

Land Condition - Trend Analysis Data Dictionary

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Introduction

The US Army Construction Engineering Research Laboratories (USACERL) developed the Land Condition Trend Analysis (LCTA) program to meet the need 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 US and overseas.

In addition, 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. Providing user-friendly automated programs to collect, analyze, interpret, and report natural resources data and land use impacts for decision making is the objective of the LCTA IMS.

Components of the LCTA IMS include:

- 1) Automated data collection techniques
- 2) Imagery processing for remotely sensed images and spatial data
- 3) Multimedia and hypermedia applications
- 4) Global electronic networking
- 5) Relational database management system
- 6) LCTA Program Manager

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 Program Manager 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 described by the National Institute of Standards and Technology (NIST) as "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". 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. Customized software is used where specific needs are not met from other COTS software.

LCTA Relational Database

A relational database model or Relational Data Base Management System (RDBMS), represents data as tables, with records stored as rows (observations), and data elements (variables) are stored as columns of the rows. Tables may also 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, allowing common data to be joined by use of a Structured Query Language (SQL) statement. Tables with referential integrity constraints are 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 design.

The LCTA database has 8 distinct components:

1. Plot information data
2. Land use data
3. Vegetation data
4. Wildlife data
5. Climate data
6. Soils data
7. Supplementary information
8. Summary data

Together 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 first represented as it's distinct components with little mention of the relationships between tables. Then the database 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 Program Manager.

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 the *US Army Land Condition-Trend Analysis (LCTA) Plot Inventory Field Methods* (USACERL Technical Report N-92-03). For more detailed information about the LCTA data collection techniques please refer to this publication. At the end of the database discussion a complete LCTA data dictionary will be presented.

Document Syntax and Terminology

This publication uses the following syntax conventions.

- entity (table) names are in uppercase
- data element names are uppercase and italicized

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 store similar data 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 which sets the data requirement rule for a data element. If a data element has a nullity rule of not null data is required.

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, allowing common data to 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 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 to allow someone without prior knowledge of the site to relocate the beginning stake and re-survey the plot. The photographs 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 along with 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 while 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 SQLBase software documentation.

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 × 6 meter 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, such conditions may be recorded under the notes column of each table.

The tables storing land use data are LANDUSE, MAINTACT, EROSEVID.

Table	Purpose
EROSEVID	Observed erosion evidence data
LANDUSE	Military and non-military land use data
MAINTACT	Maintenance activity data

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, and botanical composition, and for ground-truthing remotely sensed imagery.

One hundred points are sampled along the line transect beginning at the 0.5 meter point and continuing at 1 meter intervals along the measuring tape. The 1 meter 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 meter. Canopy cover above 1 meter is measured using a telescoping range pole.

Surface Disturbance

If a point has been disturbed, the nature of the disturbance is determined and the appropriate category selected. Categories of disturbance are listed below. 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. In the case of vehicle tracks, the ability to distinguish a general direction of travel is a prerequisite to establishing evidence of disturbance.

Code	Definition
N	No disturbance
O	Other disturbance
P	Pass
R	Road
T	Trail

Disturbance data is entered into the GNDCOVER table under the column *DISTURB*.

Table	Disturbance
GNDCOVER	Ground data from line transect inventory

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. Again, this data is entered into the GNDCOVER table under the column *VEGID*. In many cases 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 meter measuring rod as it is held plumb to the ground. For vegetation above 1 meter, the rod is replaced by a telescoping range pole.

Canopy cover is recorded in decimeter intervals to a height of 2 meters. Above 2 meters, it is recorded in 0.5 meter intervals up to 8.5 meters. 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 meters also is recorded as present if an imaginary extension of the range pole above 8.5 meters 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 meters, 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 meters 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 meter intervals, beginning at the 0.5 meter point, the tip of the 1 meter measuring rod is used to determine the presence and type of disturbance. Ground cover is recorded using the valid codes listed below. Plant species identification is not necessary for short-term monitoring. The presence absence of canopy cover at any height is determined for each point and recorded as shown in the valid aerial cover categories.

Valid Short-Term Monitoring Ground Cover Categories

Code	Definition
B	Bare ground
L	Litter
M	Microphyte
P	Plant
R	Rock

Valid Short-Term Monitoring Canopy Cover Categories.

Code	Definition
A	Annual
AP	Annual/perennial
N	No aerial cover
P	Perennial

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. Since plant species identification is not necessary a defined set of categories exists for both ground cover and canopy cover. Ground disturbance uses the same categories defined for the initial inventory.

Table	Purpose
LINEMON	Line transect monitoring data

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 width of the 100 meter 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 location 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. Individuals with heights greater than 8.5 meters are in general entered as 8.6 meters.

Some woody plants tend to produce multiple stems from a common root system. Although they may appear to be separate plants, these multi-stemmed 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 meter height classes up to 4 meters, and a single class for plants higher than 4 meters. This data is stored in the BELTMON table.

Table	Purpose
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 main 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 Program Manager.

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 then 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 Soil Conservation Service, Publication SCS-TP-159, 1982).

Floristic inventory data is stored in the HERBRIUM table. In addition to the many elements in this table site information is recorded in the SITE table and species synonymies are stored in the SYNONYMY table. SITE is a parent of HERBRIUM and is enforced through referential integrity constraints.

Please note that the floristic inventory tables listed here may differ from your current database. The changes were made to incorporate all data better into the database. Contact your LCTA support center for incorporating these changes into your current database.

Table	Purpose
HERBRIUM	Floristic inventory data
SITE	Collection site data

SYNONYMY | Species synonymy data

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 bio-indicators and are easy to sample at the scale of the LCTA plot.

Standard wildlife inventories are conducted on a sub-sample 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 so as 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.

Please note that the wildlife tables listed here may differ from your current database. The changes were made to incorporate all wildlife data better into the database. Contact your LCTA support center for incorporating these changes into your current database.

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 AM or PM) by slowly walking the length of the LCTA plot in 6 minutes, recording all birds seen or heard within 100 meters of the plot. Upon reaching the end of the plot, the observer stops for 8 minutes and again records all birds seen or heard within 100 meters. Finally, the observer walks back to the starting point in a period of 6 minutes again recording any birds detected within 100 meters of the plot. 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 as AM or PM. The location 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 (available from the LCTA support center). 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 non-singing 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 also recorded as above and additionally entering a "Y" 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.

Valid Mated Status Codes (MATED_STATUS_CODE table)

Code	Definition
*	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 status's were totaled and entered as one observation)
NR	Not recorded

Valid Measurement Point Codes (POINT_CODE table)

Code	Definition
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 meters apart; trap lines are spaced 30 meters 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 below, 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 respectively 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.

Valid Gender Codes (GENDER_CODE table)

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

Valid Method Codes (METHODS_CODE table)

Code	Definition
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 inventories for mammals on
METHODS_CODE	Mammal, reptiles and amphibian 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 meters 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 meter 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 inches high, buried 2 to 3 inches 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 inch 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 below, 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 respectively 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	Herp data from wildlife inventory
HERPSURV	Table identifying all inventories for herps on each plot
METHODS_CODE	Mammal and herp 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 Program Manager. This information includes order, class, family species, genus, sub-species, variety and common name. Refer to the LCTA Program Manager manual for details on running this procedure.

Table	Purpose
VERTLIST	Master list cataloging each vertebrate code

Climate Data

Climate data is collected from 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 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 in the *SOILDPTH* column of the PLOTSURV table.

Soil Samples

A composite soil sample is taken at each plot. Five small samples are taken approximately 1 meter from the line transect at the 0, 25, 50, 75, and 100 meter points. All litter is removed from the surface. With a narrow spade or mattock, a small pit approximately 15 centimeters deep is dug. A vertical slice comprising approximately 0.2 liters 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 along with a double-faced aluminum tag inscribed with the installation name or abbreviation and plot number. Sealed bags are boxed and shipped to an institution 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 meter 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 a level aspect is recorded. Aspect is stored in the PLOTSURV table in the *ASPECT* column.

Slope Length and Gradient

Slope length and gradient are measured at the zero, 50, and 100 meter 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 the Universal Soil Loss Equation)
SOILMAST	Master soil series table
SOILSMPL	Soil analysis data

Supplementary Information

The tables listed below represent information that do not fall under any of the above 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 HISTORY table is meant to hold general information about the installation, data collected, or the database. The INSTMAST table is a master listing for installation information and acts as a parent table to many of the other data tables.

Table	Purpose
BASALA	Basal area data
ENVCONST	Environmental constraints
F_COUNT	Optional data from inventory or monitoring
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. In most cases storing derived data is discouraged because it can be obtained from existing data in the database and adds to the size of the database. Derived data is essentially duplicate data.

Because the LCTA databases holds 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 Universal Soil Loss Equation 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 (Universal Soil Loss Equation) summary data by year
TACTCONA	Tactical concealment summary A

Relational Constraints

In this section relational constraints, in this case referential integrity constraints, will be discussed. Listed in the previous sections are the validation tables used to ensure data integrity of the data tables. Here the actual columns used to link the tables will be presented.

Referential integrity constraints are utilized 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 can not be added to the PLOTSURV table.

It is worth mentioning at this time that 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 therefore is not currently 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 no duplicate values will exist for a column. Unless specifically defined a column with the UNIQUE rule applied can have only one NULL value. The PRIMARY RULE is used in referential integrity constraints as discussed above. Only one primary key can exist for a table, but many columns can make up the primary key. Each column or group of columns that make 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 for their locations.

Defining referential integrity constraints is done by the database administrator using Data Definition Language (DDL). Here parent tables, child tables, and their linking keys will be listed.

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
INSTMAST	SITE	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	BELTRAN	INSTALID, PLOTID, RECDATE
PLOTSURV	LINEMON	INSTALID, PLOTID, RECDATE
PLOTSURV	BELTMON	INSTALID, PLOTID, RECDATE
PLOTSURV	BASAL_A	INSTALID, PLOTID, RECDATE
PLOTSURV	SOILS	INSTALID, PLOTID, RECDATE
PLOTSURV	F_COUNT	INSTALID, PLOTID, RECDATE
SITE	HERBRIUM	INSTALID, SITE, COL_DATE
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. Here all child tables are listed and their key elements, primary and foreign keys. For each key element the contributing table is listed. The LCTA database schema can also be consulted to understand the referential integrity constraints.

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

Child table	Key Elements	Contributing Table
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
EROSION	INSTALID	INSTMAST
EROSION	PLOTID	PLOTMAST
F_COUNT	INSTALID	PLOTSURV
F_COUNT	PLOTID	PLOTSURV
F_COUNT	RECDATE	PLOTSURV
GNDCOVER	INSTALID	PLOTSURV
GNDCOVER	PLOTID	PLOTSURV
GNDCOVER	RECDATE	PLOTSURV
HERBRIUM	INSTALID, SITE, COL_DATE	SITE
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	PLOTID	PLOTSURV
LANDUSE	RECDATE	PLOTSURV
LANDUSEYEARSUM	INSTALID	INSTMAST

Child table	Key Elements	Contributing Table
LINEMON	INSTALID	PLOTSURV
LINEMON	PLOTID	PLOTSURV
LINEMON	RECDATE	PLOTSURV
MAINTACT	INSTALID	PLOTSURV
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 database standards. These components persist either due to operational considerations or the likelihood of the loss of data. Following are the components that can be categorized as legacy components.

Where possible relational theory and rules have been used in this design of the LCTA database to ensure data integrity, the most import of these being referential integrity constraints. A few exceptions exist, primarily due to 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 and 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, 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 the issue is complicated. In practice the data is usually 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 respectively 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 PLNTLIST and VERTLIST tables are populated after the data tables. In some cases a species can not be identified in the field and must be given a temporary code. The temporary code is then changed to a known code once the species is identified. These operational considerations eliminate the possibility of defining the PLNTLIST and VERTLIST tables as parent tables to the data tables.

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APPENDIX A

Database Schema

The LCTA database schema is presented in IDEF1X format. Terms and notations are presented below.

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 solid circle 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 right 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 right of the element.

Entities with red borders may differ slightly from your current database.

PLANTS
-Key Data
VEGID [PK1]
-Non-Key Data
FAMILY
GENUS
SPEC
SUBSPEC
VARIETY
LIFE
ORIGIN
FORM
FORM2
FORM3
FORM4
FORM5
FORM6
HYBRID
SYNON
VEGSTAT
VEGDIST1
VEGDIST2
VEGDIST3
VEGDIST4
VEGDIST5
VEGDIST6
VEGDIST7
VEGDIST8
VEGDIST9
VEGDIST10
VEGDIST11
VEGDIST12
VEGDIST13
VEGDIST14
VEGDIST15
VEGDIST16
VEGDIST17
VEGDIST18
VEGDIST19
VEGDIST20
RECDATE

VERTS
-Key Data
VERTID [PK1]
-Non-Key Data
CLASS
ORDERS
SUBORDER
FAMILY
SUBFAM
GENUS
SPEC
COMMON
AUTHORS
VERTSTAT
VERTNOTE

TSTYPE
-Non-Key Data
VEGID [FK]
TSTYPE

SPP_INFO
-Key Data
VERTID [PK1] [FK]
-Non-Key Data
ALPHA_CODE
AOU_NUM

NEST_LOCATION
-Key Data
VERTID [PK2] [FK]
NEST_LOC [PK1] [FK]

GENERAL_HABITAT
-Key Data
VERTID [PK2] [FK]
GEN_HABITAT [PK1] [FK]

NEOTROPICAL
-Key Data
VERTID [PK1] [FK]
NEOTROP [PK2] [FK]

SFST
-Key Data
VERTID [PK1] [FK]
SEASON [PK2] [FK]
FOOD_TYPE [PK3] [FK]
SUBSTRATE [PK4] [FK]
TECHNIQUE [PK5] [FK]

SEASON_INFO
-Key Data
SEASON [PK1]
-Non-Key Data
SEASON_DEF
SEASON_NOTE

FOOD_INFO
-Key Data
FOOD_TYPE [PK1]
-Non-Key Data
FOOD_DEF
FOOD_NOTE

LOC_INFO
-Key Data
NEST_LOC [PK1]
-Non-Key Data
LOC_DEF
LOC_NOTE

HABITAT_INFO
-Key Data
GEN_HABITAT [PK1]
-Non-Key Data
HABITAT_DEF
HABITAT_NOTE

NEOTROPIC_INFO
-Key Data
NEOTROP [PK1]
-Non-Key Data
NEOTROP_DEF
NEOTROP_NOTE

SUBSTRATE_INFO
-Key Data
SUBSTRATE [PK1]
-Non-Key Data
SUBSTRATE_DEF
SUBSTRATE_NOTE

TECHNIQUE_INFO
-Key Data
TECHNIQUE [PK1]
-Non-Key Data
TECHNIQUE_DEF
TECHNIQUE_NOTE



SPPIDEF
 System Architect
 Fri Apr 19, 1996 09:41
 Comment
 Plant and vertebrate information for
 the United States

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

ITAM Database: *Identifies either LCTA or SPECIES as the database containing the table*

Inventory Type: *Identifies the type of inventory that collect the data*

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

AERCOVER

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

ITAM Database : LCTA

Inventory Type : Inventory

BASALA

Tree basal area data

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

BELTMON

Short-term monitoring belt transect data (woody vegetation)

ITAM Database : LCTA

Inventory Type : Monitoring

BELTSURV

Parameters for inventory and monitoring belt transects

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

BELTRAN

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

ITAM Database : LCTA

Inventory Type : Inventory

BIRDS

Bird data from wildlife inventory

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

BIRDSURV

Table identifying all inventories for bird data

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

CLIMATEDATA

Climate Data

ITAM Database : LCTA

Inventory Type : N/A

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

CLIMATESTATIONS

Climate station information

ITAM Database : LCTA

Inventory Type : N/A

COMMCLASSPLOTSUM

Plant community classifications for each plot

ITAM Database : LCTA

Inventory Type : Summary Table

ENVCONST

Environmental constraints

ITAM Database : LCTA

Inventory Type : N/A

EROSEVID

Observed erosion evidence data

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

EROSION

Table for Universal Soil Loss Equation (USLE) estimations

ITAM Database : LCTA

Inventory Type : Summary Table

FOOD_INFO

Validation table for food type codes

ITAM Database : SPECIES

Inventory Type : N/A

F_COUNT

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

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

GENDER_CODE

Wildlife gender code validation table

ITAM Database : LCTA

Inventory Type : N/A

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

GENERAL_HABITAT

Species general habitat information

ITAM Database : *SPECIES*

Inventory Type : *N/A*

GNDCOVER

Initial inventory and long-term monitoring ground vegetation data

ITAM Database : *LCTA*

Inventory Type : *Inventory*

GROUPING

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

ITAM Database : *LCTA*

Inventory Type : *N/A*

HABITAT_INFO

Validation table for general habitat codes

ITAM Database : *SPECIES*

Inventory Type : *N/A*

HERBRIUM

ITAM Database :

Inventory Type :

HERPS

Herp data from wildlife inventory

ITAM Database : *LCTA*

Inventory Type : *Inventory/Monitoring*

HERPSURV

Table identifying all inventories for herp on each plot

ITAM Database : *LCTA*

Inventory Type : *Inventory/Monitoring*

HISTORY

General informational data

ITAM Database : *LCTA*

Inventory Type : *Inventory/Monitoring*

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

INSTMAST

Master listing of installation information

ITAM Database : LCTA

Inventory Type : N/A

LANDUSE

Military and non-military land use data

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

LANDUSEYEARSUM

Land use summary data by year

ITAM Database : LCTA

Inventory Type : Summary Table

LINEMON

Short-term monitoring line transect data

ITAM Database : LCTA

Inventory Type : Monitoring

LOC_INFO

Validation table for nest location codes

ITAM Database : SPECIES

Inventory Type : N/A

MAINTACT

Maintenance activity data

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

MAMMALS

Mammal data from wildlife inventory

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

MAMSURV

Table identifying all inventories for mammals on each plot

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

MATED_STATUS_CODE

Bird mated status validation table

ITAM Database : LCTA

Inventory Type : N/A

METHODS_CODE

Mammal and herp trapping methods validation table

ITAM Database : LCTA

Inventory Type : N/A

NEOTROPIC

ITAM Database :

Inventory Type :

NEOTROPICAL

Species neotropical migrant information

ITAM Database : SPECIES

Inventory Type : N/A

NEOTROPIC_INFO

Validation table for neotropical migrant codes

ITAM Database : SPECIES

Inventory Type : N/A

NEST_LOCATION

Species nest location information

ITAM Database : SPECIES

Inventory Type : N/A

PCSDPLOTSUM

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

ITAM Database : LCTA

Inventory Type : Summary Table

PCSDYEARSUM

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

ITAM Database : LCTA

Inventory Type : Summary Table

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

PCTYEARSUM

Percent of soil loss tolerance summary data by year

ITAM Database : LCTA

Inventory Type : Summary Table

PLANTS

Soil Conservation Service (SCS) species listing

ITAM Database : SPECIES

Inventory Type : N/A

PLNTLIST

Installation master vegetation list

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

PLOTMAPS

Map and photo images for each plot

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

PLOTMAST

Master plot table [one per LCTA plot]

ITAM Database : LCTA

Inventory Type : Inventory

PLOTSURV

Table identifying all inventories on each plot

ITAM Database : LCTA

Inventory Type : Inventory/Monitoring

POINT_CODE

Bird data collection line location validation table

ITAM Database : LCTA

Inventory Type : N/A

SEASON_INFO

Validation table for season codes

ITAM Database : SPECIES

Inventory Type : N/A

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

SFST

Species season, food type, substrate, and technique information

ITAM Database : *SPECIES*

Inventory Type : *N/A*

SITE

Specimen collection site information

ITAM Database :

Inventory Type :

SOILLS

Plot slope data

ITAM Database : *LCTA*

Inventory Type : *Inventory*

SOILMAST

Installation master soil series table

ITAM Database : *LCTA*

Inventory Type : *N/A*

SOILSMPL

Soil sample data from USDA National Soils Lab

ITAM Database : *LCTA*

Inventory Type : *Inventory*

SPP_INFO

Species information

ITAM Database : *SPECIES*

Inventory Type : *N/A*

SUBSTRATE_INFO

Validation table for substrate code

ITAM Database : *SPECIES*

Inventory Type : *N/A*

SYNONYMY

USDA NRCS PLANTS database accepted synonymy information

ITAM Database :

Inventory Type :

Entity Information
LCTA Databases
Center for Ecological Management of Military Lands

TACTCONA

Tactical Concealment summary A

ITAM Database : *LCTA*

Inventory Type : *Summary Table*

TECHNIQUE_INFO

Validation table for feeding technique code

ITAM Database : *SPECIES*

Inventory Type : *N/A*

TSTYPE

Tree/Shrub type information

ITAM Database : *SPECIES*

Inventory Type : *N/A*

VERTLIST

Installation master vertebrate list

ITAM Database : *LCTA*

Inventory Type : *Inventory/Monitoring*

VERTS

LCTA generated codes from the Fish and Wildlife Service' (FWS) "Checklist of Vertebrates of the U.S, the U.S. Territories, and Canada"

ITAM Database : *SPECIES*

Inventory Type : *Inventory/Monitoring*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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)annual&perennial,(N)one*

Missing/Invalid : *N/A*

Used By : *LINEMON*

ALPHA_CODE

Alpha Code

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Valid alpha code*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

ANALYEAR

Analysis year

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*

AOU_NUM

AOU number

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Valid AOU number*

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

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

AUTHORS

Author of the Species

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : CHAR

SQL Type Qualifiers : 35

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : VERTLIST

Used By : VERTS

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 binomial portion of accepted name.

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *100*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Character string*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Integer*

Missing/Invalid : *N/A*

Used By : *BELTMON*

CATEGORY_DEF

Definition of generalized subdivision code.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :

Used By : *HERBRIUM*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Used By : *VERTS*

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 :

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

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: *HERPSURV*

Used By: *MAMSURV*

Used By: *SITE*

COLL_LTR

Collection letter of specimen.

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Character string*

Missing/Invalid:

Used By: *HERBRIUM*

COLL_NUM

Collection number of specimen.

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Integer*

Missing/Invalid :
Used By : *HERBRIUM*

COL_DATE

Date of collection.

SQL Data Type : *DATE*

SQL Type Qualifiers :

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid date after 1/1/1985*

Missing/Invalid : *1/11/11*
Used By : *HERBRIUM*
Used By : *SITE*

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 : *VERTLIST*
Used By : *VERTS*

COMMUNITY

Community specimen in which specimen was found.

SQL Data Type : *CHAR*

SQL Type Qualifiers : *75*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *SITE*

COUNTY

Name of county.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *45*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Valid State county*

Missing/Invalid: *N/A*

Used By: *SITE*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *Character string*

Missing/Invalid : *N/A*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *GNDCOVER*

Used By : *LINEMON*

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 : *PLOTMAST*

Used By : *SITE*

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 : *PLOTMAST*

Used By : *SITE*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

ELEVTN

Elevation of site where specimen was collect (meters).

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *integer*

Missing/Invalid :

Used By : *SITE*

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : PLANTS
Used By : PLNTLIST
Used By : VERTLIST
Used By : VERTS

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 : HERBRIUM

FLD_DESC

Field description of collected specimen.

SQL Data Type : VARCHAR

SQL Type Qualifiers : 180

Default Nullity : NULL

Derived Data : F

Valid Entries : *Text*

Missing/Invalid :
Used By : HERBRIUM

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

FOOD_DEF

Food type code definition

Data Element/Entity Reference

LCTA Databases

Center for Ecological Management of Military Lands

SQL Data Type : VARCHAR

SQL Type Qualifiers : 35

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : Alphanumeric

Missing/Invalid : N/A

Used By : FOOD_INFO

FOOD_NOTE

Food type note

SQL Data Type : VARCHAR

SQL Type Qualifiers : 100

Default Nullity : NULL

Derived Data : F

Valid Entries : Alphanumeric

Missing/Invalid : N/A

Used By : FOOD_INFO

FOOD_TYPE

Food type code

SQL Data Type : char

SQL Type Qualifiers : 4

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : Valid food type code as defined in food type domain table

Missing/Invalid : N/A

Used By : FOOD_INFO

Used By : SFST

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 :

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Default Nullity: *NULL*

Derived Data: *T*

Valid Entries: *Integer*

Missing/Invalid: *N/A*

Used By: *LANDUSEYEARSUM*

FORM

Plant life form 1

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

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)ood*

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: *PLANTS*

Used By: *PLNTLIST*

FORM3

Plant life form 3

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Derived Data : *F*

Valid Entries : *Text*

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

FORM4

Plant life form 4

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

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

FORM5

Plant Life form 5

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

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

FORM6

Plant life form 6

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

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

FSAND

Soil Analysis of find sand

SQL Data Type : *FLOAT*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Real number*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference

LCTA Databases

Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *PLANTS*
Used By : *PLNTLIST*
Used By : *VERTLIST*
Used By : *VERTS*

GEN_HABITAT

General habitat code

SQL Data Type : *char* SQL Type Qualifiers : *4*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid general habitat code as defined in the habitat domain table*

Missing/Invalid : *N/A*
Used By : *GENERAL_HABITAT*
Used By : *HABITAT_INFO*

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 : *LINEMON*

GRAZING

Number of plots with grazing

SQL Data Type : *INTEGER* SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *T*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Valid Entries : *Integer*

Missing/Invalid : *N/A*

Used By : *LANDUSEYEARSUM*

GRWHABT1_DEF

Gross growth form or habit definition - first field.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid growth/habit definition*

Missing/Invalid :

Used By : *HERBRIUM*

GRWHABT2_DEF

Gross growth form or habit definition - second field.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid growth/habit definition*

Missing/Invalid :

Used By : *HERBRIUM*

GRWHABT3_DEF

Gross growth form or habit definition - third field.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid growth/habit definition*

Missing/Invalid :

Used By : *HERBRIUM*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

HABITAT_DEF

Gross habitat definition.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid habitat definition*

Missing/Invalid :

Used By : *HABITAT_INFO*

Used By : *HERBRIUM*

HABITAT_NOTE

General habitat note

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *100*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

Missing/Invalid : *N/A*

Used By : *HABITAT_INFO*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

HYBRID

Hybrid vegetation code

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

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

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *COMMCLASSPLOTSUM*
Used By : *ENVCONST*
Used By : *EROSEVID*
Used By : *EROSION*
Used By : *F_COUNT*
Used By : *GNDCOVER*
Used By : *GROUPING*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *PCSDPLOTSUM*
Used By : *PCSDYEARSUM*
Used By : *PCTTYEARSUM*
Used By : *PLOTMAPS*
Used By : *PLOTMAST*
Used By : *PLOTSURV*
Used By : *SITE*
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)inventory,(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)*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

KCALEROSINDEX

Erosion index using calculated erodibility 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 erodibility (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 erodibility (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

Erodibility (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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : *PLANTS*

Used By : *PLNTLIST*

LIFEFORM

Plant life form category

SQL Data Type : *CHAR*

SQL Type Qualifiers : *1*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

LOCATION

Written description of location.

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *220*

Default Nullity: *NOT NULL*

Derived Data: *F*

Valid Entries: *Character string*

Missing/Invalid: *NA*

Used By: *SITE*

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*

LOC_DEF

Nest location code definition

SQL Data Type: *VARCHAR*

SQL Type Qualifiers: *35*

Default Nullity: *NOT NULL*

Derived Data: *F*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Used By : *EROSION*

LSM

Mean topographic 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*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

MICROSITE

Description of microsite.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *75*

Default Nullity : *NULL*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *HERBRIUM*

MISCMAP

Additional maps

SQL Data Type : *LONG_VARCH* **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_VARCH* **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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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

NEOTROP

Neotropic designation code

SQL Data Type : char

SQL Type Qualifiers : 4

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : Valid neotropical code as defined in neotropical domain table

Missing/Invalid : N/A

Used By : NEOTROPICAL

Used By : NEOTROPIC_INFO

NEOTROP_DEF

Neotropic code definition

SQL Data Type : VARCHAR

SQL Type Qualifiers : 35

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : Alphanumeric

Missing/Invalid : N/A

Used By : NEOTROPIC_INFO

NEOTROP_NOTE

Neotropic note

SQL Data Type : VARCHAR

SQL Type Qualifiers : 100

Default Nullity : NULL

Derived Data : F

Valid Entries : Alphanumeric

Missing/Invalid : N/A

Used By : NEOTROPIC_INFO

NEST_LOC

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Nest location code

SQL Data Type : *char*

SQL Type Qualifiers : *4*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid nest location code as defined in the nest location domain table*

Missing/Invalid : *N/A*

Used By : *LOC_INFO*

Used By : *NEST_LOCATION*

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*

NOTES

Notes for specimen - changes, reidentification, etc.

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : VARCHAR

SQL Type Qualifiers : 254

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid :

Used By : HERBRIUM

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 : PCTYEARSUM

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Used By : *VERTS*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Valid Entries : *Real number*

Missing/Invalid : *N/A*

Used By : *SOILSMPL*

ORIGIN

Plant origin (native:introduced)

SQL Data Type : *CHAR*

SQL Type Qualifiers : *1*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *(I)ntroduced, (N)ative*

Missing/Invalid : *N/A*

Used By : *PLANTS*

Used By : *PLNTLIST*

ORIGIN_DEF

Origin code definition.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *25*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid origin definition*

Missing/Invalid :

Used By : *HERBRIUM*

OTHER_ID

Taxon symbols used by other entities such as BONAP, TNC, and State Natural Heritage Programs; refers to accepted name.

SQL Data Type : *CHAR*

SQL Type Qualifiers : *14*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *alphanumeric*

Missing/Invalid :

Used By : *SYNONYMY*

PADB

Presence:Absence (PA) dwarfshrub broadleaf

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *T*

Valid Entries : *Integer*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Used By : *BIRDSURV*

PERM_CLASS

Soil permeability class

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *F*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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 : PLANTS
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

REP_VERN

A vernacular name representative of those in botanical literature of North America.

SQL Data Type : VARCHAR

SQL Type Qualifiers : 60

Default Nullity : NULL

Derived Data : F

Valid Entries : Character string

Missing/Invalid :

Used By : HERBRIUM

RESEARCH

Research needs

SQL Data Type : LONG_VARCHAR

SQL Type Qualifiers :

Default Nullity : NULL

Derived Data : F

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

SBAUTHOR

Author of binomial portion of accepted name or synonym.

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Missing/Invalid :
Used By : *SYNONYMY*

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*

SEASON

Season code

SQL Data Type : *char* **SQL Type Qualifiers :** *4*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid season code as defined in the season domain table*

Missing/Invalid : *N/A*
Used By : *SEASON_INFO*
Used By : *SFST*

SEASON_DEF

Season code definition

SQL Data Type : *VARCHAR* **SQL Type Qualifiers :** *35*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

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

SEASON_NOTE

Season note

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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)nkown, (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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SGENUS

Genus name; standard is USDA, ARS, Technical Bulletin No. 1796 (1992).

SQL Data Type : CHAR

SQL Type Qualifiers : 20

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : *Valid genus name*

Missing/Invalid :

Used By : SYNONYMY

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

SITE

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Site identifier

SQL Data Type : CHAR

SQL Type Qualifiers : 10

Default Nullity : NOT NULL

Derived Data : F

Valid Entries : Alpha-numeric

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

SITE_NOTES

Site notes

SQL Data Type : VARCHAR

SQL Type Qualifiers : 254

Default Nullity :

Derived Data : F

Valid Entries :

Missing/Invalid :
Used By : SITE

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text, Integer*

Missing/Invalid : *N/A*

Used By : *SOILMAST*

SOILDPH

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Derived Data : *F*

Valid Entries : *SCS soil series*

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

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 : *PLANTS*
Used By : *PLNTLIST*
Used By : *VERTLIST*
Used By : *VERTS*

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*

SQAUTHOR

Author of quadrinomial portion of synonym name.

SQL Data Type : *CHAR*

SQL Type Qualifiers : *100*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *SYNONYMY*

SSPECIES

Specific epithet portion of the synonym scientific name.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *30*

Default Nullity : *NOT NULL*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Derived Data : *F*

Valid Entries : *Valid species name*

Missing/Invalid :
Used By : *SYNONYMY*

SSUBSP

Subspecific epithet portion of the synonym scientific name.

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Valid subspecies name*

Missing/Invalid :
Used By : *SYNONYMY*

STATESTAT_DEF

State status code definition

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Vale State T&E code definition*

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

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Valid Entries : *Valid climate station name*

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*

STAUTHOR

Author of trinomial portion of synonym name.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *100*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :

Used By : *SYNONYMY*

STFORMA

Lowest taxonomic rank in PLANTS for the synonym. Data maintained only for those taxa pertinent to the Endangered Species Act.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *30*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :

Used By : *SYNONYMY*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Used By : *VERTS*

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*

Used By : *VERTS*

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 : *HERBRIUM*

Used By : *PLANTS*

Used By : *PLNTLIST*

SUBSTRATE

Feeding substrate code

SQL Data Type : *char*

SQL Type Qualifiers : *4*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid feeding substrate as defined in the substrate domain table*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Missing/Invalid : *N/A*
Used By : *SFST*
Used By : *SUBSTRATE_INFO*

SUBSTRATE_DEF

Feeding substrate code definition

SQL Data Type : *VARCHAR* **SQL Type Qualifiers :** *35*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

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

SUBSTRATE_NOTE

Feeding substrate note

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

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

SUBSTRTE

Substrate.

SQL Data Type : *VARCHAR* **SQL Type Qualifiers :** *115*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *SITE*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SVARIETY

Variety epithet portion of the synonym scientific name.

SQL Data Type : VARCHAR

SQL Type Qualifiers : 30

Default Nullity : NULL

Derived Data : F

Valid Entries : *Valid variety name*

Missing/Invalid :

Used By : SYNONYMY

SXGENUS

Indicates that the synonymy taxon is a hybrid at the generic level.

SQL Data Type : CHAR

SQL Type Qualifiers : 1

Default Nullity : NULL

Derived Data : F

Valid Entries : *X or null*

Missing/Invalid :

Used By : SYNONYMY

SXSPECIES

Indicates that the synonymy taxon is a hybrid at the specific epithet level.

SQL Data Type : CHAR

SQL Type Qualifiers : 1

Default Nullity : NULL

Derived Data : F

Valid Entries : *X or null*

Missing/Invalid :

Used By : SYNONYMY

SYNON

Plant synonym

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : *Species database Synonym*

Missing/Invalid : N/A

Used By : PLANTS

Used By : PLNTLIST

SYN_SYM

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

TAUTHOR

Author of trinomial portion of accepted name.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *100*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *HERBRIMUM*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

TECHNIQUE

Feeding technique code

SQL Data Type : *char*

SQL Type Qualifiers : *4*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Valid feeding technique as defined in the technique domain table*

Missing/Invalid : *N/A*

Used By : *SFST*

Used By : *TECHNIQUE_INFO*

TECHNIQUE_DEF

Feeding technique code definition

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *35*

Default Nullity : *NOT NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

Missing/Invalid : *N/A*

Used By : *TECHNIQUE_INFO*

TECHNIQUE_NOTE

Feeding technique note

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *100*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Alphanumeric*

Missing/Invalid : *N/A*

Used By : *TECHNIQUE_INFO*

TEMP

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Temperature

SQL Data Type : *INTEGER*

SQL Type Qualifiers :

Default Nullity: *NULL*

Derived Data : *F*

Valid Entries : *Integer*

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

TEMPAVE

Average weekly temperature

SQL Data Type : *FLOAT*

SQL Type Qualifiers :

Default Nullity: *NULL*

Derived Data : *F*

Valid Entries : *Real number*

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

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 : *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 : *HERPSURV*
Used By : *MAMSURV*

TGT200

Percent of plots with soil loss tolerance (T) values greater than 200

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

TOPOGRAPHY

Topography of site.

SQL Data Type : *VARCHAR*

SQL Type Qualifiers : *65*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Character string*

Missing/Invalid :
Used By : *SITE*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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)*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*
Used By : *TSTYPE*

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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)

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

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 : *HERBRIUM*

Used By : *PLANTS*

Used By : *PLNTLIST*

VCSAND

Soil analysis of very coarse sand

SQL Data Type : *FLOAT*

SQL Type Qualifiers :

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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: *BELTRAN*

Used By: *GNDCOVER*

Used By: *TACTCONA*

VEGDIST1

Plant distribution district 1

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST2

Plant distribution - district 2

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST3

Plant distribution - district 3

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST4

Plant distribution - district 4

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST5

Plant distribution - district 5

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST6

Plant distribution - district 6

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Valid Entries: *Text*

Missing/Invalid: *N/A*

Used By: *PLANTS*

VEGDIST7

Plant distribution - district 7

SQL Data Type: *CHAR*

SQL Type Qualifiers: *8*

Default Nullity: *NULL*

Derived Data: *F*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDIST8

Plant distribution - district 8

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDIST9

Plant distribution - district 9

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDST10

Plant distribution - district 10

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDST11

Plant distribution - district 11

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Used By : *PLANTS*

VEGDST12

Plant distribution - district 12

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDST13

Plant distribution - district 13

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDST14

Plant distribution - district 14

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

VEGDST15

Plant distribution - district 15

SQL Data Type : *CHAR*

SQL Type Qualifiers : *8*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

Missing/Invalid : *N/A*

Used By : *PLANTS*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

VEGDST16

Plant distribution - district 16

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : PLANTS

VEGDST17

Plant distribution - district 17

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : PLANTS

VEGDST18

Plant distribution - district 18

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : PLANTS

VEGDST19

Plant distribution - district 19

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : PLANTS

VEGDST20

Plant distribution - district 20

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : CHAR

SQL Type Qualifiers : 8

Default Nullity : NULL

Derived Data : F

Valid Entries : Text

Missing/Invalid : N/A

Used By : PLANTS

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 : PLANTS

Used By : PLNTLIST

Used By : SYNONYMY

Used By : TACTCONA

Used By : TSTYPE

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

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

Used By : *F_COUNT*
Used By : *GNDCOVER*
Used By : *LINEMON*

VEGSTAT

Veg status

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

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *Text*

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

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 : *GENERAL_HABITAT*
Used By : *HERPS*
Used By : *MAMMALS*
Used By : *NEOTROPICAL*
Used By : *NEST_LOCATION*
Used By : *SFST*
Used By : *SPP_INFO*
Used By : *VERTLIST*
Used By : *VERTS*

VERTNOTE

Note about the listing

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

SQL Data Type : VARCHAR

SQL Type Qualifiers : 254

Default Nullity : NULL

Derived Data : F

Valid Entries : Text, numbers

Missing/Invalid : N/A

Used By : VERTLIST

Used By : VERTS

VERTSTAT

Vertebrate status

SQL Data Type : CHAR

SQL Type Qualifiers : 70

Default Nullity : NULL

Derived Data : F

Valid Entries : Text, numbers

Missing/Invalid : N/A

Used By : VERTLIST

Used By : VERTS

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 :

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

Data Element/Entity Reference
LCTA Databases
Center for Ecological Management of Military Lands

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*

XSPECIES

Indicates that the accepted taxon is a hybrid at the specific epithet level.

SQL Data Type : *CHAR*

SQL Type Qualifiers : *1*

Default Nullity : *NULL*

Derived Data : *F*

Valid Entries : *X or null*

Missing/Invalid :
Used By : *HERBRIUM*

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 : *PLOTMAST*