

LANDFIRE Key Database: EVT Module

DATA DICTIONARY

SECTION I: DATA TABLES

Version 1.3
31 October 2006

Table of Contents

| Data Tables | Page |
|--------------------|-------------|
| EVT | 2 |
| EVT_Comission | 3 |
| EVT_Constancy | 3 |
| EVT_Descriptive | 4 |
| EVT_Dom_CoDom_Spp | 4 |
| EVT_LUT | 5 |
| EVT_MAT | 5 |
| EVT_NS | 5 |
| EVT_Omission | 5 |
| EVT_Out | 6 |
| EVT_Summary | 6 |
| Lifeform_XWalk | 6 |
| Plots | 7 |
| Plots_Descriptve | 7 |
| Species | 8 |
| Spp_List | 8 |

Section I: Data Tables

EVT

This table comprises the rule set (a.k.a. “key”) used to assign plots to LANDFIRE Existing Vegetation Types (EVTs).

| Name | Description |
|---------------|---|
| Row_No | Row number, which defines the order – or sequence – in which the criteria for candidate EVT's will be compared to each plot's data. |
| EVT_Code | Code for LANDFIRE EVT to which the criteria apply. |
| ESLF_Label | Code for corresponding Ecological System from NatureServe's Systems database. |
| MapZone | LANDFIRE mapping zone(s) for which the criteria apply. |
| EVT_Name | Long name of the LANDFIRE EVT to which the criteria apply. |
| totcov | Criterion: Total canopy cover (%) of all vegetation on the plot. |
| wodycov | Criterion: Total canopy cover (%) of all woody vegetation on the plot. |
| treecov | Criterion: Total canopy cover (%) of all trees on the plot. |
| conifertotcov | Criterion: Total canopy cover (%) of all coniferous trees on the plot. |
| shbcbv | Criterion: Total canopy cover (%) of all shrubs on the plot. |
| pherbcov | Criterion: Total canopy cover (%) of all perennial herbaceous plants on the plot. |
| grasscov | Criterion: Total canopy cover (%) of all graminoids on the plot. |
| spp1 | Criterion: First set of indicator species. |
| relcov1 | Criterion: Relative cover (%) threshold or presence/absence criterion for first set of indicator species. |
| spp2 | Criterion: Second set of indicator species. |
| relcov2 | Criterion: Relative cover (%) threshold or presence/absence criterion for second set of indicator species. |
| spp3 | Criterion: Third set of indicator species. |
| relcov3 | Criterion: Relative cover (%) threshold or presence/absence criterion for third set of indicator species. |
| spp4 | Criterion: Fourth set of indicator species. |
| relcov4 | Criterion: Relative cover (%) threshold or presence/absence criterion for fourth set of indicator species. |
| spp5 | Criterion: Fifth set of indicator species. |
| relcov5 | Criterion: Relative cover (%) threshold or presence/absence criterion for fifth set of indicator species. |
| spp6 | Criterion: Sixth set of indicator species. |
| relcov6 | Criterion: Relative cover (%) threshold or presence/absence criterion for sixth set of indicator species. |
| spp7 | Criterion: Seventh set of indicator species. |
| relcov7 | Criterion: Relative cover (%) threshold or presence/absence criterion for seventh set of indicator species. |
| spp8 | Criterion: Eighth set of indicator species. |
| relcov8 | Criterion: Relative cover (%) threshold or presence/absence criterion for eighth set of indicator species. |
| spp9 | Criterion: Ninth set of indicator species. |
| relcov9 | Criterion: Relative cover (%) threshold or presence/absence criterion for ninth set of indicator species. |
| spp10 | Criterion: Tenth set of indicator species. |
| relcov10 | Criterion: Relative cover (%) threshold or presence/absence criterion for tenth set of indicator species. |
| Subsection | Criterion: Ecological subsection, as described in McNab et al. (2005). |
| Elevation | Criterion: Range or threshold of elevation (meters) above mean sea level. |
| EPA_Ecoregion | Criterion: Ecoregion (level III or IV) as described in Omernik (1995). |
| TNC_Ecoregion | Criterion: Ecoregion based on Bailey (1994) as modified for The Nature Conservancy's planning purposes. |

EVT_Comission

This table is an output of the AutoKey program. It includes species- and plot-level data for all plots successfully assigned to one of the candidate EVT's.

| Name | Description |
|-----------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| Scientific_Name | Scientific name (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| AC | Absolute cover (%) of the taxon identified in the previous field. |
| RC | Relative cover (%) of the taxon identified in the previous field. |
| totcov | Total canopy cover (%) of all vegetation on the plot. |
| wdycov | Total canopy cover (%) of all woody vegetation on the plot. |
| treecov | Total canopy cover (%) of all trees on the plot. |
| conifertotcov | Total canopy cover (%) of all coniferous trees on the plot. |
| shbcov | Total canopy cover (%) of all shrubs on the plot. |
| pherbcov | Total canopy cover (%) of all perennial herbaceous plants on the plot. |
| grasscov | Total canopy cover (%) of all graminoids on the plot. |
| MapZone | LANDFIRE mapping zone in which the plot is located. |
| Subsection | Ecological subsection, as described in McNab et al. (2005), in which the plot is located. |
| Elevation | Elevation (meters) above mean sea level (extracted from the DEM) at which the plot is located. |
| EPA_Ecoregion | Ecoregion (level III or IV), as described in Omernik (1995), in which the plot is located. |
| TNC_Ecoregion | Ecoregion based on Bailey (1994) as modified for The Nature Conservancy's planning purposes, in which the plot is located. |

EVT_Constancy

This table is an output of the AutoKey program. It reports prevalence and cover characteristics of species across plots by EVT.

| Name | Description |
|-----------------|--|
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| Scientific_Name | Scientific name (per the NRCS PLANTS database ca. January 2005) of a plant occurring on at least one plot labeled as the EVT identified in the previous field. |
| Life_Form | Code for the lifeform of the taxon at hand, where T=tree, S=shrub, G=graminoid, F=forb. |
| AvgAC | Average absolute cover of the taxon at hand across all plots labeled as the EVT in question. |
| MinAC | Minimum absolute cover of the taxon at hand across all plots labeled as the EVT in question. |
| MaxAC | Maximum absolute cover of the taxon at hand across all plots labeled as the EVT in question. |
| AvgRC | Average relative cover of the taxon at hand across all plots labeled as the EVT in question. |
| MinRC | Minimum relative cover of the taxon at hand across all plots labeled as the EVT in question. |
| MaxRC | Maximum relative cover of the taxon at hand across all plots labeled as the EVT in question. |
| Constancy | Percentage of all plots labeled as the EVT in question in which the taxon at hand was reported. |

EVT_Descriptive

This table is an output of the AutoKey program. It contains plot-level descriptive data.

| Name | Description |
|------------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| RegID | Data-source code. |
| ProjID | Project code. |
| PlotID | Identifying number of the sampling unit (a.k.a. "plot"). |
| Date | Sampling date. |
| Orig_PlotID | Unique plot ID from the source dataset; may be concatenation of several data fields. |
| Orig_Ecol_System | Ecological System assigned in the source dataset to describe existing vegetation cover on the plot. |
| Orig_Alliance | NVCS Alliance assigned in the source dataset to describe existing vegetation cover on the plot. |
| PhotoID_1 | Code for plot photo 1. |
| PhotoID_2 | Code for plot photo 2. |
| NLCD | Code for the plot's predicted Land Cover Class (extracted from the MRLC 1992 National Land Cover Dataset). |
| Elevation | Elevation (meters) above mean sea level (extracted from the DEM) at which the plot is located. |
| Slope | Average slope (%) of the plot (extracted from the DEM). |
| Aspect | Aspect (degrees) of the plot (extracted from the DEM). |
| Subsection | Ecological subsection, as described in McNab et al. (2005), in which the plot is located. |
| EPA_Ecoregion | Ecoregion (level III or IV), as described in Omernik (1995), in which the plot is located. |
| TNC_Ecoregion | Ecoregion based on Bailey (1994) as modified for The Nature Conservancy's planning purposes, in which the plot is located. |

EVT_Dom_CoDom_Spp

This table is an output of the AutoKey program. It comprises plot-level cover data, the assigned EVT, and characteristics of the dominant and co-dominant vegetation for each plot.

| Name | Description |
|---------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT assigned by the plot-labeling program. |
| DomSpp | Dominant species on the plot, based on absolute canopy cover. |
| DomSppAC | Absolute canopy cover (%) of the dominant species on the plot. |
| DomSppRC | Relative canopy cover of the dominant species on the plot. |
| CoDomSpp | Co-dominant species on the plot, based on absolute canopy cover. |
| CoDomSppAC | Absolute canopy cover (%) of the co-dominant species on the plot. |
| CoDomSppRC | Relative canopy cover of the co-dominant species on the plot. |
| totcov | Total canopy cover (%) of all vegetation on the plot. |
| wodycov | Total canopy cover (%) of all woody vegetation on the plot. |
| treecov | Total canopy cover (%) of all trees on the plot. |
| conifertotcov | Total canopy cover (%) of all coniferous trees on the plot. |
| shbcov | Total canopy cover (%) of all shrubs on the plot. |
| pherbcov | Total canopy cover (%) of all perennial herbaceous plants on the plot. |
| grasscov | Total canopy cover (%) of all graminoids on the plot. |

EVT_LUT

This table is a lookup necessary for the AutoKey to identify the dominant and co-dominant taxa for each plot. It identifies the physiognomic characteristics of the LANDFIRE EVT's and the lifeform from which dominant and co-dominant species are to be drawn for each type.

| Name | Description |
|--------------|---|
| EVT_Code | Code for the LANDFIRE EVT. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| NS_Lifeform | Physiognomic grouping into which the LANDFIRE EVT falls. |
| Dom_Lifeform | Lifeform from which the plot's dominant and co-dominant taxa are to be drawn. |

EVT_MAT

This table is an output of the AutoKey program. It includes the LANDFIRE EVT information assigned to each plot.

| Name | Description |
|-----------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |

EVT_NS

This table is an output of the AutoKey program. It includes the LANDFIRE EVT assigned to each plot and the code for the Ecological System that corresponds to that LANDFIRE EVT in NatureServe's Systems database.

| Name | Description |
|------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| ESLF_Label | Code for Ecological System that corresponds to the LANDFIRE EVT per NatureServe's Systems database. |
| EVT_Name | Long name of the LANDFIRE EVT. |

EVT_Omission

This table is an output of the AutoKey program. It includes species- and plot-level data for all plots that could not be assigned to one of the candidate EVT's.

| Name | Description |
|-----------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| Scientific_Name | Scientific name (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| AC | Absolute cover (%) of the taxon identified in the previous field. |
| RC | Relative cover (%) of the taxon identified in the previous field. |
| totcov | Total canopy cover (%) of all vegetation on the plot. |
| wodycov | Total canopy cover (%) of all woody vegetation on the plot. |
| treecov | Total canopy cover (%) of all trees on the plot. |
| conifertotcov | Total canopy cover (%) of all coniferous trees on the plot. |
| shbcov | Total canopy cover (%) of all shrubs on the plot. |
| pherbcov | Total canopy cover (%) of all perennial herbaceous plants on the plot. |
| grasscov | Total canopy cover (%) of all graminoids on the plot. |
| MapZone | LANDFIRE mapping zone in which the plot is located. |

EVT_Omission (cont.)

| Name | Description |
|---------------|--|
| Subsection | Ecological subsection, as described in McNab et al. (2005), in which the plot is located. |
| Elevation | Elevation (meters) above mean sea level (extracted from the DEM) at which the plot is located. |
| EPA_Ecoregion | Ecoregion (level III or IV), as described in Omernik (1995), in which the plot is located. |
| TNC_Ecoregion | Ecoregion based on Bailey (1994) as modified for The Nature Conservancy's planning purposes, in which the plot is located. |

EVT_Out

This table is an output of the AutoKey program. It identifies the LANDFIRE EVT assigned to each plot and the row number and associated relative cover criteria ultimately used to label each plot.

| Name | Description |
|-----------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| Row_No | Row number, which defines the order – or sequence – in which the criteria for candidate EVTs will be compared to each plot's data. |
| relcov1 | Relative cover (%) threshold or presence/absence criterion for first set of indicator species. |
| relcov2 | Relative cover (%) threshold or presence/absence criterion for second set of indicator species. |
| relcov3 | Relative cover (%) threshold or presence/absence criterion for third set of indicator species. |
| relcov4 | Relative cover (%) threshold or presence/absence criterion for fourth set of indicator species. |
| relcov5 | Relative cover (%) threshold or presence/absence criterion for fifth set of indicator species. |
| relcov6 | Relative cover (%) threshold or presence/absence criterion for sixth set of indicator species. |
| relcov7 | Relative cover (%) threshold or presence/absence criterion for seventh set of indicator species. |
| relcov8 | Relative cover (%) threshold or presence/absence criterion for eighth set of indicator species. |
| relcov9 | Relative cover (%) threshold or presence/absence criterion for ninth set of indicator species. |
| relcov10 | Relative cover (%) threshold or presence/absence criterion for tenth set of indicator species. |

EVT_Summary

This table is an output of the AutoKey program. It reports the number of plots “binned” into each of the candidate LANDFIRE EVTs.

| Name | Description |
|-----------|--|
| EVT_Code | Code for the LANDFIRE EVT assigned by the plot-labeling program. |
| EVT_Name | Long name of the LANDFIRE EVT. |
| Frequency | Number of plots labeled as the EVT at hand. |

Lifeform_XWalk

This table is a lookup necessary for the AutoKey to identify the dominant and co-dominant taxa for each plot. It identifies the lifeform from which dominant and co-dominant species are to be drawn for each type, based on broad physiognomic characteristics (i.e., NS_Lifeform in the EVT_LUT).

| Name | Description |
|----------|---|
| LF_Code | Link to NS Lifeform in EVT LUT table. |
| Lifeform | Code for lifeform from which the plot's dominant and co-dominant species are to be drawn. |

Plots

This table is one of the core “input” tables needed to run the AutoKey. It includes plot-level floristic and topo-geographic data.

| Name | Description |
|--------------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| totcov | Total canopy cover (%) of all vegetation on the plot. |
| meth_totcov | Code for the method by which totcov was derived. |
| wodycov | Total canopy cover (%) of all woody vegetation on the plot. |
| meth_wodycov | Code for the method by which wodycov was derived. |
| treecov | Total canopy cover (%) of all trees on the plot. |
| meth_treecov | Code for the method by which treecov was derived. |
| conifertotcov | Total canopy cover (%) of all coniferous trees on the plot. |
| meth_conifertotcov | Code for the method by which conifertotcov was derived. |
| shbcov | Total canopy cover (%) of all shrubs on the plot. |
| meth_shbcov | Code for the method by which shbcov was derived. |
| pherbcov | Total canopy cover (%) of all perennial herbaceous plants on the plot. |
| meth_pherbcov | Code for the method by which pherbcov was derived. |
| grasscov | Total canopy cover (%) of all graminoids on the plot. |
| meth_grasscov | Code for the method by which grasscov was derived. |
| MapZone | LANDFIRE mapping zone in which the plot is located. |
| Elevation | Elevation (meters) above mean sea level (extracted from the DEM) at which the plot is located. |
| Subsection | Ecological subsection, as described in McNab et al. (2005), in which the plot is located. |
| EPA_Ecoregion | Ecoregion (level III or IV), as described in Omernik (1995), in which the plot is located. |
| TNC_Ecoregion | Ecoregion based on Bailey (1994) as modified for The Nature Conservancy’s planning purposes, in which the plot is located. |

Plots_Descriptive

This table is an ancillary “input” needed to generate the full suite of output tables from the plot-labeling (a.k.a. “key classifier”) program. It contains additional descriptive data for each plot.

| Name | Description |
|------------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| RegID | Data-source code. |
| ProjID | Project code. |
| PlotID | Identifying number of the sampling unit (a.k.a. “plot”). |
| Date | Sampling date. |
| Aspect | Aspect (degrees) of the plot (extracted from the DEM). |
| Slope | Average slope (%) of the plot (extracted from the DEM). |
| NLCD | Code for the plot’s predicted Land Cover Class (extracted from the MRLC 1992 National Land Cover Dataset). |
| PhotoID_1 | Code for plot photo 1. |
| PhotoID_2 | Code for plot photo 2. |
| Orig_Ecol_System | Ecological System assigned in the source dataset to describe existing vegetation cover on the plot. |
| Orig_Alliance | NVCS Alliance assigned in the source dataset to describe existing vegetation cover on the plot. |
| Orig_PlotID | Unique plot ID from the source dataset; may be concatenation of several data fields. |

Species

This table is one of the core “input” tables needed to run the AutoKey. It contains species-level data for each plot.

| Name | Description |
|-----------------|---|
| Master_ID | Single unique plot ID assigned by the LANDFIRE Reference Database (LFRDB) team. The first two numbers of the eight-character code identify the mapzone in which the plot falls. |
| Symbol_Key | Symbol key (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| Scientific_Name | Scientific name (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| AC | Absolute canopy cover (%) of the taxon at hand. |
| RC | Relative canopy cover (%) of the taxon at hand. |
| Height | Average height (meters) of the species at hand. |

Spp_List

This table an ancillary “input” needed to run the set of EVT diagnostic queries in the Key Database. It reports the lifeform of all plants included in the Species table. This lifeform is assigned by NatureServe on a mapzone-group basis.

| Name | Description |
|-----------------|--|
| Symbol_Key | Symbol key (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| Scientific_Name | Scientific name (per the NRCS PLANTS database ca. January 2005) of a plant recorded on the plot. |
| Life_Form | Code for the lifeform of the taxon at hand, where T=tree, S=shrub, G=graminoid, F=forb. |
| Duration | Code for the life cycle of the taxon at hand, where A=annual, P=perennial. |