flow across the site. Using a compass, aspect is estimated to the nearest octant. If the average slope is less than 5 percent, aspect is considered unimportant and level is circled on the form. Aspect is placed in the PLOTSURV table under the ASPECT column.

Slope Length and Gradient

Slope length and gradient are measured at the 0, 50, and 100-m points. Slope length is the straight line distance runoff travels across each sample point. It is measured from the point of origin of runoff to a point where a barrier or significant reduction in slope causes overland flow to be diverted into a defined channel or causes suspended sediment to be deposited. Slope length is estimated by pacing the distance between point of origin and point of deposition. Slope gradient is measured with a clinometer to the nearest half percent. Slope length (SLPLEN) and gradient (SLOPE) are stored in the SOILLS table for each location (LOC).

Table	Purpose
PLOTSURV	table identifying all inventories on each plot
SOILLS	plot slope data (used to calculate LS in USLE)
SOILMAST	master soil series table
SOILSMPL	soil sample data from USDA National Soils Survey Laboratory

Supplementary Information

The following tables represent information that does not fall under any of the foregoing categories. The BASALA, ENVCONST, and F_COUNT tables were created to store data that is not part of the standard LCTA data collection. The database has been augmented with the addition of these tables to meet the needs of some installations. The GROUPING table has been added to facilitate grouping data for the purpose of analysis either through the use of the LCTA program or SQL statements. The HISTORY table is meant to hold general information about the installation, data collected, or the database. The INSTMAST table is a master listing for all LCTA installations and acts as a parent table to many of the other data tables.

BASALA	Basal area data
ENVCONST	Environmental constraints
F_COUNT	Optional data from inventory or monitoring
GROUPING	Dynamic table for LCTA front end routines
HISTORY	General informational data
INSTMAST	Master table listing LCTA installations

Summary Data

In database theory, any stored data that is calculated from other data within the database is called derived data. Storing derived data usually is discouraged because it can be obtained from existing data in the database, and storing it adds to the size of the database. Derived data is essentially duplicate data.

Because the LCTA databases hold a great deal of data and many of the analyses take some time to run, summary (derived) data is stored in the database. Also, this summary information can be used to group other data in the database for additional information.

Tables	Purpose
COMMCLASSPLOTSUM	plant community classifications for each plot
EROSION	table for USLE estimations
LANDUSEYEARSUM	land use summary data by year
PCSDPLOTSUM	plant cover, surface disturbance summary data by plot
PCSDYEARSUM	plant cover, surface disturbance summary data by year
PCTTYEARSUM	percent of tolerance (USLE) summary data by year
TACTCONA	tactical concealment summary A
TACTCONB	tactical concealment summary B
TACTCONC	tactical concealment summary C

Validation Tables

Validation tables are used to enforce referential integrity constraints. After these integrity constraints are defined in the database system, by the database administrator, data will be allowed in the child table only if it exists in the parent table. The primary key of the parent table restricts the foreign key of the child table.

Table	Purpose
AERCOV_CODE	monitoring aerial cover code validation table
DISTURB_CODE	disturbance code validation table
EROS_CODE	observed erosion code validation table
EROSEVID	erosion evidence data from land use data
FED_STATUS	Federal status validation table
GENDER_CODE	gender code validation table
GNDCOV_CODE	monitoring ground cover code validation table
LANDUSE	military and nonmilitary land use data
LANDUSE_CODE	land use code validation table
MAINT_CODE	maintenance activity code validation table
MAINTACT	maintenance activity data
MATED_STATUS_CODE	bird mated status validation table
METHODS_CODE	mammal and herpetologic methods validation table
POINT_CODE	bird data collection line location validation table
STATE_STATUS	state T&E status validation table

Relational Constraints

Relational constraints, in this situation referential integrity constraints, will be discussed in this section. The previous section listed the validation tables used to ensure data integrity of the data tables. The actual columns used to link the tables will be presented in this section.

Referential integrity constraints are used to ensure data integrity in a database. These constraints are defined between a parent table and a child table by the use of primary and foreign keys. A parent is defined with a data element or set of elements as a primary key. The primary key is a unique value, or set of values, that constrain the entry of data into the dependent child table. For example, PLOTMAST is a parent table to PLOTSURV with PLOTID as the primary key in PLOTMAST and the foreign key in PLOTSURV. If a particular value for PLOTID does not exist in PLOTMAST, data for that plot cannot be added to the PLOTSURV table.

Other rules exist that can be used to ensure data integrity. These rules include column constraints, check constraints, unique and primary key, and others. The most important column constraint is the NOT NULL rule. This rule forces a value to be entered for a data element (column) before that observation (row) of data is applied to the database. The NOT NULL is specified in the database schema and applied by the database administrator by using SQL statements. This rule is used throughout the LCTA database. Consult the data element listing appendix for elements with the

NOT NULL rule. Check constraints test the rows of a table against a logical expression. Not all database servers utilize this rule, and it currently is not used by the LCTA database. The UNIQUE and PRIMARY KEY rules are important to relational database theory and are somewhat related. The UNIQUE rule ensures that no duplicate values will exist for a column. Unless specifically defined, a column with the UNIQUE rule applied can have only one NULL here. The PRIMARY RULE is used in referential integrity constraints as discussed. Only one primary key can exist for a table, but many columns can make up the primary key. Each column that makes up the primary key must have the UNIQUE and NOT NULL rules applied. The LCTA database uses the primary key and the related foreign key rules extensively; refer to the database schema diagram (Appendix A) for their locations.

Defining referential integrity constraints is done by the database administrator using Data Definition Language (DDL) or SQL statements. Parent tables, child tables, and their linking keys are listed. The DDL or SQL statements are in Appendix D.

Parent Table	Child Table	Joined by
INSTMAST	PLOTMAST	INSTALID
INSTMAST	ENVCONST	INSTALID
INSTMAST	CLIMATESTATIONS	INSTALID
INSTMAST	MAPS	INSTALID
INSTMAST	HISTORY	INSTALID
INSTMAST	EROSION	INSTALID
INSTMAST	COMMCLASSPLOTSUM	INSTALID
INSTMAST	LANDUSEYEARSUM	INSTALID
INSTMAST	PCSDPLOTSUM	INSTALID
INSTMAST	PCSDYEARSUM	INSTALID
INSTMAST	PCTTYEARSUM	INSTALID
INSTMAST	TACTCONA	INSTALID
INSTMAST	BIRDSURV	INSTALID
INSTMAST	HERPSURV	INSTALID
INSTMAST	MAMSURV	INSTALID
PLOTMAST	PLOTMAPS	PLOTID
PLOTMAST	PLOTSURV	INSTALID, PLOTID
PLOTMAST	SOILSMPL	INSTALID, PLOTID
PLOTMAST	EROSION	INSTALID, PLOTID
PLOTMAST	COMMCLASSPLOTSUM	INSTALID, PLOTID
PLOTMAST	PCSDPLOTSUM	INSTALID, PLOTID
PLOTMAST	TACTCONA	INSTALID, PLOTID

PLOTSURV	LANDUSE	INSTALID, PLOTID, RECDATE
PLOTSURV	MAINTACT	INSTALID, PLOTID, RECDATE
PLOTSURV	EROSEVID	INSTALID, PLOTID, RECDATE
PLOTSURV	GNDCOVER	INSTALID, PLOTID, RECDATE
PLOTSURV	AERCOVER	INSTALID, PLOTID, RECDATE
PLOTSURV	BELTSURV	INSTALID, PLOTID, RECDATE
PLOTSURV	BELTTRAN	INSTALID, PLOTID, RECDATE
PLOTSURV	LINEMON	INSTALID, PLOTID, RECDATE
PLOTSURV	BELTMON	INSTALID, PLOTID, RECDATE
PLOTSURV	BASAL_A	INSTALID, PLOTID, RECDATE
PLOTSURV	SOILLS	INSTALID, PLOTID, RECDATE
PLOTSURV	F_COUNT	INSTALID, PLOTID, RECDATE
FED_STATUS	HERBRIUM	FEDSTAT
STATE_STATUS	HERBRIUM	STATESTAT
EROS_CODE	EROSEVID	STATUS
LANDUSE_CODE	LANDUSE	LANDUSE
MAINT_CODE	MAINTACT	MAINTAIN
AERCOV_CODE	LINEMON	AERCOV
DISTURB_CODE	LINEMON, GNDCOVER	DISTURB
GNDCOV_CODE	LINEMON	GNDCOV
CLIMATESTATIONS	CLIMATEDATA	STATION
MATED_STATUS_CODE	BIRDS	MATED_STATUS
POINT_CODE	BIRDS	MEASURE_PT
GENDER_CODE	HERPS, MAMMALS	SEX
METHODS_CODE	HERPS, MAMMALS	METHOD

In the next table the same information is presented in a different format. All child tables, their key elements, and primary and foreign keys are listed. The contributing table is listed for each key element. The LCTA database schema (Appendix A) also can be consulted to understand the referential integrity constraints.

Child Table	Key Elements	Contributing Table
AERCOVER	INSTALID	PLOTSURV
AERCOVER	PLOTID	PLOTSURV
AERCOVER	RECDATE	PLOTSURV
BASAL_A	INSTALID	PLOTSURV
BASAL_A	PLOTID	PLOTSURV

BASAL_A	RECDATE	PLOTSURV
BELTMON	INSTALID	PLOTSURV
BELTMON	PLOTID	PLOTSURV
BELTMON	RECDATE	PLOTSURV
BELTSURV	INSTALID	PLOTSURV
BELTSURV	PLOTID	PLOTSURV
BELTSURV	RECDATE	PLOTSURV
BELTTRAN	INSTALID	PLOTSURV
BELTTRAN	PLOTID	PLOTSURV
BELTTRAN	RECDATE	PLOTSURV
BIRDS	INSTALID	BIRDSURV
BIRDS	MATED_STATUS	MATED_STATUS_CODE
BIRDS	MEASURE_PT	POINT_CODE
BIRDS	PLOTID	BIRDSURV
BIRDS	RECDATE	BIRDSURV
BIRDSURV	INSTALID	INSTALID
BIRDSURV	PLOTID	*
BIRDSURV	RECDATE	*
CLIMATEDATA	INSTALID	CLIMATESTATIONS
CLIMATEDATA	STATION	CLIMATESTATIONS
CLIMATESTATIONS	INSTALID	INSTMAST
CLIMATESTATIONS	STATION	*
COMMCLASSPLOTSUM	INSTALID	INSTMAST
COMMCLASSPLOTSUM	PLOTID	PLOTMAST
ENVCONST	INSTALID	INSTMAST
EROSEVID	INSTALID	PLOTSURV
EROSEVID	PLOTID	PLOTSURV
EROSEVID	RECDATE	PLOTSURV
EROSEVID	STATUS	EROS_CODE
EROSION	INSTALID	INSTMAST
EROSION	PLOTID	PLOTMAST
F_COUNT	INSTALID	PLOTSURV
F_COUNT	PLOTID	PLOTSURV
F_COUNT	RECDATE	PLOTSURV
GNDCOVER	DISTURB	DISTURB_CODE
GNDCOVER	INSTALID	PLOTSURV
GNDCOVER	PLOTID	PLOTSURV
GNDCOVER	RECDATE	PLOTSURV
HERBRIUM	FEDSTAT	FED_STATUS
HERBRIUM	STATESTAT	STATE_STATUS
HERPS	INSTALID	HERPSURV

HERPS	METHOD	METHODS_CODE
HERPS	PLOTID	HERPSURV
HERPS	RECDATE	HERPSURV
HERPS	SEX	GENDER_CODE
HERPSURV	INSTALID	INSTALID
HERPSURV	PLOTID	*
HERPSURV	RECDATE	*
HISTORY	INSTALID	INSTMAST
LANDUSE	INSTALID	PLOTSURV
LANDUSE	LANDUSE	LANDUSE_CODE
LANDUSE	PLOTID	PLOTSURV
LANDUSE	RECDATE	PLOTSURV
LANDUSEYEARSUM	INSTALID	INSTMAST
LINEMON	AERCOV	AERCOV_CODE
LINEMON	DISTURB	DISTURB_CODE
LINEMON	GNDCOV	GNDCOV_CODE
LINEMON	INSTALID	PLOTSURV
LINEMON	PLOTID	PLOTSURV
LINEMON	RECDATE	PLOTSURV
MAINTACT	INSTALID	PLOTSURV
MAINTACT	MAINTAIN	MAINT_CODE
MAINTACT	PLOTID	PLOTSURV
MAINTACT	RECDATE	PLOTSURV
MAMMALS	INSTALID	MAMSURV
MAMMALS	METHOD	METHODS_CODE
MAMMALS	PLOTID	MAMSURV
MAMMALS	RECDATE	MAMSURV
MAMMALS	SEX	GENDER_CODE
MAMSURV	INSTALID	INSTALID
MAMSURV	PLOTID	*
MAMSURV	RECDATE	*
MAPS	INSTALID	INSTMAST
PCSDPLOTSUM	INSTALID	INSTMAST
PCSDPLOTSUM	PLOTID	PLOTMAST
PCSDYEARSUM	INSTALID	INSTMAST
PCTTYEARSUM	INSTALID	INSTMAST
PLOTMAPS	INSTALID	INSTMAST
PLOTMAST	INSTALID	INSTMAST
PLOTSURV	INSTALID	PLOTMAST
PLOTSURV	PLOTID	PLOTMAST
PLOTSURV	RECDATE	*

SOILLS	INSTALID	PLOTSURV
SOILLS	PLOTID	PLOTSURV
SOILLS	RECDATE	PLOTSURV
TACTCONA	INSTALID	INSTMAST
TACTCONA	PLOTID	PLOTMAST

* Denotes that there is no contributing table. This element has been defined as a primary key to be passed to other tables as a foreign key. In other words, the table becomes the initial contributing table for that primary key.

Legacy Components

Legacy components refer to data elements, entities, or relations that do not conform to the new proposed database standards. These components persist either because of operational considerations or the likelihood of the loss of data. The components that can be categorized as legacy components follow.

When possible, relational theory and rules have been used in this design of the LCTA database to ensure data integrity; the most important of these is referential integrity constraints. A few exceptions exist, primarily because of operational considerations. These exceptions include the SOILMAST, PLNTLIST, and VERTLIST tables.

The SOILMAST table stores information for each unique soil series found on LCTA plots. The SOILSER element contains the code used to refer to a soil series; it is found in both the PLOTMAST and SOILMAST tables. By using a relational join, SQL query, soil series information for each plot can be obtained from the PLOTMAST and SOILMAST tables. To ensure that only valid soil series codes are entered for each plot in the PLOTMAST table, a referential constraint between SOILMAST (parent table) and PLOTMAST (child table) could be defined. However, the issue is complicated because other plot information found in the PLOTMAST table is collected in the field and added to the database before the soil series is identified. In practice the data usually is added to the database, and the user will identify the soil series for each plot and update the database at a later time. This restricts the use of referential integrity constraints for the SOILMAST table.

The PLNTLIST and VERTLIST tables contain unique plant and wildlife information found on LCTA plots. The LCTA program is used to scan all plant and wildlife data tables and insert the species information for those valid data into the appropriate table. The PLNLIST and VERTLIST tables are populated after the data tables. In some situations a species cannot be identified in the field and must be given a temporary code. The temporary code is changed to a known code when the species is identified. These operational considerations eliminate the possibility of defining the PLNTLIST and VERTLIST tables as parent tables to the data tables.

3 Database Schema Updates

This section will cover changes to the database schema as released with version 1.0 of the user's interface. These changes have been made to enhance the database usability, ensure further data integrity, and increase metadata.

New Tables

The format for this section is:

TABLE NAME
Description of the data stored in the table
Reason for adding table to the database

AERCOV_CODE
Short-term monitoring aerial cover code validation table
Validation table for LINEMON, element AERCOV

BIRDSURV
Table identifying all inventories for bird data
Plot survey information for bird data

CLIMATEDATA
Climate data
Climate data for analysis purposes

CLIMATESTATIONS
Climate station information
Validation table for CLIMATEDATA, element STATION

DISTURB_CODE
Disturbance code validation table
Validation table for GNDCOVER and LINEMON, element DISTURB

ENVCONST

Environmental constraints

Data from installation environmental constraint surveys

EROS_CODE

Observed erosion evidence code validation table

Validation table for EROSEVID, element STATUS

FED_STATUS

Federal status validation table

Validation table for HERBRIUM, element FEDSTAT

GENDER_CODE

Wildlife gender code validation table

Validation table for HERPS and MAMMALS, element SEX

GNDCOV_CODE

Short-term monitoring ground cover code validation table

Validation table for LINEMON, element GNDCOV

GROUPING

Dynamic table for LCTA front end routines (user defined attributes)

Used by the update front table to group summaries

HERPSURV

Table identifying all inventories for amphibians and reptiles on each plot

Plot survey data for herpetologic data

LANDUSE_CODE

Land use code validation table

Validation table for LANDUSE, element LANDUSE

MAINT_CODE

Maintenance activity code validation table

Validation table for MAINTACT, element MAINTAIN

MAMSURV

Table identifying all inventories for mammals on each plot

Plot survey data for mammals data

MAPS

Installation geographic information system maps used to display LCTA data

Allows storing of geographic information system maps in the database

MATED_STATUS_CODE

Bird mated status validation table

Validation table for BIRDS, element MATED_STATUS

METHODS_CODE

Mammal and herpetologic trapping methods validation table

Validation table for HERPS and MAMMALS, element METHOD

PLOTMAPS

Map and photo images for each plot

Allows storing of plot location maps

POINT_CODE

Bird data collection line location validation table

Validation table for BIRDS, element MEASURE_PT

STATE_STATUS

State Threatened and Endangered (T&E) status validation table

Validation table for HERBRIUM, element STATESTAT

Modified Tables

The format for this section is:

TABLE NAME

Description of the data stored in the table

Reason for changing the table

BIRDS

Bird data from wildlife inventory

Changed to reflect data as it is collected

HERBRIUM

Floristic Inventory data

Changed to reflect data as it is recorded

HERPS
Herpetologic data from wildlife inventory
Changed to reflect data as it is collected

MAMMALS
Mammal data from wildlife inventory
Changed to reflect data as it is collected

Discontinued Tables

The tables in this section were dropped because they no longer are used or the new functionality of the user's interface does not require them.

WILDSURV
PLOTTASK
TCAPCCSUM
TCBPCCSUM
TCCPCCSUM
PCSDFUNCTPLOTSUM
PCSDPCCFINCTSUM
USLEPCCSUM

Modified Data

This section lists the tables and their data elements that have changed data. In all of these tables, data have been changed from text string to a shorter text code. This makes the use of validation tables easier and enhances data integrity and data use. The format for this section is:

TABLE NAME
ELEMENT changed

LANDUSE
LANDUSE
G37
EROSEVID
STATUS

MAINTACT
MAINTAIN

4 Database Migration Strategy

The following is a series of SQL statements that will convert an existing LCTA database to the database schema described in this document. These commands are presented in SQLBase format and must be executed in the order presented to ensure proper operation. These statements try to account for all possible errors that may be encountered. However, some difficulty may be encountered during this migration strategy.

```
REMARK
\
DROP TABLES NO LONGER USED
/
DROP TABLE WILDSURV;
DROP TABLE PLOTTASK;
DROP TABLE TCAPCCSUM;
DROP TABLE TCBPCCSUM;
DROP TABLE TCCPCCSUM;
DROP TABLE PCSDFUNCTPLOTSUM;
DROP TABLE PCSDPCCFUNCTSUM;
DROP TABLE USLEPCCSUM;

REMARK
\
RENAME HERBRIUM TABLE TO SAVE DATA INSTALLATION MAY HAVE ENTERED
/
ALTER TABLE HERBRIUM RENAME TABLE HERBOLD;


REMARK
\
MODIFY INSTALID IN PLOTMAST AND PLOTSURV FOR
NOT NULL FOR PRIMARY KEY
/
ALTER TABLE PLOTMAST MODIFY INSTALID NOT NULL;
ALTER TABLE PLOTSURV MODIFY INSTALID NOT NULL;
```

```
REMARK
\
UPDATE INSTALID IN ALL TABLES HAVING INSTALID AS KEY
REPLACE 'JUS' WITH APPROPIATE ID
/
UPDATE PLOTMAST SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE PLOTSURV SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE MAINTACT SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE EROSEVID SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE LANDUSE SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE AERCOVER SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE GNDCOVER SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE LINEMON SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE BELTTRAN SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE BELTMON SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE BELTSURV SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE F_COUNT SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE SOILLS SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE BASALA SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE HISTORY SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE GROUPING SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE PLOTMAPS SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE SOILSMPL SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE CLIMATESTATIONS SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE CLIMATEDATA SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE MAPS SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE ENVCONST SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE BIRDSURV SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE MAMSURV SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE HERPSURV SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE BIRDS SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE MAMMALS SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE HERPS SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE HERBRIUM SET INSTALID = 'JUS' WHERE PLOTID IS NOT NULL;
UPDATE PCTTYEAR SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE TACTCONA SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE PCSDPLOTSUM SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE EROSION SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE PCSDYEARSUM SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
UPDATE COMMCLASSPLOTSUM SET INSTALID = 'JUS' WHERE INSTALID IS NOT
NULL;
UPDATE LANDUSEYEARSUM SET INSTALID = 'JUS' WHERE INSTALID IS NOT NULL;
```

```
REMARK
\
DROP EXISTING INDEXES
/
DROP INDEX INST_ID;
DROP INDEX PBSYSPBC_IDX;
DROP INDEX PBSYSPBE_IDX;
DROP INDEX PBSYSPBF_IDX;
DROP INDEX PBSYSPBT_IDX;
DROP INDEX PBSYSPBV_IDX;
DROP INDEX PL_VEGID;
DROP INDEX PM_PLOTDATE;
DROP INDEX PS_PLOTDATE;
DROP INDEX QST320102;

REMARK
\
DROP EXISTING KEYS
/
ALTER TABLE INSTMAST DROP PRIMARY KEY;
ALTER TABLE PLOTMAST DROP PRIMARY KEY;
ALTER TABLE PLOTSURV DROP PRIMARY KEY;

REMARK
\
CREATE NEW TABLES
/
CREATE TABLE ENVCONST (
      INSTALID          CHAR (3) NOT NULL,
      CASENO            INTEGER,
      UNITLONG          VARCHAR,
      RESTRAINT         LONG VARCHAR,
      IMPACT            LONG VARCHAR,
      REALISM           LONG VARCHAR,
      MITIGATION        LONG VARCHAR,
      RESEARCH          LONG VARCHAR,
      RECDATE           DATE NOT NULL,
      UPDATENO          INTEGER
);
```

```
CREATE TABLE CLIMATEDATA (
    INSTALID        CHAR (3) NOT NULL,
    STATION         INTEGER NOT NULL,
    RECDATE         DATE NOT NULL,
    RAIN            FLOAT  NOT NULL,
    TEMPMIN         INTEGER,
    TEMPMAX          INTEGER,
    PANEVAP         FLOAT

CREATE TABLE CLIMATESTATIONS (
    INSTALID        CHAR (3) NOT NULL,
    STATION         INTEGER NOT NULL,
    STATIONNAME     VARCHAR (130) NOT NULL,
    DMCE            INTEGER,
    DMCN            INTEGER,
    ZONE            INTEGER,
    STATION_COMMENT VARCHAR (100)

CREATE TABLE GROUPING (
    PLOTID          INTEGER NOT NULL,
    INSTALID        CHAR (3) NOT NULL

CREATE TABLE MAPS (
    INSTALID        CHAR (3) NOT NULL,
    MAPNAME         VARCHAR (32) NOT NULL,
    DMCELL          INTEGER NOT NULL,
    DMCETR          INTEGER NOT NULL,
    DMCNLL          INTEGER NOT NULL,
    DMCNTR          INTEGER NOT NULL,
    MAP             LONG VARCHAR NOT NULL

CREATE TABLE PLOTMAPS (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    GENMAP          LONG VARCHAR,
    LOCMAP          LONG VARCHAR,
    MISCMAP         LONG VARCHAR,
    PHOTOS          LONG VARCHAR
```

```
CREATE TABLE FED_STATUS (
        FEDSTAT             CHAR (6) NOT NULL,
        FEDSTAT_DEF         VARCHAR (50) NOT NULL,
        FEDSTAT_NOTE        VARCHAR (100)
);

CREATE TABLE STATE_STATUS (
        STATESTAT           CHAR (6) NOT NULL,
        STATESTAT_DEF       VARCHAR (50) NOT NULL,
        STATESTAT_NOTE      VARCHAR (100)
);

CREATE TABLE HERBRIUM (
        INSTALID            CHAR (3) NOT NULL,
        VEGID               CHAR (8),
        FAMILY              CHAR (20),
        GENUS               CHAR (20),
        SPECIES             CHAR (35),
        BAUTHOR             VARCHAR (150),
        VAR_SSP             CHAR (35),
        VARAUTH             VARCHAR (150),
        SYNGENUS            CHAR (20),
        SYNSPP              CHAR (35),
        SYNAUTH             VARCHAR (150),
        SYNVAR_SSP          CHAR (35),
        SYNVARAUTH          VARCHAR (150),
        COMMON              CHAR (40),
        COLLNO              INTEGER NOT NULL,
        COLLDATE            DATE,
        COLLECTOR           VARCHAR (70),
        DETERMIN            CHAR (20),
        LOCALITY            VARCHAR (224),
        COUNTY              VARCHAR (30),
        DMCE                INTEGER,
        DMCN                INTEGER,
        ELEV                INTEGER,
        ASSOSPP             VARCHAR (150),
        SOILTOPO            VARCHAR (150),
        HABIT               CHAR (6),
        ABUNDANCE           INTEGER,
        FEDSTAT             CHAR (6) NOT NULL,
        STATESTAT           CHAR (6) NOT NULL,
        COMMENTS            VARCHAR (175)
 );
```

```
REMARK
\
CHANGE WILDLIFE TABLES TO NEW STANDARD
/
CREATE TABLE BIRDSURV (
      INSTALID              CHAR (3) NOT NULL,
      PLOTID                INTEGER NOT NULL,
      RECDATE               DATE NOT NULL,
      PLOTTYPE              CHAR (8),
      COLLECTOR             VARCHAR (70),
      CLOUD_COVER           INTEGER,
      WIND                  INTEGER,
      TEMP                  INTEGER,
      BIRDNOTE              VARCHAR (100)



CREATE TABLE GENDER_CODE
   (SEX                     CHAR(1) NOT NULL,
    SEX_DEF                 CHAR(35) NOT NULL,
    SEX_NOTE                VARCHAR(100));


CREATE TABLE HERPSURV (
      INSTALID              CHAR (3) NOT NULL,
      PLOTID                INTEGER NOT NULL,
      RECDATE               DATE NOT NULL,
      PLOTTYPE              CHAR (8),
      COLLECTOR             VARCHAR (70),
      AZIMUTH               REAL,
      LOC                   INTEGER,
      TEMPMAX               INTEGER,
      TEMPMIN               INTEGER,
      CLOUD_COVER           INTEGER,
      WIND                  INTEGER,
      HERPNOTE              VARCHAR (100)



CREATE TABLE MATED_STATUS_CODE (
      MATED_STATUS          CHAR (2) NOT NULL,
      MSTATUS_DEF           CHAR (35) NOT NULL,
      MSTATUS_NOTE          VARCHAR (100)
```

```
CREATE TABLE MAMSURV
   (INSTALID            CHAR(3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    PLOTTYPE            CHAR(4),
    COLLECTORS          CHAR(35),
    TRAPS               CHAR(25),
    TRAPNIGHTS          INTEGER,
    BAITS               CHAR(25),
    TEMP_HIGH           INTEGER,
    TEMP_LOW            INTEGER,
    CLOUD_COVER         INTEGER,
    PRECIP              INTEGER,
    MAMNOTE             VARCHAR(100));


CREATE TABLE METHODS_CODE
   (METHOD              CHAR(3) NOT NULL,
    METHOD_DEF          CHAR(35) NOT NULL,
    METHOD_NOTE         VARCHAR(100));


CREATE TABLE POINT_CODE
   (MEASURE_PT          CHAR(2) NOT NULL,
    POINT_DEF           CHAR(35) NOT NULL,
    POINT_NOTE          VARCHAR(100));


INSERT INTO BIRDSURV (INSTALID,PLOTID,RECDATE) SELECT DISTINCT
INSTALID,PLOTID,RECDATE FROM BIRDS;
DELETE FROM BIRDS WHERE VERTID IS NULL;
ALTER TABLE BIRDS RENAME TOTAL NUM;
DELETE FROM BIRDS WHERE NUM IS NULL;

ALTER TABLE BIRDS MODIFY INSTALID NOT NULL;
ALTER TABLE BIRDS MODIFY VERTID NOT NULL;
ALTER TABLE BIRDS MODIFY NUM NOT NULL;

ALTER TABLE BIRDS ADD MATED_STATUS CHAR(8);
ALTER TABLE BIRDS ADD MEASURE_PT CHAR(2);

UPDATE BIRDS SET MATED_STATUS = 'C' WHERE MATED_STATUS IS NULL;
UPDATE BIRDS SET MEASURE_PT = 'C' WHERE MEASURE_PT IS NULL;
```

```
ALTER TABLE BIRDS MODIFY MATED_STATUS NOT NULL;
ALTER TABLE BIRDS MODIFY MEASURE_PT NOT NULL;

INSERT INTO MAMSURV (INSTALID,PLOTID,RECDATE) SELECT DISTINCT
INSTALID,PLOTID,RECDATE FROM MAMMALS;
DELETE FROM MAMMALS WHERE VERTID IS NULL;
ALTER TABLE MAMMALS RENAME TOTAL NUM;
DELETE FROM MAMMALS WHERE NUM IS NULL;
UPDATE MAMMALS SET METHOD = 'U' WHERE METHOD IS NULL;

ALTER TABLE MAMMALS MODIFY INSTALID NOT NULL;
ALTER TABLE MAMMALS MODIFY VERTID NOT NULL;
ALTER TABLE MAMMALS MODIFY NUM NOT NULL;
ALTER TABLE MAMMALS MODIFY METHOD NOT NULL;

ALTER TABLE MAMMALS ADD SEX CHAR(1);
ALTER TABLE MAMMALS ADD RETRAP INTEGER;

UPDATE MAMMALS SET SEX = 'C' WHERE SEX IS NULL;

ALTER TABLE MAMMALS MODIFY SEX NOT NULL;
INSERT INTO HERPSURV (INSTALID,PLOTID,RECDATE) SELECT DISTINCT
INSTALID,PLOTID,RECDATE FROM HERPS;
DELETE FROM HERPS WHERE VERTID IS NULL;
ALTER TABLE HERPS RENAME TOTAL NUM;
DELETE FROM HERPS WHERE NUM IS NULL;
UPDATE HERPS SET METHOD = 'U' WHERE METHOD IS NULL;

ALTER TABLE HERPS MODIFY INSTALID NOT NULL;
ALTER TABLE HERPS MODIFY VERTID NOT NULL;
ALTER TABLE HERPS MODIFY NUM NOT NULL;
ALTER TABLE HERPS MODIFY METHOD NOT NULL;

ALTER TABLE HERPS ADD SEX CHAR(1);
ALTER TABLE HERPS ADD RETRAP INTEGER;

UPDATE HERPS SET SEX = 'C' WHERE SEX IS NULL;

ALTER TABLE HERPS MODIFY SEX NOT NULL;
```

```
INSERT INTO MATED_STATUS_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER"
"*","SINGING MALE",""
"PR","ADULT MALE/FEMALE PAIR",""
"M","NONSINGING MALE",""
"F","FEMALE ONLY",""
"U","UNKNOWN SEX AND AGE",""
"Y","YOUNG OF THE YEAR",""
"FL","FLOCK",""
"C","COMBINED","ALL STATUSES WERE TOTALED AND ENTERED AS ONE
OBSERVATION"
"NR","NOT RECORDED",""
/

INSERT INTO POINT_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"LO","LINE OUT",""
"LI","LINE IN",""
"EP","END POINT",""
"C","COMBINED","ALL POINTS WERE TOTALED AND ENTERED AS ONE OBSERVATION"
"U","UNKNOWN",""
"NR","NOT RECORDED",""
/

INSERT INTO GENDER_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"M","MALE",""
"F","FEMALE",""
"U","UNKNOWN GENDER",""
"C","COMBINED","ALL GENDERS WERE TOTALED AND ENTERED AS ONE OBSERVATION"
"N","NOT RECORDED",""
/
```

```
INSERT INTO METHODS_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"O","OBSERVED",""
"S","SIGNS",""
"T","TRAPPED",""
"C","COMBINED","ALL METHODS WERE TOTALED AND ENTERED AS ONE OBSERVATION"
"U","UNKNOWN",""
"NR","NOT RECORDED",""
/

REMARK
\
TEST TO MAKE SURE COLUMNS ARE CORRECTLY NAMED
USED IF DATABASE HAS BEEN PARTIALLY UPDATED
/
ALTER TABLE BIRDSURV RENAME OBSERVER COLLECTORS;
ALTER TABLE HERPSURV RENAME SURVEYOR COLLECTORS;

ALTER TABLE MATED_STATUS_CODE RENAME STATUS_DEF MSTATUS_DEF;
ALTER TABLE MATED_STATUS_CODE RENAME STATUS_NOTE MSTATUS_NOTE;
ALTER TABLE HERPSURV RENAME SURVEYOR COLLECTORS;

REMARK
\
CREATE VALIDATION TABLES FOR
LANDUSE,MAINTACT,EROSEVID,LINEMON,GNDCOVER
AND LOAD VALIDATION DATA
/
CREATE TABLE AERCOV_CODE (
      AERCOV              CHAR (2) NOT NULL,
      AERCOV_DEF          CHAR (35) NOT NULL,
      AERCOV_NOTE         VARCHAR (100))
/
INSERT INTO AERCOV_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"N","NO AERIAL COVER","NO CANOPY COVER ABOVE THE POINT",
"A","ANNUAL","ONLY ANNUAL COVER",
```

```
"P","PERENNIAL","ONLY PERENNIAL COVER",
"AP","ANNUAL/PERENNIAL","BOTH ANNUAL AND PERENNIAL COVER",
"U","UNKNOWN AERIAL COVER","USUALLY USED WHEN CONVERTING OLD DATA",
"NR","NOT RECORDED","NO CANOPY COVER VALUE WAS ENTERED",
"L","LITTER","LITTER FOUND AT AERIAL HIT",
/
CREATE TABLE DISTURB_CODE (
      DISTURB              CHAR (2) NOT NULL,
      DISTURB_DEF          CHAR (35) NOT NULL,
      DISTURB_NOTE         VARCHAR (100))
/
INSERT INTO DISTURB_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"N","NO DISTURBANCE","NO EVIDENCE OF PHYSICAL DISTURBANCE TO THE SOIL
SURFACE OR CRUSHED VEGETATION",
"R","ROAD","PERMENANT OR SEMIPERMANENT TRAFFIC ROUTE RECEIVING
PERIODIC MAINTENANCE",
"T","TRAIL","SEMIPERMENANT TRAFFIC ROUTE RECEIVING NO MAINTENANCE",
"P","PASS","A RANDOM VEHICLE TRACK THAT DOES NOT FOLLOW AN ESTABLISHED
TRAFFIC PATTERN",
"O","OTHER DISTURBANCE","EVIDENCE OF SOIL DISTURBANCE FROM
NONVEHICULAR SOURCES SUCH AS EXCAVATION, DEMOLITION,BIVOUAC,ETC.",
"PO","PASS/OTHER","A RANDOM VEHICLE TRACK WITH OTHER VISIBLE DISTURBANCE",
"TO","TRAIL/OTHER","SEMIPERMENANT TRAFFIC ROUTE RECEIVING NO
MAINTENANCE WITH OTHER VISIBLE DISTURBANCE",
"NR","NOT RECORDED","NO DISTURBANCE WAS RECORDED (NO DATA COLLECTED)",
"U","UNKNOWN","UNKNOWN DISTURBANCE (USUALLY USED WHEN CONVERTING
OLD DATA)",
/
CREATE TABLE EROS_CODE (
      STATUS               CHAR (16) NOT NULL,
      STATUS_DEF           CHAR (35) NOT NULL,
      STATUS_NOTE          VARCHAR (100))
/
INSERT INTO EROS_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"WAA","ACTIVE GULLY","",
```

```
"WAD","DEBRIS DAM","",
"WAN","NO WATER EROSION","",
"WAP","WATER PEDESTAL PLANT","",
"WAS","SHEET/RILL","",
"WID","DRIFTING","",
"WIN","NO WIND EROSION","",
"WIP","WIND PEDESTAL PLANT","",
"WIS","SCOURING","",
/
CREATE TABLE GNDCOV_CODE (
      GNDCOV              CHAR (2) NOT NULL,
      GNDCOV_DEF          CHAR (35) NOT NULL,
      GNDCOV_NOTE         VARCHAR (100))
/
INSERT INTO GNDCOV_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"B","BARE GROUND","EXPOSED SOIL",
"R","ROCK","ANY ROCK OR GRAVEL >2MM",
"L","LITTER","ANY DETACHED PLANT PART",
"P","PLANT","ANY ATTACHED PART OF ROOTED VASCULAR PLANT",
"M","MICROPHYTE","ANY MOSS, LICHEN OR ALGAE",
"U","UNKNOWN","UNKNOWN GROUND COVER (USUALLY USED WHEN COVERTING
OLD DATA)",
"NR","NOT RECORDED","NO GROUND COVER VALUE ENTERED",
/
CREATE TABLE LANDUSE_CODE (
      LANDUSE             CHAR (16) NOT NULL,
      LANDUSE_DEF         CHAR (35) NOT NULL,
      LANDUSE_NOTE        VARCHAR (100))
/
INSERT INTO LANDUSE_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"MD","DEMOLITION","",
"NGO","GRAZING-OTHER","",
"NGS","GRAZING-SHEEP","",
"MF","FOOT","",
"NGC","GRAZING-CATTLE","",
```

```
"NN","NO NON-MILITARY USE","",
"ME","EXCAVATION","",
"MT","TRACKED","",
"NF","FORESTRY","",
"MW","WHEELED","",
"NH","HAY","",
"MN","NO MILITARY USE","",
"MO","OTHER MILITARY USE","",
"MB","BIVOUAC","",
"NO","OTHER NON-MILITARY USE","",
"NR","ROW CROP","",
"NG","GRAZING","GRAZING OF UNKNOWN TYPE",
/
CREATE TABLE MAINT_CODE (
      MAINTAIN              CHAR (16) NOT NULL,
      MAINTAIN_DEF          CHAR (35) NOT NULL,
      MAINTAIN_NOTE         VARCHAR (100))
/
INSERT INTO MAINT_CODE VALUES(
:1,
:2,
:3)
\
$DATATYPES CHARACTER,CHARACTER,CHARACTER
"MABA","ACCIDENTAL BURN","",
"MABAL","ACCIDENTAL BURN > 1 YEAR","",
"MABAS","ACCIDENTAL BURN < 1 YEAR","",
"MABP","PRESCRIBED BURN","",
"MABPL","PRESCRIBED BURN > 1 YEAR","",
"MABPS","PRESCRIBED BURN < 1 YEAR","",
"MAC","CHEMICAL  APPLICATION","",
"MAM","MOWING","",
"MAN","NO MAINTENANCE","",
"MAO","OTHER MAINTENANCE","",
"MAP","PLANTING","",
"MAS","SEEDING","",
"MAT","TILLAGE","",
/

REMARK
\
CHANGE LANDUSE,MAINTACT,EROSEVID,LINEMON,GNDCOVER DATA
TO NEW STANDARD
/
```

```
UPDATE MAINTACT SET MAINTAIN = 'MABA' WHERE MAINTAIN = 'AC BURN';
UPDATE MAINTACT SET MAINTAIN = 'MABA' WHERE MAINTAIN = 'AC BURN';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AC BURN > 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AC BURN > 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AC BURN >1 YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AC BURN >1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'ACC BURN >1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AX BURN > 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAL' WHERE MAINTAIN = 'AC BURN > 1 YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAS' WHERE MAINTAIN = 'AC BURN < 1 YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAS' WHERE MAINTAIN = 'AC BURN < 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAS' WHERE MAINTAIN = 'AC BURN <1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABAS' WHERE MAINTAIN = 'BURNED';
UPDATE MAINTACT SET MAINTAIN = 'MABP' WHERE MAINTAIN = 'PX BURN';
UPDATE MAINTACT SET MAINTAIN = 'MABP' WHERE MAINTAIN = 'PX BURN';
UPDATE MAINTACT SET MAINTAIN = 'MABP' WHERE MAINTAIN = 'X BURN';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN  >1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN > 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN >1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN >1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN>1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPL' WHERE MAINTAIN = 'PX BURN > 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPS' WHERE MAINTAIN = 'PX BURN  <1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPS' WHERE MAINTAIN = 'PX BURN < 1YR';
UPDATE MAINTACT SET MAINTAIN = 'MABPS' WHERE MAINTAIN = 'PX BURN <1YR';
UPDATE MAINTACT SET MAINTAIN = 'MAC' WHERE MAINTAIN = 'CHEM APP';
UPDATE MAINTACT SET MAINTAIN = 'MAC' WHERE MAINTAIN = 'CHEM APP.';
UPDATE MAINTACT SET MAINTAIN = 'MAM' WHERE MAINTAIN = 'MOWED';
UPDATE MAINTACT SET MAINTAIN = 'MAM' WHERE MAINTAIN = 'MOWING';
UPDATE MAINTACT SET MAINTAIN = 'MAM' WHERE MAINTAIN = 'MOWING';
UPDATE MAINTACT SET MAINTAIN = 'MAM' WHERE MAINTAIN = 'MOWING';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NONE';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NO MAINT';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NO MAINT';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NO MAINT';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NO MAINT.';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = '?';
UPDATE MAINTACT SET MAINTAIN = 'MAN' WHERE MAINTAIN = 'NO MAIN';
UPDATE MAINTACT SET MAINTAIN = 'MAO' WHERE MAINTAIN = 'OTHER';
UPDATE MAINTACT SET MAINTAIN = 'MAO' WHERE MAINTAIN = 'OTHER';
UPDATE MAINTACT SET MAINTAIN = 'MAO' WHERE MAINTAIN = 'OTHER MAINT';
UPDATE MAINTACT SET MAINTAIN = 'MAP' WHERE MAINTAIN = 'PLANTING';
UPDATE MAINTACT SET MAINTAIN = 'MAP' WHERE MAINTAIN = 'PLANTING';
UPDATE MAINTACT SET MAINTAIN = 'MAS' WHERE MAINTAIN = 'SEEDED';
UPDATE MAINTACT SET MAINTAIN = 'MAS' WHERE MAINTAIN = 'SEEDING';
```

```
UPDATE MAINTACT SET MAINTAIN = 'MAS' WHERE MAINTAIN = 'SEEDING';
UPDATE MAINTACT SET MAINTAIN = 'MAS' WHERE MAINTAIN = 'SEEDINGS';
UPDATE MAINTACT SET MAINTAIN = 'MAT' WHERE MAINTAIN = 'TILLAGE';
UPDATE MAINTACT SET MAINTAIN = 'MAT' WHERE MAINTAIN = 'TILLAGE';
UPDATE LANDUSE SET LANDUSE = 'MB' WHERE LANDUSE = 'BIVOUAC';
UPDATE LANDUSE SET LANDUSE = 'MB' WHERE LANDUSE = 'BIVOUAC';
UPDATE LANDUSE SET LANDUSE = 'MB' WHERE LANDUSE = 'BIVOUAC';
UPDATE LANDUSE SET LANDUSE = 'MD' WHERE LANDUSE = 'DEMOLITION';
UPDATE LANDUSE SET LANDUSE = 'MD' WHERE LANDUSE = 'DEMOLITION';
UPDATE LANDUSE SET LANDUSE = 'ME' WHERE LANDUSE = 'EXCAVATION';
UPDATE LANDUSE SET LANDUSE = 'ME' WHERE LANDUSE = 'EXCAVATION';
UPDATE LANDUSE SET LANDUSE = 'MF' WHERE LANDUSE = 'FOOT';
UPDATE LANDUSE SET LANDUSE = 'MF' WHERE LANDUSE = 'FOOT';
UPDATE LANDUSE SET LANDUSE = 'MF' WHERE LANDUSE = 'FOOT';
UPDATE LANDUSE SET LANDUSE = 'MN' WHERE LANDUSE = '?';
UPDATE LANDUSE SET LANDUSE = 'MN' WHERE LANDUSE = 'NO MIL.';
UPDATE LANDUSE SET LANDUSE = 'MN' WHERE LANDUSE = 'NO MIL.';
UPDATE LANDUSE SET LANDUSE = 'MN' WHERE LANDUSE = 'NO MIL.';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER MIL.';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER MIL.';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER MIL. USE';
UPDATE LANDUSE SET LANDUSE = 'MO' WHERE LANDUSE = 'OTHER MIL.';
UPDATE LANDUSE SET LANDUSE = 'MT' WHERE LANDUSE = 'TRACKED';
UPDATE LANDUSE SET LANDUSE = 'MT' WHERE LANDUSE = 'TRACKED';
UPDATE LANDUSE SET LANDUSE = 'MT' WHERE LANDUSE = 'TRACKED';
UPDATE LANDUSE SET LANDUSE = 'MW' WHERE LANDUSE = 'WHEELED';
UPDATE LANDUSE SET LANDUSE = 'MW' WHERE LANDUSE = 'WHEELED';
UPDATE LANDUSE SET LANDUSE = 'MW' WHERE LANDUSE = 'WHEELED';
UPDATE LANDUSE SET LANDUSE = 'NF' WHERE LANDUSE = 'FORESTRY';
UPDATE LANDUSE SET LANDUSE = 'NF' WHERE LANDUSE = 'FORESTRY';
UPDATE LANDUSE SET LANDUSE = 'NF' WHERE LANDUSE = 'FORESTRY';
UPDATE LANDUSE SET LANDUSE = 'NG' WHERE LANDUSE = 'GRAZING';
UPDATE LANDUSE SET LANDUSE = 'NGC' WHERE LANDUSE = 'GRAZING-CATLE';
UPDATE LANDUSE SET LANDUSE = 'NGC' WHERE LANDUSE = 'GRAZING-CATTLE';
UPDATE LANDUSE SET LANDUSE = 'NGC' WHERE LANDUSE = 'GRAZING-CATTLE';
UPDATE LANDUSE SET LANDUSE = 'NGO' WHERE LANDUSE = 'GRAZING-OTHER';
UPDATE LANDUSE SET LANDUSE = 'NGO' WHERE LANDUSE = 'GRAZING-OTHER';
UPDATE LANDUSE SET LANDUSE = 'NGS' WHERE LANDUSE = 'GRAZING-SHEEP';
UPDATE LANDUSE SET LANDUSE = 'NH' WHERE LANDUSE = 'HAY';
UPDATE LANDUSE SET LANDUSE = 'NN' WHERE LANDUSE = 'NO NON-MIL.';
UPDATE LANDUSE SET LANDUSE = 'NN' WHERE LANDUSE = 'NO NON-MIL.';
UPDATE LANDUSE SET LANDUSE = 'NN' WHERE LANDUSE = 'NO NONMIL.';
UPDATE LANDUSE SET LANDUSE = 'NN' WHERE LANDUSE = 'NO NON-MIL';
```

```
UPDATE LANDUSE SET LANDUSE = 'NN' WHERE LANDUSE = 'NO MIL. USE';
UPDATE LANDUSE SET LANDUSE = 'NO' WHERE LANDUSE = 'OTHER NON-MIL';
UPDATE LANDUSE SET LANDUSE = 'NO' WHERE LANDUSE = 'OTHER NON-MIL';
UPDATE LANDUSE SET LANDUSE = 'NO' WHERE LANDUSE = 'OTHER NON-MIL.';
UPDATE LANDUSE SET LANDUSE = 'NO' WHERE LANDUSE = 'OTHER NONMIL.';
UPDATE LANDUSE SET LANDUSE = 'NO' WHERE LANDUSE = 'OTHER NON-MIL.';
UPDATE LANDUSE SET LANDUSE = 'NR' WHERE LANDUSE = 'CROP';
UPDATE LANDUSE SET LANDUSE = 'NR' WHERE LANDUSE = 'ROW CROP';
UPDATE EROSEVID SET STATUS = 'WAA' WHERE STATUS = 'ACTIVE GULLY';
UPDATE EROSEVID SET STATUS = 'WAA' WHERE STATUS = 'ACTIVE GULLY';
UPDATE EROSEVID SET STATUS = 'WAA' WHERE STATUS = 'ACTIVE GULLY';
UPDATE EROSEVID SET STATUS = 'WAA' WHERE STATUS = 'GULLY';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAM';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAM';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAM';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAMS';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAMS';
UPDATE EROSEVID SET STATUS = 'WAD' WHERE STATUS = 'DEBRIS DAMS';
UPDATE EROSEVID SET STATUS = 'WAN' WHERE STATUS = 'NO WATER EROSION';
UPDATE EROSEVID SET STATUS = 'WAN' WHERE STATUS = 'NO WATER EROSIN';
UPDATE EROSEVID SET STATUS = 'WAN' WHERE STATUS = 'NO WATER EROSION';
UPDATE EROSEVID SET STATUS = 'WAN' WHERE STATUS = 'NO WATER EROSION';
UPDATE EROSEVID SET STATUS = 'WAN' WHERE STATUS = 'MISS';
UPDATE EROSEVID SET STATUS = 'WAP' WHERE STATUS = 'WATER PED PLNT';
UPDATE EROSEVID SET STATUS = 'WAP' WHERE STATUS = 'WATER PED PLNT';
UPDATE EROSEVID SET STATUS = 'WAP' WHERE STATUS = 'WATER PED PLNT';
UPDATE EROSEVID SET STATUS = 'WAP' WHERE STATUS = 'WAT PED PLNT';
UPDATE EROSEVID SET STATUS = 'WAP' WHERE STATUS = 'WATER PED PLNT.';
UPDATE EROSEVID SET STATUS = 'WAS' WHERE STATUS = 'SHEET RILL';
UPDATE EROSEVID SET STATUS = 'WAS' WHERE STATUS = 'SHEET/RILL';
UPDATE EROSEVID SET STATUS = 'WAS' WHERE STATUS = 'SHEET/RILL';
UPDATE EROSEVID SET STATUS = 'WAS' WHERE STATUS = 'SHEET/RILL';
UPDATE EROSEVID SET STATUS = 'WID' WHERE STATUS = 'DRIFTING';
UPDATE EROSEVID SET STATUS = 'WIN' WHERE STATUS = 'NO WIND EROSION';
UPDATE EROSEVID SET STATUS = 'WIN' WHERE STATUS = 'NO WIND EROSION';
UPDATE EROSEVID SET STATUS = 'WIN' WHERE STATUS = 'NO WIND EROSION';
UPDATE EROSEVID SET STATUS = 'WIP' WHERE STATUS = 'WIND PED PLNT';
UPDATE EROSEVID SET STATUS = 'WIP' WHERE STATUS = 'WIND PED PLNT';
UPDATE EROSEVID SET STATUS = 'WIS' WHERE STATUS = 'SCOURING';
UPDATE EROSEVID SET STATUS = 'WIS' WHERE STATUS = 'SCOURING';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = ' ';
UPDATE LINEMON SET AERCOV = 'A' WHERE AERCOV = 'A';
UPDATE LINEMON SET AERCOV = 'AP' WHERE AERCOV = 'AP';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'B';
```

```
UPDATE LINEMON SET AERCOV = 'U' WHERE AERCOV = 'H2';
UPDATE LINEMON SET AERCOV = 'L' WHERE AERCOV = 'L';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'M';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'N';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'NN';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'NP';
UPDATE LINEMON SET AERCOV = 'P' WHERE AERCOV = 'P';
UPDATE LINEMON SET AERCOV = 'P' WHERE AERCOV = 'P/';
UPDATE LINEMON SET AERCOV = 'AP' WHERE AERCOV = 'PA';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'PN';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'R';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'T';
UPDATE LINEMON SET AERCOV = 'A' WHERE AERCOV = 'A';
UPDATE LINEMON SET AERCOV = 'AP' WHERE AERCOV = 'AP';
UPDATE LINEMON SET AERCOV = 'N' WHERE AERCOV = 'N';
UPDATE LINEMON SET AERCOV = 'P' WHERE AERCOV = 'P';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = ' ';
UPDATE GNDCOVER SET DISTURB = 'U' WHERE DISTURB = 'H2';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'L';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'M';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'N';
UPDATE GNDCOVER SET DISTURB = 'O' WHERE DISTURB = 'O';
UPDATE GNDCOVER SET DISTURB = 'P' WHERE DISTURB = 'P';
UPDATE GNDCOVER SET DISTURB = 'PO' WHERE DISTURB = 'PO';
UPDATE GNDCOVER SET DISTURB = 'R' WHERE DISTURB = 'R';
UPDATE GNDCOVER SET DISTURB = 'T' WHERE DISTURB = 'T';
UPDATE GNDCOVER SET DISTURB = 'TO' WHERE DISTURB = 'TO';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'W';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'X';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'LT';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'N';
UPDATE GNDCOVER SET DISTURB = 'O' WHERE DISTURB = 'O';
UPDATE GNDCOVER SET DISTURB = 'O' WHERE DISTURB = 'OR';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = '0';
UPDATE GNDCOVER SET DISTURB = 'P' WHERE DISTURB = 'P';
UPDATE GNDCOVER SET DISTURB = 'R' WHERE DISTURB = 'R';
UPDATE GNDCOVER SET DISTURB = 'T' WHERE DISTURB = 'T';
UPDATE GNDCOVER SET DISTURB = 'T' WHERE DISTURB = 'TR';
UPDATE GNDCOVER SET DISTURB = 'N' WHERE DISTURB = 'X';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = ' ';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'AT';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'B';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'BB';
UPDATE LINEMON SET GNDCOV = 'L' WHERE GNDCOV = 'FL';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'G';
```

```
UPDATE LINEMON SET GNDCOV = 'U' WHERE GNDCOV = 'H2';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'K';
UPDATE LINEMON SET GNDCOV = 'L' WHERE GNDCOV = 'L';
UPDATE LINEMON SET GNDCOV = 'M' WHERE GNDCOV = 'M';
UPDATE LINEMON SET GNDCOV = 'M' WHERE GNDCOV = 'MO';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'N';
UPDATE LINEMON SET GNDCOV = 'P' WHERE GNDCOV = 'P';
UPDATE LINEMON SET GNDCOV = 'R' WHERE GNDCOV = 'R';
UPDATE LINEMON SET GNDCOV = 'P' WHERE GNDCOV = 'T';
UPDATE LINEMON SET GNDCOV = 'L' WHERE GNDCOV = 'TL';
UPDATE LINEMON SET GNDCOV = 'P' WHERE GNDCOV = 'TR';
UPDATE LINEMON SET GNDCOV = 'P' WHERE GNDCOV = 'V';
UPDATE LINEMON SET GNDCOV = 'B' WHERE GNDCOV = 'B';
UPDATE LINEMON SET GNDCOV = 'L' WHERE GNDCOV = 'L';
UPDATE LINEMON SET GNDCOV = 'P' WHERE GNDCOV = 'P';
UPDATE LINEMON SET GNDCOV = 'R' WHERE GNDCOV = 'R';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = ' ';
UPDATE LINEMON SET DISTURB = 'U' WHERE DISTURB = 'H2';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'L';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'M';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'N';
UPDATE LINEMON SET DISTURB = 'O' WHERE DISTURB = 'O';
UPDATE LINEMON SET DISTURB = 'P' WHERE DISTURB = 'P';
UPDATE LINEMON SET DISTURB = 'PO' WHERE DISTURB = 'PO';
UPDATE LINEMON SET DISTURB = 'R' WHERE DISTURB = 'R';
UPDATE LINEMON SET DISTURB = 'T' WHERE DISTURB = 'T';
UPDATE LINEMON SET DISTURB = 'TO' WHERE DISTURB = 'TO';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'W';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'X';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'LT';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'N';
UPDATE LINEMON SET DISTURB = 'O' WHERE DISTURB = 'O';
UPDATE LINEMON SET DISTURB = 'O' WHERE DISTURB = 'OR';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = '0';
UPDATE LINEMON SET DISTURB = 'P' WHERE DISTURB = 'P';
UPDATE LINEMON SET DISTURB = 'R' WHERE DISTURB = 'R';
UPDATE LINEMON SET DISTURB = 'T' WHERE DISTURB = 'T';
UPDATE LINEMON SET DISTURB = 'T' WHERE DISTURB = 'TR';
UPDATE LINEMON SET DISTURB = 'N' WHERE DISTURB = 'X';

REMARK
\
REBUILD INDEXES AND KEYS
/
```

```
CREATE UNIQUE INDEX AERCOV_CODE_KEY ON AERCOV_CODE (
      AERCOV);

CREATE UNIQUE INDEX BIRDSURV_KEY ON BIRDSURV (
      INSTALID,
      PLOTID,
      RECDATE);

CREATE UNIQUE INDEX CLIMATESTN_KEY ON CLIMATESTATIONS (
      INSTALID,
      STATION);

CREATE UNIQUE INDEX DISTURB_CODE_KEY ON DISTURB_CODE (
      DISTURB);

CREATE UNIQUE INDEX EROS_CODE_KEY ON EROS_CODE (
      STATUS);

CREATE UNIQUE INDEX FED_STATUS_KEY ON FED_STATUS (
      FEDSTAT);

CREATE UNIQUE INDEX GENDER_CODE_KEY ON GENDER_CODE (
      SEX);

CREATE UNIQUE INDEX GNDCOV_CODE_KEY ON GNDCOV_CODE (
      GNDCOV);

CREATE UNIQUE INDEX GROUPING_KEY ON GROUPING (
      PLOTID,
      INSTALID);

CREATE UNIQUE INDEX HERPSURV_KEY ON HERPSURV (
      INSTALID,
      PLOTID,
      RECDATE);

CREATE UNIQUE INDEX INSTMAST_KEY ON INSTMAST (
      INSTALID);

CREATE UNIQUE INDEX LANDUSE_CODE_KEY ON LANDUSE_CODE (
      LANDUSE);

CREATE UNIQUE INDEX MAINT_CODE_KEY ON MAINT_CODE (
      MAINTAIN);
```

```
CREATE UNIQUE INDEX MAMSURV_KEY ON MAMSURV (
      INSTALID,
      PLOTID,
      RECDATE);

CREATE UNIQUE INDEX MATED_STATUS_KEY ON MATED_STATUS_CODE (
      MATED_STATUS);

CREATE UNIQUE INDEX METHODS_CODE_KEY ON METHODS_CODE (
      METHOD);

CREATE UNIQUE INDEX PLNTLIST_KEY ON PLNTLIST (
      VEGID);

CREATE UNIQUE INDEX PLOTMAST_KEY ON PLOTMAST (
      INSTALID,
      PLOTID);

CREATE UNIQUE INDEX PLOTSURV_KEY ON PLOTSURV (
      INSTALID,
      PLOTID,
      RECDATE);

CREATE UNIQUE INDEX POINT_CODE_KEY ON POINT_CODE (
      MEASURE_PT);

CREATE UNIQUE INDEX STATE_STATUS_KEY ON STATE_STATUS (
      STATESTAT);

CREATE UNIQUE INDEX VERTLIST_KEY ON VERTLIST (
      VERTID);

ALTER TABLE INSTMAST
      PRIMARY KEY (INSTALID);

ALTER TABLE PLOTMAST
      PRIMARY KEY (INSTALID, PLOTID);

ALTER TABLE PLOTSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE HERPSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);
```

```
ALTER TABLE MAMSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE BIRDSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE METHODS_CODE
      PRIMARY KEY (METHOD);

ALTER TABLE GENDER_CODE
      PRIMARY KEY (SEX);

ALTER TABLE POINT_CODE
      PRIMARY KEY (MEASURE_PT);

ALTER TABLE MATED_STATUS_CODE
      PRIMARY KEY (MATED_STATUS);

ALTER TABLE DISTURB_CODE
      PRIMARY KEY (DISTURB);

ALTER TABLE AERCOV_CODE
      PRIMARY KEY (AERCOV);

ALTER TABLE GNDCOV_CODE
      PRIMARY KEY (GNDCOV);

ALTER TABLE LANDUSE_CODE
      PRIMARY KEY (LANDUSE);

ALTER TABLE EROS_CODE
      PRIMARY KEY (STATUS);

ALTER TABLE MAINT_CODE
      PRIMARY KEY (MAINTAIN);

ALTER TABLE GROUPING
      PRIMARY KEY (PLOTID, INSTALID);

ALTER TABLE CLIMATESTATIONS
      PRIMARY KEY (INSTALID, STATION);

ALTER TABLE FED_STATUS
      PRIMARY KEY (FEDSTAT);
```

```
ALTER TABLE STATE_STATUS
      PRIMARY KEY (STATESTAT);

ALTER TABLE PLOTMAST
            FOREIGN KEY FK_PMAST (INSTALID)
            REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE PLOTSURV
            FOREIGN KEY FK_PSRV (INSTALID, PLOTID)
            REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE ENVCONST
            FOREIGN KEY FK_EC (INSTALID)
            REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE GROUPING
            FOREIGN KEY FK_GRP (INSTALID, PLOTID)
            REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE HERPSURV
            FOREIGN KEY FK_HSRV (INSTALID)
            REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE MAMSURV
            FOREIGN KEY FK_MSRV (INSTALID)
            REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE BIRDSURV
            FOREIGN KEY FK_BSRV (INSTALID)
            REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE HERPS
            FOREIGN KEY FK_HRPS1 (METHOD)
            REFERENCES METHODS_CODE ON DELETE RESTRICT;
ALTER TABLE HERPS
            FOREIGN KEY FK_HRPS2 (INSTALID, PLOTID, RECDATE)
            REFERENCES HERPSURV ON DELETE RESTRICT;
ALTER TABLE HERPS
            FOREIGN KEY FK_HRPS3 (SEX)
            REFERENCES GENDER_CODE ON DELETE RESTRICT;

ALTER TABLE MAMMALS
            FOREIGN KEY FK_MAM1 (METHOD)
            REFERENCES METHODS_CODE ON DELETE RESTRICT;
```

```
ALTER TABLE MAMMALS
        FOREIGN KEY FK_MAM2 (INSTALID, PLOTID, RECDATE)
        REFERENCES MAMSURV ON DELETE RESTRICT;
ALTER TABLE MAMMALS
        FOREIGN KEY FK_MAM3 (SEX)
        REFERENCES GENDER_CODE ON DELETE RESTRICT;

ALTER TABLE BIRDS
        FOREIGN KEY FK_BIRD1 (MEASURE_PT)
        REFERENCES POINT_CODE ON DELETE RESTRICT;
ALTER TABLE BIRDS
        FOREIGN KEY FK_BIRD2 (MATED_STATUS)
        REFERENCES MATED_STATUS_CODE ON DELETE RESTRICT;
ALTER TABLE BIRDS
        FOREIGN KEY FK_BIRD3 (INSTALID, PLOTID, RECDATE)
        REFERENCES BIRDSURV ON DELETE RESTRICT;

ALTER TABLE MAINTACT
        FOREIGN KEY FK_MNT1 (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;
ALTER TABLE MAINTACT
        FOREIGN KEY FK_MNT2 (MAINTAIN)
        REFERENCES MAINT_CODE ON DELETE RESTRICT;

ALTER TABLE LINEMON
        FOREIGN KEY FK_LM1 (DISTURB)
        REFERENCES DISTURB_CODE ON DELETE RESTRICT;
ALTER TABLE LINEMON
        FOREIGN KEY FK_LM2 (AERCOV)
        REFERENCES AERCOV_CODE ON DELETE RESTRICT;
ALTER TABLE LINEMON
        FOREIGN KEY FK_LM3 (GNDCOV)
        REFERENCES GNDCOV_CODE ON DELETE RESTRICT;
ALTER TABLE LINEMON
        FOREIGN KEY FK_LM4 (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE LANDUSE
        FOREIGN KEY FK_LU1 (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;
ALTER TABLE LANDUSE
        FOREIGN KEY FK_LU2 (LANDUSE)
        REFERENCES LANDUSE_CODE ON DELETE RESTRICT;
```

```
ALTER TABLE GNDCOVER
        FOREIGN KEY FK_GND1 (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;
ALTER TABLE GNDCOVER
        FOREIGN KEY FK_GND2 (DISTURB)
        REFERENCES DISTURB_CODE ON DELETE RESTRICT;

ALTER TABLE F_COUNT
        FOREIGN KEY FK_FCNT (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE EROSEVID
        FOREIGN KEY FK_EROS1 (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;
ALTER TABLE EROSEVID
        FOREIGN KEY FK_EROS2 (STATUS)
        REFERENCES EROS_CODE ON DELETE RESTRICT;

ALTER TABLE BELTTRAN
        FOREIGN KEY FK_BELT (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE BELTSURV
        FOREIGN KEY FK_BTSRV (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE AERCOVER
        FOREIGN KEY FK_AER (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE PLOTMAPS
        FOREIGN KEY FK_PMAP (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE HISTORY
        FOREIGN KEY FK_HIST (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE BELTMON
        FOREIGN KEY FK_BM (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE BASALA
        FOREIGN KEY FK_BA (INSTALID, PLOTID, RECDATE)
        REFERENCES PLOTSURV ON DELETE RESTRICT;
```

```
ALTER TABLE SOILSMPL
        FOREIGN KEY FK_SSMPL (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE CLIMATESTATIONS
        FOREIGN KEY FK_CSTNT (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE CLIMATEDATA
        FOREIGN KEY FK_CDATA (INSTALID, STATION)
        REFERENCES CLIMATESTATIONS ON DELETE RESTRICT;

ALTER TABLE MAPS
        FOREIGN KEY FK_MAPS (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE PCSDYEARSUM
        FOREIGN KEY FK_PCSDY (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE EROSION
        FOREIGN KEY FK_ERSN (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE COMMCLASSPLOTSUM
        FOREIGN KEY FK_COMM (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE LANDUSEYEARSUM
        FOREIGN KEY FK_LUYRS (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE PCSDPLOTSUM
        FOREIGN KEY FK_PDPS (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE TACTCONA
        FOREIGN KEY FK_CONA (INSTALID, PLOTID)
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE PCTTYEARSUM
        FOREIGN KEY FK_PCTT (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;
```

```
ALTER TABLE HERBRIUM
        FOREIGN KEY FK_HERB1 (FEDSTAT)
        REFERENCES FED_STATUS ON DELETE RESTRICT;
ALTER TABLE HERBRIUM
        FOREIGN KEY FK_HERB2 (STATESTAT)
        REFERENCES STATE_STATUS ON DELETE RESTRICT;
ALTER TABLE HERBRIUM
        FOREIGN KEY FK_HERB3 (INSTALID)
        REFERENCES INSTMAST ON DELETE RESTRICT;

REMARK
\
UPDATE COMMENTS ON COLUMNS AND TABLES
/
COMMENT ON TABLE AERCOVER IS 'AERIAL DATA FROM LINE TRANSECT
INVENTORY';
COMMENT ON TABLE AERCOV_CODE IS 'MONITORING AERIAL COVER CODE
VALIDATION TABLE';
COMMENT ON TABLE BASALA IS 'BASAL AREA DATA';
COMMENT ON TABLE BELTMON IS 'BELT TRANSECT MONITORING DATA';
COMMENT ON TABLE BELTSURV IS 'PARAMETERS FOR INVENTORY AND
MONITORING BELT TRANSECTS';
COMMENT ON TABLE BELTTRAN IS 'BELT TRANSECT INVENTORY DATA';
COMMENT ON TABLE BIRDS IS 'BIRD DATA FROM WILDLIFE INVENTORY';
COMMENT ON TABLE BIRDSURV IS 'TABLE IDENTIFYING ALL INVENTORIES FOR
BIRDS ON EACH PLOT';
COMMENT ON TABLE CLIMATEDATA IS 'CLIMATE DATA';
COMMENT ON TABLE CLIMATESTATIONS IS 'CLIMATE STATION INFORMATION';
COMMENT ON TABLE COMMCLASSPLOTSUM IS 'PLANT COMMUNITY
CLASSIFICATIONS FOR EACH PLOT';
COMMENT ON TABLE DISTURB_CODE IS 'DISTURBANCE CODE VALIDATION TABLE';
COMMENT ON TABLE ENVCONST IS 'ENVIRONMENTAL CONSTRAINTS';
COMMENT ON TABLE EROSEVID IS 'EROSION EVIDENCE DATA FROM LAND USE
DATA';
COMMENT ON TABLE EROSION IS 'TABLE FOR USLE ESTIMATIONS';
COMMENT ON TABLE EROS_CODE IS 'OBSERVED EROSION CODE VALIDATION
TABLE';
COMMENT ON TABLE FED_STATUS IS 'FEDERAL STATUS VALIDATION TABLE';
COMMENT ON TABLE F_COUNT IS 'OPTIONAL DATA FROM INVENTORY OR
MONITORING';
COMMENT ON TABLE GENDER_CODE IS 'GENDER CODE VALIDATION TABLE';
COMMENT ON TABLE GNDCOVER IS 'GROUND DATA FROM LINE TRANSECT
INVENTORY';
COMMENT ON TABLE GNDCOV_CODE IS 'MONITORING GROUND COVER CODE
VALIDATION TABLE';
```

```
COMMENT ON TABLE GROUPING IS 'DYNAMIC TABLE FOR LCTA FRONT END
ROUTINES';
COMMENT ON TABLE HERBRIUM IS 'FLORISTIC INVENTORY DATA';
COMMENT ON TABLE HERPS IS 'HERP DATA FROM WILDLIFE INVENTORY';
COMMENT ON TABLE HERPSURV IS 'TABLE IDENTIFYING ALL INVENTORIES FOR
HERPS ON EACH PLOT';
COMMENT ON TABLE HISTORY IS 'GENERAL INFORMATIONAL DATA';
COMMENT ON TABLE INSTMAST IS 'MASTER TABLE LISTING LCTA INSTALLATIONS';
COMMENT ON TABLE LANDUSE IS 'MILITARY AND NON-MILITARY LAND USE DATA';
COMMENT ON TABLE LANDUSEYEARSUM IS 'LAND USE SUMMARY DATA BY YEAR';
COMMENT ON TABLE LANDUSE_CODE IS 'LANDUSE CODE VALIDATION TABLE';
COMMENT ON TABLE LINEMON IS 'LINE TRANSECT MONITORING DATA';
COMMENT ON TABLE MAINTACT IS 'MAINTENANCE ACTIVITY DATA';
COMMENT ON TABLE MAINT_CODE IS 'MAINTENANCE ACTIVITY CODE VALIDATION
TABLE';
COMMENT ON TABLE MAMMALS IS 'MAMMAL DATA FROM WILDLIFE INVENTORY';
COMMENT ON TABLE MAMSURV IS 'TABLE IDENTIFYING ALL INVENTORIES FOR
MAMMALS ON EACH PLOT';
COMMENT ON TABLE MATED_STATUS_CODE IS 'BIRD MATED STATUS VALIDATION
TABLE';
COMMENT ON TABLE METHODS_CODE IS 'MAMMAL AND HERP METHODS
VALIDATION TABLE';
COMMENT ON TABLE PCSDPLOTSUM IS 'PLANT COVER, SURFACE DISTURBANCE
SUMMARY DATA BY PLOT';
COMMENT ON TABLE PCSDYEARSUM IS 'PLANT COVER, SURFACE DISTURBANCE
SUMMARY DATA BY YEAR';
COMMENT ON TABLE PCTTYEARSUM IS 'PERCENT OF TOLERANCE (USLE) SUMMARY
DATA BY YEAR';
COMMENT ON TABLE PLNTLIST IS 'MASTER LIST CATALOGING EACH PLANT CODE';
COMMENT ON TABLE PLOTMAPS IS 'MAP IMAGES FOR EACH PLOT';
COMMENT ON TABLE PLOTMAST IS 'MASTER PLOT TABLE [ONE PER LCTA PLOT]';
COMMENT ON TABLE PLOTSURV IS 'TABLE IDENTIFYING ALL INVENTORIES ON
EACH PLOT';
COMMENT ON TABLE POINT_CODE IS 'BIRD DATA COLLECTION LINE LOCATION
VALIDATION TABLE';
COMMENT ON TABLE SOILLS IS 'PLOT SLOPE DATA [USED TO CALCULATE LS IN
USLE]';
COMMENT ON TABLE SOILMAST IS 'MASTER SOIL SERIES TABLE';
COMMENT ON TABLE SOILSMPL IS 'SOIL SAMPLE DATA FROM USDA NATIONAL
SOILS LAB';
COMMENT ON TABLE STATE_STATUS IS 'STATE T&E STATUS VALIDATION TABLE';
COMMENT ON TABLE TACTCONA IS 'TACTICAL CONCEALMENT SUMMARY A';
COMMENT ON TABLE TACTCONB IS 'TACTICAL CONCEALMENT SUMMARY B';
COMMENT ON TABLE TACTCONC IS 'TACTICAL CONCEALMENT SUMMARY C';
```

```
COMMENT ON TABLE VERTLIST IS 'MASTER LIST CATALOGING EACH VERTEBRATE
CODE';

COMMENT ON COLUMN HERBRIUM.ABUNDANCE IS 'RELATIVE ABUNDANCE, 1-5';
COMMENT ON COLUMN PCSDYEARSUM.AC00 IS 'PERCENT OF PLOTS WITH NO
AERIAL CONCEALMENT';
COMMENT ON COLUMN PCSDYEARSUM.AC100 IS 'PERCENT OF PLOTS WITH 100%
AERIAL CONCEALMENT';
COMMENT ON COLUMN PCSDYEARSUM.AC20 IS 'PERCENT OF PLOTS WITH 20%
AERIAL CONCEALMENT';
COMMENT ON COLUMN PCSDYEARSUM.AC40 IS 'PERCENT OF PLOTS WITH 40%
AERIAL CONCEALMENT';
COMMENT ON COLUMN PCSDPLOTSUM.AC4M IS 'NUMBER OF POINTS WITH COVER
ABOVE 4 M';
COMMENT ON COLUMN PCSDYEARSUM.AC60 IS 'PERCENT OF PLOTS WITH 60%
AERIAL CONCEALMENT';
COMMENT ON COLUMN PCSDYEARSUM.AC80 IS 'PERCENT OF PLOTS WITH 80%
AERIAL CONCEALMENT';
COMMENT ON COLUMN LANDUSEYEARSUM.ACCBURN IS 'NUMBER OF PLOTS WITH
ACCIDENTAL BURN';
COMMENT ON COLUMN PCSDYEARSUM.ACMEAN IS 'MEAN AERIAL CONCEALMENT
PERCENT';
COMMENT ON COLUMN PCSDPLOTSUM.ACOBS IS 'NUMBER OF AERIAL
CONCEALMENT PLOTS';
COMMENT ON COLUMN PCSDYEARSUM.ACSTDEV IS 'STANDARD DEVIATION OF
MEAN AERIAL CONCEALMENT PERCENT';
COMMENT ON COLUMN AERCOV_CODE.AERCOV IS 'MONITORING AERIAL COVER
CODE';
COMMENT ON COLUMN LINEMON.AERCOV IS 'MONITORING AERIAL COVER CODE';
COMMENT ON COLUMN AERCOV_CODE.AERCOV_DEF IS 'MONITORING AERIAL
COVER CODE DEFINITION';
COMMENT ON COLUMN AERCOV_CODE.AERCOV_NOTE IS 'AERIAL COVER
CATEGORY NOTE';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN EROSION.ANALYEAR IS 'YEAR FOR RECORDING:ANALYSIS';
COMMENT ON COLUMN LANDUSEYEARSUM.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN PCSDPLOTSUM.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN PCSDYEARSUM.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN PCTTYEARSUM.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
```

```
COMMENT ON COLUMN TACTCONA.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN TACTCONB.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN TACTCONC.ANALYEAR IS 'YEAR FOR
RECORDING:ANALYSIS';
COMMENT ON COLUMN BELTTRAN.AREA IS 'SURFACE AREA OF A VEGETATION
CLUMP';
COMMENT ON COLUMN PLOTSURV.ASPECT IS 'PLOT ASPECT';
COMMENT ON COLUMN HERBRIUM.ASSOSPP IS 'ASSOCIATED SPECIES';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATDB IS 'AERIAL TOP HITS
DWARFSHRUB BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATDC IS 'AERIAL TOP HITS
DWARFSHRUB CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATFA IS 'AERIAL TOP HITS FORB
ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATFP IS 'AERIAL TOP HITS FORB
PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATGA IS 'AERIAL TOP HITS GRASS
ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATGP IS 'AERIAL TOP HITS GRASS
PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATH IS 'AERIAL TOP HITS
HALFSHRUB';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATSB IS 'AERIAL TOP HITS SHRUB
CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATSC IS 'AERIAL TOP HITS SHRUB
CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATTB IS 'AERIAL TOP HITS TREE
BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.ATTC IS 'AERIAL TOP HITS TREE
CONIFER';
COMMENT ON COLUMN VERTLIST.AUTHORS IS 'AUTHOR OF THE SPECIES';
COMMENT ON COLUMN EROSION.AVEMINHT IS 'AVERAGE MINIMUM DRIP HEIGHT';
COMMENT ON COLUMN PLOTMAST.AZIMUTH IS 'PLOT AZIMUTH';
COMMENT ON COLUMN HERPSURV.AZIMUTH IS 'PLOT AZIMUTH';
COMMENT ON COLUMN TACTCONC.B00TO05 IS 'NUMBER OF BROADLEAF TREES IN
0 TO 5 HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.B06TO10 IS 'NUMBER OF BROADLEAF TREES IN
6 TO 10 HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.B11TO15 IS 'NUMBER OF BROADLEAF TREES IN
11 TO 15 HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.B16TO20 IS 'NUMBER OF BROADLEAF TREES IN
16 TO 20 HEIGHT CATEGORY';
```

```
COMMENT ON COLUMN TACTCONC.B21TO40 IS 'NUMBER OF BROADLEAF TREES IN
21 TO 40 HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.B41TO60 IS 'NUMBER OF BROADLEAF TREES IN
41 TO 60 HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.B61TO85 IS 'NUMBER OF BROADLEAF TREES IN
61 TO 85 HEIGHT CATEGORY';
COMMENT ON COLUMN BASALA.BA IS 'BASAL AREA';
COMMENT ON COLUMN MAMSURV.BAITS IS 'BAITS USED FOR SMALL MAMMAL
TRAPPING';
COMMENT ON COLUMN SOILSMPL.BARCLAY IS 'RATION 15 BAR-CLAY';
COMMENT ON COLUMN SOILSMPL.BARWATER IS '15 BAR WATER ON AIR DRY SOIL,
WEIGHT PERCENT';
COMMENT ON COLUMN HERBRIUM.BAUTHOR IS 'AUTHOR OF THE SPECIES';
COMMENT ON COLUMN BELTSURV.BELTHT IS 'BELT TRANSECT BELT HEIGHT';
COMMENT ON COLUMN BELTSURV.BELTWIDE IS 'BELT TRANSECT BELT WIDTH';
COMMENT ON COLUMN TACTCONC.BGT85 IS 'NUMBER OF BROADLEAF TREES IN
GREATER THAN 85 HEIGHT';
COMMENT ON COLUMN BIRDSURV.BIRDNOTE IS 'PLOT NOTE FOR BIRD SURVEY';
COMMENT ON COLUMN LANDUSEYEARSUM.BIV IS 'NUMBER OF BIVOUAC
DISTURBED SITES';
COMMENT ON COLUMN EROSION.C IS 'C VALUE USED IN USLE';
COMMENT ON COLUMN TACTCONC.C00TO05 IS 'NUMBER OF CONIFERS IN 0 TO 5
HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.C06TO10 IS 'NUMBER OF CONIFERS IN 6 TO 10
HEIGHT CATEGORY';
COMMENT ON COLUMN EROSION.C1 IS 'C1 SUBFACTOR OF C (USLE FACTOR)';
COMMENT ON COLUMN TACTCONC.C11TO15 IS 'NUMBER OF CONIFERS IN 11 TO 15
HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.C16TO20 IS 'NUMBER OF CONIFERS IN 16 TO 20
HEIGHT CATEGORY';
COMMENT ON COLUMN EROSION.C2 IS 'C2 SUBFACTOR OF C (USLE FACTOR)';
COMMENT ON COLUMN TACTCONC.C21TO40 IS 'NUMBER OF CONIFERS IN 21 TO 40
HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.C41TO60 IS 'NUMBER OF CONIFERS IN 41 TO 60
HEIGHT CATEGORY';
COMMENT ON COLUMN TACTCONC.C61TO85 IS 'NUMBER OF CONIFERS IN 61 TO 85
HEIGHT CATEGORY';
COMMENT ON COLUMN SOILMAST.CALCKMEAN IS 'MEAN CALCULATED K VALUE
(USLE FACTOR)';
COMMENT ON COLUMN SOILMAST.CALCKSTDEV IS 'STANDARD DEVIATION OF
CALCULATED K VALUE (USLE FACTOR)';
COMMENT ON COLUMN SOILSMPL.CARBLT2MM IS 'CARBONATE, < 2MM FRACTION';
COMMENT ON COLUMN ENVCONST.CASENO IS 'CASE NUMBER';
COMMENT ON COLUMN BELTMON.CAT1TO2 IS 'SHORT-TERM BELT HEIGHT
CATEGORY';
```

```
COMMENT ON COLUMN BELTMON.CAT2TO3 IS 'SHORT-TERM BELT HEIGHT
CATEGORY';
COMMENT ON COLUMN BELTMON.CAT3TO4 IS 'SHORT-TERM BELT HEIGHT
CATEGORY';
COMMENT ON COLUMN BELTMON.CATGT4 IS 'SHORT-TERM BELT HEIGHT
CATEGORY';
COMMENT ON COLUMN BELTMON.CATMINTO1 IS 'SHORT-TERM BELT HEIGHT
CATEGORY';
COMMENT ON COLUMN PCSDPLOTSUM.CCANN IS 'NUMBER OF LOCATION WITH
ONLY ANNUAL COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCANNMEAN IS 'MEAN NUMBER OF
LOCATION WITH ONLY ANNUAL COVER';
COMMENT ON COLUMN PCSDPLOTSUM.CCANNPER IS 'NUMBER OF LOCATION WITH
ANNUAL AND PERENNIAL COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCANNSTDEV IS 'STANDARD DEVIATION OF
NUMBER OF LOCATION WITH ONLY';
COMMENT ON COLUMN PCSDYEARSUM.CCAPMEAN IS 'MEAN NUMBER OF
LOCATION WITH ANNUAL AND PERENNIAL';
COMMENT ON COLUMN PCSDYEARSUM.CCAPSTDEV IS 'STANDARD DEVIATION OF
NUMBER OF LOCATION WITH ANNUAL';
COMMENT ON COLUMN PCSDPLOTSUM.CCNONE IS 'NUMBER OF LOCATION WITH
NO COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCNONEMEAN IS 'MEAN NUMBER OF
LOCATION WITH NO COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCNONESTDEV IS 'STANDARD DEVIATION
OF NUMBER OF LOCATION WITH NO';
COMMENT ON COLUMN PCSDPLOTSUM.CCOBS IS 'NUMBER OF  TOTAL LOCATION
MEASURED';
COMMENT ON COLUMN PCSDPLOTSUM.CCPER IS 'NUMBER OF LOCATION WITH
ONLY PERENNIAL COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCPERMEAN IS 'MEAN NUMBER OF
LOCATION WITH ONLY PERENNIAL COVER';
COMMENT ON COLUMN PCSDYEARSUM.CCPERSTDEV IS 'STANDARD DEVIATION OF
NUMBER OF LOCATION WITH ONLY';
COMMENT ON COLUMN TACTCONC.CGT85 IS 'NUMBER OF CONIFERS GREATER
THAN 85 DM';
COMMENT ON COLUMN LANDUSEYEARSUM.CHEMICAL IS 'NUMBER OF PLOTS WITH
EVIDENCE OF CHEMICAL USE';
COMMENT ON COLUMN VERTLIST.CLASS IS 'VERTEBRATE SPECIES CLASS';
COMMENT ON COLUMN BELTTRAN.CLMPBEGIN IS 'BEGINNING LOCATION OF
VEGETATION CLUMP';
COMMENT ON COLUMN BELTTRAN.CLMPEND IS 'END LOCATION OF VEGETATION
CLUMP';
COMMENT ON COLUMN BIRDSURV.CLOUD_COVER IS 'PERCENT OF CLOUD COVER';
COMMENT ON COLUMN HERPSURV.CLOUD_COVER IS 'PERCENT OF CLOUD COVER';
```

```
COMMENT ON COLUMN MAMSURV.CLOUD_COVER IS 'PERCENT OF CLOUD COVER';
COMMENT ON COLUMN SOILSMPL.CO3CLAY IS 'CO3 CLAY';
COMMENT ON COLUMN HERBRIUM.COLLDATE IS 'HERBARIUM COLLECTION DATE';
COMMENT ON COLUMN BIRDSURV.COLLECTOR IS 'COLLECTOR(S)';
COMMENT ON COLUMN HERPSURV.COLLECTOR IS 'COLLECTOR(S)';
COMMENT ON COLUMN MAMSURV.COLLECTOR IS 'COLLECTOR(S)';
COMMENT ON COLUMN HERBRIUM.COLLECTOR IS 'COLLECTOR(S)';
COMMENT ON COLUMN HERBRIUM.COLLNO IS 'COLLECTION NUMBER';
COMMENT ON COLUMN HERBRIUM.COMMENTS IS 'COMMENTS ON PLANT
CHARACTERISTICS, SITE, HABITAT, ETC.';
COMMENT ON COLUMN VERTLIST.COMMON IS 'VERTEBRATE COMMON NAME';
COMMENT ON COLUMN HERBRIUM.COMMON IS 'VERTEBRATE COMMON NAME';
COMMENT ON COLUMN HERBRIUM.COUNTY IS 'COUNTY WHERE COLLECTED';
COMMENT ON COLUMN SOILSMPL.COURFRAG IS 'COURSE FRAGMENTS (> 2MM),
WEIGHT % OF WHOLE SOIL';
COMMENT ON COLUMN LANDUSEYEARSUM.CROP IS 'NUMBER OF PLOTS WITH
CROP USE';
COMMENT ON COLUMN SOILSMPL.CSAND IS 'SOIL ANALYSIS OF COURSE SAND';
COMMENT ON COLUMN SOILSMPL.CSILT IS 'SOIL ANALYSIS OF COURSE SILT';
COMMENT ON COLUMN LANDUSEYEARSUM.DEBDAM IS 'NUMBER OF PLOTS WITH
DEBRIS DAMS';
COMMENT ON COLUMN PLOTMAST.DECLIN IS 'PLOT DECLINATION';
COMMENT ON COLUMN LANDUSEYEARSUM.DEMO IS 'NUMBER OF PLOTS WITH
DEMOLITION';
COMMENT ON COLUMN HERBRIUM.DETERMIN IS 'DETERMINER OF FINAL
IDENTIFICATION';
COMMENT ON COLUMN DISTURB_CODE.DISTURB IS 'GROUND DISTURBANCE TYPE';
COMMENT ON COLUMN GNDCOVER.DISTURB IS 'GROUND DISTURBANCE TYPE';
COMMENT ON COLUMN LINEMON.DISTURB IS 'GROUND DISTURBANCE TYPE';
COMMENT ON COLUMN DISTURB_CODE.DISTURB_DEF IS 'GROUND DISTURBANCE
CODE DEFINITION';
COMMENT ON COLUMN DISTURB_CODE.DISTURB_NOTE IS 'DISTURBANCE
CATEGORY NOTE';
COMMENT ON COLUMN CLIMATESTATIONS.DMCE IS 'UNIVERSAL TRASVERSE
MERCATOR COORDINATE, EASTING';
COMMENT ON COLUMN PLOTMAST.DMCE IS 'UNIVERSAL TRASVERSE MERCATOR
COORDINATE, EASTING';
COMMENT ON COLUMN HERBRIUM.DMCE IS 'UNIVERSAL TRASVERSE MERCATOR
COORDINATE, EASTING';
COMMENT ON COLUMN CLIMATESTATIONS.DMCN IS 'UNIVERSAL TRASVERSE
MERCATOR COORDINATE, NORTHING';
COMMENT ON COLUMN PLOTMAST.DMCN IS 'UNIVERSAL TRASVERSE MERCATOR
COORDINATE, NORTHING';
COMMENT ON COLUMN HERBRIUM.DMCN IS 'UNIVERSAL TRASVERSE MERCATOR
COORDINATE, NORTHING';
```

```
COMMENT ON COLUMN LANDUSEYEARSUM.DRIFTING IS 'NUMBER OF PLOTS WITH
DRIFTING WIND EROSION';
COMMENT ON COLUMN EROSION.EFFCOVER IS 'EFFECTIVE COVER IN USLE';
COMMENT ON COLUMN HERBRIUM.ELEV IS 'ELEVATION';
COMMENT ON COLUMN LANDUSEYEARSUM.EXCA IS 'NUMBER OF PLOTS WITH
EXCAVATION';
COMMENT ON COLUMN BELTSURV.EXCPTNSP IS 'EXCEPTION SPECIES TO BELT
WIDTH';
COMMENT ON COLUMN PLNTLIST.FAMILY IS 'SPECIES FAMILY';
COMMENT ON COLUMN VERTLIST.FAMILY IS 'SPECIES FAMILY';
COMMENT ON COLUMN HERBRIUM.FAMILY IS 'SPECIES FAMILY';
COMMENT ON COLUMN HERBRIUM.FEDSTAT IS 'FEDERAL STATUS';
COMMENT ON COLUMN FED_STATUS.FEDSTAT IS 'FEDERAL STATUS';
COMMENT ON COLUMN FED_STATUS.FEDSTAT_DEF IS 'FEDERAL STATUS CODE
DEFINITION';
COMMENT ON COLUMN FED_STATUS.FEDSTAT_NOTE IS 'FEDERAL STATUS CODE
NOTES';
COMMENT ON COLUMN TACTCONC.FHDIV IS 'FOLIAR HEIGHT DIVERSITY';
COMMENT ON COLUMN TACTCONC.FHEVEN IS 'FOLIAR HEIGHT EVENNESS';
COMMENT ON COLUMN BIRDS.FLYOVER IS 'BIRD SPECIES FLYOVER (YES OR NO)';
COMMENT ON COLUMN LANDUSEYEARSUM.FOOT IS 'NUMBER OF PLOTS WITH
FOOT TRAFFIC';
COMMENT ON COLUMN LANDUSEYEARSUM.FOREST IS 'NUMBER OF PLOTS WITH
FORESTRY ACTIVITY';
COMMENT ON COLUMN PLNTLIST.FORM1 IS 'PLANT LIFE FORM 1';
COMMENT ON COLUMN PLNTLIST.FORM2 IS 'PLANT LIFE FORM 2';
COMMENT ON COLUMN SOILSMPL.FSAND IS 'SOIL ANALYSIS OF FIND SAND';
COMMENT ON COLUMN SOILSMPL.FSILT IS 'SOIL ANALYSIS OF FIND SILT';
COMMENT ON COLUMN PCSDPLOTSUM.GCBARE IS 'NUMBER OF BARE GROUND
POINTS';
COMMENT ON COLUMN PCSDYEARSUM.GCBAREMEAN IS 'MEAN NUMBER OF BARE
GROUND POINTS';
COMMENT ON COLUMN PCSDYEARSUM.GCBARESTDEV IS 'STANDARD DEVIATION
OF NUMBER OF BARE GROUND';
COMMENT ON COLUMN PCSDYEARSUM.GCLITMEAN IS 'MEAN NUMBER OF POINTS
WITH LITTER';
COMMENT ON COLUMN PCSDYEARSUM.GCLITSTDEV IS 'STANDARD DEVIATION OF
POINTS WITH LITTER';
COMMENT ON COLUMN PCSDPLOTSUM.GCLITTER IS 'STANDARD DEVIATION OF
NUMBER OF POINTS WITH LITTER';
COMMENT ON COLUMN PCSDPLOTSUM.GCMICRO IS 'NUMBER OF POINTS WITH
MICROPHYTES';
COMMENT ON COLUMN PCSDYEARSUM.GCMICROMEAN IS 'MEAN NUMBER OF
POINTS WITH MICROPHYTES';
```

COMMENT ON COLUMN PCSDYEARSUM.GCMICROSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH MICROPHYTES';
COMMENT ON COLUMN PCSDPLOTSUM.GCOBS IS 'TOTAL NUMBER OF GROUND COVER POINTS';
COMMENT ON COLUMN PCSDPLOTSUM.GCPLANT IS 'NUMBER OF POINTS WITH PLANTS';
COMMENT ON COLUMN PCSDYEARSUM.GCPLANTMEAN IS 'MEAN NUMBER OF POINTS WITH PLANTS';
COMMENT ON COLUMN PCSDYEARSUM.GCPLANTSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH PLANTS';
COMMENT ON COLUMN PCSDPLOTSUM.GCROCK IS 'NUMBER OF POINTS WITH ROCKS';
COMMENT ON COLUMN PCSDYEARSUM.GCROCKMEAN IS 'MEAN NUMBER OF POINTS WITH ROCKS';
COMMENT ON COLUMN PCSDYEARSUM.GCROCKSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH ROCKS';
COMMENT ON COLUMN PCSDPLOTSUM.GDNONE IS 'NUMBER OF POINTS WITH NOTHING';
COMMENT ON COLUMN PCSDYEARSUM.GDNONEMEAN IS 'MEAN NUMBER OF POINTS WITH NOTHING';
COMMENT ON COLUMN PCSDYEARSUM.GDNONESTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH NOTHING';
COMMENT ON COLUMN PCSDPLOTSUM.GDOBS IS 'NUMBER OF GROUND DISTURBANCE POINTS';
COMMENT ON COLUMN PCSDPLOTSUM.GDOTHER IS 'NUMBER OF POINTS WITH OTHER DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDOTHMEAN IS 'MEAN NUMBER OF POINTS WITH OTHER DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDOTHSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH OTHER';
COMMENT ON COLUMN PCSDPLOTSUM.GDPASS IS 'NUMBER OF POINTS WITH VEHICLE PASS DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDPASSMEAN IS 'MEAN NUMBER OF POINTS WITH VEHICLE PASS DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDPASSSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH PASS DISTURBANCE';
COMMENT ON COLUMN PCSDPLOTSUM.GDROAD IS 'NUMBER OF POINTS WITH ROAD DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDROADMEAN IS 'MEAN NUMBER OF POINTS WITH ROAD DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDROADSTDEV IS 'STANDARD DEVIATION OF NUMBER OF POINTS WITH ROAD';
COMMENT ON COLUMN PCSDPLOTSUM.GDTRAIL IS 'NUMBER OF POINTS WITH FOOT TRAIL DISTURBANCE';

```
COMMENT ON COLUMN PCSDYEARSUM.GDTRAILMEAN IS 'MEAN NUMBER OF
POINTS WITH FOOT TRAIL DISTURBANCE';
COMMENT ON COLUMN PCSDYEARSUM.GDTRAILSTDEV IS 'STANDARD DEVIATION
OF NUMBER OF POINTS WITH FOOT';
COMMENT ON COLUMN PLOTMAPS.GENMAP IS 'GENERAL PLOT LOCATION MAP';
COMMENT ON COLUMN PLNTLIST.GENUS IS 'SPECIES GENUS';
COMMENT ON COLUMN VERTLIST.GENUS IS 'SPECIES GENUS';
COMMENT ON COLUMN HERBRIUM.GENUS IS 'SPECIES GENUS';
COMMENT ON COLUMN GNDCOV_CODE.GNDCOV IS 'MONITORING GROUND COVER
CODE';
COMMENT ON COLUMN LINEMON.GNDCOV IS 'MONITORING GROUND COVER CODE';
COMMENT ON COLUMN GNDCOV_CODE.GNDCOV_DEF IS 'MONITORING GROUND
COVER CODE DEFINITION';
COMMENT ON COLUMN GNDCOV_CODE.GNDCOV_NOTE IS 'GROUND COVER
CATEGORY NOTE';
COMMENT ON COLUMN LANDUSEYEARSUM.GRAZING IS 'NUMBER OF PLOTS WITH
GRAZING';
COMMENT ON COLUMN LANDUSEYEARSUM.GULLY IS 'NUMBER OF PLOTS WITH
GULLY EROSION';
COMMENT ON COLUMN TACTCONC.H00TO05 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 0 TO 5';
COMMENT ON COLUMN TACTCONC.H06TO10 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 6 TO 10';
COMMENT ON COLUMN TACTCONC.H11TO15 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 11 TO 15';
COMMENT ON COLUMN TACTCONC.H16TO20 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 16 TO 20';
COMMENT ON COLUMN TACTCONC.H21TO40 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 0 TO 5';
COMMENT ON COLUMN TACTCONC.H41TO60 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 41 TO 60';
COMMENT ON COLUMN TACTCONC.H61TO85 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER IN 61 TO 85';
COMMENT ON COLUMN EROSION.HABDIVIS IS 'HABITAT DIVISOR IN USLE';
COMMENT ON COLUMN HERBRIUM.HABIT IS 'HABIT CODE, FROM PLANTS';
COMMENT ON COLUMN LANDUSEYEARSUM.HAY IS 'NUMBER OF PLOTS WITH HAY
USE';
COMMENT ON COLUMN HERPSURV.HERPNOTE IS 'PLOT NOTE FOR HERP SURVEY';
COMMENT ON COLUMN TACTCONC.HGT85 IS 'NUMBER OF LOCATION WITH
HERBACEOUS COVER GREATER THAN 85';
COMMENT ON COLUMN TACTCONA.HT1TO2 IS 'NUMBER OF HITS IN HEIGHT
CATEGORY 1 TO 2 M';
COMMENT ON COLUMN TACTCONA.HT2TO3 IS 'NUMBER OF HITS IN HEIGHT
CATEGORY 2 TO 3 M';
```

```
COMMENT ON COLUMN TACTCONA.HT3TO4 IS 'NUMBER OF HITS IN HEIGHT
CATEGORY 3 TO 4 M';
COMMENT ON COLUMN TACTCONA.HTGT4 IS 'NUMBER OF HITS IN HEIGHT
CATEGORY GREATER THAN 4 M';
COMMENT ON COLUMN TACTCONA.HTMINTO1 IS 'NUMBER OF HITS IN HEIGHT
CATEGORY MINIMUM TO 1 M';
COMMENT ON COLUMN TACTCONC.HWDIV IS 'HARDWOOD DIVERSITY INDEX';
COMMENT ON COLUMN TACTCONC.HWEVEN IS 'HARDWOOD EVENNESS INDEX';
COMMENT ON COLUMN ENVCONST.IMPACT IS 'IMPACT ON TRAINING';
COMMENT ON COLUMN INSTMAST.INLOC IS 'INSTALLATION LOCATION';
COMMENT ON COLUMN INSTMAST.INNAME IS 'INSTALLATION NAME';
COMMENT ON COLUMN INSTMAST.INSIZE IS 'INSTALLATION SIZE';
COMMENT ON COLUMN AERCOVER.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BASALA.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BELTMON.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BELTSURV.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BELTTRAN.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BIRDS.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN COMMCLASSPLOTSUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN EROSEVID.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN EROSION.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN F_COUNT.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN GNDCOVER.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN HERPS.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN HISTORY.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN INSTMAST.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN LANDUSE.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN LANDUSEYEARSUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN LINEMON.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN MAINTACT.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN MAMMALS.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PCSDPLOTSUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PCSDYEARSUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PCTTYEARSUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PLOTMAPS.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PLOTMAST.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN PLOTSURV.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN SOILLS.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN SOILSMPL.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN TACTCONA.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN TACTCONB.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN TACTCONC.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN BIRDSURV.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN HERPSURV.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN MAMSURV.INSTALID IS 'INSTALLATION CODE';
```

```
COMMENT ON COLUMN ENVCONST.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN GROUPING.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN HERBRIUM.INSTALID IS 'INSTALLATION CODE';
COMMENT ON COLUMN HISTORY.INSTNOTE IS 'INSTALLATION NOTE';
COMMENT ON COLUMN PLOTSURV.INVTYPE IS 'INVENTORY TYPE';
COMMENT ON COLUMN EROSION.KCAL IS 'CALCULATED K VALUE (USLE FACTOR)';
COMMENT ON COLUMN EROSION.KCALEROSINDEX IS 'EROSION INDEX USING
CALCULATED K';
COMMENT ON COLUMN EROSION.KPUB IS 'SCS PUBLISHED K VALUE (USLE
FACTOR)';
COMMENT ON COLUMN EROSION.KPUBEROSINDEX IS 'EROSION INDEX USING
PUBLISHED K (USLE FACTOR';
COMMENT ON COLUMN SOILSMPL.LABK IS 'K VALUE CALCULATED WITH SAMPLE
DATA (USLE FACTOR)';
COMMENT ON COLUMN LANDUSE.LANDUSE IS 'PLOT LAND USE CODE';
COMMENT ON COLUMN LANDUSE_CODE.LANDUSE IS 'PLOT LAND USE CODE';
COMMENT ON COLUMN LANDUSE_CODE.LANDUSE_DEF IS 'LANDUSE CODE
DEFINITION';
COMMENT ON COLUMN LANDUSE_CODE.LANDUSE_NOTE IS 'NOTE ON LANDUSE
CODE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEALLOBS IS 'NUMBER OF PLOTS WITH
LAND USE SHOWING EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEALLVIS IS 'NUMBER OF PLOTS WITH
LAND USE OTHER THAN NONE SHOWING EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEWAOBS IS 'NUMBER OF PLOTS WITH
LAND USE SHOWING WATER EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEWAVIS IS 'NUMBER OF PLOTS WITH
LAND USE OTHER THAN NONE SHOWING WATER EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEWIOBS IS 'NUMBER OF PLOTS WITH
LAND USE SHOWING WIND EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.LEWIVIS IS 'NUMBER OF PLOTS WITH
LAND USE OTHER THAN NONE SHOWING WIND EROSION EVIDENCE';
COMMENT ON COLUMN PLNTLIST.LIFE IS 'PLANT LIFE PATTERN';
COMMENT ON COLUMN TACTCONA.LIFEFORM IS 'PLANT LIFE FORM CATEGORY';
COMMENT ON COLUMN TACTCONB.LIFEFORM IS 'PLANT LIFE FORM CATEGORY';
COMMENT ON COLUMN HERPSURV.LOC IS 'LINE TRANSECT LOCATION OF HERP
TRAP';
COMMENT ON COLUMN HERBRIUM.LOCALITY IS 'DESCRIPTION OF GEOGRAPHIC
AREA WHERE COLLECTED';
COMMENT ON COLUMN PLOTMAPS.LOCMAP IS 'SPECIFIC LOCATION MAP';
COMMENT ON COLUMN EROSION.LS0 IS 'LS AT TRANSECT LOCATION 0 (USLE
FACTOR)';
COMMENT ON COLUMN EROSION.LS1 IS 'LS AT TRANSECT LOCATION 50 (USLE
FACTOR)';
```

```
COMMENT ON COLUMN EROSION.LS2 IS 'LS AT TRANSECT LOCATION 100 (USLE
FACTOR)';
COMMENT ON COLUMN EROSION.LSM IS 'MEAN LS OF 3 TRANSECTS (USLE
FACTOR)';
COMMENT ON COLUMN MAINTACT.MAINNOTE IS 'PLOT MAINTENANCE NOTE';
COMMENT ON COLUMN MAINTACT.MAINTAIN IS 'PLOT MAINTENANCE CODE';
COMMENT ON COLUMN MAINT_CODE.MAINTAIN IS 'PLOT MAINTENANCE CODE';
COMMENT ON COLUMN MAINT_CODE.MAINTAIN_DEF IS 'MAINTENANCE CODE
DEFINITION';
COMMENT ON COLUMN MAINT_CODE.MAINTAIN_NOTE IS 'MAINTENANCE ACTIVITY
CODE NOTE';
COMMENT ON COLUMN MAMSURV.MAMNOTE IS 'PLOT NOTE FOR MAMMAL
SURVEY';
COMMENT ON COLUMN LANDUSEYEARSUM.MANONE IS 'NUMBER OF PLOTS WITH
NO MAINTENANCE ACTIVITY';
COMMENT ON COLUMN LANDUSEYEARSUM.MAOBS IS 'NUMBER OF PLOTS WITH
MAINTENANCE RECORDED';
COMMENT ON COLUMN LANDUSEYEARSUM.MAOTHER IS 'NUMBER OF PLOTS WITH
"OTHER" MAINTENANCE';
COMMENT ON COLUMN BIRDS.MATED_STATUS IS 'CODE OF BIRD SPECIES MATED
STATUS';
COMMENT ON COLUMN MATED_STATUS_CODE.MATED_STATUS IS 'CODE OF BIRD
SPECIES MATED STATUS';
COMMENT ON COLUMN COMMCLASSPLOTSUM.MCCCODE IS 'MOST COMMON
COMMUNITY (MCC) CLASSIFICATION CODE';
COMMENT ON COLUMN COMMCLASSPLOTSUM.MCCTYPE IS 'MOST COMMON
COMMUNITY (MCC) CLASSIFICATION TYPE';
COMMENT ON COLUMN LANDUSEYEARSUM.MEALLOBS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES SHOWING EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.MEALLVIS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES OTHER THAN NONE SHOWING EROSION EVIDENCE';
COMMENT ON COLUMN BIRDS.MEASURE_PT IS 'LINE LOCATION OF BIRD SURVEY
DATA LOCATION';
COMMENT ON COLUMN POINT_CODE.MEASURE_PT IS 'LINE LOCATION OF BIRD
SURVEY DATA LOCATION';
COMMENT ON COLUMN HERPS.METHOD IS 'VERTEBRATE COLLECTION METHOD';
COMMENT ON COLUMN MAMMALS.METHOD IS 'VERTEBRATE COLLECTION
METHOD';
COMMENT ON COLUMN METHODS_CODE.METHOD IS 'VERTEBRATE COLLECTION
METHOD';
COMMENT ON COLUMN METHODS_CODE.METHOD_DEF IS 'VERTEBRATE
COLLECTION METHOD CODE DEFINITION';
COMMENT ON COLUMN METHODS_CODE.METHOD_NOTE IS 'VERTEBRATE
COLLECTION NOTES';
```

```
COMMENT ON COLUMN LANDUSEYEARSUM.MEWAOBS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES SHOWING WATER EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.MEWAVIS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES OTHER THAN NONE SHOWING WATER EROSION
EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.MEWIOBS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES SHOWING WIND EROSION EVIDENCE';
COMMENT ON COLUMN LANDUSEYEARSUM.MEWIVIS IS 'NUMBER OF PLOTS WITH
MAINTENANCE ACTIVITIES OTHER THAN NONE SHOWING WIND EROSION
EVIDENCE';
COMMENT ON COLUMN PLOTMAPS.MISCMAP IS 'ADDITIONAL MAPS';
COMMENT ON COLUMN ENVCONST.MITIGATION IS 'MITIGATION STRATEGIES';
COMMENT ON COLUMN LANDUSEYEARSUM.MNONE IS 'NUMBER OF PLOTS WITH
NO MILITARY ACTIVITY';
COMMENT ON COLUMN LANDUSEYEARSUM.MOBS IS 'NUMBER OF PLOTS WITH
MILITARY ACTIVITY RECORDED';
COMMENT ON COLUMN LANDUSEYEARSUM.MOTHER IS 'NUMBER OF PLOTS WITH
"OTHER" MIL ACTIVITY';
COMMENT ON COLUMN LANDUSEYEARSUM.MOW IS 'NUMBER OF PLOTS WITH
MOWING';
COMMENT ON COLUMN SOILSMPL.MSAND IS 'SOIL ANALYSIS OF MEDIUM SAND';
COMMENT ON COLUMN MATED_STATUS_CODE.MSTATUS_DEF IS 'BIRD SPECIES
MATED STATUS CODE';
COMMENT ON COLUMN MATED_STATUS_CODE.MSTATUS_NOTE IS 'MATED STATUS
CODE NOTE';
COMMENT ON COLUMN LANDUSEYEARSUM.NMNONE IS 'NUMBER OF PLOTS WITH
NO NONMILITARY ACTIVITY';
COMMENT ON COLUMN LANDUSEYEARSUM.NMOBS IS 'NUMBER OF PLOTS WITH
NONMILITARY ACTIVITY RECORDED';
COMMENT ON COLUMN LANDUSEYEARSUM.NMOTHER IS 'NUMBER OF PLOTS WITH
NONMILITARY "OTHER" ACTIVITY';
COMMENT ON COLUMN BIRDS.NUM IS 'NUMBER OF BIRD, MAMMAL, OR HERP
SPECIES SITED/TRAPPED';
COMMENT ON COLUMN HERPS.NUM IS 'NUMBER OF BIRD, MAMMAL, OR HERP
SPECIES SITED/TRAPPED';
COMMENT ON COLUMN MAMMALS.NUM IS 'NUMBER OF BIRD, MAMMAL, OR HERP
SPECIES SITED/TRAPPED';
COMMENT ON COLUMN PCTTYEARSUM.OBS IS 'TOTAL NUMBER OF OBSERVATION
PER GROUP';
COMMENT ON COLUMN BELTTRAN.OPT_REAL IS 'OPTIONAL BELT VARIABLE,
USUALLY DBH';
COMMENT ON COLUMN GNDCOVER.OPT_TEXT IS 'OPTIONAL LINE VARIABLE';
COMMENT ON COLUMN LINEMON.OPT_TEXT IS 'OPTIONAL LINE VARIABLE';
COMMENT ON COLUMN F_COUNT.OPT_TEXT1 IS 'OPTIONAL VARIABLE 1';
COMMENT ON COLUMN F_COUNT.OPT_TEXT2 IS 'OPTIONAL VARIABLE 2';
```

```
COMMENT ON COLUMN F_COUNT.OPT_TEXT3 IS 'OPTIONAL VARIABLE 3';
COMMENT ON COLUMN F_COUNT.OPT_TEXT4 IS 'OPTIONAL VARIABLE 4';
COMMENT ON COLUMN F_COUNT.OPT_TEXT5 IS 'OPTIONAL VARIABLE 5';
COMMENT ON COLUMN VERTLIST.ORDERS IS 'ORDER OF THE SPECIES';
COMMENT ON COLUMN SOILSMPL.ORGCARB IS 'WALKLEY-BLACK ORGANIC
CARBON';
COMMENT ON COLUMN SOILSMPL.ORGMATT IS 'SOIL ANALYSIS OF ORGANIC
MATTER';
COMMENT ON COLUMN PLNTLIST.ORIGIN IS 'PLANT ORIGIN (NATIVE:INTROD)';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PADB IS 'PRESENCE:ABSENCE (PA)
DWARFSHRUB BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PADC IS 'PRESENCE:ABSENCE (PA)
DWARFSHRUB CONIFER';
COMMENT ON COLUMN EROSION.PAERCOV IS 'PERCENT AERIAL COVER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PAFA IS 'PRESENCE:ABSENCE (PA)
FORB ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PAFP IS 'PRESENCE:ABSENCE (PA)
FORB PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PAGA IS 'PRESENCE:ABSENCE (PA)
GRASS ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PAGP IS 'PRESENCE:ABSENCE (PA)
GRASS PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PAH IS 'PRESENCE:ABSENCE (PA)
HALFSHRUB';
COMMENT ON COLUMN CLIMATEDATA.PANEVAP IS 'PAN EVAPORATION';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PASB IS 'PRESENCE:ABSENCE (PA)
SHRUB BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PASC IS 'PRESENCE:ABSENCE (PA)
SHRUB CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PATB IS 'PRESENCE:ABSENCE (PA)
TREE BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PATC IS 'PRESENCE:ABSENCE (PA)
TREE CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PCCCODE IS 'PLANT COMMUNITY
CODE CLASSIFICATION';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PCCTYPE IS 'PLANT COMMUNITY
TYPE CLASSIFICATION';
COMMENT ON COLUMN EROSION.PCTTKCAL IS 'USLE PERCENT OF  T USING KCAL';
COMMENT ON COLUMN EROSION.PCTTKPUB IS 'USLE PERCENT OF  T USING KPUB';
COMMENT ON COLUMN BIRDS.PERIOD IS 'PERIOD OF MEASUREMENTS (AM OR PM)';
COMMENT ON COLUMN SOILSMPL.PERM_CLASS IS 'SOIL PERMEABILITY CLASS';
COMMENT ON COLUMN EROSION.PGNDCOV IS 'PERCENT GROUND COVER';
COMMENT ON COLUMN SOILSMPL.PH1TO1 IS 'PH, 1:1 SOIL-WATER SUSPENSION';
COMMENT ON COLUMN SOILSMPL.PH1TO2 IS 'PH, 1:2 SOIL-CACL2 SUSPENSION';
COMMENT ON COLUMN PLOTMAPS.PHOTOS IS 'PLOT PHOTOS';
```

```
COMMENT ON COLUMN LANDUSEYEARSUM.PLANT IS 'NUMBER OF PLOTS WITH
PLANTING';
COMMENT ON COLUMN BELTTRAN.PLANTHT IS 'BELT TRANSECT PLANT HEIGHT';
COMMENT ON COLUMN PLOTMAST.PLDATE IS 'INITIAL PLOT ALLOCATION DATE';
COMMENT ON COLUMN AERCOVER.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BASALA.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BELTMON.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BELTSURV.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BELTTRAN.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BIRDS.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.PLOTID IS 'PLOT IDENTIFICATION
NUMBER';
COMMENT ON COLUMN EROSEVID.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN EROSION.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN F_COUNT.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN GNDCOVER.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN HERPS.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN LANDUSE.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN LINEMON.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN MAINTACT.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN MAMMALS.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN PCSDPLOTSUM.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN PLOTMAPS.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN PLOTMAST.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN PLOTSURV.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN SOILLS.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN SOILSMPL.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN TACTCONA.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN TACTCONB.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN TACTCONC.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN BIRDSURV.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN HERPSURV.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN MAMSURV.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN GROUPING.PLOTID IS 'PLOT IDENTIFICATION NUMBER';
COMMENT ON COLUMN PLOTSURV.PLOTNOTE IS 'PLOT COMMENTS';
COMMENT ON COLUMN PCSDPLOTSUM.PLOTTYPE IS 'PLOTS CORE:SPECIAL USE
FLAG';
COMMENT ON COLUMN PLOTSURV.PLOTTYPE IS 'PLOTS CORE:SPECIAL USE FLAG';
COMMENT ON COLUMN BIRDSURV.PLOTTYPE IS 'PLOTS CORE:SPECIAL USE FLAG';
COMMENT ON COLUMN HERPSURV.PLOTTYPE IS 'PLOTS CORE:SPECIAL USE FLAG';
COMMENT ON COLUMN MAMSURV.PLOTTYPE IS 'PLOTS CORE:SPECIAL USE FLAG';
COMMENT ON COLUMN POINT_CODE.POINT_DEF IS 'LINE LOCATION CODE OF BIRD
SURVEY DATA DEFINITION';
COMMENT ON COLUMN POINT_CODE.POINT_NOTE IS 'NOTE ON MEASURE_PT CODE';
```

```
COMMENT ON COLUMN LANDUSEYEARSUM.PREBURN IS 'NUMBER OF PLOTS WITH
PRESCRIBED BURN';
COMMENT ON COLUMN MAMSURV.PRECIP IS 'PRECIPITATION IN INCHES';
COMMENT ON COLUMN SOILMAST.PUBLK IS 'SCS PUBLISHED K FOR SOIL SERIES
(USLE FACTOR)';
COMMENT ON COLUMN TACTCONB.R00TO05 IS 'NUMBER IN HEIGHT CATEGORY 0
TO 5 DM';
COMMENT ON COLUMN TACTCONB.R06TO10 IS 'NUMBER IN HEIGHT CATEGORY 6
TO 10 DM';
COMMENT ON COLUMN TACTCONB.R11TO15 IS 'NUMBER IN HEIGHT CATEGORY 11
TO 15 DM';
COMMENT ON COLUMN TACTCONB.R16TO20 IS 'NUMBER IN HEIGHT CATEGORY 16
TO 20 DM';
COMMENT ON COLUMN TACTCONB.R21TO40 IS 'NUMBER IN HEIGHT CATEGORY 21
TO 40 DM';
COMMENT ON COLUMN TACTCONB.R41TO60 IS 'NUMBER IN HEIGHT CATEGORY 41
TO 60 DM';
COMMENT ON COLUMN TACTCONB.R61TO85 IS 'NUMBER IN HEIGHT CATEGORY 61
TO 85 DM';
COMMENT ON COLUMN CLIMATEDATA.RAIN IS 'WEEKLY RAIN FALL';
COMMENT ON COLUMN ENVCONST.REALISM IS 'LOSS OF TRAINING REALISM';
COMMENT ON COLUMN AERCOVER.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BASALA.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BELTMON.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BELTSURV.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BELTTRAN.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BIRDS.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN CLIMATEDATA.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN EROSEVID.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN F_COUNT.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN GNDCOVER.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN HERPS.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN HISTORY.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN LANDUSE.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN LINEMON.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN MAINTACT.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN MAMMALS.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN PLOTSURV.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN SOILLS.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN BIRDSURV.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN HERPSURV.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN MAMSURV.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN ENVCONST.RECDATE IS 'PLOT SURVEY DATE';
COMMENT ON COLUMN HISTORY.RECORDER IS 'PLOT RECORDER';
COMMENT ON COLUMN PLOTSURV.RECORDER IS 'PLOT RECORDER';
```

```
COMMENT ON COLUMN ENVCONST.RESEARCH IS 'RESEARCH NEEDS';
COMMENT ON COLUMN ENVCONST.RESTRAINT IS 'ENVIRONMENTAL
CONSTRAINT/RESTRAINT';
COMMENT ON COLUMN HERPS.RETRAP IS 'NUMBER OF RETRAPPED MAMMALS OR
HERPS';
COMMENT ON COLUMN MAMMALS.RETRAP IS 'NUMBER OF RETRAPPED MAMMALS
OR HERPS';
COMMENT ON COLUMN TACTCONB.RGT85 IS 'NUMBER IN HEIGHT CATEGORY
GREATER THAN 85 DM';
COMMENT ON COLUMN EROSION.RVAL IS 'R VALUE FOR RECORDER';
COMMENT ON COLUMN PLOTMAST.RVAL IS 'R VALUE FOR RECORDER';
COMMENT ON COLUMN LANDUSEYEARSUM.SCOURING IS 'NUMBER OF PLOTS WITH
SCOURING EROSION';
COMMENT ON COLUMN LANDUSEYEARSUM.SEED IS 'NUMBER OF PLOTS WITH
SEEDING';
COMMENT ON COLUMN HERPS.SEX IS 'WILDLIFE GENDER CODE';
COMMENT ON COLUMN MAMMALS.SEX IS 'WILDLIFE GENDER CODE';
COMMENT ON COLUMN GENDER_CODE.SEX IS 'WILDLIFE GENDER CODE';
COMMENT ON COLUMN GENDER_CODE.SEX_DEF IS 'GENDER CODE DEFINITION';
COMMENT ON COLUMN GENDER_CODE.SEX_NOTE IS 'NOTE ON GENDER CODE';
COMMENT ON COLUMN LANDUSEYEARSUM.SHEET IS 'NUMBER OF PLOTS WITH
SHEET EROSION';
COMMENT ON COLUMN BELTSURV.SIDE IS 'PLANT BELT SIDE LOCATION';
COMMENT ON COLUMN BELTTRAN.SIDE IS 'PLANT BELT SIDE LOCATION';
COMMENT ON COLUMN BELTTRAN.SIDEDIST IS 'PLANT BELT SIDE DISTANCE';
COMMENT ON COLUMN SOILLS.SLOPE IS 'PLOT SLOPE';
COMMENT ON COLUMN SOILLS.SLPLEN IS 'PLOT SLOPE LENGTH';
COMMENT ON COLUMN SOILMAST.SOILCAT IS 'SOIL CATEGORY NUMBER FOR
RUNNING GRASS OUTPUT';
COMMENT ON COLUMN PLOTSURV.SOILDPTH IS 'AVERAGE PLOT SOIL DEPTH';
COMMENT ON COLUMN SOILMAST.SOILNAME IS 'PLOT SOIL SERIES NAME';
COMMENT ON COLUMN SOILSMPL.SOILNOTE IS 'MISC. SOIL NOTES';
COMMENT ON COLUMN PLOTMAST.SOILSER IS 'PLOT SOIL SERIES CODE';
COMMENT ON COLUMN SOILMAST.SOILSER IS 'PLOT SOIL SERIES CODE';
COMMENT ON COLUMN HERBRIUM.SOILTOPO IS 'GEOLOGY, SOIL, TOPOGRAPHY';
COMMENT ON COLUMN PLNTLIST.SPEC IS 'SPECIES NAME';
COMMENT ON COLUMN VERTLIST.SPEC IS 'SPECIES NAME';
COMMENT ON COLUMN HERBRIUM.SPECIES IS 'HERBRIUM TABLE SPECIES
INFORMATION (EXTENDED)';
COMMENT ON COLUMN TACTCONC.SPPDIV IS 'PLANT SPECIES DIVERSITY INDEX';
COMMENT ON COLUMN TACTCONC.SPPEVEN IS 'PLANT SPECIES EVENNESS INDEX';
COMMENT ON COLUMN TACTCONC.SPPRICH IS 'PLANT SPECIES RICHNESS';
```

```
COMMENT ON COLUMN HERBRIUM.STATESTAT IS 'CURRENT STATUS AS STATE
ENDANGERED (SE), OTHER STATE STATUS';
COMMENT ON COLUMN STATE_STATUS.STATESTAT IS 'CURRENT STATUS AS STATE
ENDANGERED (SE), OTHER STATE STATUS';
COMMENT ON COLUMN STATE_STATUS.STATESTAT_DEF IS 'STATE STATUS CODE
DEFINITION';
COMMENT ON COLUMN STATE_STATUS.STATESTAT_NOTE IS 'STATE STATUS CODE
NOTES';
COMMENT ON COLUMN CLIMATEDATA.STATION IS 'CLIMATE STATION ID';
COMMENT ON COLUMN CLIMATESTATIONS.STATION IS 'CLIMATE STATION ID';
COMMENT ON COLUMN CLIMATESTATIONS.STATIONNAME IS 'CLIMATE STATION
NAME';
COMMENT ON COLUMN EROSEVID.STATUS IS 'OBSERVED EROSION STATUS CODE';
COMMENT ON COLUMN EROS_CODE.STATUS IS 'OBSERVED EROSION STATUS CODE';
COMMENT ON COLUMN EROS_CODE.STATUS_DEF IS 'OBSERVED EROSION CODE
DEFINITION';
COMMENT ON COLUMN EROS_CODE.STATUS_NOTE IS 'NOTE ON EROSION STATUS
CODE';
COMMENT ON COLUMN TACTCONC.STRDIV IS 'STRUCTURAL DIVERSITY INDEX';
COMMENT ON COLUMN TACTCONC.STREVEN IS 'STRUCTURAL DIVERSITY
EVENNESS';
COMMENT ON COLUMN SOILSMPL.STRUCT_CODE IS 'SOIL STRUCTURE CODE USED
TO CALCULATE K-VALUE';
COMMENT ON COLUMN VERTLIST.SUBFAM IS 'VERTEBRATE SUBFAMILY';
COMMENT ON COLUMN VERTLIST.SUBORDER IS 'VERTEBRATE SUBORDER';
COMMENT ON COLUMN PLNTLIST.SUBSPEC IS 'PLANT SUBSPECIES';
COMMENT ON COLUMN PLOTSURV.SURVEYOR IS 'PLOT SURVEYOR';
COMMENT ON COLUMN HERBRIUM.SYNAUTH IS 'AUTHOR OF SYNONYM VARIETY
OR SUBSPECIES';
COMMENT ON COLUMN HERBRIUM.SYNGENUS IS 'SYNONYM GENUS';
COMMENT ON COLUMN PLNTLIST.SYNON IS 'PLANT SYNONYM';
COMMENT ON COLUMN HERBRIUM.SYNSPP IS 'SYNONYM SPECIES';
COMMENT ON COLUMN HERBRIUM.SYNVARAUTH IS 'AUTHOR OF SYNONYM
VARIETY OR SUBSPECIES';
COMMENT ON COLUMN HERBRIUM.SYNVAR_SSP IS 'SYNONYM VARIETY OR
SUBSPECIES';
COMMENT ON COLUMN EROSION.T IS 'SOIL SERIES T VALUE';
COMMENT ON COLUMN SOILMAST.T IS 'SOIL SERIES T VALUE';
COMMENT ON COLUMN PCTTYEARSUM.T00TO50 IS 'PERCENT OF PLOTS WITH T
VALUES FROM 0 TO 50';
COMMENT ON COLUMN PCTTYEARSUM.T100TO150 IS 'PERCENT OF PLOTS WITH T
VALUES FROM 100 TO 150';
```

```
COMMENT ON COLUMN PCTTYEARSUM.T150TO200 IS 'PERCENT OF PLOTS WITH T
VALUES FROM 150 TO 200';
COMMENT ON COLUMN PCTTYEARSUM.T50TO100 IS 'PERCENT OF PLOTS WITH T
VALUES FROM 50 TO 100';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCDB IS 'TOTAL COUNT
DWARFSHRUB BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCDC IS 'TOTAL COUNT
DWARFSHRUB CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCFA IS 'TOTAL COUNT FORB
ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCFP IS 'TOTAL COUNT FORB
PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCGA IS 'TOTAL COUNT GRASS
ANNUAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCGP IS 'TOTAL COUNT GRASS
PERENNIAL';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCH IS 'TOTAL COUNT HALFSHRUB';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCSB IS 'TOTAL COUNT SHRUB
BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCSC IS 'TOTAL COUNT SHRUB
CONIFER';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCTB IS 'TOTAL COUNT TREE
BROADLEAF';
COMMENT ON COLUMN COMMCLASSPLOTSUM.TCTC IS 'TOTAL COUNT TREE
CONIFER';
COMMENT ON COLUMN BIRDSURV.TEMP IS 'TEMPERATURE';
COMMENT ON COLUMN CLIMATEDATA.TEMPMAX IS 'MAXIMUM TEMPERATURE';
COMMENT ON COLUMN HERPSURV.TEMPMAX IS 'MAXIMUM TEMPERATURE';
COMMENT ON COLUMN MAMSURV.TEMPMAX IS 'MAXIMUM TEMPERATURE';
COMMENT ON COLUMN CLIMATEDATA.TEMPMIN IS 'MINIMUM TEMPERATURE';
COMMENT ON COLUMN HERPSURV.TEMPMIN IS 'MINIMUM TEMPERATURE';
COMMENT ON COLUMN MAMSURV.TEMPMIN IS 'MINIMUM TEMPERATURE';
COMMENT ON COLUMN PCTTYEARSUM.TGT200 IS 'PERCENT OF PLOTS WITH T
VALUES GREATER THAN 200';
COMMENT ON COLUMN LANDUSEYEARSUM.TILL IS 'NUMBER OF PLOTS WITH
TILLAGE';
COMMENT ON COLUMN SOILSMPL.TOTCLAY IS 'PERCENT TOTAL CLAY';
COMMENT ON COLUMN SOILSMPL.TOTSAND IS 'PERCENT TOTAL SAND';
COMMENT ON COLUMN SOILSMPL.TOTSILT IS 'PERCENT TOTAL SILT';
COMMENT ON COLUMN LANDUSEYEARSUM.TRACK IS 'PERCENT OF PLOTS WITH
EVIDENCE OF TRACKED VEHICLES';
```

```
COMMENT ON COLUMN PLOTSURV.TRAIN IS 'PLOT TRAINING AREA';
COMMENT ON COLUMN BASALA.TRANLOC IS 'TRANSECT LOCATION';
COMMENT ON COLUMN SOILLS.TRANLOC IS 'TRANSECT LOCATION';
COMMENT ON COLUMN MAMSURV.TRAPNIGHTS IS 'NUMBER OF TRAP NIGHTS
(NUMBER OF TRAPS * NUMBER OF NIGHTS)';
COMMENT ON COLUMN MAMSURV.TRAPS IS 'TYPES OF TRAPS USED FOR SMALL
MAMMAL SURVEY';
COMMENT ON COLUMN PLNTLIST.TSTYPE IS 'BROADLEAF:CONIFEROUS TYPE';
COMMENT ON COLUMN ENVCONST.UNIT IS 'UNITS AFFECTED';
COMMENT ON COLUMN ENVCONST.UPDATENO IS 'UPDATE VERSION OF
INFORMATION';
COMMENT ON COLUMN LANDUSE.USENOTE IS 'LAND USE NOTE';
COMMENT ON COLUMN PLOTMAST.USGS IS 'USGS QUADRANGLE NAME';
COMMENT ON COLUMN EROSION.USLE0KCAL IS 'USLE (AT LOCATION 0 USING
CALCULATED K)';
COMMENT ON COLUMN EROSION.USLE0KPUB IS 'USLE (AT TRANSECT LOCATION
0 USING PUB K)';
COMMENT ON COLUMN EROSION.USLE1KCAL IS 'USLE (AT LOCATION 50 USING
CALCULATED K)';
COMMENT ON COLUMN EROSION.USLE1KPUB IS 'USLE (AT TRANSECT LOCATION
50 USING PUB K)';
COMMENT ON COLUMN EROSION.USLE2KCAL IS 'USLE (AT LOCATION 100 USING
CALCULATED K)';
COMMENT ON COLUMN EROSION.USLE2KPUB IS 'USLE (AT TRANSECT LOCATION
100 USING PUB K)';
COMMENT ON COLUMN EROSION.USLEMKCAL IS 'USLE (MEAN OF 3 TRANSECTS
USING CALCULATED K)';
COMMENT ON COLUMN EROSION.USLEMKPUB IS 'USLE (MEAN OF 3 TRANSECTS
USING PUB K)';
COMMENT ON COLUMN HERBRIUM.VARAUTH IS 'AUTHOR OF VARIETY OR
SUBSPECIES';
COMMENT ON COLUMN PLNTLIST.VARIETY IS 'PLANT VARIETY';
COMMENT ON COLUMN HERBRIUM.VAR_SSP IS 'VARIETY OR SUBSPECIES';
COMMENT ON COLUMN SOILSMPL.VCSAND IS 'SOIL ANALYSIS OF VERY COARSE
SAND';
COMMENT ON COLUMN BELTMON.VEGCOND IS 'PLANT CONDITION';
COMMENT ON COLUMN BELTSURV.VEGCOND IS 'PLANT CONDITION';
COMMENT ON COLUMN BELTTRAN.VEGCOND IS 'PLANT CONDITION';
COMMENT ON COLUMN GNDCOVER.VEGCOND IS 'PLANT CONDITION';
COMMENT ON COLUMN TACTCONA.VEGCOND IS 'PLANT CONDITION';
COMMENT ON COLUMN AERCOVER.VEGHT IS 'AERIAL PLANT HEIGHT NAME';
COMMENT ON COLUMN AERCOVER.VEGID IS 'PLANT SPECIES CODE';
```

```
COMMENT ON COLUMN BELTMON.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN BELTTRAN.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN GNDCOVER.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN PLNTLIST.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN TACTCONA.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN TACTCONB.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN HERBRIUM.VEGID IS 'PLANT SPECIES CODE';
COMMENT ON COLUMN AERCOVER.VEGLOC IS 'TRANSECT LOCATION ALONG LINE';
COMMENT ON COLUMN BELTTRAN.VEGLOC IS 'TRANSECT LOCATION ALONG LINE';
COMMENT ON COLUMN F_COUNT.VEGLOC IS 'TRANSECT LOCATION ALONG LINE';
COMMENT ON COLUMN GNDCOVER.VEGLOC IS 'TRANSECT LOCATION ALONG LINE';
COMMENT ON COLUMN LINEMON.VEGLOC IS 'TRANSECT LOCATION ALONG LINE';
COMMENT ON COLUMN PLOTSURV.VEGTYPE IS 'GENERAL PLOT VEGETATION TYPE';
COMMENT ON COLUMN BIRDS.VERTID IS 'VERTEBRATE SPECIES CODE';
COMMENT ON COLUMN HERPS.VERTID IS 'VERTEBRATE SPECIES CODE';
COMMENT ON COLUMN MAMMALS.VERTID IS 'VERTEBRATE SPECIES CODE';
COMMENT ON COLUMN VERTLIST.VERTID IS 'VERTEBRATE SPECIES CODE';
COMMENT ON COLUMN VERTLIST.VERTNOTE IS 'NOTE ABOUT THE LISTING';
COMMENT ON COLUMN VERTLIST.VERTSTAT IS 'VERTEBRATE STATUS';
COMMENT ON COLUMN SOILSMPL.VFSAND IS 'SOIL ANALYSIS OF VERY FINE SAND';
COMMENT ON COLUMN LANDUSEYEARSUM.WANONE IS 'NUMBER OF PLOTS WITH
NO WATER EROSION';
COMMENT ON COLUMN LANDUSEYEARSUM.WAOBS IS 'NUMBER OF PLOTS WITH
WATER EROSION RECORDED';
COMMENT ON COLUMN LANDUSEYEARSUM.WAPEDPLNT IS 'NUMBER OF PLOTS
WITH WATER PEDESTAL PLANT EROSION';
COMMENT ON COLUMN LANDUSEYEARSUM.WHEEL IS 'NUMBER OF PLOTS WITH
WHEEL TRAFFIC';
COMMENT ON COLUMN BIRDSURV.WIND IS 'WIND SPEED';
COMMENT ON COLUMN HERPSURV.WIND IS 'WIND SPEED';
COMMENT ON COLUMN LANDUSEYEARSUM.WINONE IS 'NUMBER OF PLOTS WITH
NO WIND EROSION';
COMMENT ON COLUMN LANDUSEYEARSUM.WIOBS IS 'NUMBER OF PLOTS WITH
WIND EROSION RECORDED';
COMMENT ON COLUMN LANDUSEYEARSUM.WIPEDPLNT IS 'NUMBER OF PLOTS
WITH WIND PEDESTAL PLANT EROSION';
COMMENT ON COLUMN SOILSMPL.WT20TO75M IS '20-75 MM WEIGHT PERCENTAGE
OF SOIL < 75 MM';
COMMENT ON COLUMN SOILSMPL.WT2TO5MM IS '2-5 MM WEIGHT PERCENTAGE OF
SOIL < 75 MM';
COMMENT ON COLUMN SOILSMPL.WT5TO20MM IS '5-20 MM WEIGHT PERCENTAGE
OF SOIL < 75 MM';
COMMENT ON COLUMN SOILSMPL.YR IS 'SAMPLE YEAR';
```

```
REMARK
\
RECORD NOTE IN HISTORY TABLE THAT UPDATE WAS MADE
REPLACE ??? WITH INSTALATION ID AND ????? WITH YOUR NAME
/
INSERT INTO HISTORY (INSTALID,RECDATE,RECORDER,INSTNOTE)
VALUES (:1,:2,:3,:4)
\
"???","1994-01-01","?????","UPDATED LCTA DATABASE TO NEW STANDARD"
/
```

References

Bruce, T.A., *Designing Quality Databases with IDEF1X Information Models* (Dorset House Publishing, 1992).

Newton, J.J., and D.C. Wahl, eds., *Manual for Data Administration,* NIST Special Publication 500-208 (National Institute of Standards and Technology ([NIST], Gaithersburg, MD, March 1993).

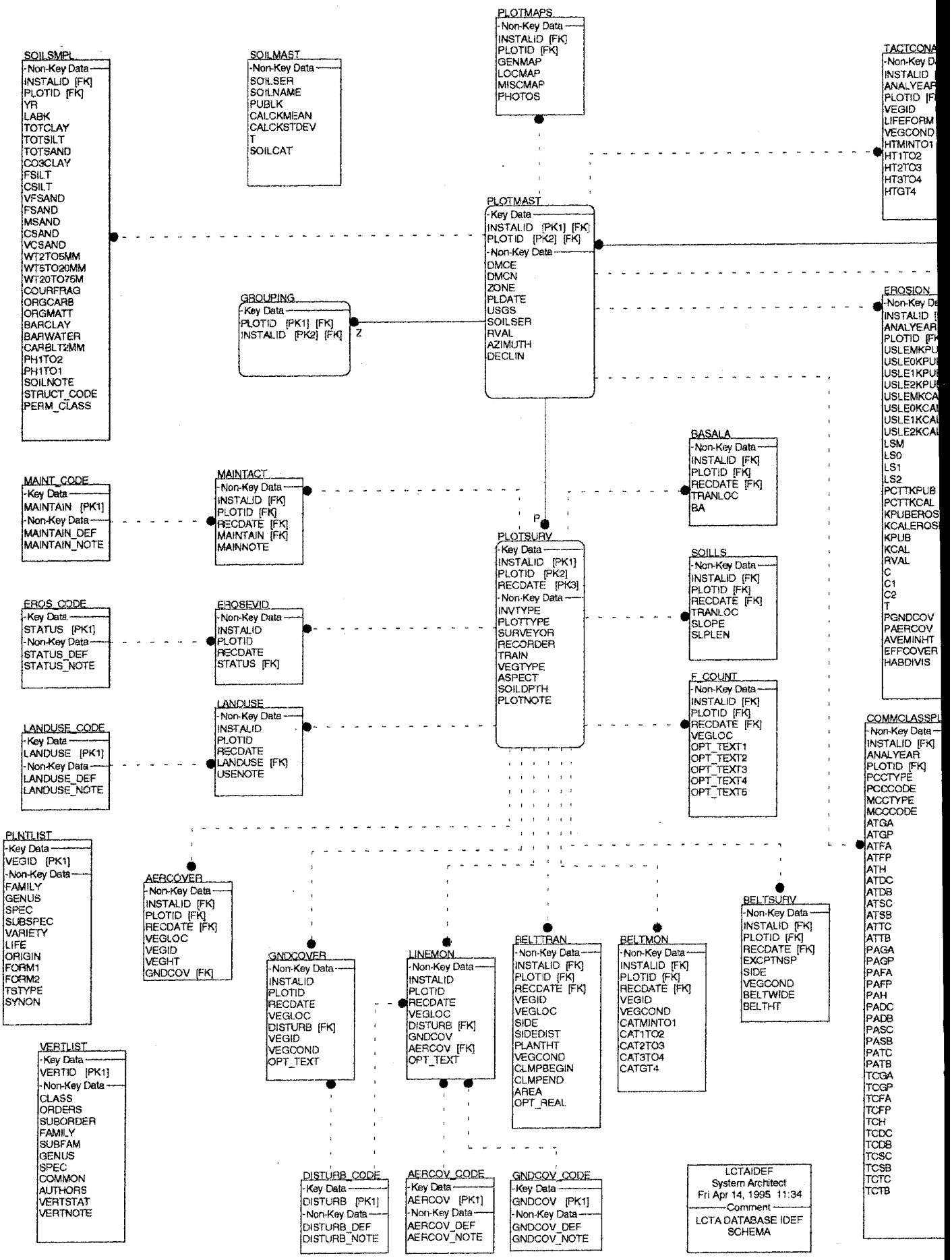
Tazik, D.J., S.D. Warren, V.E. Diersing, R.B. Shaw, R.J. Brozka, C.F. Bagley, and W.R. Whitworth, *U.S. Army Land Condition-Trend Analysis (LCTA) Plot Inventory Field Methods*, Technical Report N-92-03/ADA247931 (U.S. Army Construction Engineering Research Laboratories [USACERL], February 1992).

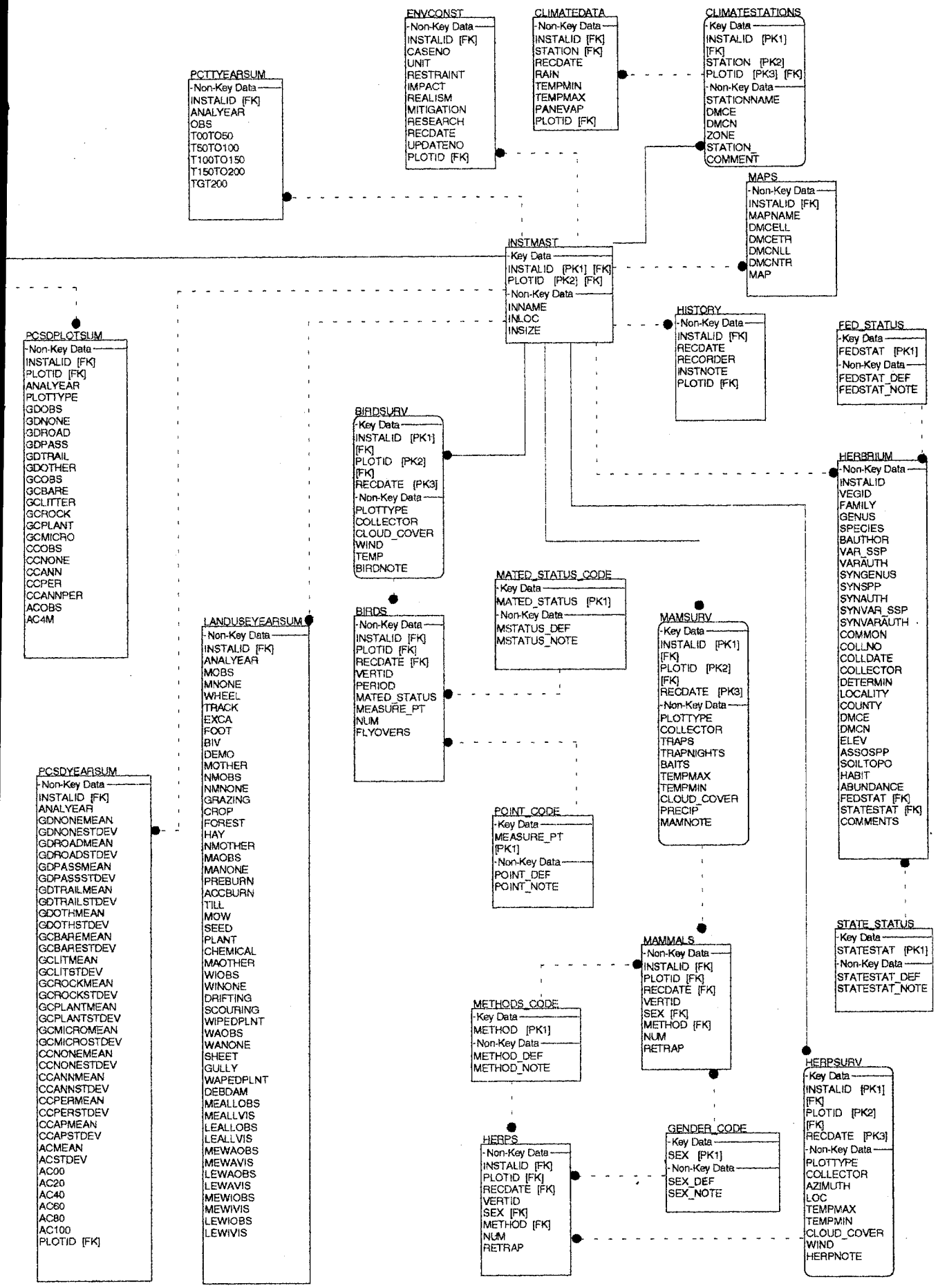
U.S. Department of Agriculture, *National List of Scientific Plant Names, vol 1, List of Plant Names,* SCS-TP-159 (Soil Conservation Service, U.S. Department of Agriculture [USDA], Government Printing Office, Washington, DC, January 1982).

Appendix A: Database Schema

The LCTA database schema is presented in IDEF1X format. Terms and notation are presented here.

Identifying relation	A relationship in which the primary key attributes of the parent table become part of the primary key of the child entity. Represented by a solid line between entities with a solid circle at the child entity end.
Nonidentifying relation	A relationship in which the primary key attributes of the parent do not become part of the primary key of the child. Represented by a dashed line between entities with a filled solid at the child entity end.
Independent entity	An entity that does not depend on any other for its identification. Represented by a squared corner rectangle.
Dependent entity	An entity that depends on another for its identity (the primary key of the child contains attributes inherited from the primary key of the parent). Represented by a rounded corner rectangle.
PK (primary key)	An element or group of elements that act as the unique identifier of the entity. Represented by placing [PK] to the left of the element.
FK (foreign key)	A primary key of a parent entity that is contributed to the child entity through a relationship. Represented by placing [FK] to the left of the element.


PLOTMAPS
Non-Key Data
INSTALID [FK]
PLOTID [FK]
GENMAP
LOCMAP
MISCMAP
PHOTOS
SOILSMPL
Non-Key Data
INSTALID [FK]
PLOTID [FK]
YR
LABK
TOTCLAY
TOTSILT
TOTSAND
CO3CLAY
FSILT
CSILT
VFSAND
FSAND
MSAND
CSAND
VCSAND
WT2TO5MM
WT5TO20MM
WT20TO75M
COURFRAG
ORGCARB
ORGMATT
BARCLAY
BARWATER
CARBLT2MM
PH1TO2
PH1TO1
SOILNOTE
STRUCT_CODE
PERM_CLASS
SOILMAST
Non-Key Data
SOILSER
SOILNAME
PUBLK
CALCKMEAN
CALCKSTDEV
T
SOILCAT
TACTCONA
Non-Key D
INSTALID
ANALYEAR
PLOTID [F
VEGID
LIFEFORM
VEGCOND
HTMINTO1
HT1TO2
HT2TO3
HT3TO4
HTGT4
PLOTMAST
Key Data
INSTALID [PK1] [FK]
PLOTID [PK2] [FK]
Non-Key Data
DMCE
DMCN
ZONE
PLDATE
USGS
SOILSER
RVAL
AZIMUTH
DECLIN
GROUPING
Key Data
PLOTID [PK1] [FK]
INSTALID [PK2] [FK]
Z
EROSION
Non-Key Da
INSTALID
ANALYEAR
PLOTID [FK
USLEMKPU
USLE0KPU
USLE1KPU
USLE2KPU
USLEMKCA
USLE0KCA
USLE1KCA
USLE2KCA
LSM
LS0
LS1
LS2
PCTTKPUB
PCTTKCAL
KPUBEROS
KCALEROS
KPUB
KCAL
RVAL
C
C1
C2
T
PGNDCOV
PAERCOV
AVEMINHT
EFFCOVER
HABDIVIS
BASALA
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
TRANLOC
BA
MAINT_CODE
Key Data
MAINTAIN [PK1]
Non-Key Data
MAINTAIN_DEF
MAINTAIN_NOTE
MAINTACT
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
MAINTAIN [FK]
MAINNOTE
P
PLOTSURV
Key Data
INSTALID [PK1]
PLOTID [PK2]
RECDATE [PK3]
Non-Key Data
INVTYPE
PLOTTYPE
SURVEYOR
RECORDER
TRAIN
VEGTYPE
ASPECT
SOILDPTH
PLOTNOTE
SOILLS
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
TRANLOC
SLOPE
SLPLEN
EROS_CODE
Key Data
STATUS [PK1]
Non-Key Data
STATUS_DEF
STATUS_NOTE
EROSEVID
Non-Key Data
INSTALID
PLOTID
RECDATE
STATUS [FK]
F_COUNT
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VEGLOC
OPT_TEXT1
OPT_TEXT2
OPT_TEXT3
OPT_TEXT4
OPT_TEXT5
LANDUSE
Non-Key Data
INSTALID
PLOTID
RECDATE
LANDUSE [FK]
USENOTE
LANDUSE_CODE
Key Data
LANDUSE [PK1]
Non-Key Data
LANDUSE_DEF
LANDUSE_NOTE
COMMCLASSPL
Non-Key Data
INSTALID [FK]
ANALYEAR
PLOTID [FK]
PCCTYPE
PCCCODE
MCCTYPE
MCCCODE
ATGA
ATGP
ATFA
ATFP
ATH
ATDC
ATDB
ATSC
ATSB
ATTC
ATTB
PAGA
PAGP
PAFA
PAFP
PAH
PADC
PADB
PASC
PASB
PATC
PATB
TCGA
TCGP
TCFA
TCFP
TCH
TCDC
TCDB
TCSC
TCSB
TCTC
TCTB
PLNTLIST
Key Data
VEGID [PK1]
Non-Key Data
FAMILY
GENUS
SPEC
SUBSPEC
VARIETY
LIFE
ORIGIN
FORM1
FORM2
TSTYPE
SYNON
AERCOVER
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VEGLOC
VEGID
VEGHT
GNDCOV [FK]
GNDCOVER
Non-Key Data
INSTALID
PLOTID
RECDATE
VEGLOC
DISTURB [FK]
VEGID
VEGCOND
OPT_TEXT
LINEMON
Non-Key Data
INSTALID
PLOTID
RECDATE
VEGLOC
DISTURB [FK]
GNDCOV
AERCOV [FK]
OPT_TEXT
BELTTRAN
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VEGID
VEGLOC
SIDE
SIDEDIST
PLANTHT
VEGCOND
CLMPBEGIN
CLMPEND
AREA
OPT_REAL
BELTMON
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VEGID
VEGCOND
CATMINTO1
CAT1TO2
CAT2TO3
CAT3TO4
CATGT4
BELTSURV
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
EXCPTNSP
SIDE
VEGCOND
BELTWIDE
BELTHT
VERTLIST
Key Data
VERTID [PK1]
Non-Key Data
CLASS
ORDERS
SUBORDER
FAMILY
SUBFAM
GENUS
SPEC
COMMON
AUTHORS
VERTSTAT
VERTNOTE
DISTURB_CODE
Key Data
DISTURB [PK1]
Non-Key Data
DISTURB_DEF
DISTURB_NOTE
AERCOV_CODE
Key Data
AERCOV [PK1]
Non-Key Data
AERCOV_DEF
AERCOV_NOTE
GNDCOV_CODE
Key Data
GNDCOV [PK1]
Non-Key Data
GNDCOV_DEF
GNDCOV_NOTE
LCTAIDEF
System Architect
Fri Apr 14, 1995 11:34
Comment
LCTA DATABASE IDEF SCHEMA


ENVCONST
Non-Key Data
INSTALID [FK]
CASENO
UNIT
RESTRAINT
IMPACT
REALISM
MITIGATION
RESEARCH
RECDATE
UPDATENO
PLOTID [FK]
CLIMATEDATA
Non-Key Data
INSTALID [FK]
STATION [FK]
RECDATE
RAIN
TEMPMIN
TEMPMAX
PANEVAP
PLOTID [FK]
CLIMATESTATIONS
Key Data
INSTALID [PK1] [FK]
STATION [PK2]
PLOTID [PK3] [FK]
Non-Key Data
STATIONNAME
DMCE
DMCN
ZONE
STATION_COMMENT
PCTTYEARSUM
Non-Key Data
INSTALID [FK]
ANALYEAR
OBS
T00TO50
T50TO100
T100TO150
T150TO200
TGT200
MAPS
Non-Key Data
INSTALID [FK]
MAPNAME
DMCELL
DMCETR
DMCNLL
DMCNTR
MAP
INSTMAST
Key Data
INSTALID [PK1] [FK]
PLOTID [PK2] [FK]
Non-Key Data
INNAME
INLOC
INSIZE
HISTORY
Non-Key Data
INSTALID [FK]
RECDATE
RECORDER
INSTNOTE
PLOTID [FK]
FED_STATUS
Key Data
FEDSTAT [PK1]
Non-Key Data
FEDSTAT_DEF
FEDSTAT_NOTE
PCSDPLOTSUM
Non-Key Data
INSTALID [FK]
PLOTID [FK]
ANALYEAR
PLOTTYPE
GDOBS
GDNONE
GDROAD
GDPASS
GDTRAIL
GDOTHER
GCOBS
GCBARE
GCLITTER
GCROCK
GCPLANT
GCMICRO
CCOBS
CCNONE
CCANN
CCPER
CCANNPER
ACOBS
AC4M
BIRDSURV
Key Data
INSTALID [PK1] [FK]
PLOTID [PK2] [FK]
RECDATE [PK3]
Non-Key Data
PLOTTYPE
COLLECTOR
CLOUD_COVER
WIND
TEMP
BIRDNOTE
HERBRIUM
Non-Key Data
INSTALID
VEGID
FAMILY
GENUS
SPECIES
BAUTHOR
VAR_SSP
VARAUTH
SYNGENUS
SYNSPP
SYNAUTH
SYNVAR_SSP
SYNVARAUTH
COMMON
COLLNO
COLLDATE
COLLECTOR
DETERMIN
LOCALITY
COUNTY
DMCE
DMCN
ELEV
ASSOSPP
SOILTOPO
HABIT
ABUNDANCE
FEDSTAT [FK]
STATESTAT [FK]
COMMENTS
MATED_STATUS_CODE
Key Data
MATED_STATUS [PK1]
Non-Key Data
MSTATUS_DEF
MSTATUS_NOTE
BIRDS
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VERTID
PERIOD
MATED_STATUS
MEASURE_PT
NUM
FLYOVERS
MAMSURV
Key Data
INSTALID [PK1] [FK]
PLOTID [PK2] [FK]
RECDATE [PK3]
Non-Key Data
PLOTTYPE
COLLECTOR
TRAPS
TRAPNIGHTS
BAITS
TEMPMAX
TEMPMIN
CLOUD_COVER
PRECIP
MAMNOTE
LANDUSEYEARSUM
Non-Key Data
INSTALID [FK]
ANALYEAR
MOBS
MNONE
WHEEL
TRACK
EXCA
FOOT
BIV
DEMO
MOTHER
NMOBS
NMNONE
GRAZING
CROP
FOREST
HAY
NMOTHER
MAOBS
MANONE
PREBURN
ACCBURN
TILL
MOW
SEED
PLANT
CHEMICAL
MAOTHER
WIOBS
WINONE
DRIFTING
SCOURING
WIPEDPLNT
WAOBS
WANONE
SHEET
GULLY
WAPEDPLNT
DEBDAM
MEALLOBS
MEALLVIS
LEALLOBS
LEALLVIS
MEWAOBS
MEWAVIS
LEWAOBS
LEWAVIS
MEWIOBS
MEWIVIS
LEWIOBS
LEWIVIS
POINT_CODE
Key Data
MEASURE_PT [PK1]
Non-Key Data
POINT_DEF
POINT_NOTE
STATE_STATUS
Key Data
STATESTAT [PK1]
Non-Key Data
STATESTAT_DEF
STATESTAT_NOTE
PCSDYEARSUM
Non-Key Data
INSTALID [FK]
ANALYEAR
GDNONEMEAN
GDNONESTDEV
GDROADMEAN
GDROADSTDEV
GDPASSMEAN
GDPASSSTDEV
GDTRAILMEAN
GDTRAILSTDEV
GDOTHMEAN
GDOTHSTDEV
GCBAREMEAN
GCBARESTDEV
GCLITMEAN
GCLITSTDEV
GCROCKMEAN
GCROCKSTDEV
GCPLANTMEAN
GCPLANTSTDEV
GCMICROMEAN
GCMICROSTDEV
CCNONEMEAN
CCNONESTDEV
CCANNMEAN
CCANNSTDEV
CCPERMEAN
CCPERSTDEV
CCAPMEAN
CCAPSTDEV
ACMEAN
ACSTDEV
AC00
AC20
AC40
AC60
AC80
AC100
PLOTID [FK]
MAMMALS
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VERTID
SEX [FK]
METHOD [FK]
NUM
RETRAP
METHODS_CODE
Key Data
METHOD [PK1]
Non-Key Data
METHOD_DEF
METHOD_NOTE
HERPSURV
Key Data
INSTALID [PK1] [FK]
PLOTID [PK2] [FK]
RECDATE [PK3]
Non-Key Data
PLOTTYPE
COLLECTOR
AZIMUTH
LOC
TEMPMAX
TEMPMIN
CLOUD_COVER
WIND
HERPNOTE
HERPS
Non-Key Data
INSTALID [FK]
PLOTID [FK]
RECDATE [FK]
VERTID
SEX [FK]
METHOD [FK]
NUM
RETRAP
GENDER_CODE
Key Data
SEX [PK1]
Non-Key Data
SEX_DEF
SEX_NOTE

Appendix B: Entity (table) Information

Entity definitions and structures are presented in this appendix. Syntax is as follows.

TABLE NAME

Description of the data stored in the table

data structure

The data structure is presented in the format output by Systems Architect.* Each data element is followed by a "+" denoting the end of the element information. In some cases information between two "/" will appear. This shows the referential integrity constraint references. For example, INSTALID/FKFROM "PLOTSURV. INSTALID()"/+ is defined as:

the data element INSTALID is a foreign key constrained by the element INSTALID in the table PLOTSURV.

* Popkin Software and Systems Incorporated, 11 Park Place, New York, NY.

LCTA Entity Definitions
LCTA System

AERCOVER

Aerial data from initial inventory and long-term monitoring line transect

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGLOC+
VEGID+
VEGHT

AERCOV_CODE

Short-term monitoring aerial cover code validation table

@1 AERCOV+
AERCOV_DEF+
AERCOV_NOTE

BASALA

Tree basal area data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
TRANLOC+
BA

BELTMON

Short-term monitoring belt transect data (woody vegetation)

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGID+
VEGCOND+
CATMINTO1+
CAT1TO2+
CAT2TO3+
CAT3TO4+
CATGT4

BELTSURV

Parameters for inventory and monitoring belt transects

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
EXCPTNSP+
SIDE+
VEGCOND+
BELTWIDE+
BELTHT

BELTTRAN

Initial inventory and long-term monitoring belt transect data (woody vegetation)

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGID+
VEGLOC+
SIDE+
SIDEDIST+
PLANTHT+
VEGCOND+
CLMPBEGIN+

CLMPEND+
AREA+
OPT_REAL

BIRDS

Bird data from wildlife inventory

INSTALID / FKFROM "BIRDSURV.INSTALID()"/+
PLOTID / FKFROM "BIRDSURV.PLOTID()"/+
RECDATE / FKFROM "BIRDSURV.RECDATE()"/+
VERTID+
PERIOD+
MATED_STATUS / FKFROM "MATED_STATUS_CODE.MATED_STATUS()"/+
MEASURE_PT / FKFROM "POINT_CODE.MEASURE_PT()"/+
NUM+
FLYOVERS

BIRDSURV

Table identifying all inventories for bird data

@1 INSTALID / FKFROM "INSTMAST.INSTALID()"/+
@2 PLOTID+
@3 RECDATE+
PLOTTYPE+
COLLECTOR+
CLOUD_COVER+
WIND+
TEMP+
BIRDNOTE

CLIMATEDATA

Climate Data

INSTALID / FKFROM "CLIMATESTATIONS.INSTALID()"/+
STATION / FKFROM "CLIMATESTATIONS.STATION()"/+
RECDATE+
RAIN+
TEMPMIN+
TEMPMAX+
PANEVAP

CLIMATESTATIONS

Climate station information

@1 INSTALID / FKFROM "INSTMAST.INSTALID()"/+
@2 STATION+
STATIONNAME+
DMCE+
DMCN+
ZONE+
STATION_COMMENT

COMMCLASSPLOTSUM

Plant community classifications for each plot

INSTALID / FKFROM "INSTMAST.INSTALID()" FKFROM "PLOTMAST.INSTALID()"/+
ANALYEAR+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
PCCTYPE+
PCCCODE+
MCCTYPE+
MCCCODE+
ATGA+
ATGP+
ATFA+
ATFP+

ATH+
ATDC+
ATDB+
ATSC+
ATSB+
ATTC+
ATTB+
PAGA+
PAGP+
PAFA+
PAFP+
PAH+
PADC+
PADB+
PASC+
PASB+
PATC+
PATB+
TCGA+
TCGP+
TCFA+
TCFP+
TCH+
TCDC+
TCDB+
TCSC+
TCSB+
TCTC+
TCTB

DISTURB_CODE

Disturbance code validation table

@1 DISTURB+
DISTURB_DEF+
DISTURB_NOTE

ENVCONST

Environmental constraints

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
CASENO+
UNIT+
RESTRAINT+
IMPACT+
REALISM+
MITIGATION+
RESEARCH+
RECDATE+
UPDATENO

EROSEVID

Observed erosion evidence data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
STATUS / FKFROM "EROS_CODE.STATUS()"/

EROSION

Table for Universal Soil Loss Equation (USLE) estimations

INSTALID / FKFROM "INSTMAST.INSTALID()" FKFROM "PLOTMAST.INSTALID()"/+
ANALYEAR+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
USLEMKPUB+
USLE0KPUB+
USLE1KPUB+

USLE2KPUB+
USLEMKCAL+
USLE0KCAL+
USLE1KCAL+
USLE2KCAL+
LSM+
LS0+
LS1+
LS2+
PCTTKPUB+
PCTTKCAL+
KPUBEROSINDEX+
KCALEROSINDEX+
KPUB+
KCAL+
RVAL+
C+
C1+
C2+
T+
PGNDCOV+
PAERCOV+
AVEMINHT+
EFFCOVER+
HABDIVIS

EROS_CODE

Observed erosion evidence code validation table

@1 STATUS+
STATUS_DEF+
STATUS_NOTE

F_COUNT

Optional data for initial from inventory or monitoring (contains user defined attributes)

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGLOC+
OPT_TEXT1+
OPT_TEXT2+
OPT_TEXT3+
OPT_TEXT4+
OPT_TEXT5

GENDER_CODE

Wildlife gender code validation table

@1 SEX+
SEX_DEF+
SEX_NOTE

GNDCOVER

Initial inventory and long-term monitoring ground vegetation data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGLOC+
DISTURB / FKFROM "DISTURB_CODE.DISTURB()"/+
VEGID+
VEGCOND+
OPT_TEXT

GNDCOV_CODE

Short-term monitoring ground cover code validation table

@1 GNDCOV+
GNDCOV_DEF+
GNDCOV_NOTE

GROUPING

Dynamic table for LCTA front end routines (user defined attributes)

@1 PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
@2 INSTALID / FKFROM "PLOTMAST.INSTALID()"/

HERPS

Herp data from wildlife inventory

INSTALID / FKFROM "HERPSURV.INSTALID()"/+
PLOTID / FKFROM "HERPSURV.PLOTID()"/+
RECDATE / FKFROM "HERPSURV.RECDATE()"/+
VERTID+
SEX / FKFROM "GENDER_CODE.SEX()"/+
METHOD / FKFROM "METHODS_CODE.METHOD()"/+
NUM+
RETRAP

HERPSURV

Table identifying all inventories for herp on each plot

@1 INSTALID / FKFROM "INSTMAST.INSTALID()"/+
@2 PLOTID+
@3 RECDATE+
PLOTTYPE+
COLLECTOR+
AZIMUTH+
LOC+
TEMPMAX+
TEMPMIN+
CLOUD_COVER+
WIND+
HERPNOTE

HISTORY

General informational data

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
RECDATE+
RECORDER+
INSTNOTE

INSTMAST

Master listing of all LCTA installations

@1 INSTALID+
INNAME+
INLOC+
INSIZE

LANDUSE

Military and non-military land use data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
LANDUSE / FKFROM "LANDUSE_CODE.LANDUSE()"/+
USENOTE

LANDUSEYEARSUM

Land use summary data by year

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
ANALYEAR+
MOBS+
MNONE+
WHEEL+
TRACK+
EXCA+
FOOT+
BIV+
DEMO+
MOTHER+
NMOBS+
NMNONE+
GRAZING+
CROP+
FOREST+
HAY+
NMOTHER+
MAOBS+
MANONE+
PREBURN+
ACCBURN+
TILL+
MOW+
SEED+
PLANT+
CHEMICAL+
MAOTHER+
WIOBS+
WINONE+
DRIFTING+
SCOURING+
WIPEDPLNT+
WAOBS+
WANONE+
SHEET+
GULLY+
WAPEDPLNT+
DEBDAM+
MEALLOBS+
MEALLVIS+
LEALLOBS+
LEALLVIS+
MEWAOBS+
MEWAVIS+
LEWAOBS+
LEWAVIS+
MEWIOBS+
MEWIVIS+
LEWIOBS+
LEWIVIS

LANDUSE_CODE

Land use code validation table

@1 LANDUSE+
LANDUSE_DEF+
LANDUSE_NOTE

LINEMON

Short-term monitoring line transect data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
VEGLOC+

DISTURB / FKFROM "DISTURB_CODE.DISTURB()"/+
GNDCOV / FKFROM "GNDCOV_CODE.GNDCOV()"/+
AERCOV / FKFROM "AERCOV_CODE.AERCOV()"/+
OPT_TEXT

MAINTACT

Maintenance activity data

INSTALID / FKFROM "PLOTSURV.INSTALID()"/+
PLOTID / FKFROM "PLOTSURV.PLOTID()"/+
RECDATE / FKFROM "PLOTSURV.RECDATE()"/+
MAINTAIN / FKFROM "MAINT_CODE.MAINTAIN()"/+
MAINNOTE

MAINT_CODE

Maintenance activity code validation table

@1 MAINTAIN+
MAINTAIN_DEF+
MAINTAIN_NOTE

MAMMALS

Mammal data from wildlife inventory

INSTALID / FKFROM "MAMSURV.INSTALID()"/+
PLOTID / FKFROM "MAMSURV.PLOTID()"/+
RECDATE / FKFROM "MAMSURV.RECDATE()"/+
VERTID+
SEX / FKFROM "GENDER_CODE.SEX()"/+
METHOD / FKFROM "METHODS_CODE.METHOD()"/+
NUM+
RETRAP

MAMSURV

Table identifying all inventories for mammals on each plot

@1 INSTALID / FKFROM "INSTMAST.INSTALID()"/+
@2 PLOTID+
@3 RECDATE+
PLOTTYPE+
COLLECTOR+
TRAPS+
TRAPNIGHTS+
BAITS+
TEMPMAX+
TEMPMIN+
CLOUD_COVER+
PRECIP+
MAMNOTE

MAPS

Installation GIS maps used to display LCTA data

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
MAPNAME+
DMCELL+
DMCETR+
DMCNLL+
DMCNTR+
MAP

MATED_STATUS_CODE

Bird mated status validation table

@1 MATED_STATUS+

MSTATUS_DEF+
MSTATUS_NOTE

METHODS_CODE

Mammal and herp trapping methods validation table

@1 METHOD+
METHOD_DEF+
METHOD_NOTE

PCSDPLOTSUM

Plant Cover, Surface Disturbance (PCSD) summary data by plot

INSTALID / FKFROM "INSTMAST.INSTALID()" FKFROM "PLOTMAST.INSTALID()"/+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
ANALYEAR+
PLOTTYPE+
GDOBS+
GDNONE+
GDROAD+
GDPASS+
GDTRAIL+
GDOTHER+
GCOBS+
GCBARE+
GCLITTER+
GCROCK+
GCPLANT+
GCMICRO+
CCOBS+
CCNONE+
CCANN+
CCPER+
CCANNPER+
ACOBS+
AC4M

PCSDYEARSUM

Plant Cover, Surface Disturbance (PCSD) summary data by year

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
ANALYEAR+
GDNONEMEAN+
GDNONESTDEV+
GDROADMEAN+
GDROADSTDEV+
GDPASSMEAN+
GDPASSSTDEV+
GDTRAILMEAN+
GDTRAILSTDEV+
GDOTHMEAN+
GDOTHSTDEV+
GCBAREMEAN+
GCBARESTDEV+
GCLITMEAN+
GCLITSTDEV+
GCROCKMEAN+
GCROCKSTDEV+
GCPLANTMEAN+
GCPLANTSTDEV+
GCMICROMEAN+
GCMICROSTDEV+
CCNONEMEAN+
CCNONESTDEV+
CCANNMEAN+
CCANNSTDEV+
CCPERMEAN+
CCPERSTDEV+
CCAPMEAN+

CCAPSTDEV+
ACMEAN+
ACSTDEV+
AC00+
AC20+
AC40+
AC60+
AC80+
AC100

PCTTYEARSUM

Percent of soil loss tolerance summary data by year

INSTALID / FKFROM "INSTMAST.INSTALID()"/+
ANALYEAR+
OBS+
T00TO50+
T50TO100+
T100TO150+
T150TO200+
TGT200

PLNTLIST

Installation master vegetation list

@1 VEGID+
FAMILY+
GENUS+
SPEC+
SUBSPEC+
VARIETY+
LIFE+
ORIGIN+
FORM1+
FORM2+
TSTYPE+
SYNON

PLOTMAPS

Map and photo images for each plot

INSTALID / FKFROM "PLOTMAST.INSTALID()"/+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
GENMAP+
LOCMAP+
MISCMAP+
PHOTOS

PLOTMAST

Master plot table [one per LCTA plot]

@1 INSTALID / FKFROM "GROUPING.INSTALID()" FKFROM "INSTMAST.INSTALID()"/+
@2 PLOTID / FKFROM "GROUPING.PLOTID()"/+
DMCE+
DMCN+
ZONE+
PLDATE+
USGS+
SOILSER+
RVAL+
AZIMUTH+
DECLIN

PLOTSURV

Table identifying all inventories on each plot

@1 INSTALID / FKFROM "PLOTMAST.INSTALID()"/+
@2 PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
@3 RECDATE+
INVTYPE+
PLOTTYPE+
SURVEYOR+
RECORDER+
TRAIN+
VEGTYPE+
ASPECT+
SOILDPTH+
PLOTNOTE

POINT_CODE

Bird data collection line location validation table

@1 MEASURE_PT+
POINT_DEF+
POINT_NOTE

SOILLS

Plot slope data

INSTALID+
PLOTID+
RECDATE+
TRANLOC+
SLOPE+
SLPLEN

SOILMAST

Installation master soil series table

SOILSER+
SOILNAME+
PUBLK+
CALCKMEAN+
CALCKSTDEV+
T+
SOILCAT

SOILSMPL

Soil sample data from USDA National Soils Lab

INSTALID / FKFROM "PLOTMAST.INSTALID()"/+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
YR+
LABK+
TOTCLAY+
TOTSILT+
TOTSAND+
CO3CLAY+
FSILT+
CSILT+
VFSAND+
FSAND+
MSAND+
CSAND+
VCSAND+
WT2TO5MM+
WT5TO20MM+
WT20TO75M+
COURFRAG+
ORGCARB+
ORGMATT+
BARCLAY+
BARWATER+
CARBLT2MM+

PH1TO2+
PH1TO1+
SOILNOTE+
STRUCT_CODE+
PERM_CLASS

TACTCONA

Tactical Concealment summary A

INSTALID / FKFROM "INSTMAST.INSTALID()" FKFROM "PLOTMAST.INSTALID()"/+
ANALYEAR+
PLOTID / FKFROM "PLOTMAST.PLOTID()"/+
VEGID+
LIFEFORM+
VEGCOND+
HTMINTO1+
HT1TO2+
HT2TO3+
HT3TO4+
HTGT4

VERTLIST

Installation master vertebrate list

@1 VERTID+
CLASS+
ORDERS+
SUBORDER+
FAMILY+
SUBFAM+
GENUS+
SPEC+
COMMON+
AUTHORS+
VERTSTAT+
VERTNOTE

Appendix C: Data Element Information

Data element definitions are presented in this appendix. Syntax is as follows.

DATA ELEMENT NAME

element definition

SQL Data Type: designates the type of data

SQL Type Qualifiers: length of text data

Default Nullity: if not null data is required

Derived Data: if T (true) this data was calculated from other data in the database

Valid Entries: gives valid data information

Missing/Invalid: if applicable lists the data entered to denote missing or invalid data

Used By: a list of tables that contain the data element

ABUNDANCE

Relative abundance, 1-5

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

AC00

Percent of plots with no aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AC100

Percent of plots with 100% aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AC20

Percent of plots with 20% aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AC40

Percent of plots with 40% aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AC4M

Number of points with cover above 4 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

AC60

Percent of plots with 60% aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AC80

Percent of plots with 80% aerial concealment

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

ACCBURN

Number of plots with accidental burn

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

ACMEAN

Mean aerial concealment percent

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

ACOBS

Number of aerial concealment plots

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

ACSTDEV

Standard deviation of mean aerial concealment percent

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

AERCOV

Short-term monitoring aerial cover code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(A)nnual,(P)erennial,(AP)annaul&perennial,(N)one*

Missing/Invalid: *N/A*
Used By: *AERCOV_CODE*
Used By: *LINEMON*

AERCOV_DEF

Short-term monitoring aerial cover code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Annual,Perennial,annaul&perennial,None*

Missing/Invalid: *N/A*
Used By: *AERCOV_CODE*

AERCOV_NOTE

Aerial cover category note

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *AERCOV_CODE*

ANALYEAR

Year for recording:analysis

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *4 digit year*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*
Used By: *EROSION*

Used By: *LANDUSEYEARSUM*
Used By: *PCSDPLOTSUM*
Used By: *PCSDYEARSUM*
Used By: *PCTTYEARSUM*
Used By: *TACTCONA*

AREA

Surface area of a vegetation clump

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *BELTTRAN*

ASPECT

Plot aspect

SQL Data Type: *CHAR*

SQL Type Qualifiers: *2*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *N,NE,E,SE,S,SW,W,NW,L*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

ASSOSPP

Associated species

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid associated species*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

ATDB

Aerial top hits dwarfshrub broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATDC

Aerial top hits dwarfshrub conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATFA

Aerial top hits forb annual

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATFP

Aerial top hits forb perennial

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATGA

Aerial top hits grass annual

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATGP

Aerial top hits grass perennial

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATH

Aerial top hits halfshrub

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATSB

Aerial top hits shrub conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATSC

Aerial top hits shrub conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATTB

Aerial top hits tree broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

ATTC

Aerial top hits tree conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

AVEMINHT

Average minimum drip height

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

AZIMUTH

Plot azimuth

SQL Data Type: *REAL*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *HERPSURV*
Used By: *PLOTMAST*

BA

Basal Area

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *BASALA*

BAITS

Baits used for small mammal trapping

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *25*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid baits used for trapping*

Missing/Invalid: *N/A*
Used By: *MAMSURV*

BARCLAY

Ration 15 Bar-Clay

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

BARWATER

15 Bar water on air dry soil, weight percent

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

BAUTHOR

Author of the species

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

BELTHT

Belt transect belt minimum height

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *BELTSURV*

BELTWIDE

Belt transect belt width

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *BELTSURV*

BIRDNOTE

Plot note for bird survey

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*

BIV

Number of Bivouac disturbed sites

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

C

Cover value (C) used in USLE

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

C1

C1 subfactor of C (USLE factor)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

C2

C2 subfactor of C (USLE factor)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

CALCKMEAN

Mean Calculated natural erodibility (K) value (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILMAST*

CALCKSTDEV

Standard deviation of calculated natural erodibility (K) value (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *SOILMAST*

CARBLT2MM

Carbonate, < 2mm fraction

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

CASENO

Case Number

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

CAT1TO2

Short-term belt height category 1 to 2 meters

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BELTMON*

CAT2TO3

Short-term belt height category 2 to 3 meters

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BELTMON*

CAT3TO4

Short-term belt height category 3 to 4 meters

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BELTMON*

CATGT4

Short-term belt height category greater than 4 meters

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BELTMON*

CATMINTO1

Short-term belt height category minimum to 1 meter

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BELTMON*

CCANN

Number of locations with only annual cover

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

CCANNMEAN

Mean number of locations with only annual cover

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

CCANNPER

Number of locations with annual and perennial cover

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

CCANNSTDEV

Standard deviation of number of locations with only annual cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

CCAPMEAN

Mean number of locations with annual and perennial cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

CCAPSTDEV

Standard deviation of number of locations with annual and perennial cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

CCNONE

Number of locations with no cover

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

CCNONEMEAN

Mean number of locations with no cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

CCNONESTDEV

Standard deviation of number of locations with no cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

CCOBS

Number of total locations measured

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

CCPER

Number of locations with only perennial cover

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

CCPERMEAN

Mean number of locations with only perennial cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

CCPERSTDEV

Standard deviation of number of locations with only perennial cover

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

CHEMICAL

Number of plots with evidence of chemical use

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

CLASS

Vertebrate species class

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *15*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Class*

Missing/Invalid: *N/A*
Used By: *VERTLIST*

CLMPBEGIN

Beginning location of vegetation clump

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number (0.0-100.0)*

Missing/Invalid: *N/A*
Used By: *BELTTRAN*

CLMPEND

End location of vegetation clump

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number (0.0-100.0)*

Missing/Invalid: *N/A*
Used By: *BELTTRAN*

CLOUD_COVER

Percent of cloud cover

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid percentage (0-100)*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*
Used By: *HERPSURV*
Used By: *MAMSURV*

CO3CLAY

CO3 Clay

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

COLLDATE

Herbarium collection date

SQL Data Type: *DATE*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid date*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

COLLECTOR

Collector(s)

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *70*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*
Used By: *HERBRIUM*
Used By: *HERPSURV*
Used By: *MAMSURV*

COLLNO

Collection number

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

COMMENTS

Comments on plant characteristics, site, habitat, etc.

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *175*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

COMMON

Species common name

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *40*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database animal common name*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*
Used By: *VERTLIST*

COUNTY

County where collected

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *30*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid State county*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

COURFRAG

Course fragments (> 2mm), weight % of whole soil

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

CROP

Number of plots with crop use

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

CSAND

Soil analysis of course sand

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

CSILT

Soil analysis of course silt

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

DEBDAM

Number of plots with debris dams

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

DECLIN

Plot declination

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PLOTMAST*

DEMO

Number of plots with demolition

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

DETERMIN

Determiner of final identification

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

DISTURB

Ground disturbance code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(N)one,(P)ass,(T)rail,(R)oad,(O)ther*

Missing/Invalid: *N/A*
Used By: *DISTURB_CODE*
Used By: *GNDCOVER*
Used By: *LINEMON*

DISTURB_DEF

Ground disturbance code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *None,Pass,Trail,Road,Other*

Missing/Invalid: *N/A*
Used By: *DISTURB_CODE*

DISTURB_NOTE

Disturbance category note

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *DISTURB_CODE*

DMCE

Universal Trasverse Mercator coordinate, easting

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid UTM - Easting*

Missing/Invalid: *N/A*
Used By: *CLIMATESTATIONS*
Used By: *HERBRIUM*
Used By: *PLOTMAST*

DMCELL

Universal Trasverse Mercator easting of lower left corner

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid DMC (UTM)*

Missing/Invalid: *N/A*
Used By: *MAPS*

DMCETR

Universal Trasverse Mercator easting of top right corner

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid DMCE (UTM)*

Missing/Invalid: *N/A*
Used By: *MAPS*

DMCN

Universal Trasverse Mercator coordinate, northing

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid UTM - Northing*

Missing/Invalid: *N/A*
Used By: *CLIMATESTATIONS*
Used By: *HERBRIUM*
Used By: *PLOTMAST*

DMCNLL

Universal Trasverse Mercator northing of lower left corner

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid DMCN (UTM)*

Missing/Invalid: *N/A*
Used By: *MAPS*

DMCNTR

Universal Trasverse Mercator northing or top right corner

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid DMCN (UTM)*

Missing/Invalid: *N/A*
Used By: *MAPS*

DRIFTING

Number of plots with observed drifting wind erosion

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

EFFCOVER

Effective cover in USLE calculation

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

ELEV

Elevation

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

EXCA

Number of plots with excavation

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

EXCPTNSP

Exception species to belt width

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Species database plant code*

Missing/Invalid: *N/A*
Used By: *BELTSURV*

FAMILY

Species family

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Family*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*
Used By: *PLNTLIST*
Used By: *VERTLIST*

FEDSTAT

Federal status code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *6*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid Federal T&E code*

Missing/Invalid: *N/A*
Used By: *FED_STATUS*
Used By: *HERBRIUM*

FEDSTAT_DEF

Federal status code definition

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *50*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid Federal T&E definition*

Missing/Invalid: *N/A*
Used By: *FED_STATUS*

FEDSTAT_NOTE

Federal status code notes

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *FED_STATUS*

FLYOVERS

Bird species flyover data

SQL Data Type: *char* **SQL Type Qualifiers:** *3*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(Y)es, (N)o*

Missing/Invalid: *N/A*
Used By: *BIRDS*

FOOT

Number of plots with foot traffic

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

FOREST

Number of plots with forestry activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

FORM1

Plant life form 1

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(G)rass,(F)orb,(T)ree,(H)half,(S)shrub,(T)ree,(W)oody*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

FORM2

Plant life form 2

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(V)ine,(S)hrub*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

FSAND

Soil Analysis of find sand

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

FSILT

Soil Analysis of find silt

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

GCBARE

Number of bare ground points

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCBAREMEAN

Mean number of bare ground points

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GCBARESTDEV

Standard deviation of number of bare ground points

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GCLITMEAN

Mean number of points with litter

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GCLITSTDEV

Standard Deviation of points with litter

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GCLITTER

Standard deviation of number of points with litter

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCMICRO

Number of points with microphytes

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCMICROMEAN

Mean number of points with microphytes

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GCMICROSTDEV

Standard deviation of number of points with microphytes

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GCOBS

Total number of ground cover points

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCPLANT

Number of points with plants

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCPLANTMEAN

Mean number of points with plants

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GCPLANTSTDEV

Standard deviation of number of points with plants

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GCROCK

Number of points with rocks

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GCROCKMEAN

Mean number of points with rocks

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GCROCKSTDEV

Standard deviation of number of points with rocks

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GDNONE

Number of points with no ground cover

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDNONEMEAN

Mean number of points with no ground cover

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GDNONESTDEV

Standard deviation of number of points with no ground cover

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GDOBS

Number of ground disturbance points

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDOTHER

Number of points with other disturbance

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDOTHMEAN

Mean number of points with other disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GDOTHSTDEV

Standard deviation of number of points with other disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GDPASS

Number of points with vehicle pass disturbance

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDPASSMEAN

Mean number of points with vehicle pass disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GDPASSSTDEV

Standard deviation of number of points with pass disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GDROAD

Number of points with road disturbance

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDROADMEAN

Mean number of points with road disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GDROADSTDEV

Standard deviation of number of points with road disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GDTRAIL

Number of points with foot trail disturbance

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCSDPLOTSUM*

GDTRAILMEAN

Mean number of points with foot trail disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *PCSDYEARSUM*

GDTRAILSTDEV

Standard deviation of number of points with foot trail disturbance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *PCSDYEARSUM*

GENMAP

General plot location map

SQL Data Type: *LONG_VARCHAR*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Bitmap or TIFF format*

Missing/Invalid: *N/A*
Used By: *PLOTMAPS*

GENUS

Species genus

SQL Data Type: *CHAR*

SQL Type Qualifiers: *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Genus*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*
Used By: *PLNTLIST*
Used By: *VERTLIST*

GNDCOV

Monitoring ground cover code

SQL Data Type: *CHAR*

SQL Type Qualifiers: *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(P)lant,(L)itter,(B)are,(R)ock*

Missing/Invalid: *N/A*
Used By: *GNDCOV_CODE*
Used By: *LINEMON*

GNDCOV_DEF

Monitoring ground cover code definition

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Plant,Litter,Bare,Rock*

Missing/Invalid: *N/A*
Used By: *GNDCOV_CODE*

GNDCOV_NOTE

Ground cover category note

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *GNDCOV_CODE*

GRAZING

Number of plots with grazing

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

GULLY

Number of plots with observed gully erosion

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

HABDIVIS

Habitat divisor in USLE calculations

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

HABIT

Habit code, from SCS PLANTS database

SQL Data Type: *CHAR*

SQL Type Qualifiers: *6*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

HAY

Number of plots with hay use

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

HERPNOTE

Plot note for herp survey

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERPSURV*

HT1TO2

Number of hits in height category 1 to 2 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

HT2TO3

Number of hits in height category 2 to 3 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

HT3TO4

Number of hits in height category 3 to 4 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

HTGT4

Number of hits in height category greater than 4 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

HTMINTO1

Number of hits in height category minimum to 1 m

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

IMPACT

Impact on training

SQL Data Type: *LONG_VARCHAR*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

INLOC

Installation location

SQL Data Type: *CHAR*

SQL Type Qualifiers: *40*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *State and country*

Missing/Invalid: *N/A*
Used By: *INSTMAST*

INNAME

Installation name

SQL Data Type: *CHAR*

SQL Type Qualifiers: *30*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Correct installation name*

Missing/Invalid: *N/A*
Used By: *INSTMAST*

INSIZE

Installation size

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *installation size in acres*

Missing/Invalid: *N/A*
Used By: *INSTMAST*

INSTALID

Installation code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *3*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Three letter installation code*

Missing/Invalid: *N/A*
Used By: *AERCOVER*
Used By: *BASALA*
Used By: *BELTMON*
Used By: *BELTSURV*
Used By: *BELTTRAN*
Used By: *BIRDS*
Used By: *BIRDSURV*
Used By: *CLIMATEDATA*
Used By: *CLIMATESTATIONS*
Used By: *COMMCLASSPLOTSUM*
Used By: *ENVCONST*
Used By: *EROSEVID*
Used By: *EROSION*
Used By: *F_COUNT*
Used By: *GNDCOVER*
Used By: *GROUPING*
Used By: *HERBRIUM*
Used By: *HERPS*
Used By: *HERPSURV*
Used By: *HISTORY*
Used By: *INSTMAST*
Used By: *LANDUSE*
Used By: *LANDUSEYEARSUM*
Used By: *LINEMON*
Used By: *MAINTACT*
Used By: *MAMMALS*
Used By: *MAMSURV*
Used By: *MAPS*
Used By: *PCSDPLOTSUM*
Used By: *PCSDYEARSUM*
Used By: *PCTTYEARSUM*
Used By: *PLOTMAPS*
Used By: *PLOTMAST*
Used By: *PLOTSURV*
Used By: *SOILLS*
Used By: *SOILSMPL*
Used By: *TACTCONA*

INSTNOTE

Installation note

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *254*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text or numbers*

Missing/Invalid: *N/A*

Used By: *HISTORY*

INVTYPE

Inventory type

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(I)nventory,(M)onitoring,(L)ong term monitoring*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

KCAL

Calculated erodibility (K) value (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *SCS K value (calculated)*

Missing/Invalid: *-1*
Used By: *EROSION*

KCALEROSINDEX

Erosion index using calculated erodiblity value (K)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *EROSION*

KPUB

SCS Published erodibilty (K) value (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS K value*

Missing/Invalid: *N/A*

Used By: *EROSION*

KPUBEROSINDEX

Erosion index using published erodibilty (K) (USLE factor

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

LABK

Erodiblity (K) value calculated with sample data (USLE factor)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS K value*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

LANDUSE

Plot land use code

SQL Data Type: *CHAR*

SQL Type Qualifiers: *16*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid military or non-military use*

Missing/Invalid: *N/A*
Used By: *LANDUSE*
Used By: *LANDUSE_CODE*

LANDUSE_DEF

Landuse code definition

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid landuse code definition*

Missing/Invalid: *N/A*
Used By: *LANDUSE_CODE*

LANDUSE_NOTE

Note on landuse code

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Alphanumeric*

Missing/Invalid: *N/A*
Used By: *LANDUSE_CODE*

LEALLOBS

Number of plots with land use showing erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LEALLVIS

Number of plots with land use other than NONE showing erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LEWAOBS

Number of plots with land use showing water erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LEWAVIS

Number of plots with land use other than NONE showing water erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LEWIOBS

Number of plots with land use showing wind erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LEWIVIS

Number of plots with land use other than NONE showing wind erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

LIFE

Plant life pattern

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(A)nnual,(P)erennial*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

LIFEFORM

Plant life form category

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(A)nnual,(P)erennial*

Missing/Invalid: *N/A*
Used By: *TACTCONA*

LOC

Line transect location of herp trap

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *0 to 100*

Missing/Invalid: *N/A*
Used By: *HERPSURV*

LOCALITY

Description of geographic area where plant was collected

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *224*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

LOCMAP

Specific location map

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Bitmap or TIFF format*

Missing/Invalid: *N/A*
Used By: *PLOTMAPS*

LS0

Toppgraphic factor (LS) at transect location 0 m (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid LS value*

Missing/Invalid: *N/A*
Used By: *EROSION*

LS1

Toppgraphic factor (LS) at transect location 50 m (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid LS value*

Missing/Invalid: *N/A*
Used By: *EROSION*

LS2

Toppgraphic factor (LS) at transect location 100 m (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid LS value*

Missing/Invalid: *N/A*
Used By: *EROSION*

LSM

Mean toppgraphic factor (LS) of 3 transects (USLE factor)

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid LS value*

Missing/Invalid: *N/A*
Used By: *EROSION*

MAINNOTE

Plot maintenance note

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *254*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *MAINTACT*

MAINTAIN

Plot maintenance code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *16*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid maintenance activity*

Missing/Invalid: *N/A*
Used By: *MAINTACT*
Used By: *MAINT_CODE*

MAINTAIN_DEF

Maintenance code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid maintenace code definition*

Missing/Invalid: *N/A*
Used By: *MAINT_CODE*

MAINTAIN_NOTE

Maintenance activity code note

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Alphanumeric*

Missing/Invalid: *N/A*
Used By: *MAINT_CODE*

MAMNOTE

Plot note for mammal survey

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *MAMSURV*

MANONE

Number of plots with no maintenance activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MAOBS

Number of plots with maintenance recorded

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MAOTHER

Number of plots with "other" maintenance

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MAP

A map image

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid image type*

Missing/Invalid: *N/A*
Used By: *MAPS*

MAPNAME

User supplied map name

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *32*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *MAPS*

MATED_STATUS

Bird species mated status code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(*)Singing male,(PR)Adult male/female pair,(M)Nonsinging male,(F)Female onl*

Missing/Invalid: *N/A*
Used By: *BIRDS*
Used By: *MATED_STATUS_CODE*

MCCCODE

Most common community (MCC) classification code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid Most Common Classification code*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

MCCTYPE

Most common community (MCC) classification type

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *4*

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid Most Common Classification type*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

MEALLOBS

Number of plots with maintenance activities showing erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MEALLVIS

Number of plots with maintenance activities other than NONE showing erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MEASURE_PT

Line location of bird survey data location

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *2*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(LO)Line-out, (LI)Line-in,(EP)End-point,(C)Combined,(U)Unknown,(NR)Not reco*

Missing/Invalid: *N/A*
Used By: *BIRDS*
Used By: *POINT_CODE*

METHOD

Vertebrate collection method

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *3*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(O)bserved,(S)ighting,(T)rapped*

Missing/Invalid: *N/A*
Used By: *HERPS*
Used By: *MAMMALS*
Used By: *METHODS_CODE*

METHOD_DEF

Vertebrate collection method code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Observed,Sighting,Trapped*

Missing/Invalid: *N/A*
Used By: *METHODS_CODE*

METHOD_NOTE

Vertebrate collection notes

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *METHODS_CODE*

MEWAOBS

Number of plots with maintenance activities showing water erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MEWAVIS

Number of plots with maintenance activities other than NONE showing water erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MEWIOBS

Number of plots with maintenance activities showing wind erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MEWIVIS

Number of plots with maintenance activities other than NONE showing wind erosion evidence

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MISCMAP

Additional maps

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Bitmap or TIFF format*

Missing/Invalid: *N/A*
Used By: *PLOTMAPS*

MITIGATION

Mitigation strategies

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

MNONE

Number of plots with no military activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MOBS

Number of plots with military activity recorded

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MOTHER

Number of plots with "other" military activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MOW

Number of plots with mowing

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

MSAND

Soil analysis of medium sand

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

MSTATUS_DEF

Bird species mated status code

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: **,PR,M,F,U,Y,FL,C,NR*

Missing/Invalid: *N/A*
Used By: *MATED_STATUS_CODE*

MSTATUS_NOTE

Mated status code note

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Alphanumeric*

Missing/Invalid: *N/A*
Used By: *MATED_STATUS_CODE*

NMNONE

Number of plots with no nonmilitary activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

NMOBS

Number of plots with nonmilitary activity recorded

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

NMOTHER

Number of plots with nonmilitary "other" activity

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

NUM

Number of bird, mammal, or herp species sited/trapped

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BIRDS*
Used By: *HERPS*
Used By: *MAMMALS*

OBS

Total number of observation per group

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

OPT_REAL

Optional belt variable, usually DBH

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real numbers*

Missing/Invalid: *N/A*
Used By: *BELTTRAN*

OPT_TEXT

Optional line variable

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *GNDCOVER*
Used By: *LINEMON*

OPT_TEXT1

Optional variable 1

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *F_COUNT*

OPT_TEXT2

Optional variable 2

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *F_COUNT*

OPT_TEXT3

Optional variable 3

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *F_COUNT*

OPT_TEXT4

Optional variable 4

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *F_COUNT*

OPT_TEXT5

Optional variable 5

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *F_COUNT*

ORDERS

Order of the Species

SQL Data Type: *CHAR*

SQL Type Qualifiers: *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Order*

Missing/Invalid: *N/A*
Used By: *VERTLIST*

ORGCARB

Walkley-Black organic carbon

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

ORGMATT

Soil analysis of organic matter

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

PADB

Presence:Absence (PA) dwarfshrub broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PADC

Presence:Absence (PA) dwarfshrub conifer

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PAERCOV

Percent aerial cover

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *EROSION*

PAFA

Presence:Absence (PA) forb annual

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PAFP

Presence:Absence (PA) forb perennial

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PAGA

Presence:Absence (PA) grass annual

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PAGP

Presence:Absence (PA) grass perennial

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PAH

Presence:Absence (PA) halfshrub

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PANEVAP

Pan evaporation

SQL Data Type: *float*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Float*

Missing/Invalid: *N/A*
Used By: *CLIMATEDATA*

PASB

Presence:Absence (PA) shrub broadleaf

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PASC

Presence:Absence (PA) shrub conifer

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PATB

Presence:Absence (PA) tree broadleaf

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PATC

Presence:Absence (PA) tree conifer

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PCCCODE

Plant community classification code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Valid classification code*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PCCTYPE

Plant community classification type

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *4*

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *(A)nnual,(P)erennial,(B)roadleaf,(C)oniferous,(M)ixed*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

PCTTKCAL

USLE percent of T using Kcal

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

PCTTKPUB

USLE percent of T using Kpub

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

PERIOD

Period of measurements (AM or PM)

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *4*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *AM, PM*

Missing/Invalid: *N/A*
Used By: *BIRDS*

PERM_CLASS

Soil permeability class

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

PGNDCOV

Percent ground cover

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *EROSION*

PH1TO1

pH, 1:1 Soil-water suspension

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

PH1TO2

pH, 1:2 Soil-CACL2 Suspension

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

PHOTOS

Plot photos

SQL Data Type: *LONG_VARCHAR*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Bitmap or TIFF format*

Missing/Invalid: *N/A*
Used By: *PLOTMAPS*

PLANT

Number of plots with planting

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

PLANTHT

Belt transect plant height

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *BELTTRAN*

PLDATE

Initial plot allocation date

SQL Data Type: *DATE*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid date*

Missing/Invalid: *N/A*
Used By: *PLOTMAST*

PLOTID

Plot identification number

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *AERCOVER*
Used By: *BASALA*
Used By: *BELTMON*
Used By: *BELTSURV*
Used By: *BELTTRAN*
Used By: *BIRDS*
Used By: *BIRDSURV*
Used By: *COMMCLASSPLOTSUM*
Used By: *EROSEVID*
Used By: *EROSION*
Used By: *F_COUNT*
Used By: *GNDCOVER*
Used By: *GROUPING*
Used By: *HERPS*
Used By: *HERPSURV*
Used By: *LANDUSE*
Used By: *LINEMON*
Used By: *MAINTACT*
Used By: *MAMMALS*
Used By: *MAMSURV*
Used By: *PCSDPLOTSUM*
Used By: *PLOTMAPS*
Used By: *PLOTMAST*
Used By: *PLOTSURV*
Used By: *SOILLS*
Used By: *SOILSMPL*
Used By: *TACTCONA*

PLOTNOTE

Plot comments

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

PLOTTYPE

Plots core:special use flag

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(C)ore, (S)pecial use*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*
Used By: *HERPSURV*
Used By: *MAMSURV*
Used By: *PCSDPLOTSUM*
Used By: *PLOTSURV*

POINT_DEF

Line location code of bird survey data definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Line-out, Line-in,End-point,Combined,Unknown,Not recorded*

Missing/Invalid: *N/A*
Used By: *POINT_CODE*

POINT_NOTE

Note on measure_pt code

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *POINT_CODE*

PREBURN

Number of plots with prescribed burn

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

PRECIP

Precipitation in inches

SQL Data Type: *float*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Float*

Missing/Invalid: *N/A*
Used By: *MAMSURV*

PUBLK

SCS published erodibility value (K) for soil series (USLE factor)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS K value*

Missing/Invalid: *N/A*
Used By: *SOILMAST*

RAIN

Weekly rain fall

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *CLIMATEDATA*

REALISM

Loss of training realism

SQL Data Type: *LONG_VARCHAR*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

RECDATE

Plot survey date

SQL Data Type: *DATE*

SQL Type Qualifiers:

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid date*

Missing/Invalid: *N/A*
Used By: *AERCOVER*
Used By: *BASALA*
Used By: *BELTMON*
Used By: *BELTSURV*
Used By: *BELTTRAN*
Used By: *BIRDS*
Used By: *BIRDSURV*
Used By: *CLIMATEDATA*
Used By: *ENVCONST*
Used By: *EROSEVID*
Used By: *F_COUNT*
Used By: *GNDCOVER*
Used By: *HERPS*
Used By: *HERPSURV*
Used By: *HISTORY*
Used By: *LANDUSE*
Used By: *LINEMON*
Used By: *MAINTACT*
Used By: *MAMMALS*
Used By: *MAMSURV*
Used By: *PLOTSURV*
Used By: *SOILLS*

RECORDER

Plot recorder

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HISTORY*
Used By: *PLOTSURV*

RESEARCH

Research needs

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

RESTRAINT

Environmental constraint/restraint

SQL Data Type: *LONG_VARCHAR* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

RETRAP

Number of retrapped mammals or herps

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *HERPS*
Used By: *MAMMALS*

RVAL

Rainfall erosivity (R) value for recorder

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS R value*

Missing/Invalid: *N/A*
Used By: *EROSION*
Used By: *PLOTMAST*

SCOURING

Number of plots with observed scouring erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

SEED

Number of plots with seeding

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

SEX

Wildlife gender code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *(M)ale, (F)emale, (U)nknown, (C)ombined,(NR)not recorded*

Missing/Invalid: *N/A*
Used By: *GENDER_CODE*
Used By: *HERPS*
Used By: *MAMMALS*

SEX_DEF

Gender code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Male, Female, Unknown, Combined,Not recorded*

Missing/Invalid: *N/A*
Used By: *GENDER_CODE*

SEX_NOTE

Note on gender code

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *GENDER_CODE*

SHEET

Number of plots with observed sheet erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

SIDE

Plant belt side location

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(L)eft, (R)ight*

Missing/Invalid: *N/A*
Used By: *BELTSURV*
Used By: *BELTTRAN*

SIDEDIST

Plant belt side distance

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *BELTTRAN*

SLOPE

Plot slope

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILLS*

SLPLEN

Plot slope length

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *SOILLS*

SOILCAT

Soil category number for running GRASS output

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, Integer*

Missing/Invalid: *N/A*
Used By: *SOILMAST*

SOILDPTH

Average plot soil depth

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *3*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *0,0-1, 1-2, 2-3, 3-4, >4*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

SOILNAME

Plot soil series name

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *40*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS soil name*

Missing/Invalid: *N/A*
Used By: *SOILMAST*

SOILNOTE

Misc. soil notes

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *254*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

SOILSER

Plot soil series code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS soil series*

Missing/Invalid: *N/A*
Used By: *PLOTMAST*
Used By: *SOILMAST*

SOILTOPO

Geology, soil, topography

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

SPEC

Species name

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *25*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Speices database species*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*
Used By: *VERTLIST*

SPECIES

Herbrium table species information (extended)

SQL Data Type: *char* **SQL Type Qualifiers:** *35*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid species information*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

STATESTAT

Current status as State endangered (SE), other State status

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *6*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid State T&E code*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*
Used By: *STATE_STATUS*

STATESTAT_DEF

State status code definition

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *50*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Vale State T&E code definition*

Missing/Invalid: *N/A*
Used By: *STATE_STATUS*

STATESTAT_NOTE

State status code notes

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *STATE_STATUS*

STATION

Climate station ID

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *CLIMATEDATA*
Used By: *CLIMATESTATIONS*

STATIONNAME

Climate station name

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *130*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid climate station name*

Missing/Invalid: *N/A*
Used By: *CLIMATESTATIONS*

STATION_COMMENT

Comments for climate stations

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Alphanumeric*

Missing/Invalid: *N/A*
Used By: *CLIMATESTATIONS*

STATUS

Observed erosion status code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *16*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid erosion status code*

Missing/Invalid: *N/A*
Used By: *EROSEVID*
Used By: *EROS_CODE*

STATUS_DEF

Observed erosion code definition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Valid erosion status code definition*

Missing/Invalid: *N/A*
Used By: *EROS_CODE*

STATUS_NOTE

Note on observed erosion status code

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *EROS_CODE*

STRUCT_CODE

Soil structure code used to calculate K-value

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

SUBFAM

Vertebrate subfamily

SQL Data Type: *CHAR*

SQL Type Qualifiers: *15*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Subfamily*

Missing/Invalid: *N/A*
Used By: *VERTLIST*

SUBORDER

Vertebrate suborder

SQL Data Type: *CHAR*

SQL Type Qualifiers: *15*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Suborder*

Missing/Invalid: *N/A*
Used By: *VERTLIST*

SUBSPEC

Plant subspecies

SQL Data Type: *CHAR*

SQL Type Qualifiers: *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database Subspecies*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

SURVEYOR

Plot surveyor

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

SYNAUTH

Author of synonym variety or subspecies

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

SYNGENUS

Synonym genus

SQL Data Type: *CHAR*

SQL Type Qualifiers: *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

SYNSPP

Synonym species

SQL Data Type: *CHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

SYNVARAUTH

Author of synonym variety or subspecies

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

SYNVAR_SSP

Synonym variety or subspecies

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *35*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

T

Soil series soil loss tolerance (T) value

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *SCS T value*

Missing/Invalid: *N/A*
Used By: *EROSION*
Used By: *SOILMAST*

T00TO50

Percent of plots with soil loss tolerance (T) values from 0 to 50

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

T100TO150

Percent of plots with soil loss tolerance (T) values from 100 to 150

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

T150TO200

Percent of plots with soil loss tolerance (T) values from 150 to 200

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

T50TO100

Percent of plots with soil loss tolerance (T) values from 50 to 100

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

TCDB

Total count dwarfshrub broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCDC

Total count dwarfshrub conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCFA

Total count forb annual

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCFP

Total count forb perennial

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCGA

Total count grass annual

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCGP

Total count grass perennial

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCH

Total count halfshrub

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCSB

Total count shrub broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCSC

Total count shrub conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCTB

Total count tree broadleaf

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TCTC

Total count tree conifer

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *COMMCLASSPLOTSUM*

TEMP

Temperature

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*

TEMPMAX

Maximum temperature

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *CLIMATEDATA*
Used By: *HERPSURV*
Used By: *MAMSURV*

TEMPMIN

Minimum temperature

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *CLIMATEDATA*
Used By: *HERPSURV*
Used By: *MAMSURV*

TGT200

Percent of plots with soil loss tolerance (T) values greater than 200

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *PCTTYEARSUM*

TILL

Number of plots with tillage

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

TOTCLAY

Percent total clay

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

TOTSAND

Percent total sand

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

TOTSILT

Percent total silt

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

TRACK

Percent of plots with evidence of tracked vehicles

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

TRAIN

Plot training area

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

TRANLOC

Transect location

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real (0.0-100.0)*

Missing/Invalid: *N/A*
Used By: *BASALA*
Used By: *SOILLS*

TRAPNIGHTS

*Number of trap nights (number of traps * number of nights)*

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *MAMSURV*

TRAPS

Types of traps used for small mammal survey

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *25*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *MAMSURV*

TSTYPE

Broadleaf:coniferous type

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(B)roadleaf,(C)oniferous*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

UNIT

Units affected

SQL Data Type: *LONG_VARCHAR*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, number*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

UPDATENO

Update version of information

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *ENVCONST*

USENOTE

Land use note

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *254*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text, numbers*

Missing/Invalid: *N/A*
Used By: *LANDUSE*

USGS

USGS quadrangle name

SQL Data Type: *CHAR*

SQL Type Qualifiers: *24*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *USGS quad name*

Missing/Invalid: *N/A*
Used By: *PLOTMAST*

USLE0KCAL

USLE (at location 0 using calculated K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *EROSION*

USLE0KPUB

USLE (at transect location 0 using pub K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

USLE1KCAL

USLE (at location 50 using calculated K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *EROSION*

USLE1KPUB

USLE (at transect location 50 using pub K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

USLE2KCAL

USLE (at location 100 using calculated K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *-1*
Used By: *EROSION*

USLE2KPUB

USLE (at transect location 100 using pub K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

USLEMKCAL

USLE (mean of 3 transects using calculated K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

USLEMKPUB

USLE (mean of 3 transects using pub K)

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *EROSION*

VARAUTH

Author of variety or subspecies

SQL Data Type: *VARCHAR* **SQL Type Qualifiers:** *150*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *HERBRIUM*

VARIETY

Plant Variety

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *20*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database variety*

Missing/Invalid: *N/A*
Used By: *PLNTLIST*

VCSAND

Soil analysis of very coarse sand

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

VEGCOND

Plant condition

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *1*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *(L)ive,(D)ead,(S)nag*

Missing/Invalid: *N/A*
Used By: *BELTMON*
Used By: *BELTSURV*
Used By: *BELTTRAN*
Used By: *GNDCOVER*
Used By: *TACTCONA*

VEGHT

Aerial plant height name

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *AERCOVER*

VEGID

Plant species code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database plant code*

Missing/Invalid: *N/A*
Used By: *AERCOVER*
Used By: *BELTMON*
Used By: *BELTTRAN*
Used By: *GNDCOVER*
Used By: *HERBRIUM*
Used By: *PLNTLIST*
Used By: *TACTCONA*

VEGLOC

Transect location along line

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Real number (0.0-100.0)*

Missing/Invalid: *-1*
Used By: *AERCOVER*
Used By: *BELTTRAN*
Used By: *F_COUNT*
Used By: *GNDCOVER*
Used By: *LINEMON*

VEGTYPE

General plot vegetation type

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *30*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*
Used By: *PLOTSURV*

VERTID

Vertebrate species code

SQL Data Type: *CHAR* **SQL Type Qualifiers:** *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Species database animal code*

Missing/Invalid: *N/A*
Used By: *BIRDS*
Used By: *HERPS*
Used By: *MAMMALS*
Used By: *VERTLIST*

VFSAND

Soil analysis of very fine sand

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

WANONE

Number of plots with no water erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WAOBS

Number of plots with water erosion recorded

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WAPEDPLNT

Number of plots with water pedestal plant erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WHEEL

Number of plots with wheel traffic

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WIND

Wind speed

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *BIRDSURV*
Used By: *HERPSURV*

WINONE

Number of plots with no wind erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WIOBS

Number of plots with wind erosion recorded

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WIPEDPLNT

Number of plots with wind pedestal plant erosion

SQL Data Type: *INTEGER* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*
Used By: *LANDUSEYEARSUM*

WT20TO75M

20-75 mm weight percentage of soil < 75 mm

SQL Data Type: *REAL* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

WT2TO5MM

2-5 mm weight percentage of soil < 75 mm

SQL Data Type: *FLOAT* **SQL Type Qualifiers:**

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

WT5TO20MM

5-20 mm weight percentage of soil < 75 mm

SQL Data Type: *FLOAT*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Real number*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

YR

Sample year

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Year (yyyy)*

Missing/Invalid: *N/A*
Used By: *SOILSMPL*

ZONE

Universal Trasverse Mercator zone

SQL Data Type: *INTEGER*

SQL Type Qualifiers:

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid UTM zone*

Missing/Invalid: *N/A*
Used By: *CLIMATESTATIONS*
Used By: *PLOTMAST*

Appendix D: Data Definition Language (DDL)

Data Definition Language (DDL) is used by the database administrator to define tables, columns, column constraints, unique rules, and referential integrity constraints. The user in most cases will have no use for the DDL, it is only presented here for reference. However, this information can be used to construct a new LCTA database, communicate with others who wish to use the data, or create a LCTA database in another relational database system. The format of the DDL presented here is specific to SQLBase but should be similar to other database management systems following SQL standards.

```
CREATE TABLE AERCOVER (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VEGLOC              FLOAT  NOT NULL,
    VEGID               CHAR (8),
    VEGHT               FLOAT  NOT NULL
);

CREATE TABLE AERCOV_CODE (
    AERCOV              CHAR (2) NOT NULL,
    AERCOV_DEF          CHAR (35) NOT NULL,
    AERCOV_NOTE         VARCHAR (100)
);

CREATE TABLE BASALA (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    TRANLOC             INTEGER,
    BA                  FLOAT
);
```

```
CREATE TABLE BELTMON (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VEGID               CHAR (8),
    VEGCOND             CHAR (1),
    CATMINTO1           INTEGER NOT NULL,
    CAT1TO2             INTEGER NOT NULL,
    CAT2TO3             INTEGER NOT NULL,
    CAT3TO4             INTEGER NOT NULL,
    CATGT4              INTEGER NOT NULL

CREATE TABLE BELTSURV (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    EXCPTNSP            CHAR (8) NOT NULL,
    SIDE                CHAR (1),
    VEGCOND             CHAR (1),
    BELTWIDE            FLOAT  NOT NULL,
    BELTHT              FLOAT  NOT NULL

CREATE TABLE BELTTRAN (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VEGID               CHAR (8),
    VEGLOC              FLOAT  NOT NULL,
    SIDE                CHAR (1),
    SIDEDIST            FLOAT ,
    PLANTHT             FLOAT  NOT NULL,
    VEGCOND             CHAR (1),
    CLMPBEGIN           FLOAT ,
    CLMPEND             FLOAT ,
    AREA                FLOAT ,
    OPT_REAL            FLOAT
```

```
CREATE TABLE BIRDS (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VERTID              CHAR (8),
    PERIOD              CHAR (4),
    MATED_STATUS        CHAR (8) NOT NULL,
    MEASURE_PT          CHAR (2) NOT NULL,
    NUM                 INTEGER NOT NULL,
    FLYOVERS            CHAR (3)


CREATE TABLE BIRDSURV (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    PLOTTYPE            CHAR (8),
    COLLECTOR           VARCHAR (70),
    CLOUD_COVER         INTEGER,
    WIND                INTEGER,
    TEMP                INTEGER,
    BIRDNOTE            VARCHAR (100)


CREATE TABLE CLIMATEDATA (
    INSTALID            CHAR (3) NOT NULL,
    STATION             INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    RAIN                FLOAT  NOT NULL,
    TEMPMIN             INTEGER,
    TEMPMAX             INTEGER,
    PANEVAP             FLOAT


CREATE TABLE CLIMATESTATIONS (
    INSTALID            CHAR (3) NOT NULL,
    STATION             INTEGER NOT NULL,
    STATIONNAME         VARCHAR (130) NOT NULL,
    DMCE                INTEGER,
```

```
    DMCN                INTEGER,
    ZONE                INTEGER,
    STATION_COMMENT     VARCHAR (100)


CREATE TABLE COMMCLASSPLOTSUM (
    INSTALID            CHAR (3) NOT NULL,
    ANALYEAR            INTEGER NOT NULL,
    PLOTID              INTEGER NOT NULL,
    PCCTYPE             CHAR (4),
    PCCCODE             CHAR (8),
    MCCTYPE             CHAR (4),
    MCCCODE             CHAR (8),
    ATGA                INTEGER,
    ATGP                INTEGER,
    ATFA                INTEGER,
    ATFP                INTEGER,
    ATH                 INTEGER,
    ATDC                INTEGER,
    ATDB                INTEGER,
    ATSC                INTEGER,
    ATSB                INTEGER,
    ATTC                INTEGER,
    ATTB                INTEGER,
    PAGA                INTEGER,
    PAGP                INTEGER,
    PAFA                INTEGER,
    PAFP                INTEGER,
    PAH                 INTEGER,
    PADC                INTEGER,
    PADB                INTEGER,
    PASC                INTEGER,
    PASB                INTEGER,
    PATC                INTEGER,
    PATB                INTEGER,
    TCGA                INTEGER,
    TCGP                INTEGER,
    TCFA                INTEGER,
    TCFP                INTEGER,
    TCH                 INTEGER,
    TCDC                INTEGER,
```

```
    TCDB            INTEGER,
    TCSC            INTEGER,
    TCSB            INTEGER,
    TCTC            INTEGER,
    TCTB            INTEGER

CREATE TABLE DISTURB_CODE (
    DISTURB         CHAR (2) NOT NULL,
    DISTURB_DEF     CHAR (35) NOT NULL,
    DISTURB_NOTE    VARCHAR (100)

CREATE TABLE ENVCONST (
    INSTALID        CHAR (3) NOT NULL,
    CASENO          INTEGER,
    UNIT            LONG VARCHAR,
    RESTRAINT       LONG VARCHAR,
    IMPACT          LONG VARCHAR,
    REALISM         LONG VARCHAR,
    MITIGATION      LONG VARCHAR,
    RESEARCH        LONG VARCHAR,
    RECDATE         DATE NOT NULL,
    UPDATENO        INTEGER

CREATE TABLE EROSEVID (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    RECDATE         DATE NOT NULL,
    STATUS          CHAR (16) NOT NULL

CREATE TABLE EROSION (
    INSTALID        CHAR (3) NOT NULL,
    ANALYEAR        INTEGER NOT NULL,
    PLOTID          INTEGER NOT NULL,
    USLEMKPUB       FLOAT ,
    USLE0KPUB       FLOAT ,
    USLE1KPUB       FLOAT ,
    USLE2KPUB       FLOAT ,
```

```
    USLEMKCAL           FLOAT ,
    USLE0KCAL           FLOAT ,
    USLE1KCAL           FLOAT ,
    USLE2KCAL           FLOAT ,
    LSM                 FLOAT ,
    LS0                 FLOAT ,
    LS1                 FLOAT ,
    LS2                 FLOAT ,
    PCTTKPUB            FLOAT ,
    PCTTKCAL            FLOAT ,
    KPUBEROSINDEX       FLOAT ,
    KCALEROSINDEX       FLOAT ,
    KPUB                FLOAT ,
    KCAL                FLOAT ,
    RVAL                FLOAT ,
    C                   FLOAT ,
    C1                  FLOAT ,
    C2                  FLOAT ,
    T                   FLOAT ,
    PGNDCOV             INTEGER,
    PAERCOV             INTEGER,
    AVEMINHT            FLOAT ,
    EFFCOVER            FLOAT ,
    HABDIVIS            FLOAT

CREATE TABLE EROS_CODE (
    STATUS              CHAR (16) NOT NULL,
    STATUS_DEF          CHAR (35) NOT NULL,
    STATUS_NOTE         VARCHAR (100)

CREATE TABLE FED_STATUS (
    FEDSTAT             CHAR (6) NOT NULL,
    FEDSTAT_DEF         VARCHAR (50) NOT NULL,
    FEDSTAT_NOTE        VARCHAR (100)
```

```
CREATE TABLE F_COUNT (
        INSTALID                CHAR (3) NOT NULL,
        PLOTID                  INTEGER NOT NULL,
        RECDATE                 DATE NOT NULL,
        VEGLOC                  FLOAT  NOT NULL,
        OPT_TEXT1               CHAR (8),
        OPT_TEXT2               CHAR (8),
        OPT_TEXT3               CHAR (8),
        OPT_TEXT4               CHAR (8),
        OPT_TEXT5               CHAR (8)
);

CREATE TABLE GNDCOVER (
        INSTALID                CHAR (3) NOT NULL,
        PLOTID                  INTEGER NOT NULL,
        RECDATE                 DATE NOT NULL,
        VEGLOC                  FLOAT  NOT NULL,
        DISTURB                 CHAR (2) NOT NULL,
        VEGID                   CHAR (8),
        VEGCOND                 CHAR (1),
        OPT_TEXT                CHAR (8)
);

CREATE TABLE GNDCOV_CODE (
        GNDCOV                  CHAR (2) NOT NULL,
        GNDCOV_DEF              CHAR (35) NOT NULL,
        GNDCOV_NOTE             VARCHAR (100)
);

CREATE TABLE GROUPING (
        PLOTID                  INTEGER NOT NULL,
        INSTALID                CHAR (3) NOT NULL
);

CREATE TABLE HERBRIUM (
        INSTALID                CHAR (3) NOT NULL,
        VEGID                   CHAR (8),
        FAMILY                  CHAR (20),
        GENUS                   CHAR (20),
        SPECIES                 CHAR (35),
        BAUTHOR                 VARCHAR (150),
```

```
    VAR_SSP          CHAR (35),
    VARAUTH          VARCHAR (150),
    SYNGENUS         CHAR (20),
    SYNSPP           CHAR (35),
    SYNAUTH          VARCHAR (150),
    SYNVAR_SSP       CHAR (35),
    SYNVARAUTH       VARCHAR (150),
    COMMON           CHAR (40),
    COLLNO           INTEGER NOT NULL,
    COLLDATE         DATE,
    COLLECTOR        VARCHAR (70),
    DETERMIN         CHAR (20),
    LOCALITY         VARCHAR (224),
    COUNTY           VARCHAR (30),
    DMCE             INTEGER,
    DMCN             INTEGER,
    ELEV             INTEGER,
    ASSOSPP          VARCHAR (150),
    SOILTOPO         VARCHAR (150),
    HABIT            CHAR (6),
    ABUNDANCE        INTEGER,
    FEDSTAT          CHAR (6) NOT NULL,
    STATESTAT        CHAR (6) NOT NULL,
    COMMENTS         VARCHAR (175)


CREATE TABLE HERPS (
    INSTALID         CHAR (3) NOT NULL,
    PLOTID           INTEGER NOT NULL,
    RECDATE          DATE NOT NULL,
    VERTID           CHAR (8),
    SEX              CHAR (1) NOT NULL,
    METHOD           CHAR (3) NOT NULL,
    NUM              INTEGER NOT NULL,
    RETRAP           INTEGER


CREATE TABLE HERPSURV (
    INSTALID         CHAR (3) NOT NULL,
    PLOTID           INTEGER NOT NULL,
    RECDATE          DATE NOT NULL,
```

```
    PLOTTYPE            CHAR (8),
    COLLECTOR           VARCHAR (70),
    AZIMUTH             REAL,
    LOC                 INTEGER,
    TEMPMAX             INTEGER,
    TEMPMIN             INTEGER,
    CLOUD_COVER         INTEGER,
    WIND                INTEGER,
    HERPNOTE            VARCHAR (100)
);

CREATE TABLE HISTORY (
    INSTALID            CHAR (3) NOT NULL,
    RECDATE             DATE NOT NULL,
    RECORDER            CHAR (35),
    INSTNOTE            VARCHAR (254)
);

CREATE TABLE INSTMAST (
    INSTALID            CHAR (3) NOT NULL,
    INNAME              CHAR (30) NOT NULL,
    INLOC               CHAR (40),
    INSIZE              FLOAT
);

CREATE TABLE LANDUSE (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    LANDUSE             CHAR (16) NOT NULL,
    USENOTE             VARCHAR (254)
);

CREATE TABLE LANDUSEYEARSUM (
    INSTALID            CHAR (3) NOT NULL,
    ANALYEAR            INTEGER NOT NULL,
    MOBS                INTEGER,
    MNONE               INTEGER,
    WHEEL               INTEGER,
    TRACK               INTEGER,
    EXCA                INTEGER,
```

```
FOOT            INTEGER,
BIV             INTEGER,
DEMO            INTEGER,
MOTHER          INTEGER,
NMOBS           INTEGER,
NMNONE          INTEGER,
GRAZING         INTEGER,
CROP            INTEGER,
FOREST          INTEGER,
HAY             INTEGER,
NMOTHER         INTEGER,
MAOBS           INTEGER,
MANONE          INTEGER,
PREBURN         INTEGER,
ACCBURN         INTEGER,
TILL            INTEGER,
MOW             INTEGER,
SEED            INTEGER,
PLANT           INTEGER,
CHEMICAL        INTEGER,
MAOTHER         INTEGER,
WIOBS           INTEGER,
WINONE          INTEGER,
DRIFTING        INTEGER,
SCOURING        INTEGER,
WIPEDPLNT       INTEGER,
WAOBS           INTEGER,
WANONE          INTEGER,
SHEET           INTEGER,
GULLY           INTEGER,
WAPEDPLNT       INTEGER,
DEBDAM          INTEGER,
MEALLOBS        INTEGER,
MEALLVIS        INTEGER,
LEALLOBS        INTEGER,
LEALLVIS        INTEGER,
MEWAOBS         INTEGER,
MEWAVIS         INTEGER,
LEWAOBS         INTEGER,
LEWAVIS         INTEGER,
MEWIOBS         INTEGER,
```

```
    MEWIVIS             INTEGER,
    LEWIOBS             INTEGER,
    LEWIVIS             INTEGER
);

CREATE TABLE LANDUSE_CODE (
    LANDUSE             CHAR (16) NOT NULL,
    LANDUSE_DEF         CHAR (35) NOT NULL,
    LANDUSE_NOTE        VARCHAR (100)
);

CREATE TABLE LINEMON (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VEGLOC              FLOAT  NOT NULL,
    DISTURB             CHAR (2) NOT NULL,
    GNDCOV              CHAR (2) NOT NULL,
    AERCOV              CHAR (2) NOT NULL,
    OPT_TEXT            CHAR (8)
);

CREATE TABLE MAINT_CODE (
    MAINTAIN            CHAR (16) NOT NULL,
    MAINTAIN_DEF        CHAR (35) NOT NULL,
    MAINTAIN_NOTE       VARCHAR (100)
);

CREATE TABLE MAINTACT (
    INSTALID            CHAR (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    MAINTAIN            CHAR (16) NOT NULL,
    MAINNOTE            VARCHAR (254)
);

CREATE TABLE MAMMALS (
    INSTALID            (3) NOT NULL,
    PLOTID              INTEGER NOT NULL,
    RECDATE             DATE NOT NULL,
    VERTID              (8),
```

```
    SEX             CHAR (1) NOT NULL,
    METHOD          (3) NOT NULL,
    NUM             INTEGER NOT NULL,
    RETRAP          INTEGER


CREATE TABLE MAMSURV (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    RECDATE         DATE NOT NULL,
    PLOTTYPE        CHAR (8),
    COLLECTOR       VARCHAR (70),
    TRAPS           CHAR (25),
    TRAPNIGHTS      INTEGER,
    BAITS           CHAR (25),
    TEMPMAX         INTEGER,
    TEMPMIN         INTEGER,
    CLOUD_COVER     INTEGER,
    PRECIP          FLOAT ,
    MAMNOTE         VARCHAR (100)


CREATE TABLE MAPS (
    INSTALID        CHAR (3) NOT NULL,
    MAPNAME         VARCHAR (32) NOT NULL,
    DMCELL          INTEGER NOT NULL,
    DMCETR          INTEGER NOT NULL,
    DMCNLL          INTEGER NOT NULL,
    DMCNTR          INTEGER NOT NULL,
    MAP             LONG VARCHAR NOT NULL


CREATE TABLE PCSDPLOTSUM (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    ANALYEAR        INTEGER NOT NULL,
    PLOTTYPE        CHAR (8),
    GDOBS           INTEGER,
    GDNONE          INTEGER,
    GDROAD          INTEGER,
    GDPASS          INTEGER,
```

```
    GDTRAIL             INTEGER,
    GDOTHER             INTEGER,
    GCOBS               INTEGER,
    GCBARE              INTEGER,
    GCLITTER            INTEGER,
    GCROCK              INTEGER,
    GCPLANT             INTEGER,
    GCMICRO             INTEGER,
    CCOBS               INTEGER,
    CCNONE              INTEGER,
    CCANN               INTEGER,
    CCPER               INTEGER,
    CCANNPER            INTEGER,
    ACOBS               INTEGER,
    AC4M                INTEGER
);

CREATE TABLE PCSDYEARSUM (
    INSTALID            CHAR (3) NOT NULL,
    ANALYEAR            INTEGER NOT NULL,
    GDNONEMEAN          FLOAT ,
    GDNONESTDEV         FLOAT ,
    GDROADMEAN          FLOAT ,
    GDROADSTDEV         FLOAT ,
    GDPASSMEAN          FLOAT ,
    GDPASSSTDEV         FLOAT ,
    GDTRAILMEAN         FLOAT ,
    GDTRAILSTDEV        FLOAT ,
    GDOTHMEAN           FLOAT ,
    GDOTHSTDEV          FLOAT ,
    GCBAREMEAN          FLOAT ,
    GCBARESTDEV         FLOAT ,
    GCLITMEAN           FLOAT ,
    GCLITSTDEV          FLOAT ,
    GCROCKMEAN          FLOAT ,
    GCROCKSTDEV         FLOAT ,
    GCPLANTMEAN         FLOAT ,
    GCPLANTSTDEV        FLOAT ,
    GCMICROMEAN         FLOAT ,
    GCMICROSTDEV        FLOAT ,
    CCNONEMEAN          FLOAT ,
```

```
    CCNONESTDEV     FLOAT ,
    CCANNMEAN       FLOAT ,
    CCANNSTDEV      FLOAT ,
    CCPERMEAN       FLOAT ,
    CCPERSTDEV      FLOAT ,
    CCAPMEAN        FLOAT ,
    CCAPSTDEV       FLOAT ,
    ACMEAN          FLOAT ,
    ACSTDEV         FLOAT ,
    AC00            FLOAT ,
    AC20            FLOAT ,
    AC40            FLOAT ,
    AC60            FLOAT ,
    AC80            FLOAT ,
    AC100           FLOAT

CREATE TABLE PCTTYEARSUM (
    INSTALID        CHAR (3) NOT NULL,
    ANALYEAR        INTEGER NOT NULL,
    OBS             INTEGER,
    T00TO50         INTEGER,
    T50TO100        INTEGER,
    T100TO150       INTEGER,
    T150TO200       INTEGER,
    TGT200          INTEGER

CREATE TABLE PLNTLIST (
    VEGID           CHAR (8),
    FAMILY          CHAR (20),
    GENUS           CHAR (20),
    SPEC            CHAR (25),
    SUBSPEC         CHAR (20),
    VARIETY         CHAR (20),
    LIFE            CHAR (1),
    ORIGIN          CHAR (1),
    FORM1           CHAR (1),
```

```
    FORM2                CHAR (1),
    TSTYPE               CHAR (1),
    SYNON                CHAR (8)
);

CREATE TABLE PLOTMAPS (
    INSTALID             CHAR (3) NOT NULL,
    PLOTID               INTEGER NOT NULL,
    GENMAP               LONG VARCHAR,
    LOCMAP               LONG VARCHAR,
    MISCMAP              LONG VARCHAR,
    PHOTOS               LONG VARCHAR
);

CREATE TABLE PLOTMAST (
    INSTALID             CHAR (3) NOT NULL,
    PLOTID               INTEGER NOT NULL,
    DMCE                 INTEGER,
    DMCN                 INTEGER,
    ZONE                 INTEGER,
    PLDATE               DATE NOT NULL,
    USGS                 CHAR (24),
    SOILSER              CHAR (8),
    RVAL                 FLOAT ,
    AZIMUTH              REAL,
    DECLIN               FLOAT
);

CREATE TABLE PLOTSURV (
    INSTALID             CHAR (3) NOT NULL,
    PLOTID               INTEGER NOT NULL,
    RECDATE              DATE NOT NULL,
    INVTYPE              CHAR (2) NOT NULL,
    PLOTTYPE             CHAR (8),
    SURVEYOR             CHAR (35),
    RECORDER             CHAR (35),
    TRAIN                CHAR (8),
    VEGTYPE              CHAR (30),
```

```
    ASPECT          CHAR (2),
    SOILDPTH        CHAR (3),
    PLOTNOTE        LONG VARCHAR


CREATE TABLE SOILLS (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    RECDATE         DATE NOT NULL,
    TRANLOC         INTEGER,
    SLOPE           FLOAT ,
    SLPLEN          FLOAT


CREATE TABLE SOILMAST (
    SOILSER         CHAR (8),
    SOILNAME        CHAR (40),
    PUBLK           FLOAT ,
    CALCKMEAN       FLOAT ,
    CALCKSTDEV      FLOAT ,
    T               FLOAT ,
    SOILCAT         INTEGER


CREATE TABLE SOILSMPL (
    INSTALID        CHAR (3) NOT NULL,
    PLOTID          INTEGER NOT NULL,
    YR              INTEGER,
    LABK            FLOAT ,
    TOTCLAY         FLOAT ,
    TOTSILT         FLOAT ,
    TOTSAND         FLOAT ,
    CO3CLAY         FLOAT ,
    FSILT           FLOAT ,
    CSILT           FLOAT ,
    VFSAND          FLOAT ,
    FSAND           FLOAT ,
    MSAND           FLOAT ,
    CSAND           FLOAT ,
    VCSAND          FLOAT ,
    WT2TO5MM        FLOAT ,
```

```
    WT5TO20MM           FLOAT ,
    WT20TO75M           REAL,
    COURFRAG            FLOAT ,
    ORGCARB             FLOAT ,
    ORGMATT             FLOAT ,
    BARCLAY             FLOAT ,
    BARWATER            FLOAT ,
    CARBLT2MM           FLOAT ,
    PH1TO2              FLOAT ,
    PH1TO1              FLOAT ,
    SOILNOTE            VARCHAR (254),
    STRUCT_CODE         INTEGER,
    PERM_CLASS          INTEGER
);

CREATE TABLE STATE_STATUS (
    STATESTAT           CHAR (6) NOT NULL,
    STATESTAT_DEF       VARCHAR (50) NOT NULL,
    STATESTAT_NOTE      VARCHAR (100)
);

CREATE TABLE TACTCONA (
    INSTALID            CHAR (3) NOT NULL,
    ANALYEAR            INTEGER NOT NULL,
    PLOTID              INTEGER NOT NULL,
    VEGID               CHAR (8),
    LIFEFORM            CHAR (1),
    VEGCOND             CHAR (1),
    HTMINTO1            INTEGER,
    HT1TO2              INTEGER,
    HT2TO3              INTEGER,
    HT3TO4              INTEGER,
    HTGT4               INTEGER
);

CREATE TABLE VERTLIST (
    VERTID              CHAR (8),
    CLASS               CHAR (15),
    ORDERS              CHAR (20),
    SUBORDER            CHAR (15),
    FAMILY              CHAR (20),
```

```
    SUBFAM          CHAR (15),
    GENUS           CHAR (20),
    SPEC            CHAR (25),
    COMMON          CHAR (40),
    AUTHORS         CHAR (35),
    VERTSTAT        CHAR (70),
    VERTNOTE        VARCHAR (254)


CREATE UNIQUE INDEX AERCOV_CODE_KEY ON AERCOV_CODE (
    AERCOV);

CREATE UNIQUE INDEX BIRDSURV_KEY ON BIRDSURV (
    INSTALID,
    PLOTID,
    RECDATE);

CREATE UNIQUE INDEX CLIMATESTATIONS_KEY ON CLIMATESTATIONS (
    INSTALID,
    STATION);

CREATE UNIQUE INDEX DISTURB_CODE_KEY ON DISTURB_CODE (
    DISTURB);

CREATE UNIQUE INDEX EROS_CODE_KEY ON EROS_CODE (
    STATUS);

CREATE UNIQUE INDEX FED_STATUS_KEY ON FED_STATUS (
    FEDSTAT);

CREATE UNIQUE INDEX GNDCOV_CODE_KEY ON GNDCOV_CODE (
    GNDCOV);

CREATE UNIQUE INDEX GROUPING_KEY ON GROUPING (
    PLOTID,
    INSTALID);

CREATE UNIQUE INDEX HERPSURV_KEY ON HERPSURV (
    INSTALID,
    PLOTID,
    RECDATE);
```

```
CREATE UNIQUE INDEX INSTMAST_KEY ON INSTMAST (
    INSTALID);

CREATE UNIQUE INDEX LANDUSE_CODE_KEY ON LANDUSE_CODE (
    LANDUSE);

CREATE UNIQUE INDEX MAINT_CODE_KEY ON MAINT_CODE (
    MAINTAIN);

CREATE UNIQUE INDEX MAMSURV_KEY ON MAMSURV (
    INSTALID,
    PLOTID,
    RECDATE);

CREATE UNIQUE INDEX PLNTLIST_KEY ON PLNTLIST (
    VEGID);

CREATE UNIQUE INDEX PLOTMAST_KEY ON PLOTMAST (
    INSTALID,
    PLOTID);

CREATE UNIQUE INDEX PLOTSURV_KEY ON PLOTSURV (
    INSTALID,
    PLOTID,
    RECDATE);

CREATE UNIQUE INDEX STATE_STATUS_KEY ON STATE_STATUS (
    STATESTAT);

CREATE UNIQUE INDEX VERTLIST_KEY ON VERTLIST (
    VERTID);

ALTER TABLE ENVCONST
      PRIMARY KEY ();

ALTER TABLE ENVCONST
         FOREIGN KEY FK_ENVCONST_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE INSTMAST
      PRIMARY KEY (INSTALID);
```

```
ALTER TABLE HERPSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE HERPSURV
         FOREIGN KEY FK_HERPSURV_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE MAMSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE MAMSURV
         FOREIGN KEY FK_MAMSURV_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE METHODS_CODE
      PRIMARY KEY (METHOD);

ALTER TABLE HERPS
      PRIMARY KEY ();

ALTER TABLE HERPS
         FOREIGN KEY FK_HERPS_1 ((METHOD))
         REFERENCES METHODS_CODE ON DELETE RESTRICT;
         FOREIGN KEY FK_HERPS_2 ((INSTALID, PLOTID, RECDATE))
         REFERENCES HERPSURV ON DELETE RESTRICT;
         FOREIGN KEY FK_HERPS_3 ((SEX))
         REFERENCES GENDER_CODE ON DELETE RESTRICT;

ALTER TABLE MAMMALS
      PRIMARY KEY ();

ALTER TABLE MAMMALS
         FOREIGN KEY FK_MAMMALS_1 ((METHOD))
         REFERENCES METHODS_CODE ON DELETE RESTRICT;
         FOREIGN KEY FK_MAMMALS_2 ((INSTALID, PLOTID, RECDATE))
         REFERENCES MAMSURV ON DELETE RESTRICT;
         FOREIGN KEY FK_MAMMALS_3 ((SEX))
         REFERENCES GENDER_CODE ON DELETE RESTRICT;

ALTER TABLE GENDER_CODE
      PRIMARY KEY (SEX);
```

```
ALTER TABLE POINT_CODE
      PRIMARY KEY (MEASURE_PT);

ALTER TABLE BIRDS
      PRIMARY KEY ();

ALTER TABLE BIRDS
         FOREIGN KEY FK_BIRDS_1 ((MEASURE_PT))
         REFERENCES POINT_CODE ON DELETE RESTRICT;
         FOREIGN KEY FK_BIRDS_2 ((MATED_STATUS))
         REFERENCES MATED_STATUS_CODE ON DELETE RESTRICT;

ALTER TABLE MATED_STATUS_CODE
      PRIMARY KEY (MATED_STATUS);

ALTER TABLE PLOTSURV
      PRIMARY KEY (INSTALID, PLOTID, RECDATE);

ALTER TABLE PLOTSURV
         FOREIGN KEY FK_PLOTSURV_1 ((INSTALID, PLOTID))
         REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE MAINTACT
      PRIMARY KEY ();

ALTER TABLE MAINTACT
         FOREIGN KEY FK_MAINTACT_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;
         FOREIGN KEY FK_MAINTACT_2 ((MAINTAIN))
         REFERENCES MAINT_CODE ON DELETE RESTRICT;

ALTER TABLE LINEMON
      PRIMARY KEY ();

ALTER TABLE LINEMON
         FOREIGN KEY FK_LINEMON_1 ((DISTURB))
         REFERENCES DISTURB_CODE ON DELETE RESTRICT;
         FOREIGN KEY FK_LINEMON_2 ((AERCOV))
         REFERENCES AERCOV_CODE ON DELETE RESTRICT;
         FOREIGN KEY FK_LINEMON_3 ((GNDCOV))
```

```
        REFERENCES GNDCOV_CODE ON DELETE RESTRICT;
        FOREIGN KEY FK_LINEMON_4 ((INSTALID, PLOTID, RECDATE))
        REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE DISTURB_CODE
    PRIMARY KEY (DISTURB);

ALTER TABLE AERCOV_CODE
    PRIMARY KEY (AERCOV);

ALTER TABLE GNDCOV_CODE
    PRIMARY KEY (GNDCOV);

ALTER TABLE LANDUSE
    PRIMARY KEY ();

ALTER TABLE LANDUSE
        FOREIGN KEY FK_LANDUSE_1 ((INSTALID, PLOTID, RECDATE))
        REFERENCES PLOTSURV ON DELETE RESTRICT;
        FOREIGN KEY FK_LANDUSE_2 ((LANDUSE))
        REFERENCES LANDUSE_CODE ON DELETE RESTRICT;

ALTER TABLE LANDUSE_CODE
    PRIMARY KEY (LANDUSE);

ALTER TABLE GNDCOVER
    PRIMARY KEY ();

ALTER TABLE GNDCOVER
        FOREIGN KEY FK_GNDCOVER_1 ((INSTALID, PLOTID, RECDATE))
        REFERENCES PLOTSURV ON DELETE RESTRICT;
        FOREIGN KEY FK_GNDCOVER_2 ((DISTURB))
        REFERENCES DISTURB_CODE ON DELETE RESTRICT;

ALTER TABLE F_COUNT
    PRIMARY KEY ();

ALTER TABLE F_COUNT
        FOREIGN KEY FK_F_COUNT_1 ((INSTALID, PLOTID, RECDATE))
        REFERENCES PLOTSURV ON DELETE RESTRICT;
```

```
ALTER TABLE EROSEVID
      PRIMARY KEY ();

ALTER TABLE EROSEVID
         FOREIGN KEY FK_EROSEVID_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;
         FOREIGN KEY FK_EROSEVID_2 ((STATUS))
         REFERENCES EROS_CODE ON DELETE RESTRICT;

ALTER TABLE EROS_CODE
      PRIMARY KEY (STATUS);

ALTER TABLE BELTTRAN
      PRIMARY KEY ();

ALTER TABLE BELTTRAN
         FOREIGN KEY FK_BELTTRAN_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE BELTSURV
      PRIMARY KEY ();

ALTER TABLE BELTSURV
         FOREIGN KEY FK_BELTSURV_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE AERCOVER
      PRIMARY KEY ();

ALTER TABLE AERCOVER
         FOREIGN KEY FK_AERCOVER_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE PLOTMAST
      PRIMARY KEY (INSTALID, PLOTID);

ALTER TABLE PLOTMAST
         FOREIGN KEY FK_PLOTMAST_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;
```

```
ALTER TABLE PLOTMAPS
      PRIMARY KEY ();

ALTER TABLE PLOTMAPS
         FOREIGN KEY FK_PLOTMAPS_1 ((INSTALID, PLOTID))
         REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE HISTORY
      PRIMARY KEY ();

ALTER TABLE HISTORY
         FOREIGN KEY FK_HISTORY_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE BELTMON
      PRIMARY KEY ();

ALTER TABLE BELTMON
         FOREIGN KEY FK_BELTMON_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE BASALA
      PRIMARY KEY ();

ALTER TABLE BASALA
         FOREIGN KEY FK_BASALA_1 ((INSTALID, PLOTID, RECDATE))
         REFERENCES PLOTSURV ON DELETE RESTRICT;

ALTER TABLE MAINT_CODE
      PRIMARY KEY (MAINTAIN);

ALTER TABLE GROUPING
      PRIMARY KEY (PLOTID, INSTALID);

ALTER TABLE SOILSMPL
      PRIMARY KEY ();

ALTER TABLE SOILSMPL
         FOREIGN KEY FK_SOILSMPL_1 ((INSTALID, PLOTID))
         REFERENCES PLOTMAST ON DELETE RESTRICT;
```

```
ALTER TABLE CLIMATESTATIONS
      PRIMARY KEY (INSTALID, STATION);

ALTER TABLE CLIMATESTATIONS
         FOREIGN KEY FK_CLIMATESTATIONS_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE MAPS
      PRIMARY KEY ();

ALTER TABLE MAPS
         FOREIGN KEY FK_MAPS_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE CLIMATEDATA
      PRIMARY KEY ();

ALTER TABLE CLIMATEDATA
         FOREIGN KEY FK_CLIMATEDATA_1 ((INSTALID, STATION))
         REFERENCES CLIMATESTATIONS ON DELETE RESTRICT;

ALTER TABLE PCSDYEARSUM
      PRIMARY KEY ();

ALTER TABLE PCSDYEARSUM
         FOREIGN KEY FK_PCSDYEARSUM_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE EROSION
      PRIMARY KEY ();

ALTER TABLE EROSION
         FOREIGN KEY FK_EROSION_1 ((INSTALID))
         REFERENCES INSTMAST ON DELETE RESTRICT;
         FOREIGN KEY FK_EROSION_2 ((INSTALID, PLOTID))
         REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE COMMCLASSPLOTSUM
      PRIMARY KEY ();
```

```
ALTER TABLE COMMCLASSPLOTSUM
        FOREIGN KEY FK_COMMCLASSPLOTSUM_1 ((INSTALID))
        REFERENCES INSTMAST ON DELETE RESTRICT;
        FOREIGN KEY FK_COMMCLASSPLOTSUM_2 ((INSTALID, PLOTID))
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE PCSDPLOTSUM
     PRIMARY KEY ();

ALTER TABLE PCSDPLOTSUM
        FOREIGN KEY FK_PCSDPLOTSUM_1 ((INSTALID))
        REFERENCES INSTMAST ON DELETE RESTRICT;
        FOREIGN KEY FK_PCSDPLOTSUM_2 ((INSTALID, PLOTID))
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE TACTCONA
     PRIMARY KEY ();

ALTER TABLE TACTCONA
        FOREIGN KEY FK_TACTCONA_1 ((INSTALID))
        REFERENCES INSTMAST ON DELETE RESTRICT;
        FOREIGN KEY FK_TACTCONA_2 ((INSTALID, PLOTID))
        REFERENCES PLOTMAST ON DELETE RESTRICT;

ALTER TABLE PCTTYEARSUM
     PRIMARY KEY ();

ALTER TABLE PCTTYEARSUM
        FOREIGN KEY FK_PCTTYEARSUM_1 ((INSTALID))
        REFERENCES INSTMAST ON DELETE RESTRICT;

ALTER TABLE HERBRIUM
     PRIMARY KEY ();

ALTER TABLE HERBRIUM
        FOREIGN KEY FK_HERBRIUM_1 ((FEDSTAT))
        REFERENCES FED_STATUS ON DELETE RESTRICT;
        FOREIGN KEY FK_HERBRIUM_2 ((STATESTAT))
        REFERENCES STATE_STATUS ON DELETE RESTRICT;
        FOREIGN KEY FK_HERBRIUM_3 ((INSTALID))
        REFERENCES INSTMAST ON DELETE RESTRICT;
```

```
ALTER TABLE FED_STATUS
      PRIMARY KEY (FEDSTAT);

ALTER TABLE STATE_STATUS
      PRIMARY KEY (STATESTAT);
```

Species

```
CREATE TABLE FOOD_INFO (
      FOOD_TYPE            CHAR (4) NOT NULL,
      FOOD_DEF             VARCHAR (35) NOT NULL,
      FOOD_NOTE            VARCHAR (100)
);

CREATE TABLE GENERAL_HABITAT (
      VERTID               CHAR (8),
      GEN_HABITAT          CHAR (4) NOT NULL
);

CREATE TABLE HABITAT_INFO (
      GEN_HABITAT          CHAR (4) NOT NULL,
      HABITAT_DEF          VARCHAR (35) NOT NULL,
      HABITAT_NOTE         VARCHAR (100)
);

CREATE TABLE LOC_INFO (
      NEST_LOC             CHAR (4) NOT NULL,
      LOC_DEF              VARCHAR (35) NOT NULL,
      LOC_NOTE             VARCHAR (100)
);

CREATE TABLE MATED_STATUS_CODE (
      MATED_STATUS         CHAR (8) NOT NULL,
      MSTATUS_DEF          CHAR (8) NOT NULL,
      MSTATUS_NOTE         VARCHAR (100)
);
```

```
CREATE TABLE NEOTROPICAL (
    VERTID              CHAR (8),
    NEOTROP             CHAR (4) NOT NULL


CREATE TABLE NEOTROPIC_INFO (
    NEOTROP             CHAR (4) NOT NULL,
    NEOTROP_DEF         VARCHAR (35) NOT NULL,
    NEOTROP_NOTE        VARCHAR (100)


CREATE TABLE NEST_LOCATION (
    VERTID              CHAR (8),
    NEST_LOC            CHAR (4) NOT NULL


CREATE TABLE PLANTS (
    VEGID               CHAR (8),
    FAMILY              CHAR (20),
    GENUS               CHAR (20),
    SPEC                CHAR (25),
    SUBSPEC             CHAR (20),
    VARIETY             CHAR (20),
    LIFE                CHAR (1),
    ORIGIN              CHAR (1),
    FORM                CHAR (8),
    FORM2               CHAR (1),
    FORM3               CHAR (8),
    FORM4               CHAR (8),
    FORM5               CHAR (8),
    FORM6               CHAR (8),
    HYBRID              CHAR (8),
    SYNON               CHAR (8),
    VEGSTAT             CHAR (8),
    VEGDIST1            CHAR (8),
    VEGDIST2            CHAR (8),
    VEGDIST3            CHAR (8),
    VEGDIST4            CHAR (8),
    VEGDIST5            CHAR (8),
    VEGDIST6            CHAR (8),
    VEGDIST7            CHAR (8),
```

```
    VEGDIST8            CHAR (8),
    VEGDIST9            CHAR (8),
    VEGDST10            CHAR (8),
    VEGDST11            CHAR (8),
    VEGDST12            CHAR (8),
    VEGDST13            CHAR (8),
    VEGDST14            CHAR (8),
    VEGDST15            CHAR (8),
    VEGDST16            CHAR (8),
    VEGDST17            CHAR (8),
    VEGDST18            CHAR (8),
    VEGDST19            CHAR (8),
    VEGDST20            CHAR (8),
    RECDATE             DATE NOT NULL
);

CREATE TABLE SEASON_INFO (
    SEASON              CHAR (4) NOT NULL,
    SEASON_DEF          VARCHAR (35) NOT NULL,
    SEASON_NOTE         VARCHAR (100)
);

CREATE TABLE SFST (
    VERTID              CHAR (8),
    SEASON              CHAR (4) NOT NULL,
    FOOD_TYPE           CHAR (4) NOT NULL,
    SUBSTRATE           CHAR (4) NOT NULL,
    TECHNIQUE           CHAR (4) NOT NULL
);

CREATE TABLE SPP_INFO (
    VERTID              CHAR (8),
    ALPHA_CODE          CHAR (8),
    AOU_NUM             CHAR (8)
);

CREATE TABLE SUBSTRATE_INFO (
    SUBSTRATE           CHAR (4) NOT NULL,
    SUBSTRATE_DEF       VARCHAR (35) NOT NULL,
    SUBSTRATE_NOTE      VARCHAR (100)
);
```

```
CREATE TABLE TECHNIQUE_INFO (
    TECHNIQUE           CHAR (4) NOT NULL,
    TECHNIQUE_DEF       VARCHAR (35) NOT NULL,
    TECHNIQUE_NOTE      VARCHAR (100)


CREATE TABLE TSTYPE (
    VEGID               CHAR (8),
    TSTYPE              CHAR (1)


CREATE UNIQUE INDEX FOOD_INFO_KEY ON FOOD_INFO (
    FOOD_TYPE);

CREATE UNIQUE INDEX GENERAL_HABITAT_KEY ON GENERAL_HABITAT (
    GEN_HABITAT,
    VERTID);

CREATE UNIQUE INDEX HABITAT_INFO_KEY ON HABITAT_INFO (
    GEN_HABITAT);

CREATE UNIQUE INDEX LOC_INFO_KEY ON LOC_INFO (
    NEST_LOC);

CREATE UNIQUE INDEX MATED_STATUS_CODE_KEY ON
    MATED_STATUS_CODE (
    MATED_STATUS);

CREATE UNIQUE INDEX NEOTROPICAL_KEY ON NEOTROPICAL (
    VERTID,
    NEOTROP);

CREATE UNIQUE INDEX NEOTROPIC_INFO_KEY ON NEOTROPIC_INFO (
    NEOTROP);

CREATE UNIQUE INDEX NEST_LOCATION_KEY ON NEST_LOCATION (
    NEST_LOC,
    VERTID);
```

```
CREATE UNIQUE INDEX PLANTS_KEY ON PLANTS (
    VEGID);

CREATE UNIQUE INDEX SEASON_INFO_KEY ON SEASON_INFO (
    SEASON);

CREATE UNIQUE INDEX SFST_KEY ON SFST (
    VERTID,
    SEASON,
    FOOD_TYPE,
    SUBSTRATE,
    TECHNIQUE);

CREATE UNIQUE INDEX SPP_INFO_KEY ON SPP_INFO (
    VERTID);

CREATE UNIQUE INDEX SUBSTRATE_INFO_KEY ON SUBSTRATE_INFO (
    SUBSTRATE);

CREATE UNIQUE INDEX TECHNIQUE_INFO_KEY ON TECHNIQUE_INFO (
    TECHNIQUE);

CREATE UNIQUE INDEX TSTYPE_KEY ON TSTYPE (
    VEGID);

ALTER TABLE SPP_INFO
     PRIMARY KEY (VERTID);

ALTER TABLE SPP_INFO
        FOREIGN KEY FK_SPP_INFO_1 ((VERTID))
        REFERENCES VERTS ON DELETE RESTRICT;

ALTER TABLE TECHNIQUE_INFO
     PRIMARY KEY (TECHNIQUE);

ALTER TABLE SFST
      PRIMARY KEY (VERTID, SEASON, FOOD_TYPE, SUBSTRATE,
TECHNIQUE);
```

```
ALTER TABLE SFST
        FOREIGN KEY FK_SFST_1 ((TECHNIQUE))
        REFERENCES TECHNIQUE_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_SFST_2 ((FOOD_TYPE))
        REFERENCES FOOD_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_SFST_3 ((SEASON))
        REFERENCES SEASON_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_SFST_4 ((SUBSTRATE))
        REFERENCES SUBSTRATE_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_SFST_5 ((VERTID))
        REFERENCES SPP_INFO ON DELETE RESTRICT;

ALTER TABLE FOOD_INFO
    PRIMARY KEY (FOOD_TYPE);

ALTER TABLE SEASON_INFO
    PRIMARY KEY (SEASON);

ALTER TABLE SUBSTRATE_INFO
    PRIMARY KEY (SUBSTRATE);

ALTER TABLE NEOTROPIC_INFO
    PRIMARY KEY (NEOTROP);

ALTER TABLE NEOTROPICAL
    PRIMARY KEY (VERTID, NEOTROP);

ALTER TABLE NEOTROPICAL
        FOREIGN KEY FK_NEOTROPICAL_1 ((NEOTROP))
        REFERENCES NEOTROPIC_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_NEOTROPICAL_2 ((VERTID))
        REFERENCES SPP_INFO ON DELETE RESTRICT;

ALTER TABLE HABITAT_INFO
    PRIMARY KEY (GEN_HABITAT);

ALTER TABLE GENERAL_HABITAT
    PRIMARY KEY (GEN_HABITAT, VERTID);
```

```
ALTER TABLE GENERAL_HABITAT
        FOREIGN KEY FK_GENERAL_HABITAT_1 ((GEN_HABITAT))
        REFERENCES HABITAT_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_GENERAL_HABITAT_2 ((VERTID))
        REFERENCES SPP_INFO ON DELETE RESTRICT;

ALTER TABLE LOC_INFO
     PRIMARY KEY (NEST_LOC);

ALTER TABLE NEST_LOCATION
     PRIMARY KEY (NEST_LOC, VERTID);

ALTER TABLE NEST_LOCATION
        FOREIGN KEY FK_NEST_LOCATION_1 ((NEST_LOC))
        REFERENCES LOC_INFO ON DELETE RESTRICT;
        FOREIGN KEY FK_NEST_LOCATION_2 ((VERTID))
        REFERENCES SPP_INFO ON DELETE RESTRICT;

ALTER TABLE TSTYPE
     PRIMARY KEY (VEGID);

ALTER TABLE TSTYPE
        FOREIGN KEY FK_TSTYPE_1 ((VEGID))
        REFERENCES PLANTS ON DELETE RESTRICT;

ALTER TABLE PLANTS
     PRIMARY KEY (VEGID);

ALTER TABLE VERTS
     PRIMARY KEY (VERTID);
```

Distribution

Army Headquarters
ATTN: DAIM-ED-N
ATTN: DAMO-TRO
ATTN: ANOP
ATTN: AMSTE-EQ
ATTN: SFIM-AEC-ECN
ATTN: ATIC-CTS
ATTN: FKEN-EN
ATTN: AEAGC-TD-MO
ATTN: AEAGC-TD-RMD
ATTN: APOP-TR
ATTN: APEN-EV

US Army Europe
ATTN: AEAEN-ENVR 09014
100th Support Group
ATTN: AETT-EN-DPW 09114
CMTC Hohenfels 09173
ATTN: AETTH-DEH

FORSCOM
Fts Gillem & McPherson 30330
ATTN: AFOB-TE
ATTN: AFOP-TSR
ATTN: AFPI-ENE
Installations:
Fort Indiantown Gap 17003
ATTN: AFKA-ZQ-DE-E
Fort AP Hill 22427
ATTN: ANAP-PWE
Fort McPherson 30330
ATTN: AFZK-EH-E
Fort Sheridan 60037
ATTN: AFZO-DE
Fort Riley 66441
ATTN: AFZN-DE-V-N
Fort Polk 71459
ATTN: AFZX-DE-EN
Fort Sam Houston 78234
ATTN: AFZG-DE-EM
Fort Ord 93941
ATTN: AFZW-DE
Fort Lewis 98433
ATTN: AFZH-DE-Q
Fort Carson 80913
ATTN: AFZC-ECM-NR
Fort Bragg 28307
ATTN: AFZA-PW-DW
Fort Campbell 42223
ATTN: AFZB-DPW-E
Fort McCoy 54656
ATTN: AFZR-DE-E
Fort Pickett 23824
ATTN: AFZA-FP-E
Fort Stewart 31314
ATTN: AFZP-DEV
Fort Buchanan 00934
ATTN: AFZK-B-EHE
Fort Devens 01433
ATTN: AFZD-DEM
Fort Drum 13602
ATTN: AFZS-EH-E
Fort Irwin 92310
ATTN: AFZJ-EHE-EN
Fort Hood 76544
ATTN: AFZF-DE-ENV
Fort Hunter Liggett 93928
ATTN: AFZW-HE-DE
Yakima Tng Center 98901-5000
ATTN: AFZH-Y-ENR
Fort Dix 08640
ATTN: ATZT-EHN

TRADOC
Fort Monroe 23651
ATTN: ATBO-G
ATTN: ATBO-FE
Installations:
Fort Lee 23801
ATTN: ATZM-EPE
Fort Jackson 29207
ATTN: ATZJ-PWN
Fort Gordon 30905
ATTN: ATZH-DIE
Fort Benning 31905
ATTN: ATZB-PWN
Fort McClellan 36205
ATTN: ATZN-EM
Fort Rucker 36362
ATTN: ATZQ-DPW-EN
Fort Leonard Wood 64573
ATTN: ATZT-DPW-EE
Fort Leavenworth 66027
ATTN: ATZL-GCE
Fort Bliss 79916
ATTN: ATZC-DOE
Carlisle Barracks 17013
ATTN: ATZE-DPW-E
Fort Eustis 23604
ATTN: ATZF-PWE
Fort Chaffee 72905
ATTN: ATZR-ZF
Fort Sill 73503
ATTN: ATZR-B
Fort Huachuca 85613
ATTN: ATZS-EHB
Fort Knox 40121
ATTN: ATZK-PWE

USAMC Instal & Srvc Activity
ATTN: AMXEN-M 61299
Rock Island Arsenal
ATTN: AMSMC-EHR
ATTN: SMCRI-PWB
White Sands Missile Range
ATTN: STEWS-ES-E
US Army Dugway Proving Ground
ATTN: STEDP-EPO-CP
US Army Yuma Proving Ground
ATTN: STEYP-ES-E
Aberdeen Proving Ground
ATTN: STERP-SH-ER
ATTN: AMSTE-EQ

National Guard Bureau 20310
ATTN: NGB-ARE
ATTN: NGB-ARI
ATTN: NGB-ARO-TS

Army National Guard
Ft. Richardson, AK 99505-5800
Phoenix, AZ 85008-3495
Sacramento, CA 95826-9101
Los Alamitos, CA 90720
Boise, ID 83707-4507
Jackson, MS 39209
Camp Shelby, MS 39407-5500
Oklahoma City, OK 73111-4389
Draper, UT 84020-1776
Braggs, OK 74423
Reading, MA 01867-1999
Camp Edwards, MA 02542-5003
Richmond, VA 23219
Columbia, SC 29201
Eastover, SC 29244
St. Augustine, FL 32085
Starke, FL 32091
Indianapolis, IN 46241
Lansing, MI 48913
Little Falls, MN 56345
Jefferson, MO 65101

US Military Academy 10996
ATTN: MAEN-EV
ATTN: DOPS

US Army Research Laboratory
ATTN: AMSRL-OP-SDFE

US Govt Printing Office 20401
ATTN: Rec Sec/Deposit Sec

Defense Technical Info Ctr 22304
ATTN: DTIC-FAB

94
4/12/95

This publication was reproduced on recycled paper.