# Oregon/Washington Bureau of Land Management



# Botany and Wildlife Observations and Surveys

**Spatial Data Standard** 



Wildlife specialist holding Pygmy Rabbit during field exam, SE Oregon, Photo credit: Larisa Bogardus July 2016.

Version 2.0 November 3, 2023

# **Document Revisions**

Revision	Date	Author	Description	Affected Pages
1.0	3/26/2021	Dana Baker-Allum, Chelsea Waddell, Mark Mousseaux, Susan Carter, Bruce Hollen	Initial Release	All
2.0	11/3/2023	Dana Baker-Allum, Tera Hinkley-Bressi	Reformatted document to meet Section 508 standards and match the latest data standard template.	All
			Updated section 1 to make it comply with the new data structure.	
			Updated FOIA category, records retention schedule text, and keywords.	
			Corrected sponsor.	
			Updated architecture diagrams.	
			Added field aliases, edit tracking fields, and default values for required fields.	
			Updated publication dataset section to match current document conventions.	
			Added attribute rules to editing procedures.	
			Split the Collections table into separate tables for Flora Sites, Flora Obs, and Fauna Obs.	
			Split the Additional Observations table into separate tables for Survey Poly and Survey Point.	
			Renamed feature classes, tables, and attributes to better comply with Oregon Data Framework standards where possible.	
			Modified how species codes/names are recorded to simplify the data and make it easier to collect on a mobile device.	
			WIND_SPEED field changed to WND_CND	
			Added BLM_ORG_CD to Feature Point and Poly feature classes.	
			Added new BAIT_TYPE and SCENT_LURE_TYPE to Survey Point feature class to support Carnivore surveys.	
			The following domains were modified to remove unnecessary underscores in codes: dom_GB_FTR_STATUS, dom_GB_FTR_TYPE, dom_GB_FTR_USE, dom_GB_SOIL_TEXT, dom_GB_SUBSTRATE, dom_GB_THREAT	
			Changed Migration Source codes ONHP to ORBIC and WADFW to WDFW.	
			Edits to Survey Method domain descriptions.	
			Other minor edits and corrections too numerous to detail.	

# **Navigation**

This document uses hyperlinks to display additional information on topics. External links are displayed with an underline.

Internal links are blue text, not underlined. After clicking on an internal link, press the Alt + Left Arrow keys to return to the original location from the target location.

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#### 1 General Information

The Botany and Wildlife Observations and Surveys dataset represents and includes inventory, current and historic spatial locations, habitat, and population data BLM Special Status wildlife and botanical species, survey & manage, and other rare species on BLM lands in Oregon and Washington. This dataset documents surveys, inventories of species that were surveyed for, and the associated sites and observations encountered during those surveys. It also includes incidental sites and observations of wildlife and botanical species, and biologically significant features of the environment. The dataset is intended for rare species that are typically identified to their lowest taxonomic classification, and at least to species. Additionally, the dataset includes a master list of all species within the database as well as the status of those species according to the most recent Interagency Special Status Species Program's list. BLM botanists, wildlife biologists, and other specialists, manage, enter, and query their data for BLM Special Status Species and district priority species when using the Geographic Biotic Observations (GeoBOB) ArcGIS application. The data largely comes from records collected and entered by district staff as well as relevant supplementary datasets that have been migrated into the database. The original dataset was released in January 2005 and a second version, which included improvements and simplifications to the data design, was released in November 2016. GeoBOB is a critical tool and key component of the BLM Oregon & Washington's Interagency Special Status Species Program's management of associated wildlife and botanical species.

- Dataset (Theme) Name: Botany and Wildlife Observations and Surveys
- Dataset (Feature Classes and Tables): FAUNA\_OBS\_PT, FAUNA\_SITE\_POLY, FEATURE\_POLY, FEATURE\_PT, FLORA\_OBS\_PT, FLORA\_SITE\_POLY, SURVEY\_POLY, SURVEY\_PT, FAUNA\_DETAIL\_TBL, FAUNA\_OBS\_COLL\_TBL, FLORA\_OBS\_COLL\_TBL, FLORA\_SITE\_COLL\_TBL, SURVEY\_POLY\_ADDOBS\_TBL, SURVEY\_PT\_ADDOBS\_TBL

# 1.1 Roles and Responsibilities

Table 1 Roles and Responsibilities

Roles	Responsibilities
State Data Steward	The State Data Steward responsibilities include approving data standards and business rules, developing Quality Assurance/Quality Control procedures, identifying potential Privacy issues, and managing that data as a corporate resource. The State Data Steward coordinates with field office data stewards, the State Data Administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Steward reviews geospatial metadata for completeness and quality.
GIS Technical Lead	The GIS Technical Lead works with data stewards to convert business needs into GIS applications and derive data requirements and participates in the development of data standards. The GIS technical lead coordinates with system administrators and GIS coordinators to manage the GIS databases. The GIS technical lead works with data editors to ensure the consistency and accordance with the established data standards of data input into the enterprise Spatial Database Engine (SDE) geodatabase. The GIS technical lead provides technical assistance and advice on GIS analysis, query, and display of the dataset.
State Data Administrator	The State Data Administrator provides information management leadership, data modeling expertise, and custodianship of the state data models. The State Data Administrator ensures compliance with defined processes for development of data standards and metadata, and process consistency and completeness. The State Data Administrator is responsible for making data standards and metadata accessible to all users. The State Data Administrator coordinates with data

	stewards and GIS coordinators to respond to national spatial data requests.
State FOIA/Privacy Act Team Lead	The State FOIA/Privacy Act team lead assists the state data steward to identify any privacy issues related to spatial data. The State FOIA/Privacy Act team lead also provides direction and guidance on data release, fees, and classification under the appropriate Freedom of Information Act exemption.
State Records Administrator	The state records administrator classifies data under the proper records retention schedule.

#### 1.2 FOIA Category

Category 1B: Public Data, Reviewed before Release.

Data with reference to cave locations are Category 2: NonPublic Data, Internal Use and are covered under FOIA exemption 3: Information that is prohibited from disclosure by another federal law. In this case the Federal Cave Resources Protection Act of 1988.

#### 1.3 Records Retention Schedule

The DRS/GRS/BLM Combined Records Schedule, under Schedule 20/52a3 (Electronic Records/Geographic Information Systems), lists this theme as one of the system-centric themes that are significant for BLM's mission that must be permanently retained.

"PERMANENT. Cutoff at the end of each Fiscal Year (FY) or when significant changes and additions have been made, before and after the change. Use BLM 20/52a. Transfer to the National Archives every three years after cutoff. Under the instruction in 36 CFR 1235.44-50 or whichever guidance is in place at the time of the transfer. Submissions are full datasets and are in addition to, not replacements of, earlier submissions."

Oregon/Washington (OR/WA) Bureau of Land Management (BLM) Guidebook for Management of Geospatial Data (v1) Section 15.2 - Corporate Data Online Archives prescribes:

"Vector annual archives are retained online for 12 years. Each year, data that has reached 12 years old is copied off-line to be retained until no longer needed (determined by data stewards and program leads) with format and readability maintained in a five (5) year "tech refresh" update cycle."

#### 1.4 Security/Access/Sensitivity

This theme does not require any additional security other than that provided by the General Support System (the hardware/software infrastructure of the OR/WA BLM).

This dataset is not sensitive and there are no restrictions on access to this data, either from within the BLM or external to the BLM. This dataset falls under the standard Records Access Category 1B Public Data, Reviewed before release. This data is not to be made available on the public web.

There are no privacy issues or concerns associated with these data themes. A privacy impact assessment was submitted for this dataset on 7/22/2016.

#### 1.5 Keywords

Keywords that can be used to locate this dataset include:

• BLM Thesaurus: Vegetation, Wildlife

- Additional keywords: Flora, Fauna, Botany, Threatened & Endangered, Special Status Species, Sensitive Species, Strategic Species
- ISO Thesaurus: biota, environment

#### 1.6 Subject Function Codes

BLM Subject Function codes used to describe this dataset include:

- 1283 Data Administration
- 6500 Wildlife Management
- 6800 Wildlife Population Management
- 6850 Protection of Special Status Plants
- 9167 Geographic Information System (GIS)

#### 2 Dataset Overview

# 2.1 Usage

This dataset is used to document BLM special status species observations, discrete locations, and biological clearance' surveys for use in NEPA analysis, ESA consultation for BLM actions, and for conservation planning strategies for special status and rare species groups. This dataset can be used to track the status of rare species through time (trend) and to document areas that have been surveyed and 'cleared' prior to BLM actions that could adversely affect BLM special status species. The dataset is also used by the Interagency Special Status and Sensitive Species Program (ISSSSP) to develop conservation planning documents and special status lists. The dataset is an important resource for historic and current documented rare species locations in the region. The data is shared with a variety of partner programs including the U.S. Forest Service (USFS) Region 6, Oregon Biodiversity Information Center (ORBIC), Washington Natural Heritage Program (WNHP), and Washington Department of Fish and Wildlife (WDFW). The data is often requested by and shared with other federal agencies and state government agencies as well as a variety of requesting non-government organizations, businesses, and the public through various data sharing agreements.

Data editors include BLM Oregon & Washington wildlife biologists, botanists, natural resource specialists, biological technicians, and GIS staff who have received formal training to use the database. Information about observations, monitoring known sites, features, and surveys for threatened & endangered species (TES), special status species (SSS), Survey and Manage (S&M), and district priority species are entered into the database for all projects and monitoring as they occur on BLM lands, and annually by March 1st of each year. Managers, planners, and other specialists can view and query the dataset using Esri ArcGIS software.

#### 2.2 Sponsor/Affected Parties

The sponsor for this dataset is the Deputy Director for the Division of Resources, Lands, and Minerals.

Affected parties include the Oregon Biodiversity Information Center (ORBIC), the Washington Natural Heritage Program (WNHP), the USFS Region 6, and Washington Department of Fish & Wildlife (WDFW). The BLM also exchanges data for individual and groups of species with the Oregon Department of Fish & Wildlife (ODFW), Oregon Department of Agriculture (ODA), and US Fish & Wildlife Service (USFWS) to support species status reviews, and other conservation efforts.

# 2.3 Relationship to Other Datasets, Databases, or Files

When the GeoBOB application was first created in 2005, local district databases and records from the Interagency Species Management System (ISMS), which included Special Status and Threatened & Endangered species from Oregon, Washington, and Northern California, were migrated into the dataset. Since its creation, the dataset has also integrated the data for all species locations from the former S&M mitigation of the Northwest Forest Plan, Oregon Bat Grid data for BLM lands, and Frank Isaac's 29 years of bald eagle nest monitoring data for Oregon and parts of Washington. Annually, the Oregon State Office migrates North American Bat Monitoring Program (NABat) data for BLM lands into GeoBOB. Non-corporate District datasets, data from survey and monitoring projects funded by the ISSSSP or other Oregon State Office programs, and pertinent non-BLM records that occur on BLM lands are migrated and entered into the dataset as staff resources and digital or paper records become available.

The dataset is located within the Oregon Data Framework (ODF) within the Resources section under Species Occurrences and within the Activities section under Surveys. The dataset includes several affiliations and relationships with other datasets within the Oregon Data Framework.

- Marbled Murrelet The MAMU dataset is intended for entering observations, surveys, weather, and occupied sites for the marbled murrelet, a federally threatened species. Non-target species that are encountered during marbled Murrelet surveys are typically entered into GeoBOB as observations.
- NSO (Northern Spotted Owl) The NSO dataset is where information about observations, records of visits to known and potential owl locations, nest tree information, and annual summaries based on cumulative visits to owl sites is located. If Northern Spotted Owls and Barred Owls are encountered during a survey incidentally, observation records would be entered into the NSO dataset. Non-target species that are encountered during spotted owl surveys are typically entered into GeoBOB as observations.
- Micro\*Storms This dataset is inherently affiliated with the Forestry database, Micro\*Storms, which includes
  a Vegetation Publication (forest\_MicroStorms\_veg\_pub.gdb). Often, the Forest Operations Inventory (FOI)
  Vegetation Publication dataset polygons are used to define survey polygons, especially on O&C lands in
  Western Oregon.
- **Grazing Allotments** On Public Domain lands, the Grazing Allotments (Grazing\_allotments.gdb) dataset is affiliated with this dataset because it is used to define survey polygons within pastures, especially for conducting Rangeland Health Assessments.
- VMAP (Vegetation Management Action Portal) These same FOI and Grazing Allotment derived GeoBOB survey polygons are often used in the database since botanical (GeoBOB) and weed surveys (VMAP) are often done concurrently and within the same area.
- ACEC (Areas of Critical Environmental Concern) and Research Natural Areas (RNA)
   (areas\_of\_critical\_concern.gdb) often contain valued rare species and have been designated and managed for those rare species. Rare species sites and surveys that occur within these ACEC are recorded in GeoBOB.
- Sample Points (Fish) the Fish Sample Points dataset is where information about observations and surveys for fish species is located. Often, observations of wildlife species, including mussels, are made while these surveys are being conducted, and trained users can enter those records into Botany and Wildlife Survey and Observations.

There are a variety of other external datasets that are often used in conjunction or are otherwise affiliated with this dataset. Critical Habitat, which is designated for many TES by the U.S. Fish & Wildlife Service and National Marine Fisheries Service, is an important resource that is used in combination with this dataset and other observation data for planning and consultation with the Service. Additionally, there are a variety of management and conservation areas, habitat, modeled data, and other relevant datasets that are provided by partner agencies for focal species and are available in external sourced corporate data locations.

#### 2.4 Data Category/Architecture Link

This data theme is a portion of the Oregon Data Framework (ODF) shown in Figure 1, Oregon Data Framework (ODF) Overview on page 9. The illustration is a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The ODF utilizes the concept of inheritance to define specific instances of data. The ODF divides all OR/WA resource-related data into three general categories:

- Activities
- Resources
- Boundaries

These general categories are broken into sub-categories that inherit spatial characteristics and attributes from their parent category. These sub-categories may be further broken into more specific groups until the basic data set cannot be further sub-divided. Those basic data sets inherit all characteristics of all groups/categories above them. The basic data sets are where physical data gets populated. Those groups/categories above them do not contain actual data but set parameters which all data of that type must follow.

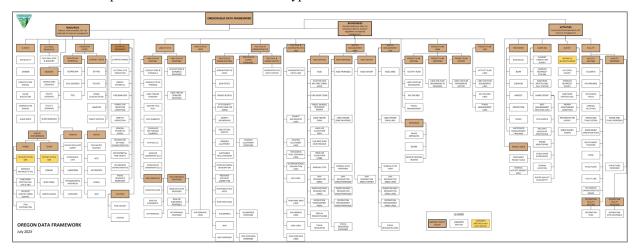


Figure 1 Oregon Data Framework Overview

For an easier to view version of the Oregon Data Framework diagram, go to: <a href="https://gis.blm.gov/ORDownload/DataFramework/BLM">https://gis.blm.gov/ORDownload/DataFramework/BLM</a> ODF Model Mini Status.pdf.

Physical data is populated in the basic data sets. Those groups/categories above them do not contain actual data but set parameters that all data of that type must follow. See Figure 2, Data Organization Structure for a simplified schematic of the entire ODF showing the overall organization and entity inheritance. The Botany and Wildlife Observations and Surveys entities are highlighted. For additional information about the ODF, contact the <a href="State">State</a> <a href="Data Administrator">Data Administrator</a>. The State Data Administrator's contact information can be found at the following link: <a href="https://www.blm.gov/about/data/oregon-data-management">https://www.blm.gov/about/data/oregon-data-management</a>.

In the ODF, Botany and Wildlife Observations and Surveys is considered an Activity and a Resource and categorized as follows:

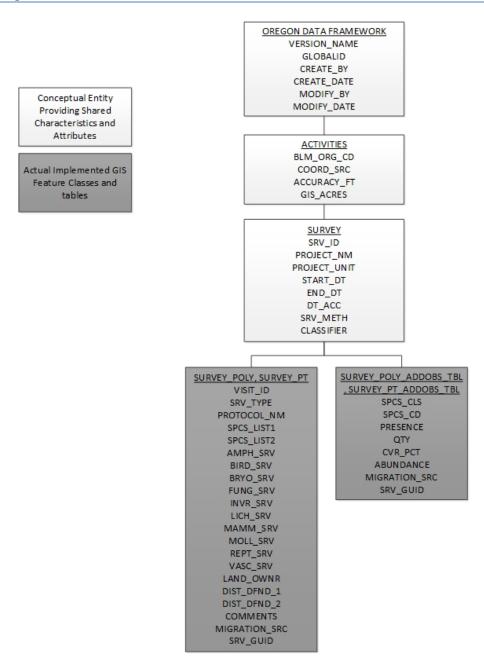


Figure 2 Data Organization Structure - Activities

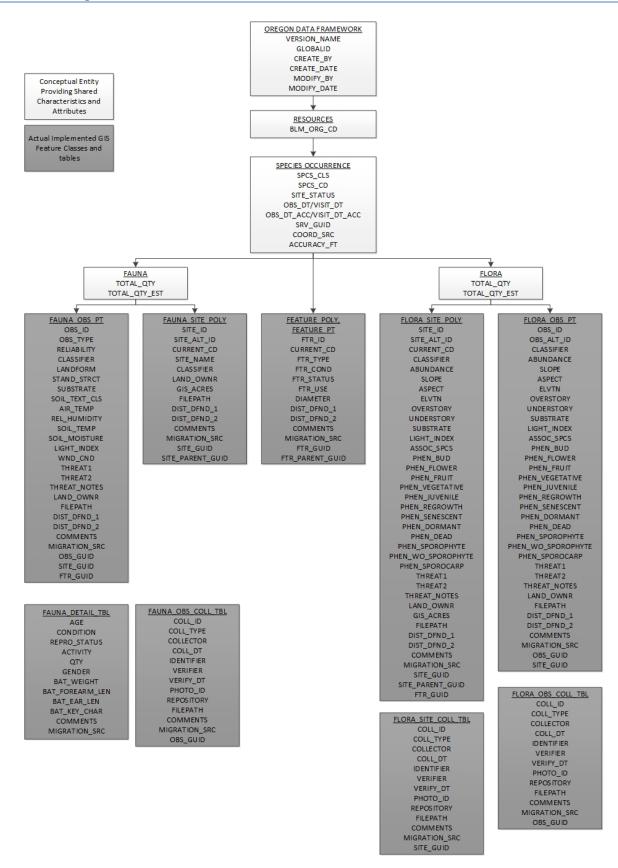


Figure 3 Data Organization Structure - Resources

# 2.5 Relationship to DOI Enterprise Architecture Data Resource Mode

The Department of the Interior (DOI) Enterprise Architecture contains a component called the Data Resource Model. This model addresses the concepts of data sharing, data description, and data context. This data standard provides information needed to address each of those areas. Data sharing is addressed through complete documentation and simple data structures which make sharing easier. Data description is addressed through the section on Attribute Descriptions. Data context is addressed through the data organization and structure portions of this document. In addition, the DOI Data Resource Model categorizes data by use of standardized Data Subject Areas and Information Classes. For this data set, the Data Subject Area and Information Class are:

Data Subject Area: Geospatial
Information Class: Location

# 3 Data Management Protocols

#### 3.1 Accuracy Requirements

Spatial Accuracy - This dataset requires the best possible spatial accuracy based on the tools and technologies available to document polygons, points, and their associated species data. Spatial accuracy attributes are automatically generated from mobile GIS. All features within the dataset have a field called ACCURACY\_FT, which describes the precision with which the recorded UTMs or lat/longs and the associated GIS digitized (electronic) point or polygon matches the actual ground site location. Domain values are included in the dom\_COORD\_SRC domain, and include GPS Unit precisions, manual digitization, legal descriptions, and Unknown or Vague map accuracies. The values of required attributes have an accuracy of at least 95 percent. GPS location accuracy for sites and observations is usually +- 30ft, but this GPS accuracy is often limited by site conditions (ex. canopy cover).

Identification Accuracy - For Fauna Observations (FAUNA\_OBS\_PT), the required RELIABILITY field identifies a ranking of how reliable the Observation record is, based on the experience of the identifier or verifier. These rankings can be found in the dom\_GB\_RELIABILITY domain.

Date Accuracy - Some records in the dataset (Fauna Obs, Survey Poly, and Survey Pt), include a date accuracy field that describes the accuracy of the date the observation or visit occurred. Examples of date accuracy include day, month, and year.

#### 3.2 Collection, Input, and Maintenance Protocols

Resource specialists have the option of entering data from paper field forms in the office using Desktop ArcGIS or field-going staff may collect data using a mobile device.

To enter data into the dataset, one must first become an editor. To become a GeoBOB Editor, intended users attend an in-person, virtual, or self-study training that provides an overview of the dataset, the programs it supports, its intended use, the data entry protocol, and general information about the database. This training includes standardized training materials for entering wildlife, botany, and mobile data into the database. Once a prospective editor has completed their training, they are sponsored by their District GIS Coordinator, and granted access to the dataset as an editor by the Regional GeoBOB Data Steward.

Paper Data Collection - data can be collected by using "GeoBOB Paper Field Forms", which includes forms for all the spatial features and tables in the dataset. These paper records and report forms are available for download on the GeoBOB SharePoint site. Once a form is used to collect data, the data is then manually entered into the dataset by using the Version Management Add-in for ArcGIS Pro.

Mobile data may be collected using the S1 Mobile Mapper for Android application with the GeoBOB sync-and-submit service. The S1 Mobile Mapper sync and submit service populates on-premise services, including a tracking table, on gis.blm.gov. All the services point to databases using internal SDE for off network access,

token-authenticated external on-premise services are used to view, download, and sync data offline. Security is enabled on the on-premise services to restrict access to authorized active directory users based on active directory credentials. An active directory user id and password is used to generate a token and get access to the services.

To collect data, the user must be a member of the BLM GBP Mobile Portal and be a member of the active directory group that has permissions to edit the data. Once added to the correct group, users can log into the S1 Mobile for Android application and download an editable replica of the GeoBOB dataset to their device for offline use in the field. This application allows users to create new features or edit existing features.

When the user returns to the office and re-establishes wireless internet connectivity on the device, they will then choose the option to sync and submit their data from the mobile application. This will add the created, updated, and/or deleted data to a BLM Version queue. Authorized GeoBOB editors will then import this mobile version into ArcGIS Pro where they will review the data, perform any needed corrections or updates, and submit the version for automated QAQC, reconcile and posting. The automated QAQC process performed during version submission will check the version for missing values in required fields, values outside of applied range and/or coded value domains, and other data rules.

Additional editing guidance is available in section 9 of this document.

#### 3.3 Update Frequency and Archival Protocols

Data is updated as needed, but at least annually. It is archived annually at the end of the fiscal year. Additionally, to maintain a current representation of surveys, observations, and sites in the dataset, all records collected in the previous year should be entered into the database by March 1<sup>st</sup> of the following year. This deadline is outlined in the IM for the State Director's list, which is released about every three years.

#### 3.4 Statewide Monitoring

The State Data Stewards include the Threatened & Endangered Species Program Lead, the State Botanist/Plant Conservation & Restoration Program Lead, and the Regional Data Steward and Coordinator for GeoBOB. State Data Stewards are responsible for ensuring data is managed as a corporate resource, that new and existing users are trained and supported, and that information for special status species is being entered into the database annually. They coordinate with field office data stewards, the state data administrator, Geographic Information System (GIS) coordinators, and national data stewards. The State Data Stewards are responsible for approving and drafting data standards and business rules, reviewing metadata, providing technical support, developing Quality Assurance/Quality Control procedures, coordinating data exchange with external partners, developing data sharing agreements with researchers and other parties, and identifying potential privacy issues. The GIS technical lead provides GIS technical support and application development.

Each year, the Resource Science Data team of the BLM Division of Resources, Lands, and Minerals meets with each State Data Steward for every corporate geospatial theme to conduct an annual review of the data. During the annual review, geospatial staff present the state data stewards with a report detailing Quality Assurance/Quality Control (QAQC) results performed on the data. The QAQC does the following:

- Checks that all attribute values conform to the range or coded-value domains to which they are applied.
- Checks that all attributes marked as required in the data standard have values.
- Checks for duplicate features which have the same geometry and attributes.
- Checks for overlapping features if forbidden by the data standard.
- Checks for invalid geometry.
- Other checks as necessary (can be customized according to the data standard).

In addition to this report, geospatial staff conduct a qualitative needs assessment with the steward to identify any unmet needs or problems with the status of the data. At the conclusion of the review, the team records the

steward's approval of the datasets reviewed. These approvals are then added to the corporate metadata.

# 4 Botany and Wildlife Observations and Surveys Schema (simplified)

General Information: Attributes are listed in the order they appear in the geodatabase feature class. The order is an indication of the importance of the attribute for theme definition and use. There are no aliases unless specifically noted. The domains used in this data standard can be found in Appendix A. These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: https://www.blm.gov/about/data/oregon-data-management.

For domains not listed at that site contact: State Data Administrator.

#### 4.1 Feature Classes

#### 4.1.1 FAUNA\_OBS\_PT Feature Class (Fauna Observation Points)

Attribute Name	Data Type	Length	Default Value	Required	Domain
OBS_ID	String	50		No	
SPCS_CLS	Short Integer			Yes **	
SPCS_CD	String	10		Yes	Multiple - see field description
OBS_TYPE	String	20		Yes	dom_GB_OBS_TYPE
RELIABILITY	String	10		Yes	dom_GB_RELIABILITY
CLASSIFIER	String	250		Yes	
OBS_DT	Date			Yes	
OBS_DT_ACC	String	7	Day	Yes	dom_DT_ACC
TOTAL_QTY	Short Integer			No	
TOTAL_QTY_EST	String	1		Conditional	dom_YN
LANDFORM	String	20		No	dom_GB_LANDFORM
STAND_STRCT	String	20		No	dom_GB_STAND_STRCT
SUBSTRATE	String	20		No	dom_GB_SUBSTRATE
SOIL_TEXT_CLS	String	10		No	dom_GB_SOIL_TEXT
AIR_TEMP	Short Integer			No	dom_TEMPERATURE_F
REL_HUMIDITY	Short Integer			No	dom_PCT100
SOIL_TEMP	Short Integer			No	dom_TEMPERATURE_F
SOIL_MOISTURE	String	20		No	dom_GB_SOIL_MOISTURE
LIGHT_INDEX	String	20		No	dom_GB_LIGHT_INDEX
WND_CND	String	10		No	dom_WND_CND
THREAT1	String	25		No	dom_GB_THREAT

Attribute Name	Data Type	Length	Default Value	Required	Domain
THREAT2	String	25		No	dom_GB_THREAT
THREAT_NOTES	String	255		No	
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
FILEPATH	String	255		No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
OBS_GUID	GUID			Yes *	
SITE_GUID	GUID			No	
SRV_GUID	GUID			No	
FTR_GUID	GUID			No	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# 4.1.2 FAUNA\_SITE\_POLY Feature Class (Fauna Site Polygons)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SITE_ID	String	50		Yes	
SITE_ALT_ID	String	100		No	
CURRENT_CD	String	1	С	Yes	dom_CURRENT_CD
SITE_NAME	String	60		No	
SPCS_CLS	Short Integer			Yes **	dom_GB_SPCS_CLS
SPCS_CD	String	10		Yes	Multiple - see field description

Attribute Name	Data Type	Length	Default Value	Required	Domain
SITE_STATUS	String	10	Unknown	Yes	dom_GB_SITE_STATUS
CLASSIFIER	String	250		Yes	
VISIT_DT	Date		1/1/8888	Yes	
VISIT_DT_ACC	String	7	Day	Yes	dom_DT_ACC
TOTAL_QTY	Long Integer			Conditional	
TOTAL_QTY_EST	String	1		Conditional	dom_YN
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
GIS_ACRES	Double			Yes **	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
FILEPATH	String	255		No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SITE_GUID	GUID			Yes *	
SITE_PARENT_GUID	GUID			No	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

#### 4.1.3 FEATURE\_POLY Feature Class (Feature Polygons)

Attribute Name	Data Type	Length	Default Value	Required	Domain
FTR_ID	String	50		Yes	
CURRENT_CD	String	1	С	Yes	dom_CURRENT_CD
FTR_TYPE	String	20	Unknown	No	dom_GB_FTR_TYPE

Attribute Name	Data Type	Length	Default Value	Required	Domain
FTR_COND	String	20	Unknown	No	dom_GB_FTR_CONDITION
FTR_STATUS	String	20	Unknown	Yes	dom_GB_FTR_STATUS
FTR_USE	String	20	Unknown	Yes	dom_GB_FTR_USE
VISIT_DT	Date		1/1/8888	Yes	
VISIT_DT_ACC	String	7	Day	Yes	dom_DT_ACC
SPCS_CLS	Short Integer			No	dom_GB_SPCS_CLS
SPCS_CD	String	10		No	Multiple - see field description
DIAMETER	Short Integer			No	
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
FTR_GUID	GUID			Yes *	
FTR_PARENT_GUID	GUID			No	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# **4.1.4** FEATURE\_PT Feature Class (Feature Points)

Attribute Name	Data Type	Length	Default Value	Required	Domain
FTR_ID	String	50		Yes	
CURRENT_CD	String	1	С	Yes	dom_CURRENT_CD
FTR_TYPE	String	20	Unknown	No	dom_GB_FTR_TYPE
FTR_COND	String	20	Unknown	No	dom_GB_FTR_CONDITION

Attribute Name	Data Type	Length	Default Value	Required	Domain
FTR_STATUS	String	20	Unknown	Yes	dom_GB_FTR_STATUS
FTR_USE	String	20	Unknown	Yes	dom_GB_FTR_USE
VISIT_DT	Date		1/1/8888	Yes	
VISIT_DT_ACC	String	7	Day	Yes	dom_DT_ACC
SPCS_CLS	Short Integer			No	dom_GB_SPCS_CLS
SPCS_CD	String	10		No	Multiple - see field description
DIAMETER	Short Integer			No	
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
FTR_GUID	GUID			Yes *	
FTR_PARENT_GUID	GUID			No	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# 4.1.5 FLORA\_OBS\_PT Feature Class (Flora Observation Points)

Attribute Name	Data Type	Length	Default Value	Required	Domain
OBS_ID	String	50		Yes	
OBS_ALT_ID	String	100		No	
SPCS_CLS	Short Integer			Yes **	dom_GB_SPCS_CLS
SPCS_CD	String	10		Yes	Multiple - see field description
CLASSIFIER	String	250		Yes	

Attribute Name	Data Type	Length	Default Value	Required	Domain
VISIT_DT	Date		1/1/8888	Yes	
VISIT_DT_ACC	String	7	Day	Yes	dom_DT_ACC
QUANTITY	Short Integer			Conditional	
QTY_EST	String	1		Conditional	dom_YN
ABUNDANCE	String	20		Conditional	dom_GB_ABUNDANCE
SLOPE	Short Integer		-1	Yes	dom_GB_SLOPE
ASPECT	Short Integer			Yes	dom_GB_ASPECT
ELVTN	Long Integer			Yes	dom_GB_ELVTN
OVERSTORY	Short Integer			Yes	
UNDERSTORY	Short Integer			Yes	
SUBSTRATE	String	60		Conditional	dom_GB_SUBSTRATE
LIGHT_INDEX	String	20		Yes	dom_GB_LIGHT_INDEX
ASSOC_SPCS	String	255		No	
PHEN_BUD	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_FLOWER	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_FRUIT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_VEGETATIVE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_JUVENILE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_REGROWTH	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SENESCENT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_DORMANT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_DEAD	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SPOROPHYTE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_WO_SPOROPHYTE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SPOROCARP	Short Integer		-1	Yes	dom_PCT100_Neg
THREAT1	String	25		No	dom_GB_THREAT
THREAT2	String	25		No	dom_GB_THREAT
THREAT_NOTES	String	255		No	
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
FILEPATH	String	255		No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	

Attribute Name	Data Type	Length	Default Value	Required	Domain
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
OBS_GUID	GUID			Yes *	
SITE_GUID	GUID			No	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# 4.1.6 FLORA\_SITE\_POLY Feature Class (Flora Site Polygons)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SITE_ID	String	50		Yes	
SITE_ALT_ID	String	100		No	
CURRENT_CD	String	1	С	Yes	dom_CURRENT_CD
SPCS_CLS	Short Integer			Yes **	
SPCS_CD	String	10		Yes	Multiple - see field description
SITE_STATUS	String	10	Unknown	Yes	dom_GB_SITE_STATUS
CLASSIFIER	String	250		Yes	
VISIT_DT	Date		1/1/8888	Yes	
VISIT_DT_ACC	String	7	Day	Yes	dom_DT_ACC
TOTAL_QTY	Short Integer			Conditional	
TOTAL_QTY_EST	String	1		Conditional	dom_YN
ABUNDANCE	String	20		Conditional	dom_GB_ABUNDANCE
SLOPE	Short Integer		-1	Yes	dom_GB_SLOPE
ASPECT	Short Integer			Yes	dom_GB_ASPECT
ELVTN	Long Integer			Yes	dom_GB_ELVTN
OVERSTORY	Short Integer			Yes	

Attribute Name	Data Type	Length	Default Value	Required	Domain
UNDERSTORY	Short Integer			Yes	
SUBSTRATE	String	60		Conditional	dom_GB_SUBSTRATE
LIGHT_INDEX	String	20		Yes	dom_GB_LIGHT_INDEX
ASSOC_SPCS	String	255		No	
PHEN_BUD	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_FLOWER	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_FRUIT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_VEGETATIVE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_JUVENILE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_REGROWTH	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SENESCENT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_DORMANT	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_DEAD	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SPOROPHYTE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_WO_SPOROPHYTE	Short Integer		-1	Yes	dom_PCT100_Neg
PHEN_SPOROCARP	Short Integer		-1	Yes	dom_PCT100_Neg
THREAT1	String	25		No	dom_GB_THREAT
THREAT2	String	25		No	dom_GB_THREAT
THREAT_NOTES	String	255		No	
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
GIS_ACRES	Double			Yes **	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
FILEPATH	String	255		No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SITE_GUID	GUID			Yes *	
SITE_PARENT_GUID	GUID			No	
SRV_GUID	GUID			No	
FTR_GUID	GUID			No	
GLOBALID	GUID			Yes *	

Attribute Name	Data Type	Length	Default Value	Required	Domain
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

#### 4.1.7 SURVEY POLY Feature Class (Survey Polygons)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SRV_ID	String	50		Yes	
VISIT_ID	String	50		No	
PROJECT_NM	String	60		No	
PROJECT_UNIT	String	50		No	
SRV_TYPE	String	20	Unspecified	Yes	dom_GB_SRV_TYPE
SRV_METH	String	20	Unspecified	Yes	dom_GB_SRV_METH
PROTOCOL_NM	String	100		No	dom_GB_PROTOCOL
START_DT	Date		1/1/8888	Yes	
END_DT	Date			No	
DT_ACC	String	7		Yes	dom_DT_ACC
CLASSIFIER	String	255		Yes	
SPCS_LIST1	String	15		No	dom_GB_SPCS_LIST
SPCS_LIST2	String	15		No	dom_GB_SPCS_LIST
AMPH_SRV	String	1	N	Conditional	dom_YN
BIRD_SRV	String	1	N	Conditional	dom_YN
BRYO_SRV	String	1	N	Conditional	dom_YN
FUNG_SRV	String	1	N	Conditional	dom_YN
INVR_SRV	String	1	N	Conditional	dom_YN
LICH_SRV	String	1	N	Conditional	dom_YN
MAMM_SRV	String	1	N	Conditional	dom_YN
MOLL_SRV	String	1	N	Conditional	dom_YN
REPT_SRV	String	1	N	Conditional	dom_YN
VASC_SRV	String	1	N	Conditional	dom_YN

Attribute Name	Data Type	Length	Default Value	Required	Domain
BLM_ORG_CD	String	5	OR000	Yes **	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
GIS_ACRES	Double			Yes **	
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SRV_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

<sup>\*</sup> Values automatically generated

#### 4.1.8 SURVEY PT Feature Class (Survey Points)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SRV_ID	String	50		Yes	
VISIT_ID	String	50		No	
PROJECT_NM	String	60		No	
PROJECT_UNIT	String	50		No	
SRV_TYPE	String	20	Unspecified	Yes	dom_GB_SRV_TYPE
SRV_METH	String	20	Unspecified	Yes	dom_GB_SRV_METH
PROTOCOL_NM	String	100		No	dom_GB_PROTOCOL
START_DT	Date		1/1/8888	Yes	
END_DT	Date			No	
DT_ACC	String	7		Yes	dom_DT_ACC
CLASSIFIER	String	255		Yes	

<sup>\*\*</sup> Enforced during quality control, may appear in data as not required

<sup>\*\*\*</sup> Maintained through versioning tools, may appear not required in database

Attribute Name	Data Type	Length	Default Value	Required	Domain
SPCS_LIST1	String	15		No	dom_GB_SPCS_LIST
SPCS_LIST2	String	15		No	dom_GB_SPCS_LIST
AMPH_SRV	String	1	N	Conditional	dom_YN
BIRD_SRV	String	1	N	Conditional	dom_YN
BRYO_SRV	String	1	N	Conditional	dom_YN
FUNG_SRV	String	1	N	Conditional	dom_YN
INVR_SRV	String	1	N	Conditional	dom_YN
LICH_SRV	String	1	N	Conditional	dom_YN
MAMM_SRV	String	1	N	Conditional	dom_YN
MOLL_SRV	String	1	N	Conditional	dom_YN
REPT_SRV	String	1	N	Conditional	dom_YN
VASC_SRV	String	1	N	Conditional	dom_YN
BAIT_TYPE	String	20		No	dom_GB_BAIT_TYPE
SCENT_LURE_TYPE	String	20		No	dom_GB_SCENT_LURE_TYPE
BLM_ORG_CD	String	5	OR000	Yes *	dom_BLM_ORG_CD
LAND_OWNR	String	3	BL	Yes	dom_JURIS_CODE
COORD_SRC	String	7		No	dom_COORD_SRC
ACCURACY_FT	Short Integer			No	
DIST_DFND_1	String	255		No	
DIST_DFND_2	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SRV_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

Values automatically generated

<sup>\*\*</sup> Enforced during quality control, may appear in data as not required

<sup>\*\*\*</sup> Maintained through versioning tools, may appear not required in database

#### 4.2 Standalone Tables

# 4.2.1 FAUNA\_DETAIL\_TBL (Fauna Detail Observation Table)

For domain and default values, see Section 7Attribute Characteristics and Definition (In alphabetical order) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
AGE	String	15		No	dom_GB_AGE_CLS
CONDITION	String	10		No	dom_GB_CONDITION
REPRO_STATUS	String	35		No	dom_GB_REPRO_STATUS
ACTIVITY	String	30		No	dom_GB_ACTIVITY
QTY	Short Integer			No	
GENDER	String	20		No	dom_GB_GENDER
BAT_WEIGHT	Double			No	
BAT_FOREARM_LEN	Double			No	
BAT_EAR_LEN	Double			No	
BAT_KEY_CHAR	String	50		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
OBS_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

<sup>\*</sup> Values automatically generated

#### 4.2.2 FAUNA\_OBS\_COLL\_TBL (Fauna Observation Collection Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
COLL_ID	String	50		Yes	
COLL_TYPE	String	15	None	Yes	dom_GB_COLL_TYPE
COLLECTOR	String	255		Yes	
COLL_DT	Date			Yes	

<sup>\*\*</sup> Enforced during quality control, may appear in data as not required

<sup>\*\*\*</sup> Maintained through versioning tools, may appear not required in database

Attribute Name	Data Type	Length	Default Value	Required	Domain
IDENTIFIER	String	255		No	
VERIFIER	String	255		No	
VERIFY_DT	Date			No	
PHOTO_ID	String	50		No	
REPOSITORY	String	255	UNK	Yes	dom_GB_REPOSITORY
SPCS_CLS	Short Integer			No	dom_GB_SPCS_CLS
SPCS_CD	String	10		No	Multiple - see field description
FILEPATH	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
OBS_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

<sup>\*</sup> Values automatically generated

### 4.2.3 FLORA\_OBS\_COLL\_TBL (Flora Observations Collection Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
COLL_ID	String	50		Yes	
COLL_TYPE	String	15	None	Yes	dom_GB_COLL_TYPE
COLLECTOR	String	255		Yes	
COLL_DT	Date			Yes	
IDENTIFIER	String	255		No	
VERIFIER	String	255		No	
VERIFY_DT	Date			No	
PHOTO_ID	String	50		No	
REPOSITORY	String	255	UNK	Yes	dom_GB_REPOSITORY
SPCS_CLS	Short Integer			No	dom_GB_SPCS_CLS

<sup>\*\*</sup> Enforced during quality control, may appear in data as not required

<sup>\*\*\*</sup> Maintained through versioning tools, may appear not required in database

Attribute Name	Data Type	Length	Default Value	Required	Domain
SPCS_CD	String	10		No	Multiple - see field description
FILEPATH	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
OBS_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

#### 4.2.4 FLORA\_SITE\_COLL\_TBL (Flora Site Collection Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
COLL_ID	String	50		Yes	
COLL_TYPE	String	15	None	Yes	dom_GB_COLL_TYPE
COLLECTOR	String	255		Yes	
COLL_DT	Date			Yes	
IDENTIFIER	String	255		No	
VERIFIER	String	255		No	
VERIFY_DT	Date			No	
PHOTO_ID	String	50		No	
REPOSITORY	String	255	UNK	Yes	dom_GB_REPOSITORY
SPCS_CLS	Short Integer			No	
SPCS_CD	String	10		No	Multiple - see field description
FILEPATH	String	255		No	
COMMENTS	String	2000		No	
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SITE_GUID	GUID			Yes **	

Attribute Name	Data Type	Length	Default Value	Required	Domain
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- \* Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# **4.2.5** SURVEY\_POLY\_ADDOBS\_TBL Table (Survey Polygon Additional Observations Table)

For domain and default values, see Section 7 Attribute Characteristics and Definition (In alphabetical order) in this document.

Attribute Name	Data Type	Length	Default Value	Required	Domain
SPCS_CLS	Short Integer			Yes **	dom_GB_SPCS_CLS
SPCS_CD	String	10		Yes	Multiple - see field description
PRESENCE	String	2	X	Yes	dom_GB_PRESENCE
QTY	Short Integer			No	
CVR_PCT	Short Integer			No	dom_PCT100
ABUNDANCE	String	20		No	dom_GB_ABUNDANCE
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SRV_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

- Values automatically generated
- \*\* Enforced during quality control, may appear in data as not required
- \*\*\* Maintained through versioning tools, may appear not required in database

# **4.2.6** SURVEY\_PT\_ADDOBS\_TBL Table (Survey Point Additional Observations Table)

Attribute Name	Data Type	Length	Default Value	Required	Domain
SPCS_CLS	Short Integer			Yes **	dom_GB_SPCS_CLS
SPCS_CD	String	10		Yes	Multiple - see field description
PRESENCE	String	2	X	Yes	dom_GB_PRESENCE
QTY	Short Integer			No	
CVR_PCT	Short Integer			No	dom_PCT100
ABUNDANCE	String	20		No	dom_GB_ABUNDANCE
MIGRATION_SRC	String	20		No	dom_GB_MIGRATION_SRC
VERSION_NAME	String	50	InitialLoad	Yes ***	
SRV_GUID	GUID			Yes **	
GLOBALID	GUID			Yes *	
CREATE_BY	String	50		No *	
CREATE_DATE	Date			No *	
MODIFY_BY	String	50		No *	
MODIFY_DATE	Date			No *	

<sup>\*</sup> Values automatically generated

# 4.3 Relationship Classes

# 4.3.1 rel\_FAUNA\_OBS\_PT\_COLL\_TBL

Origin Table	FAUNA_OBS_PT
Origin Primary Key	OBS_GUID
Destination Table	FAUNA_OBS_COLL_TBL
Destination Foreign Key	OBS_GUID
Relationship Type	Simple
Labels	Collection Table, Fauna Obs Pt
Messages	None
Cardinality	1 to Many

# 4.3.2 rel\_FAUNA\_OBS\_PT\_DETAIL\_TBL

Origin Table	FAUNA_OBS_PT
Origin Primary Key	OBS_GUID
Destination Table	FAUNA_DETAIL_TBL
Destination Foreign Key	OBS_GUID

<sup>\*\*</sup> Enforced during quality control, may appear in data as not required

<sup>\*\*\*</sup> Maintained through versioning tools, may appear not required in database

Relationship Type	Simple
Labels	Fauna Detail Observation Table, Fauna Obs Pt
Messages	None
Cardinality	1 to Many

# 4.3.3 rel\_FAUNA\_SITE\_POLY\_OBS\_PT

Origin Table	FAUNA_SITE_POLY
Origin Primary Key	SITE_GUID
Destination Table	FAUNA_OBS_PT
Destination Foreign Key	SITE_GUID
Relationship Type	Simple
Labels	Fauna Obs Point, Fauna Site Poly
Messages	None
Cardinality	1 to Many

# 4.3.4 rel\_FLORA\_OBS\_PT\_COLL\_TBL

Origin Table	FLORA_OBS_PT
Origin Primary Key	OBS_GUID
Destination Table	FLORA_OBS_COLL_TBL
Destination Foreign Key	OBS_GUID
Relationship Type	Simple
Labels	Collection Table, Flora Obs Pt
Messages	None
Cardinality	1 to Many

## 4.3.5 rel\_FLORA\_SITE\_POLY\_COLL\_TBL

Origin Table	FLORA_SITE_POLY
Origin Primary Key	SITE_GUID
Destination Table	FLORA_SITE_COLL_TBL
Destination Foreign Key	SITE_GUID
Relationship Type	Simple
Labels	Collection Table, Flora Site Poly
Messages	None
Cardinality	1 to Many

#### 4.3.6 rel FLORA SITE POLY FLORA OBS PT

Origin Table	FLORA_SITE_POLY
Origin Primary Key	SITE_GUID
Destination Table	FLORA_OBS_PT
Destination Foreign Key	SITE_GUID
Relationship Type	Simple
Labels	Flora Observation Point, Flora Site Poly
Messages	None
Cardinality	1 to Many

# 4.3.7 rel\_FEATURE\_POLY\_FAUNA\_OBS\_PT

Origin Table	FEATURE_POLY
Origin Primary Key	FTR_GUID
Destination Table	FAUNA_OBS_PT
Destination Foreign Key	FTR_GUID
Relationship Type	Simple
Labels	Fauna Observation Point, Feature Poly
Messages	None
Cardinality	1 to Many

# 4.3.8 rel\_FEATURE\_POLY\_FLORA\_SITE\_POLY

Origin Table	FEATURE_POLY
Origin Primary Key	FTR_GUID
Destination Table	FLORA_SITE_POLY
Destination Foreign Key	FTR_GUID
Relationship Type	Simple
Labels	Flora Site Poly, Feature Poly
Messages	None
Cardinality	1 to Many

# 4.3.9 rel\_FEATURE\_PT\_FAUNA\_OBS\_PT

Origin Table	FEATURE_PT
Origin Primary Key	FTR_GUID
Destination Table	FAUNA_OBS_PT

Destination Foreign Key	FTR_GUID
Relationship Type	Simple
Labels	Fauna Observation Point, Feature Point
Messages	None
Cardinality	1 to Many

#### 4.3.10 rel\_FEATURE\_PT\_FLORA\_SITE\_POLY

Origin Table	FEATURE_PT
Origin Primary Key	FTR_GUID
Destination Table	FLORA_SITE_POLY
Destination Foreign Key	FTR_GUID
Relationship Type	Simple
Labels	Flora Site Poly, Feature Point
Messages	None
Cardinality	1 to Many

#### 4.3.11 rel\_SURVEY\_POLY\_ADDOBS\_TBL

Origin Table	SURVEY_POLY
Origin Primary Key	SRV_GUID
Destination Table	SURVEY_POLY_ADDOBS_TBL
Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Additional Obs Table, Survey Poly
Messages	None
Cardinality	1 to Many

#### 4.3.12 rel\_SURVEY\_POLY\_FAUNA\_OBS\_PT

Origin Table	SURVEY_POLY
Origin Primary Key	SRV_GUID
Destination Table	FAUNA_OBS_PT
Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Fauna Observation Point, Survey Poly
Messages	None
Cardinality	1 to Many

#### 4.3.13 rel\_SURVEY\_POLY\_FLORA\_SITE\_POLY

Origin Table	SURVEY_POLY
Origin Primary Key	SRV_GUID
Destination Table	FLORA_SITE_POLY
Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Flora Site Poly, Survey Poly
Messages	None
Cardinality	1 to Many

#### 4.3.14 rel\_SURVEY\_PT\_ADDOBS\_TBL

Origin Table	SURVEY_PT
Origin Primary Key	SRV_GUID
Destination Table	SURVEY_PT_ADDOBS_TBL
Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Additional Obs Table, Survey Point
Messages	None
Cardinality	1 to Many

#### 4.3.15 rel\_SURVEY\_PT\_FAUNA\_OBS\_PT

Origin Table	SURVEY_PT
Origin Primary Key	SRV_GUID
Destination Table	FAUNA_OBS_PT
Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Fauna Observation Point, Survey Point
Messages	None
Cardinality	1 to Many

#### 4.3.16 rel SURVEY PT\_FLORA SITE POLY

Origin Table	SURVEY_PT
Origin Primary Key	SRV_GUID
Destination Table	FLORA_SITE_POLY

Destination Foreign Key	SRV_GUID
Relationship Type	Simple
Labels	Flora Site Poly, Survey Point
Messages	None
Cardinality	1 to Many

#### 5 Projection and Spatial Extent

All feature classes are in Geographic, North American Datum 83. Units are decimal degrees. Spatial extent (area of coverage) includes all lands managed by the BLM OR/WA, plus lands in Northern California for historic data. See the metadata for this dataset for more precise description of the extent.

#### **6** Spatial Entity Characteristics

- SURVEY POLYGONS (SURVEY\_POLY)
  - O Description: Each Survey polygon is an area that was surveyed for one or more species. The survey method must be recorded and if a specific survey protocol was followed that is recorded as well. The target of survey can be implied with use of the Species List (SPCS\_LIST1, 2) fields along with the Species Group fields and/or specific species and their presence recorded in the SURVEY\_POLY\_ADDOBS\_TBL. Detection of the target species during the survey are represented by related Flora Site Polygons or Fauna Observation Points.
  - Geometry: Polygon; disjoint large areas or scattered small areas. Features may have donut holes or islands; features may overlap (stack) on each other. Multi-part features are allowed.
  - Topology: No topology enforced.
  - o Integration Requirements: None

#### SURVEY POINTS (SURVEY PT)

- Description: Each point is a location of any survey without area. For example, the location of call or trap stations, or where an eDNA sample was collected. The survey method must be recorded and if a survey protocol was followed that is recorded as well. The target of survey can be implied with use of the Species List (SPCS\_LIST1, 2) fields along with the Species Group fields and/or specific species and their presence recorded in the SURVEY\_PT\_ADDOBS\_TBL. Detection of the target species during the survey are represented by related Flora Site Polygons or Fauna Observation Points.
- Geometry: Point; disjoint large areas or scattered small areas. Features may overlap (stack) on each other.
- Topology: No topology enforced.
- Integration Requirements: None

#### • FEATURE POLYGONS (FEATURE POLY)

 Description: Each Feature polygon represents the area of any biologically important aspect of the landscape (pond, talus slope, meadow). Features may be associated to Flora Sites or Fauna Observations. Features may be monitored for use by a target species, which may result in stacked polygons that represent a single monitoring visit to the Feature. Detection of the target species while monitoring the Feature are represented by related Flora Site Polygons or Fauna Observation Points.

- Geometry: Polygon; disjoint large areas or scattered small areas. Features may have donut holes or islands; features may overlap (stack) on each other. Multi-part features are allowed.
- Topology: No topology enforced.
- Integration Requirements: None

#### FEATURE POINTS (FEATURE\_PT)

- O Description: Each Feature point represents the location of a Feature that is too small to be represented as a polygon (tree, stump, bridge). Features may be associated to Flora Sites or Fauna Observations. Features may be monitored for use by a target species, which may result in stacked points with each representing a single monitoring visit to the Feature. Detection of the target species while monitoring the Feature are represented by related Flora Site Polygons or Fauna Observation Points.
- Geometry: Point; disjoint large areas or scattered small areas. Features may overlap (stack) on each other.
- Topology: No topology enforced.
- o Integration Requirements: None

#### • FAUNA OBSERVATION POINTS (FAUNA OBS PT)

- Description: Fauna Observations are point locations where target species were detected.
   Observation Type must be noted ( such as visual, aural, or sign). Fauna Observations are the required data entry record for target wildlife species.
- Geometry: Point; disjoint large areas or scattered small areas. Features may overlap (stack) on each other.
- Topology: No topology enforced.
- Integration Requirements: None

#### • FAUNA SITE POLYGONS (FAUNA SITE POLY)

- Description: Each Fauna Site polygon represents an area of biological importance for a specific wildlife species. A Fauna Site may encompass the location(s) of Observations of the species (where a pygmy rabbit was seen) and/or Features important to the species (a pygmy rabbit burrow or the ½ mile radius around a nest tree). Fauna Sites are often monitored, which may result in stacked polygons with each representing a single monitoring visit to the Site. The size of a Site may change in size over time. Use of the Site by the target species during site monitoring is recorded in the SITE\_STATUS field. Detection of the target species while monitoring the Fauna Site are represented by related Fauna Observation Points.
- Geometry: Polygon; disjoint large areas or scattered small areas. Features may have donut holes or islands; features may overlap (stack) on each other. Multi-part features are allowed.
- Topology: No topology enforced.
- o Integration Requirements: None

#### • FLORA OBSERVATION POINTS (FLORA\_OBS\_PT)

- O Description: Each Flora Observation represents a point location of the target species for which a Flora Site has been created. Flora Observations are not required data entry except when a Collection has been made, in that case, a Flora Observation must be made, and a Collection table record should be recorded. Flora Observations can also be used to indicate individual plants within a larger Flora Site.
- o Geometry: Point; disjoint large areas or scattered small areas. Features may overlap (stack) on each other.
- Topology: No topology enforced.
- Integration Requirements: None

#### FLORA SITE POLYGONS (FLORA SITE POLY)

- O Description: Each Flora Site represents an area where the specific flora species was observed. Flora Sites are the required data entry record for target vascular plant, bryophyte, lichen, and fungi species. Flora Sites are often monitored, which may result in stacked polygons with each representing a single monitoring visit to the Site. Detection of the target species during site monitoring is recorded in the SITE\_STATUS field. The size of a Site may change in size over time, however, no Flora Site should be smaller than a 9m radius circle.
- Geometry: Polygon; disjoint large areas or scattered small areas. Features may have donut holes or islands; features may overlap (stack) on each other. Multi-part features are allowed.
- o Topology: No topology enforced.
- Integration Requirements: None

## 7 Attribute Characteristics and Definition (In alphabetical order)

#### 7.1 ABUNDANCE

Geodatabase Name	ABUNDANCE
BLM Structured Name	Abundance_Code
Inheritance	Not Inherited
Alias Name	Abundance
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	An assessment of how abundant the species is within the polygon or point. For Flora Sites and Flora Observations, if the species belongs to the Lichen or Bryophyte groups Abundance is a required field.
Required/Optional	Conditional
Domain (Valid Values)	dom_GB_ABUNDANCE
Data Type	String (20)

#### 7.2 ACCURACY\_FT

Geodatabase Name	ACCURACY_FT
BLM Structured Name	Accuracy_Feet_Measure
Inheritance	Inherited from entities Activities and Species Occurrence
Alias Name	Accuracy Ft
Feature Class Use/Entity Table	SRV_POLY, SRV_PT, SRV_HIST_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY
Definition	How close, in feet, the spatial GIS depiction is to the actual location on the ground. There are several factors to consider in GIS error: scale and accuracy of map-based sources, accuracy of GPS equipment, and the skill level of the data manipulators. A value of zero indicates no entry was made. This is the correct value when the COORD_SRC is another GIS theme (Digital Line Graphs (DLG), Geographic Coordinate Database (GCD), and Digital Elevation Model (DEM)) because the accuracy is determined by that theme. However, if COORD_SRC is MAP (digitized from a paper map) or GPS, a value of "0" indicates a missing value that should be filled in either with a non-zero number or "-1." A value of "-1" indicates that the accuracy is unknown, and no reliable estimate can be made.
Required/Optional	Optional
Domain (Valid Values)	None. Examples: 3 (for high accuracy GPS), 40 (best possible for USGS 24K topo map), 200
Data Type	Short Integer

#### 7.3 ACTIVITY

Geodatabase Name	ACTIVITY
BLM Structured Name	Activity_Code
Inheritance	Not Inherited
Alias Name	Activity
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	The behavior of the individual at the time of the detection.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_ACTIVITY
Data Type	String (30)

#### **7.4 AGE**

Geodatabase Name	AGE
BLM Structured Name	Age_Class_Code
Inheritance	Not Inherited
Alias Name	Age
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	Development stage of a species observation.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_AGE_CLS
Data Type	String (15)

# 7.5 AIR\_TEMP

Geodatabase Name	AIR_TEMP
BLM Structured Name	Air_Temperature_Measure
Inheritance	Not Inherited
Alias Name	Air Temperature (F)
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	The temperature of the air, measured in Fahrenheit degrees, at the time of the species observation.
Required/Optional	Optional
Domain (Valid Values)	dom_TEMPERATURE_F
Data Type	Short Integer

# 7.6 AMPH\_SRV

Geodatabase Name	AMPH_SRV
BLM Structured Name	Amphibians_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Amphibian Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Amphibian species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

#### **7.7 ASPECT**

Geodatabase Name	ASPECT
BLM Structured Name	Aspect_Number
Inheritance	Not Inherited
Alias Name	Aspect (deg)
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	Dominant aspect of the location recorded in degrees (0-360). Historic records without a recorded value were assigned a value of -1.
Required/Optional	Required
Domain (Valid Values)	dom_GB_ASPECT
Data Type	Short Integer

# 7.8 ASSOC\_SPCS

Geodatabase Name	ASSOC_SPCS
BLM Structured Name	Associated_Species_Text
Inheritance	Not Inherited
Alias Name	Associated Species
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	A list of the dominant associated species at the site. This can include the overstory, shrub, and forb species. From this list, one should generally be able to ascertain what the plant association is.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "CHRYS9,ONAC,BRTE"

Data Type	String (255)	
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# 7.9 BAIT\_TYPE

Geodatabase Name	BAIT_TYPE
BLM Structured Name	Bait_Type_Code
Inheritance	Not Inherited
Alias Name	Bait Type
Feature Class Use/Entity Table	SURVEY_PT
Definition	The type of bait (if any) used during the survey. Typically associated with a carnivore survey.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_BAIT_TYPE
Data Type	String (20)

#### 7.10 BAT\_EAR\_LEN

Geodatabase Name	BAT_EAR_LEN
BLM Structured Name	Bat_Ear_Length_Measure
Inheritance	Not Inherited
Alias Name	Bat Ear Length (mm)
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	The length of the ear in millimeters from the notch at the inner base of the ear and tragus to the longest point of the ear.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: 30.5
Data Type	Double

#### 7.11 BAT\_FOREARM\_LEN

Geodatabase Name	BAT_FOREARM_LEN
BLM Structured Name	Bat_Forearm_Length_Measure
Inheritance	Not Inherited
Alias Name	Bat Forearm Length (mm)
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	The length of the forearm to near millimeter using calipers to measure between elbow and wrist.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: 43.6

Data Type	Double
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## 7.12 BAT\_KEY\_CHAR

Geodatabase Name	BAT_KEY_CHAR
BLM Structured Name	Bat_Key_Characteristic_Text
Inheritance	Not Inherited
Alias Name	Bat Key Characteristics
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	The measurement or characteristic used to make species determination.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: "Sonobat"
Data Type	String (50)

## 7.13 BAT\_WEIGHT

Geodatabase Name	BAT_WEIGHT
BLM Structured Name	Bat_Weight_Measure
Inheritance	Not Inherited
Alias Name	Bat Weight (g)
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	The weight of the bat in grams, to two decimal places.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Example: 3.7
Data Type	Double

## 7.14 BIRD\_SRV

Geodatabase Name	BIRD_SURV_YN
BLM Structured Name	Bird_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Bird Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Bird species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN

Data Type	String (1)	
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## 7.15 BLM\_ORG\_CD

Geodatabase Name	BLM_ORG_CD
BLM Structured Name	Administrative_Unit_Organization_Code
Inheritance	Inherited from entities Activities and Resources
Alias Name	Administrative Unit Code
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_SITE_POLY, FAUNA_OBS_PT, FEATURE_PT, FEATURE_POLY
Definition	A combination of the BLM administrative state and field office that has administrative responsibility for the spatial entity. This includes which office covers the entity for planning purposes and which office is the lead for GIS edits. Another agency or individual may have the physical management responsibility for the on-the-ground entity. This field applies particularly when a spatial entity crosses resource area or district boundaries, and the administrative responsibility is assigned to one or the other rather than splitting the spatial unit. Similarly, OR/WA BLM may have administrative responsibility over some area that is physically located in Nevada, Idaho, and California and vice versa. When appropriate, the office can be identified only to the district or state level rather than to the resource area level.
Required/Optional	Required
Domain (Valid Values)	dom_BLM_ORG_CD
Data Type	String (5)

# **7.16 BRYO\_SRV**

Geodatabase Name	BRYO_SURV_YN
BLM Structured Name	Bryophyte_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Bryophyte Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Bryophyte species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

#### 7.17 CLASSIFIER

Geodatabase Name	CLASSIFIER
BLM Structured Name	Classifier_Name
Inheritance	Inherited from entity Survey
Alias Name	Observers
Feature Class Use/Entity Table	FAUNA_OBS_PT, FAUNA_SITE_POLY, FLORA_OBS_PT, FLORA_SITE_POLY, SURVEY_POLY, SURVEY_PT
Definition	The name(s) of the observers.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: "John Doe", "Mary Smith"
Data Type	String (250)

## **7.18 COLL\_DT**

Geodatabase Name	COLL_DT
BLM Structured Name	Collection_Date
Inheritance	Not Inherited
Alias Name	Date
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	Date the collection was made.
Required/Optional	Required
Domain (Valid Values)	No Domain. Example: 6/20/2019
Data Type	Date

#### **7.19 COLL\_ID**

Geodatabase Name	COLL_ID
BLM Structured Name	Collection_Identifier_Text
Inheritance	Not Inherited
Alias Name	ID
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	A user defined identifier for the record.
Required/Optional	Required
Domain (Valid Values)	No Domain. Example: "C_BigElkMeadow_17JUL08_AEK_IF-0027.w"
Data Type	String (50)

## 7.20 COLL\_TYPE

Geodatabase Name	COLL_TYPE
BLM Structured Name	Collection_Type_Code
Inheritance	Not Inherited
Alias Name	Туре
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The reason for making the collection.
Required/Optional	Required
Domain (Valid Values)	dom_GB_COLL_TYPE
Data Type	String (15)

#### 7.21 COLLECTOR

Geodatabase Name	COLLECTOR
BLM Structured Name	Collector_Name
Inheritance	Not Inherited
Alias Name	Collector Name
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The name of the person who made the collection.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "John Doe", "Mary Smith"
Data Type	String (255)

#### 7.22 COMMENTS

Geodatabase Name	COMMENTS
BLM Structured Name	Comments_Text
Inheritance	Not Inherited
Alias Name	Comments
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_DETAIL_TBL
Definition	Free text for additional information about the record.
Required/Optional	Optional
Domain (Valid Values)	No domain.

Data Type	String (length varies by data object)
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#### 7.23 CONDITION

Geodatabase Name	CONDITION
BLM Structured Name	Species_Condition_Code
Inheritance	Not Inherited
Alias Name	Condition
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	Species condition description.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_CONDITION
Data Type	String (10)

## 7.24 COORD\_SRC

Geodatabase Name	COORD_SRC
BLM Structured Name	Coordinate_Source_Code
Inheritance	Inherited from entities Activities and Species Occurrence
Alias Name	Coordinate Source
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY
Definition	The actual source of the GIS coordinates for the spatial features.
Required/Optional	Optional
Domain (Valid Values)	dom_COORD_SRC
Data Type	String (7)

#### 7.25 CREATE\_BY

Geodatabase Name	CREATE_BY
BLM Structured Name	Record_Created_By_Text
Inheritance	Inherited from entity ODF
Alias Name	Created By
Feature Class Use/Entity Table	All feature classes and tables
Definition	The BLM login ID of the person who entered the data. The default value for this field is UNK. This field is auto populated during editing.
Required/Optional	Optional

Domain (Valid Values)	No domain. Examples: jdoe, msmith
Data Type	String (50)

## 7.26 CREATE\_DATE

Geodatabase Name	CREATE_DATE
BLM Structured Name	Record_Created_Date
Inheritance	Inherited from entity ODF
Alias Name	Created Date
Feature Class Use/Entity Table	All feature classes and tables
Definition	The date the record was entered. The default value for this field is 1/1/8888. This field is auto populated during editing.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 1/5/1999, 10/15/2021
Data Type	Date

## 7.27 CURRENT\_CD

Geodatabase Name	CURRENT_CD
BLM Structured Name	Feature_Current_Code
Inheritance	Not Inherited
Alias Name	Current
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FAUNA_SITE_POLY
Definition	Flag that denotes if the site or feature is the current or historical record. The most recent visit to a site or feature is marked as current and past visits are marked as historic.
Required/Optional	Required
Domain (Valid Values)	dom_CURRENT_CD
Data Type	String (1)

## **7.28** CVR\_PCT

Geodatabase Name	CVR_PCT
BLM Structured Name	Species_Cover_Percentage_Number
Inheritance	Not Inherited
Alias Name	Cover %
Feature Class Use/Entity Table	SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	The estimated percent cover of an associated plant at a species observation.

Required/Optional	Optional
Domain (Valid Values)	dom_PCT100
Data Type	Short Integer

#### 7.29 DIAMETER

Geodatabase Name	DIAMETER
BLM Structured Name	Diameter_Inches_Number
Inheritance	Not Inherited
Alias Name	Diameter (in)
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	The diameter (in inches) of the feature, if applicable. If the feature is a tree, record dbh.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 24, 13
Data Type	Short Integer

## **7.30 DIST\_DFND\_1**

Geodatabase Name	DIST_DFND_1
BLM Structured Name	First_District_Defined_Field_Text
Inheritance	Not Inherited
Alias Name	District Defined 1
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY
Definition	A district defined text field with a length of 255 characters. The District Data Steward will manage these fields as they choose. However, coordination between Districts is desirable if similar information is collected and entered.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (255)

# **7.31 DIST\_DFND\_2**

Geodatabase Name	DIST_DFND_2
BLM Structured Name	Second_District_Defined_Field_Text
Inheritance	Not Inherited
Alias Name	District Defined 2

Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY
Definition	A district defined text field with a length of 255 characters. The District Data Steward will manage these fields as they choose. However, coordination between Districts is desirable if similar information is collected and entered.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (255)

# **7.32 DT\_ACC**

Geodatabase Name	DT_ACC
BLM Structured Name	Date_Accuracy_Code
Inheritance	Inherited from entity Survey
Alias Name	Date Accuracy
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Describes the accuracy of the survey dates.
Required/Optional	Required
Domain (Valid Values)	dom_DT_ACC
Data Type	String (7)

#### **7.33 ELVTN**

Geodatabase Name	ELVTN
BLM Structured Name	Elevation_Feet_Number
Inheritance	Not Inherited
Alias Name	Elevation (ft)
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The average elevation (in feet) at the site or observation.
Required/Optional	Required
Domain (Valid Values)	dom_GB_ELVTN
Data Type	Long Integer

## **7.34** END\_DT

Geodatabase Name	END_DT
BLM Structured Name	Survey_End_Date
Inheritance	Inherited from entity Survey
Alias Name	End Date
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The date the survey ended.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: 6/20/2010, 5/1/1989
Data Type	Date

#### 7.35 FILEPATH

Geodatabase Name	FILEPATH
BLM Structured Name	Filename_Path_Text
Inheritance	Not Inherited
Alias Name	File Path
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	Computer storage location for a photo file (e.g., jpg), Word document, spreadsheet or associated document. The value in this field serves as a hyperlink to that location and the file it opens. Could also be a directory or dataset that opens for further browsing (where multiple files are being referenced).
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (255)

## 7.36 FTR\_COND

Geodatabase Name	FTR_COND
BLM Structured Name	Feature_Condition_Code
Inheritance	Not Inherited
Alias Name	Feature Condition
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	The usability of the feature on the date it was visited.
Required/Optional	Required
Domain (Valid Values)	dom_GB_FTR_CONDITION

Data Type String (20)	
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#### 7.37 FTR\_GUID

Geodatabase Name	FTR_GUID
BLM Structured Name	Feature_Unique_Identifier
Inheritance	Not Inherited
Alias Name	Feature Unique ID
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FAUNA_OBS_PT
Definition	The unique identifier for the feature record. Used to relate features to other feature classes and tables.
Required/Optional	Required in FEATURE_POLY, FEATURE_PT Optional in FLORA_SITE_POLY, FAUNA_OBS_PT
Domain (Valid Values)	No domain
Data Type	GUID

#### 7.38 FTR\_ID

Geodatabase Name	FTR_ID
BLM Structured Name	Feature_Identifier_Text
Inheritance	Not Inherited
Alias Name	Feature ID
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	User defined identifier for the feature.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: 3702E17ACRLAK_STNE_NEST1992, GARTER SNAKE POND"
Data Type	String (50)

## 7.39 FTR\_PARENT\_GUID

Geodatabase Name	FTR_PARENT_GUID
BLM Structured Name	Feature_Parent_Unique_Identifier
Inheritance	Not Inherited
Alias Name	Parent Feature Unique ID
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	When multiple visits are made to a feature, the first visit is referred to as the parent and the FTR_GUID is assigned to the FTR_PARENT_GUID field for all subsequent visits. This attribute provides a tabular link for all the records.

Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	GUID

## 7.40 FTR\_STATUS

Geodatabase Name	FTR_STATUS
BLM Structured Name	Feature_Status_Code
Inheritance	Not Inherited
Alias Name	Feature Status
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	A description of the feature occupancy status.
Required/Optional	Required
Domain (Valid Values)	dom_GB_FTR_STATUS
Data Type	String (20)

## **7.41 FTR\_TYPE**

Geodatabase Name	FTR_TYPE
BLM Structured Name	Feature_Type_Code
Inheritance	Not Inherited
Alias Name	Feature Type
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	An object or area that is being or may be used by the species of interest.
Required/Optional	Required
Domain (Valid Values)	dom_GB_FTR_TYPE
Data Type	String (20)

## **7.42 FTR\_USE**

Geodatabase Name	FTR_USE
BLM Structured Name	Feature_Use_Code
Inheritance	Not Inherited
Alias Name	Feature Use
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT
Definition	A description of how the feature is being or could be used.
Required/Optional	Required
Domain (Valid Values)	dom_GB_FTR_USE

Data Type	String (20)
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## 7.43 FUNG\_SRV

Geodatabase Name	FUNG_SRV
BLM Structured Name	Fungi_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Fungi Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Fungi species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

#### **7.44 GENDER**

Geodatabase Name	GENDER
BLM Structured Name	Gender_Code
Inheritance	Not Inherited
Alias Name	Gender
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	Identifies species gender.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_GENDER
Data Type	String (20)

## 7.45 GIS\_ACRES

Geodatabase Name	GIS_ACRES
BLM Structured Name	GIS_Acres_Measure
Inheritance	Inherited from entities Activities
Alias Name	GIS Acres
Feature Class Use/Entity Table	SURVEY_POLY, FLORA_SITE_POLY, FAUNA_SITE_POLY
Definition	GIS_ACRES is calculated when the submitted polygon is approved for incorporation into the dataset. The standard spatial reference of Geographic (NAD 1983) cannot be used for calculating acres, so the features are projected as determined by the BLM_ORG_CD of the record. These projections all utilize linear units of meters, so the ESRI Geodatabase-

	controlled field SHAPE.AREA can be used to convert to acres with the factor based on the U.S. Survey Foot: GIS_ACRES = SHAPE.AREA * 0.0002471044.
	GIS_ACRES is calculated using the NAD 1983 Albers Equal Area project except for the following OR/WA Districts:
	Prineville: NAD 1983 USFS R6 Albers
	Coos Bay, Eugene, Lakeview, Medford, Roseburg, Salem: NAD 1983 UTM Zone 10N
	Burns, Spokane, Vale: NAD 1983 UTM Zone 11N
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 2.4, 46.1, 350.5
Data Type	Double

#### 7.46 GLOBALID

Geodatabase Name	GLOBALID
BLM Structured Name	Global_Unique_Identifier
Inheritance	Inherited from entity ODF
Alias Name	None
Feature Class Use/Entity Table	All feature classes and tables
Definition	An alpha-numeric code that serves as the universal and unique identifier for each feature within the feature class or table of a geodatabase. Software generated value. A field of type UUID (Universal Unique Identifier) in which values are automatically assigned by the geodatabase when a row is created. This field is not editable and is automatically populated when it is added for existing data.
Required/Optional	Required
Domain (Valid Values)	No domain. Example: {4747B796-44B4-4628-B069-2D496422E59F}
Data Type	GUID

#### 7.47 IDENTIFIER

Geodatabase Name	IDENTIFIER
BLM Structured Name	Collection_Identifier_Text
Inheritance	Not Inherited
Alias Name	Identifier Name
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The name of the person who verified the collection.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "John Doe", "Mary Smith"
Data Type	String (255)

## **7.48 INVR\_SRV**

Geodatabase Name	INVR_SURV_YN
BLM Structured Name	Invertebrate_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Invertebrate Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Invertebrate species group were the target of the Survey.
	Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

## 7.49 LAND\_OWNR

Geodatabase Name	LAND_OWNR
BLM Structured Name	Land_Owner_Code
Inheritance	Not Inherited
Alias Name	Landowner
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY
Definition	The landowner or agency administering the land at the location. This is the ownership at the actual point and may be different from the BLM Administrative Unit (BLM_ORG_CD).
D = ==================================	The default value for this field is BL (Bureau of Land Management).
Required/Optional	Required
Domain (Valid Values)	dom_JURIS_CODE
Data Type	String (3)

#### 7.50 LANDFORM

Geodatabase Name	LANDFORM
BLM Structured Name	Landform_Code
Inheritance	Not Inherited
Alias Name	Landform
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	Refers to the general geomorphic structure and shape of habitat.

Required/Optional	Optional
Domain (Valid Values)	dom_GB_LANDFORM
Data Type	String (20)

# 7.51 LICH\_SRV

Geodatabase Name	LICH_SRV
BLM Structured Name	Lichen_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Lichen Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Lichen species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

## 7.52 LIGHT\_INDEX

Geodatabase Name	LIGHT_INDEX
BLM Structured Name	Light_Index_Code
Inheritance	Not Inherited
Alias Name	Light Index
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT
Definition	Describes the amount of sun the species or habitat used by the species receives at that site or observation point.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_LIGHT_INDEX
Data Type	String (20)

#### **7.53 MAMM\_SRV**

Geodatabase Name	MAMM_SRV
BLM Structured Name	Mammal_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Mammal Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT

Definition	Indicates if species in the Mammal species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

# 7.54 MIGRATION\_SRC

Geodatabase Name	MIGRATION_SRC
BLM Structured Name	Migration_Source_Code
Inheritance	Not Inherited
Alias Name	Migration Source
Feature Class Use/Entity Table	All feature classes and tables
Definition	Field to track the source of data migrated into the dataset.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_MIGRATION_SRC
Data Type	String (50)

## 7.55 MODIFY\_BY

Geodatabase Name	MODIFY_BY
BLM Structured Name	Record_Last_Modified_By_Text
Inheritance	Inherited from entity ODF
Alias Name	Modified By
Feature Class Use/Entity Table	All feature classes and tables
Definition	The BLM login ID of the person who last edited the data. The default value for this field is UNK. This field is auto populated during editing.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: jdoe, msmith
Data Type	String (50)

# 7.56 MODIFY\_DATE

Geodatabase Name	MODIFY_DATE
BLM Structured Name	Record_Last_Modified_Date
Inheritance	Inherited from entity ODF
Alias Name	Modified Date

Feature Class Use/Entity Table	All feature classes and tables
Definition	The date the record was last edited. The default value for this field is 1/1/8888. This field is auto populated during editing.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 1/5/1999, 10/15/2021
Data Type	Date

#### 7.57 MOLL\_SRV

Geodatabase Name	MOLL_SRV
BLM Structured Name	Mollusk_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Mollusk Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Mollusk species group were the target of the Survey.
	Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

# 7.58 OBS\_ALT\_ID

Geodatabase Name	OBS_ALT_ID
BLM Structured Name	Flora_Observation_Alternate_Identifier_Text
Inheritance	Not Inherited
Alias Name	Alternate Identifier
Feature Class Use/Entity Table	FLORA_OBS_PT
Definition	An alternate user defined identifier or name.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Oxbow West; West Eugene Wetlands", "O'DELL #5986"
Data Type	String (100)

## 7.59 **OBS\_DT**

Geodatabase Name	OBS_DT
BLM Structured Name	Observation_Date

Inheritance	Inherited from entity Species Occurrence
Alias Name	Observation Date
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	The date of the observation.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 1/1/2018, 12/30/1999
Data Type	Date

# 7.60 OBS\_DT\_ACC

Geodatabase Name	OBS_DT_ACC
BLM Structured Name	Observation_Date_Accuracy_Code
Inheritance	Inherited from entity Species Occurrence
Alias Name	Date Accuracy
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	Describes the accuracy of the observation date.
Required/Optional	Required
Domain (Valid Values)	dom_YN
Data Type	String (1)

# 7.61 OBS\_GUID

Geodatabase Name	OBS_GUID
BLM Structured Name	Observation_Unique_Identifier
Inheritance	Not Inherited
Alias Name	Observation Unique ID
Feature Class Use/Entity Table	FAUNA_OBS_PT, FLORA_OBS_PT, FAUNA_DETAIL_TBL, FAUNA_OBS_COLL_TBL, FLORA_OBS_COLL_TBL
Definition	The unique identifier for the observation record. Used to relate records to other feature classes and tables.
Required/Optional	Required
Domain (Valid Values)	No domain
Data Type	GUID

## 7.62 **OBS\_ID**

Geodatabase Name	OBS_ID
BLM Structured Name	Fauna_Observation_Identifier_Text

Inheritance	Not Inherited
Alias Name	ID
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	A user-defined identifier for the Observation record.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "626-MYCA-Voucher Specimen", "CBSIGHT_1892"
Data Type	String (50)

#### **7.63 OBS\_TYPE**

Geodatabase Name	OBS_TYPE
BLM Structured Name	Observation_Type_Code
Inheritance	Not Inherited
Alias Name	Obs Type
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	Type of detection by which species presence was determined.
Required/Optional	Required
Domain (Valid Values)	dom_GB_OBS_TYPE
Data Type	String (20)

#### 7.64 OVERSTORY

Geodatabase Name	OVERSTORY
BLM Structured Name	Overstory_Percent_Number
Inheritance	Not Inherited
Alias Name	Overstory %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	A visual estimate of the percentage of the ground area covered by the canopy layer that generally receives light from all sides; dominate, co-dominate and open-grown trees.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100
Data Type	Short Integer

# 7.65 PHEN\_BUD

Geodatabase Name	PHEN_BUD
BLM Structured Name	Phenology_Bud_Code

Inheritance	Not Inherited
Alias Name	Phenology Bud %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with mostly buds present.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

#### 7.66 PHEN\_DEAD

Geodatabase Name	PHEN_DEAD
BLM Structured Name	Phenology_Dead_Code
Inheritance	Not Inherited
Alias Name	Phenology Dead %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals without living tissue.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

#### 7.67 PHEN\_DORMANT

Geodatabase Name	PHEN_DORMANT
BLM Structured Name	Phenology_Dormant_Code
Inheritance	Not Inherited
Alias Name	Phenology Dormant %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals that are alive but not growing.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

# 7.68 PHEN\_FLOWER

Geodatabase Name	PHEN_FLOWER
BLM Structured Name	Phenology_Flower_Code
Inheritance	Not Inherited
Alias Name	Phenology Flower %

Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with mostly flowers present.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

## 7.69 PHEN\_FRUIT

Geodatabase Name	PHEN_FRUIT
BLM Structured Name	Phenology_Fruit_Code
Inheritance	Not Inherited
Alias Name	Phenology Fruit %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with vascular plant fruit.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

#### 7.70 PHEN\_JUVENILE

Geodatabase Name	PHEN_JUVENILE
BLM Structured Name	Phenology_Juvenile_Code
Inheritance	Not Inherited
Alias Name	Phenology Juvenile %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals that are immature vascular plants, fungi, bryophytes, or lichens.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

# 7.71 PHEN\_REGROWTH

Geodatabase Name	PHEN_REGROWTH
BLM Structured Name	Phenology_Regrowth_Code
Inheritance	Not Inherited
Alias Name	Phenology Regrowth %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT

Definition	The percent of individuals with new growth following removal of leaves.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

## 7.72 PHEN\_SENESCENT

Geodatabase Name	PHEN_SENESCENT
BLM Structured Name	Phenology_Senescent_Code
Inheritance	Not Inherited
Alias Name	Phenology Senescent %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with plant growth phase from full maturity to death that is characterized by the dying of tissues.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

# 7.73 PHEN\_SPOROCARP

Geodatabase Name	PHEN_SPOROCARP
BLM Structured Name	Phenology_Sporocarp_Code
Inheritance	Not Inherited
Alias Name	Phenology Sporocarp %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with the fruiting body of a fungus.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

## 7.74 PHEN\_SPOROPHYTE

Geodatabase Name	PHEN_SPOROPHYTE
BLM Structured Name	Phenology_Sporophyte_Code
Inheritance	Not Inherited
Alias Name	Phenology Sporophye %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT

Definition	The percent of individuals with sporophytes (spore producing structures) present.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

## 7.75 PHEN\_VEGETATIVE

Geodatabase Name	PHEN_VEGETATIVE
BLM Structured Name	Phenology_Vegetative_Code
Inheritance	Not Inherited
Alias Name	Phenology Vegetative %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals with mainly foliage without fruits or flowers.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

# 7.76 PHEN\_WO\_SPOROPHYTE

Geodatabase Name	PHEN_WO_SPOROPHYTE
BLM Structured Name	Phenology_Without_Sporophyte_Code
Inheritance	Not Inherited
Alias Name	Phenology Without Sporophyte %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	The percent of individuals without sporophytes (spore producing structures) present.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

## **7.77 PHOTO\_ID**

Geodatabase Name	PHOTO_ID
BLM Structured Name	Photo_Identifier_Text
Inheritance	Not Inherited
Alias Name	Photo ID
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL

Definition	A user defined photograph ID number.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "38S-5E-29 CLSA9 GV14-417 11-15-14", "OR085.DSCN2723"
Data Type	String (50)

#### 7.78 PRESENCE

Geodatabase Name	PRESENCE
BLM Structured Name	Presence_Flag_Code
Inheritance	Not Inherited
Alias Name	Presence
Feature Class Use/Entity Table	SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	Indicates whether a species was or was found or not.
Required/Optional	Required
Domain (Valid Values)	dom_GB_PRESENCE
Data Type	String (2)

## 7.79 PROJECT\_NM

Geodatabase Name	PROJECT_NM
BLM Structured Name	Project_Name_Text
Inheritance	Inherited from entity Survey
Alias Name	Project Name
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The project name for the survey.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "TOPSY POKEGAMA SLASHBUSTING", "Williams Vascular and Non-Vascular Surveys"
Data Type	String (60)

#### 7.80 PROJECT\_UNIT

Geodatabase Name	PROJECT_UNIT
BLM Structured Name	Project_Unit_Number_Text
Inheritance	Inherited from entity Survey
Alias Name	Project Unit
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT

Definition	Unit name or number within a project.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "17-2", "003"
Data Type	String (50)

# 7.81 PROTOCOL\_NM

Geodatabase Name	PROTOCOL_NM
BLM Structured Name	Protocol_Name_Text
Inheritance	Not Inherited
Alias Name	Protocol Name
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The name of the protocol used to complete the survey.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_PROTOCOL
Data Type	String (100)

## 7.82 QTY

Geodatabase Name	QTY
BLM Structured Name	Quantity_Number
Inheritance	Not Inherited
Alias Name	Quantity
Feature Class Use/Entity Table	FLORA_OBS_PT, FAUNA_DETAIL_TBL, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	Total number of individuals at an Observation point.
Required/Optional	Conditional
	For FLORA_OBS_PT: If the species is a Vascular Plant (SPCS_CLS = 1, 2, 3, 4, 5), then the Quantity field is required.
	This field is optional for all other cases.
Domain (Valid Values)	No Domain. Examples: 1, 550
Data Type	Short Integer

#### **7.83 QTY\_EST**

Geodatabase Name	QTY_EST
BLM Structured Name	Quantity_Estimated_Flag_Code
Inheritance	Not Inherited
Alias Name	Quantity Estimated

Feature Class Use/Entity Table	FLORA_OBS_PT
Definition	Indicates whether the total quantity was an estimate or an actual count.
Required/Optional	Conditional This field is required if QTY is not null.
Domain (Valid Values)	dom_YN
Data Type	String (1)

# 7.84 REL\_HUMIDITY

Geodatabase Name	REL_HUMIDITY
BLM Structured Name	Relative_Humidity_Measure
Inheritance	Not Inherited
Alias Name	Relative Humidity
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	The amount of water vapor in the air compared to the amount the air could hold if it was totally saturated (percent).
Required/Optional	Optional
Domain (Valid Values)	dom_PCT100
Data Type	Short Integer

#### 7.85 RELIABILITY

Geodatabase Name	RELIABILITY
BLM Structured Name	Observation_Reliability_Code
Inheritance	Not Inherited
Alias Name	Reliability
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	A ranking of how reliable the Observation record is, based on the expertise of the identifier and/or verifier.
Required/Optional	Required
Domain (Valid Values)	dom_GB_RELIABILITY
Data Type	String (10)

#### 7.86 REPOSITORY

Geodatabase Name	REPOSITORY
BLM Structured Name	Collection_Repository_Code
Inheritance	Not Inherited

Alias Name	Repository
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The code and name of the repository that stores a species collection.
Required/Optional	Required
Domain (Valid Values)	dom_GB_REPOSITORY
Data Type	String (255)

## 7.87 REPRO\_STATUS

Geodatabase Name	REPRO_STATUS
BLM Structured Name	Reproductive_Status_Code
Inheritance	Not Inherited
Alias Name	Reproductive Status
Feature Class Use/Entity Table	FAUNA_DETAIL_TBL
Definition	Species reproductive status.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_REPRO_STATUS
Data Type	String (35)

# **7.88 REPT\_SRV**

Geodatabase Name	REPT_SRV
BLM Structured Name	Reptile_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Reptile Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Reptile species group were the target of the Survey.  Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

#### 7.89 SCENT\_LURE\_TYPE

Geodatabase Name	SCENT_LURE_TYPE
BLM Structured Name	Scent_Lure_Type_Code

Inheritance	Not Inherited
Alias Name	Scent Lure Type
Feature Class Use/Entity Table	SURVEY_PT
Definition	The type of scent lure (if any) used during the survey. Typically associated with a carnivore survey.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_SCENT_LURE_TYPE
Data Type	String (20)

# 7.90 SITE\_ALT\_ID

Geodatabase Name	SITE_ALT_ID
BLM Structured Name	Site_Alternate_Identifier_Text
Inheritance	Not Inherited
Alias Name	Alt ID
Feature Class Use/Entity Table	FAUNA_SITE_POLY, FLORA_SITE_POLY
Definition	An alternate user defined identifier.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "CEDAR BUTTE / ROUND ABOUT", "OC2F"
Data Type	String (100)

# 7.91 SITE\_GUID

Geodatabase Name	SITE_GUID
BLM Structured Name	Site_Unique_Identifier
Inheritance	Not Inherited
Alias Name	Site Unique ID
Feature Class Use/Entity Table	FAUNA_SITE_POLY, FLORA_SITE_POLY
Definition	The unique identifier for the site record. Used to relate site features to other feature classes and tables.
Required/Optional	Required in FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_SITE_POLY, FLORA_SITE_COLL_TBL Optional in FAUNA_OBS_PT
Domain (Valid Values)	No domain
Data Type	GUID

## **7.92 SITE\_ID**

Geodatabase Name	SITE_ID
BLM Structured Name	Site_Identifier_Text
Inheritance	Not Inherited
Alias Name	Site ID
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY
Definition	User defined site identifier.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "OR_0043", "BRID_MoffittRDFoxButteRD_0021001"
Data Type	String (50)

## 7.93 SITE\_NAME

Geodatabase Name	SITE_NAME
BLM Structured Name	Site_Name_Text
Inheritance	Not Inherited
Alias Name	Site Name
Feature Class Use/Entity Table	FAUNA_SITE_POLY
Definition	A unique name for the site.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Echo Is/ Indian Charlie/ Brandy Bar", "Aldrich Point"
Data Type	String (60)

## 7.94 SITE\_PARENT\_GUID

Geodatabase Name	SITE_PARENT_GUID
BLM Structured Name	Site_Parent_Unique_Identifier
Inheritance	Not Inherited
Alias Name	Parent Unique Identifier
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY
Definition	When multiple visits are made to a site, the first visit is referred to as the parent and the SITE_GUID is assigned to the SITE_PARENT_GUID field for all subsequent visits. This attribute provides a tabular link for all the site records.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	GUID

# 7.95 SITE\_STATUS

Geodatabase Name	SITE_STATUS
BLM Structured Name	Site_Status_Code
Inheritance	Inherited from entity Species Occurrence
Alias Name	Site Status
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY
Definition	A description of the occupancy of the Site during the most recent visit.
Required/Optional	Required
Domain (Valid Values)	dom_GB_SITE_STATUS
Data Type	String (10)

### **7.96 SLOPE**

Geodatabase Name	SLOPE
BLM Structured Name	Slope_Number
Inheritance	Not Inherited
Alias Name	Slope %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	Dominant percent slope of location (100% is equivalent to a 45-degree incline). Use -1 if the value is unknown.
Required/Optional	Required
Domain (Valid Values)	dom_GB_SLOPE
Data Type	Short Integer

# 7.97 SOIL\_MOISTURE

Geodatabase Name	SOIL_MOISTURE
BLM Structured Name	Soil_Moisture_Code
Inheritance	Not Inherited
Alias Name	Soil Moisture
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	A description of the amount of moisture in the soil.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_SOIL_MOISTURE
Data Type	String (20)

# 7.98 SOIL\_TEMP

Geodatabase Name	SOIL_TEMP
BLM Structured Name	Soil_Temperature_Number
Inheritance	Not Inherited
Alias Name	Soil Temperature (F)
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	Soil Temperature in degrees Fahrenheit.
Required/Optional	Optional
Domain (Valid Values)	dom_TEMPERATURE_F
Data Type	Short Integer

# 7.99 SOIL\_TEXT\_CLS

Geodatabase Name	SOIL_TEXT_CLS
BLM Structured Name	Soil_Texture_Class_Code
Inheritance	Not Inherited
Alias Name	Soil Texture
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	The soil texture at the observation: Sand, silt, clay, etc.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_SOIL_TEXT
Data Type	String (10)

# **7.100 SPCS\_CD**

Geodatabase Name	SPECIES_CD
BLM Structured Name	Species_Code
Inheritance	Inherited from entity Species Occurrence
Alias Name	Species
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, FEATURE_POLY, FEATURE_PT, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	The short species identifier of the species recorded at a survey, site, or observation. For Features, it is the species that utilizes the feature. For collections, it is the verified species.  For plant species, this code is the USDA Plants Database plant symbol.

Required/Optional	Required in FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL  Optional in FEATURE_POLY, FEATURE_PT, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Domain (Valid Values)	The domain displayed for the field is controlled by the corresponding SPCS CLS value.
	dom GB SPCS AMPHIBIAN
	dom GB SPCS BIRD
	dom_GB_SPCS_BRYOPHYTE
	dom_GB_SPCS_CYANBAC
	dom_GB_SPCS_DICOT
	dom_GB_SPCS_FUNGUS
	dom_GB_SPCS_GYMNOSPERMS
	dom_GB_SPCS_INVERTEBRATE
	dom_GB_SPCS_LICHEN
	dom_GB_SPCS_LIVERWORT
	dom_GB_SPCS_LYCOPHYTE
	dom_GB_SPCS_MAMMAL
	dom_GB_SPCS_MAMMALBAT
	dom_GB_SPCS_MOLLUSK
	dom_GB_SPCS_MONOCOT
	dom_GB_SPCS_PTERIDOPHYTES
	dom_GB_SPCS_REPTILE
Data Type	String (10)

# **7.101 SPCS\_CLS**

Geodatabase Name	SPCS_CLS
BLM Structured Name	Species_Class_Number
Inheritance	Inherited from entity Species Occurrence
Alias Name	Species Class
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, FEATURE_POLY, FEATURE_PT, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL
Definition	A number that represents the species taxonomic class or species group. Used as a subtype field to allow for separate species domains in the SPCS_CD field.
Required/Optional	Required in FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT, FAUNA_SITE_POLY, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL

	Optional in FEATURE_POLY, FEATURE_PT, FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Domain (Valid Values)	dom_GB_SPCS_CLS
Data Type	Short Integer

# **7.102 SPCS\_LIST1**

Geodatabase Name	SPECIES_LIST1
BLM Structured Name	First_Survey_Species_List_Code
Inheritance	Not Inherited
Alias Name	1st Species List
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The first documented species list that the survey was conducted for. Includes the ISSSSP and Survey and Manage lists. This field is used in conjunction with the species group fields to identify the groups of species surveyed for, without having to record each species inventoried.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_SPCS_LIST
Data Type	String (15)

# **7.103 SPCS\_LIST2**

Geodatabase Name	SPCS_LIST2
BLM Structured Name	Second_Survey_Species_List_Code
Inheritance	Not Inherited
Alias Name	2 <sup>nd</sup> Species List
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The second documented species list that the survey was conducted for. Only record data in this field if there are more than one list surveyed for. Includes the ISSSSP and Survey and Manage lists. This field is used in conjunction with the species group fields to identify the groups of species surveyed for, without having to record each species inventoried.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_SPCS_LIST
Data Type	String (15)

## **7.104 SRV\_GUID**

Geodatabase Name	SRV_GUID
BLM Structured Name	Survey_Unique_Identifier

Inheritance	Not Inherited
Alias Name	Survey Unique ID
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The unique identifier for the survey record. Used to relate surveys to other feature classes and tables.
Required/Optional	Required in SURVEY_POLY, SURVEY_PT, SURVEY_POLY_ADDOBS_TBL, SURVEY_PT_ADDOBS_TBL Optional in FAUNA_OBS_PT, FLORA_SITE_POLY
Domain (Valid Values)	No domain
Data Type	GUID

# **7.105 SRV\_ID**

Geodatabase Name	SRV_ID
BLM Structured Name	Survey_Identifier_Text
Inheritance	Inherited from entity Survey
Alias Name	Survey ID
Feature Class Use/Entity Table	SRV_POLY, SRV_PT
Definition	User defined survey identifier.
Required/Optional	Required
Domain (Valid Values)	No Domain. Examples: "BP3208W11U007", "MEASFCR_LUCKY"
Data Type	String (50)

# **7.106 SRV\_METH**

Geodatabase Name	SRV_METH
BLM Structured Name	Survey_Method_Code
Inheritance	Inherited from entity Survey
Alias Name	Method
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The method used to complete the survey.
Required/Optional	Required
Domain (Valid Values)	dom_GB_SRV_METH
Data Type	String (20)

# **7.107 SRV\_TYPE**

Geodatabase Name	SRV_TYPE
BLM Structured Name	Survey_Type_Code
Inheritance	Not Inherited
Alias Name	Туре
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The reason for doing the survey.
Required/Optional	Required
Domain (Valid Values)	dom_GB_SRV_TYPE
Data Type	String (20)

# 7.108 STAND\_STRCT

Geodatabase Name	STAND_STRCT
BLM Structured Name	Stand_Structure_Code
Inheritance	Not Inherited
Alias Name	Stand Structure
Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	The number of canopy layers.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_STAND_STRCT
Data Type	String (20)

## **7.109 START\_DT**

Geodatabase Name	START_DT
BLM Structured Name	Survey_Start_Date
Inheritance	Inherited from entity Survey
Alias Name	Start Date
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	The day the survey started.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 10/1/2019, 1/1/2000
Data Type	Date

### 7.110 SUBSTRATE

Geodatabase Name	SUBSTRATE
BLM Structured Name	Substrate_Code
Inheritance	Not Inherited
Alias Name	Substrate
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	The substance that typifies the species habitat. In the case of habitat - frequently rock type.
Required/Optional	Conditional  If the species is a Bryophyte, Lichen, or Fungus (SPCS_CLS = 6, 8, 7)  Substrate is required
Domain (Valid Values)	dom_GB_SUBSTRATE
Data Type	String (20)

## **7.111 THREAT1**

Geodatabase Name	THREAT1
BLM Structured Name	First_Threat_Type_Code
Inheritance	Not Inherited
Alias Name	Threat 1
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	1st Threat Code. List of codes for factors that may have adverse effects on the persistence of the species at a given location.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_THREAT
Data Type	String (25)

### **7.112 THREAT2**

Geodatabase Name	THREAT2
BLM Structured Name	Second_Threat_Type_Code
Inheritance	Not Inherited
Alias Name	Threat 2
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	2nd Threat Code. List of codes for factors that may have adverse effects on the persistence of the species at a given location.
Required/Optional	Optional
Domain (Valid Values)	dom_GB_THREAT
Data Type	String (25)

# 7.113 THREAT\_NOTES

Geodatabase Name	THREAT_NOTES
BLM Structured Name	Threat_Notes_Text
Inheritance	Not Inherited
Alias Name	Threat Notes
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	Additional information about the threat.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "Cheatgrass & Russian thistle", "Habitat loss, conifer succession"
Data Type	String (255)

# **7.114 TOTAL\_QTY**

Geodatabase Name	TOTAL_QTY
BLM Structured Name	Total_Quantity_Number
Inheritance	Inherited from entity Species Occurrence
Alias Name	Total Quantity
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	The total number of individuals at an observation point or site.
Required/Optional	Conditional For FLORA_SITE_POLY: If the species is a Vascular Plant (SPCS_CLS = 1, 2, 3, 4, 5), then the Total Quantity field is required. This field is optional for all other cases.
Domain (Valid Values)	No domain. Examples: 1, 550
Data Type	Long Integer

# 7.115 TOTAL\_QTY\_EST

Geodatabase Name	TOTAL_QTY_EST
BLM Structured Name	Total_Quantity_Estimated_Flag_Code
Inheritance	Inherited from entity Species Occurrence
Alias Name	Quantity Estimated?
Feature Class Use/Entity Table	FLORA_SITE_POLY, FAUNA_SITE_POLY, FAUNA_OBS_PT
Definition	Indicates whether the total quantity was an estimate or an actual count.
Required/Optional	Conditional. This field is required if TOTAL_QTY is not null.
Domain (Valid Values)	dom_YN
Data Type	String (1)

### 7.116 UNDERSTORY

Geodatabase Name	UNDERSTORY
BLM Structured Name	Understory_Percent_Number
Inheritance	Not Inherited
Alias Name	Understory %
Feature Class Use/Entity Table	FLORA_SITE_POLY, FLORA_OBS_PT
Definition	A visual estimate of the percentage of cover for seedlings, saplings, intermediate and suppressed trees. Use -1 for unknown values.
Required/Optional	Required
Domain (Valid Values)	dom_PCT100_Neg
Data Type	Short Integer

# **7.117 VASC\_SRV**

Geodatabase Name	VASC_SURV_YN
BLM Structured Name	Vascular_Plant_Surveyed_Code
Inheritance	Not Inherited
Alias Name	Vascular Plant Survey?
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	Indicates if species in the Vascular Plant species group were the target of the Survey.
	Conditionally required - at least one of the Species Group surveyed for fields must be set to Yes.
Required/Optional	Conditional
Domain (Valid Values)	dom_YN
Data Type	String (1)

### 7.118 VERIFIER

Geodatabase Name	VERIFIER
BLM Structured Name	Collection_Verifier_Text
Inheritance	Not Inherited
Alias Name	Verifier Name
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The name of the person who verified the collection.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: "John Doe", "Mary Smith"

Data Type	String (255)	
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## **7.119 VERIFY\_DT**

Geodatabase Name	VERIFY_DT
BLM Structured Name	Collection_Verification_Date
Inheritance	Not Inherited
Alias Name	Verified Date
Feature Class Use/Entity Table	FLORA_SITE_COLL_TBL, FLORA_OBS_COLL_TBL, FAUNA_OBS_COLL_TBL
Definition	The date the collection was verified.
Required/Optional	Optional
Domain (Valid Values)	No domain. Examples: 10/1/2019, 1/1/2000
Data Type	Date

## 7.120 VERSION\_NAME

Geodatabase Name	VERSION_NAME
BLM Structured Name	Geodatabase_Version_Text
Inheritance	Inherited from entity ODF
Alias Name	Version Name
Feature Class Use/Entity Table	All feature classes and tables
Definition	Only appears in the transactional (edit) version. Public version (which is also the version used internally for mapping or analysis) does not contain this attribute.
	Name of the corporate geodatabase version previously used to edit the record.
	InitialLoad = feature has not been edited in ArcSDE.
	Format: username.XXX-mmddyy-hhmmss = version name of last edit (hours might be a single digit; leading zeros are trimmed for hours only). XXX=theme abbreviation.
Required/Optional	Optional
Domain (Valid Values)	No domain
Data Type	String (50)

## **7.121 VISIT\_DT**

Geodatabase Name	VISIT_DT
BLM Structured Name	Visit_Date
Inheritance	Not Inherited
Alias Name	Inherited from entity Species Occurrence

Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT
Definition	The date of the visit.
Required/Optional	Required
Domain (Valid Values)	No domain. Examples: 10/1/2019, 1/1/2000
Data Type	Date

## 7.122 VISIT\_DT\_ACC

Geodatabase Name	VISIT_DT_ACC
BLM Structured Name	Visit Date_Accuracy_Code
Inheritance	Inherited from entity Species Occurrence
Alias Name	Date Accuracy
Feature Class Use/Entity Table	FEATURE_POLY, FEATURE_PT, FLORA_SITE_POLY, FLORA_OBS_PT, FAUNA_OBS_PT
Definition	Describes the accuracy of the survey dates.
Required/Optional Required	
Domain (Valid Values)	dom_DT_ACC
Data Type	String (7)

## **7.123 VISIT\_ID**

Geodatabase Name	VISIT_ID
BLM Structured Name	Visit_Identifier_Text
Inheritance	Not Inherited
Alias Name	Visit ID
Feature Class Use/Entity Table	SURVEY_POLY, SURVEY_PT
Definition	User defined visit ID.
Required/Optional	Optional
Domain (Valid Values)	No Domain. Examples: "KEEL-PLOT11V1-DN", "MEASTF17AS1"
Data Type	String (50)

## **7.124 WND\_CND**

Geodatabase Name	WND_CND	
BLM Structured Name	Wind_Condition_Code	
Inheritance	Not Inherited	
Alias Name	Wind Condition	

Feature Class Use/Entity Table	FAUNA_OBS_PT
Definition	Describes the predominant wind condition during the visit. Surveys should never be conducted in windy conditions, and rarely in moderate or gusty conditions.
Required/Optional	Optional
Domain (Valid Values)	dom_WND_CND
Data Type	String (20)

### **8** Publication Views

#### 8.1 General

Master corporate feature classes/datasets maintained in the edit database are "published" to the user database in several ways:

- Copied completely with no changes (replicated).
- Copied with no changes except to omit one or more feature classes from a feature dataset.
- Minor changes made (e.g., clip, dissolve, union with ownership) to make the data easier to use. Feature classes that have been changed are indicated by "PUB" in their name. They are created through scripts that can be automatically executed and are easily rebuilt from the master data whenever necessary.

### 8.2 Specific to This Dataset

Publication feature classes will be created for internal use where:

- The attribute VERSION NAME is removed (for privacy reasons).
- The edit tracking attributes CREATE BY, MODIFY BY are removed.
- CREATE\_DATE and MODIFY\_DATE fields are kept in the publication dataset to allow data sharing partners to see when the records were last modified.

This dataset is not replicated to the public web.

### 8.3 Layer Files

Layer files are not new data requiring storage and maintenance but point to existing data. They have appropriate selection and symbolization for correct use and display of the data. They provide the guidance for data published on the web. Layer files are created by simple, documented processes, and can be deleted and recreated at any time.

Layer files for this dataset are available under the categories:

- Wildlife
  - o GeoBOB Wildlife
- Vegetation and Ecoregions
  - GeoBOB Botany

### **9 Editing Procedures**

### 9.1 Managing Overlap (General Guidance)

"Overlap" means there are potentially more than one feature in the same feature class that occupies the same space ("stacked" polygons). Depending on the query, acres will be double counted.

In this discussion, an area entity may consist of more than one polygon, and a line entity may consist of more than one arc. They would have multiple records in the spatial table (with identical attributes). Multi-part features are not allowed. Multi-part features are easily created inadvertently and not always easy to identify. If they are not consciously and consistently avoided, feature classes will end up with a mixture of single and multi-part features. Multi-part features can be more difficult to edit, query, and select, along with impacting overall performance.

Overlap is only allowed in the ODF in limited and controlled scenarios. In each case, the "cause" of the overlap (the attribute changes that "kick off" a new feature which may overlap an existing feature) is carefully defined and controlled. In other words, in feature classes that permit overlap for a change in spatial extent, there is always a new feature created which may overlap an existing feature, but in addition there are certain attribute(s) that will result in a new feature even if there is no spatial change. The feature classes (and the one feature dataset) that allow overlap, and the attributes that lead to a new, possibly overlapping feature, are described below.

### 9.1.1 Overlapping Polygons where polygons are a stand-alone feature class

- No topology rules.
- Species Occurrence Group: These are distinct sites defined by species and time. A different species creates a new polygon which may overlap another site in whole or part. A change in time (new visit date) will create a new polygon if it is desired that the old spatial extent and date is retained (as historic). Additionally, for wildlife, a different season/type of use (e.g., winter range vs. spring breeding) will create new polygon that may overlap others. Examples: WEEDS POLY, FLORA SITE POLY.
- Survey Group: Within each feature class a new survey is created only for a new date. This group might
  also include proposed surveys in separate feature classes. Examples: SURVEY\_POLY, Archeological
  Investigations.
- Treatment Activity Group: Within each feature class (TRT\_BURN, TRT\_HARV, TRT\_MECH, TRT\_CHEM, TRT\_BIO, TRT\_REVEG, TRT\_PROT), an overlapping treatment area is created only for a new date, and sometimes for a different method (if it is not possible to SPLIT the treatment area by method and it is important to capture more than one method applied to the same area on the same day). This group also includes proposed treatments which could overlap existing treatments and have additional overlap created by different treatment alternatives.
- Recreation Site Polygons (RECSITE\_POLY): An overlapping site polygon is created only for different name, type, or development level.
- Land Status Encumbrances Group: A new, possibly overlapping polygon is created for a new casefile number even if it is the same area. Examples: easement/ROW areas (ESMTROW\_POLY) and land acquisitions/disposals (ACQ\_DSP\_POLY).

### 9.1.2 Overlapping Points

Generally, these are allowed and do not cause a problem since points have no spatial extent. However, it is easy to inadvertently create more than one point making it important to search for and delete duplicates.

### 9.2 Editing Quality Control

Duplicate features. Checking for undesired duplicates is critical. Polygons or arcs that are 100% duplicate are easily found by searching for identical attributes along with identical Shape\_Area and/or Shape\_Length. Searching for partially overlapping arcs or polygons is harder, and each case must be inspected to determine if the overlap is desired or not.

To avoid overlapping polygons on the same area, polygons from different input themes are incorporated with the Union spatial overlay tool, not copied.

Union rather than Intersect is used to prevent unintended data loss.

Gap and overlap slivers. These can be hard to find if there are no topology rules. A temporary map topology can be created to find overlap slivers. Gap slivers can be found by constructing polygons from all arcs and checking polygons with very small area.

Buffer and dissolve considerations. Where polygons are created with the buffer tool, the correct option must be selected. The default option is "None", which means overlap will be retained. Sometimes the overlap should be dissolved, and the option changed to "All." Lines resulting from buffer have vertices too close together, especially around the end curves. They should be generalized to thin the vertices. If the dissolve tool is used on polygons or arcs, the "Create multipart features" should be unchecked.

GPS considerations. GPS linework is often messy and should always be checked and cleaned up as necessary. Often vertices need to be thinned (generalize) especially at line ends. Multi-part polygons are sometimes inadvertently created when GPS files with vertices too close together or crossing lines or spikes are brought into ArcGIS. Tiny, unwanted polygons are created but are "hidden" because they are in a multi-part.

Be careful when merging lines. Multi-part lines will be created if there are tiny unintentional (unknown) gaps, and it can be difficult to find these unless the multi-parts are exploded.

Null geometry. Check any features that have 0 or very small Shape\_Area or Shape\_Length. If a feature has 0 geometry and you can't zoom to it, it is probably an inadvertently created "Null" feature and should be deleted. Very small features may also be unintended, resulting from messy line work.

Snapping considerations. Where line segments with different COORD\_SRC meet, the most accurate or important (in terms of legal boundary representation) are kept unaltered, and other lines snapped to them. In general, the hierarchy of importance is PLSS (CadNSDI points/lines) first, with DLG or SOURCEL next, then DEM, and MAP last. When snapping to the data indicated in COORD\_SRC (as opposed to duplicating with copy/paste), be sure there are the same number of vertices in the target, and source theme arcs. When the DEF\_FEATURE is "SUBDIVISION," snap the line segment to PLSS points, and make sure there are the same number of vertices in the line as PLSS points.

Check that all date fields contain valid dates in MM/DD/YYYY format. If an attribute has a domain, check for invalid values. The values must be exact.

Check for capitalization and spacing differences in attribute values that should be the same. Check for leading or trailing blanks what will make a different value even if it looks identical.

### 9.3 Theme Specific Guidance

There is much in the data standard that addresses editing and provides guidance especially in the Data Management Protocols (Section 3).

Detailed instructions for editing data using the GeoBOB tools are available in the GeoBOB user guide and recorded trainings.

#### 9.3.1 Calculation Data Rules

The following are a list of calculation rules that occur during editing. Calculation rules are used to automatically populate attributes in a field. These are in addition to the default values defined in Sections 4 and 7.

FAUNA OBS PT:

• Fill OBS GUID with a new GUID value on create.

• Calculate BLM ORG CD on create.

#### FAUNA SITE POLY:

- Fill SITE GUID with a new GUID value on create.
- Calculate BLM\_ORG\_CD on create.
- Calculate GIS ACRES on create or modify.

#### FEATURE POLY:

• Fill FTR GUID with a new GUID value on create.

#### FEATURE\_PT:

• Fill FTR GUID with a new GUID value on create.

#### FLORA OBS PT:

- Fill OBS\_GUID with a new GUID value on create.
- Calculate BLM ORG CD on create.

#### FLORA\_SITE\_POLY:

- Fill SITE\_GUID with a new GUID value on create.
- Calculate BLM\_ORG\_CD on create.
- Calculate GIS ACRES on create or modify.

#### SURVEY POLY:

- Fill SRV GUID with a new GUID value on create.
- Calculate BLM\_ORG\_CD on create.
- Calculate GIS\_ACRES on create or modify.

#### SURVEY PT:

- Fill SRV GUID with a new GUID value on create.
- Calculate BLM ORG CD on create.

#### 9.3.2 Constraint Data Rules

The following are a list of data constraint rules that are enforced during editing. Constraint rules specify allowable combinations of values between two or more fields in a record. They are used to ensure that specific conditions are met.

#### FAUNA OBS PT:

• If Total Quantity is not null, then Total Quantity Estimated is required.

#### FAUNA SITE POLY:

• No constraint rules.

#### FEATURE POLY:

• No constraint rules.

#### FEATURE PT:

No constraint rules.

#### FLORA OBS PT:

- If the species is a Vascular Plant (SPCS CLS = 1, 2, 3, 4, 5), then Quantity is required.
- If the species is a Bryophyte or Lichen (SPCS\_CLS = 6, 8), then Abundance is required.
- If the species is a Bryophye, Lichen, or Fungus (SPCS CLS = 6, 8, 7), Substrate is required.
- A Flora Obs Point must have a related Flora Site Poly record.
- If Quantity is not null, then Quantity Estimated YN is required.

#### FLORA SITE POLY:

- If the species is a Vascular Plant (SPCS\_CLS = 1, 2, 3, 4, 5) and the visit date > 6/1/2012, then the Total Quantity field is required.
- If the species is a Bryophyte or Lichen (SPCS\_CLS = 6, 8) and the visit date > 6/1/2012, then Abundance is required.
- If the species is a Bryophye, Lichen, or Fungus (SPCS\_CLS = 6, 8, 7) and the visit date > 10/1/2016, Substrate is required.
- If Total Quantity is not null, then Total Quantity Estimated is required.

#### SURVEY POLY:

- Survey End Date must be later than Survey Start Date.
- If the Survey Start Date > 6/1/2016, then at least one of the Species Surveyed For fields must equal Yes (AMPH\_SRV, BIRD\_SRV, BRYO\_SRV, FUNG\_SRV, INVR\_SRV, LICH\_SRV, MAMM\_SRV, MOLL\_SRV, REPT\_SRV, VASC\_SRV).

#### SURVEY PT:

- Survey End Date must be later than Survey Start Date.
- If the Survey Start Date > 6/1/2016, then at least one of the Species Surveyed For fields must equal Yes (AMPH\_SRV, BIRD\_SRV, BRYO\_SRV, FUNG\_SRV, INVR\_SRV, LICH\_SRV, MAMM\_SRV, MOLL\_SRV, REPT\_SRV, VASC\_SRV).

#### FAUNA DETAIL TBL:

• A Fauna Detail Obs record must have a related Fauna Obs Point record.

#### FAUNA\_OBS\_COLL\_TBL:

• A Fauna Obs Collection record must have a related Fauna Obs Point record.

#### FLORA OBS COLL TBL:

• A Flora Obs Collection record must have a related Flora Obs Point record.

#### FLORA SITE COLL TBL:

• A flora Site Collection record must have a related Flora Site Poly record.

#### SURVEY POLY ADDOBS TBL:

• A Survey Poly Additional Obs record must have a related Survey Poly record.

#### SURVEY PT ADDOBS TBL:

• A Survey Point Additional Obs record must have a related Survey Point record.

## 10 Abbreviations and Acronyms

Does not include abbreviations/acronyms used as codes for data attributes or domain values.

 Table 2
 Abbreviations/Acronyms Used

Abbreviations	Descriptions
ARC	GIS line feature
BLM	Bureau of Land Management, U.S. Department of the Interior
CADNSDI	Cadastral National Spatial Data Infrastructure
DEM	Digital Elevation Model
DLG	Digital Line Graphs
FOIA	Freedom of Information Act
FOIVEG	Forest Operations Inventory
GB	GeoBOB (Geographic Biotic Observations)
GIS	Geographic Information System
GNIS	Geographic Names Information System
GPS	Global Positioning System
GTRN	Ground Transportation GIS dataset
IDP	Interdisciplinary
NAD	North American Datum
NARA	National Archives and Records Administration
NEPA	National Environmental Policy Act
ODF	Oregon Data Framework
OR/WA	Oregon/Washington BLM Administrative State
POLY	GIS polygon feature
PUB	Publication
RMP	Resource Management Plan
USFS	United States Forest Service, U.S. Department of Agriculture
USGS	United States Geological Survey, U.S. Department of the Interior
SDE	Spatial Database Engine
WEB	Worldwide Web (internet)

## 11 References

US National Vegetation Classification. Natural Vegetation Classification. <a href="http://usnvc.org/data-standard/natural-vegetation-classification/">http://usnvc.org/data-standard/natural-vegetation-classification/</a>

### A Domains (Valid Values)

These are the domains at the time the data standard was approved. Domains can be changed without a re-issue of the data standard. Current domains are found on the internal OR/WA SharePoint data management page. Some of the domains used in this data standard are also available at the following web site: <a href="http://www.blm.gov/or/datamanagement/index.php">http://www.blm.gov/or/datamanagement/index.php</a>

For domains not listed at that site contact: contact the State Data Administrator.

### A.1 dom BLM ORG CD

**Administrative Unit Organization Code.** Standard BLM organization codes generated from the national list. This is a subset of OR/WA administrative offices and those in other states that border.

This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom/BLM\_ORG\_CODE.xls">https://gis.blm.gov/ORDownload/Domains/dom/BLM\_ORG\_CODE.xls</a>

### A.2 dom\_COORD\_SRC

Coordinate Source Code. The source of the geographic coordinates (lines, points, polygons).

Code	Description
CADNSDI	CADNSDI - Lines from or snapped to the CADNSDI dataset
CFF	CFF - Lines duplicated or buffered from Cartographic Feature Files (USFS)
DEM	DEM - Digital Elevation Model (30m or better accuracy) used for creation of contours
DGPS	DGPS - Feature obtained from a Global Positioning System device with Real Time Correction (SBAS)
DIS	DIS - Lines generated to connect discontinuous features
DLG	DLG - Lines duplicated or buffered from (24K scale accuracy) USGS Digital Line Graphs
DOQ	DOQ - Screen digitized linework over digital orthophotography backdrop (DOQ, NAIP, OSIP, or others)
DRG	DRG - Screen digitized linework over Digital Raster Graphic backdrop
GCD	GCD - Lines snapped to Geographic Coordinate Database Points
GPS	GPS - Lines obtained from a Global Positioning System device
IMG	IMG - Linework derived from interpretation of satellite or other non-photographic imagery
LiDAR	LiDAR - LiDAR points, lines, or polygons generated through interpretation or analysis.
MAP	MAP - Digitized coordinates from hardcopy map or onto a map backdrop
MTP	MTP - Lines duplicated from Digital Master Title Plat
SOURCEL	SOURCEL - Coordinates duplicated from a BLM GIS source layer.
SOURCEX	SOURCEX - Source Layer from non-BLM GIS
SRV	SRV - Survey methods were used to create the linework (e.g., COGO)
TIGER	TIGER - Tiger Data
TRS	TRS - Coordinates only given as a legal description (township, range, section)
UNK	UNK - Unknown coordinate source
WOD	WOD - WODDB Photogrammetric

### A.3 dom\_CURRENT\_CD

Feature Current Code. Description

Code	Description
С	C - Current
Н	H - Historic
N	N - Not applicable, entity still proposed

### A.4 dom\_DT\_ACC

Date Accuracy Code. Describes the accuracy of a date field.

Code	Description
Day	Day - Only the exact day, month, and year is known.
Month	Month - Only the exact month and year is known.
Year	Year - Only the exact year is known.
Unknown	Unknown - The accuracy of the date is unknown

### A.5 dom\_GB\_ABUNDANCE

GeoBOB Abundance Code. Assessment of how abundant the species is within the polygon or point.

Code	Description
Absent	Absent - not encountered
Abundant	Abundant - Encountered continuously/numerous individuals
Common	Common - Encountered often/moderate number of individuals
Rare	RETIRED: Rare - Seldom encountered/very few individuals
Uncommon	Uncommon - Not encountered often/relatively low number of individuals
Unknown	Unknown - Abundance unspecified
Very Uncommon	Very Uncommon - Less common than uncommon

### A.6 dom GB ACTIVITY

GeoBOB Activity Code. The behavior of the individual at the time of the detection.

Code	Description
Basking	Basking - Resting in a sunny location
Bedding	Bedding - Sleeping or in preparation for sleeping
Begging	Begging - Soliciting food from an adult or parent
Birthing	Birthing - The act of giving birth
Branching	Branching - young birds perched outside of the nest on limbs of the nest tree.

Code	Description
Brooding/Incub	Brooding/Incub - Sitting on eggs
Circling	Circling - Flying in a circular pattern
Dead	Dead - No longer living.
Denning	Denning - Inhabiting a ground shelter
Displaying	Displaying - A type of courting activity
Estivating	Estivating - Summer dormancy
Feeding/Drink	Feeding/Drink - Any eating or drinking activity including feeding young
Fighting	Fighting - Engaged in physical aggression
Fledging	Fledging - first flight from the nest after acquiring feather
Fleeing	Fleeing - Moving swiftly away from
Flushed	Flushed - flying/exposed/chased from a place of concealment
Flying	Flying - Traveling by air
Grooming	Grooming - Cleaning
Hatching	Hatching - The process of breaking out of the egg.
Hibernating	Hibernating - Winter dormancy
Hunting/Forage	Hunting/Forage - Searching for food
Licking Minerals	Licking Minerals - Ingesting soil at a known mineral concentration
Mating/Courting	Mating/Courting - Any mating behavior prior to copulation
Migrating	Migrating - Seasonal movement
Nesting	Nesting - Building or occupying a nest
Other	Other - Any activity not captured in the list of values
Pair Formation	Pair Formation - A behavior signifying the formation of a mating pair
Perching	Perching - standing in elevated spot (e.g. branch)
Pipping	Pipping - The process of breaking open an eggshell using an egg tooth.
Pseudoincubation	Pseudoincubation - A bird assuming the incubation position without egg.
Responding to Call	Responding to Call - A vocal response to a human-created call
Resting	Resting - Stopping action for an extended period
Roosting	Roosting - Resting on a perch for an extended period
Soaring	Soaring - The act of flying by utilizing ascending air currents.
Swimming	Swimming - Moving through water
Tending	Tending young
Territorial Behavior	Territorial Behavior - Behavior in defense of resources and or to attract a mate
Unknown	Unknown - An activity was not determined
Vocal	Vocal - An audible sound detected
Walking	Walking - Moving slowly by foot

Code	Description
Wallowing	Wallowing - Wading or rolling on the ground

### A.7 dom\_GB\_AGE\_CLS

GeoBOB Age Class Code. Development stage of a species observation.

Code	Description
Adult	Adult - Able to reproduce
Chick	Chick - Newly hatched young of any bird
Egg Mass	Egg Mass - Group of eggs
Egg/Embryo	Egg/Embryo - Not yet hatched
Fledgling	Fledgling - Can fly, but depends on parents
Hatchling	Hatchling - Recently hatched, downy
Juvenile	Juvenile - Has not reached sexual maturity
Larvae	Larvae - Pre-adult stage of many insects & amphibians
Live (mollusk)	RETIRED: Live (mollusk) - Mollusk found alive in its shell
Metamorphosing	Metamorphosing - Larval to adult phase
Nestling	Nestling - Has not left the nest
Pupae	Pupae - Inactive phase from larvae to adult
Shell (mollusk)	RETIRED: Shell (mollusk) - Mollusk shell found with no live animal.
Sub-adult	Sub-adult - Independent, but unable to reproduce
Tadpole	Tadpole - Larval stage of a frog or toad
Unknown	Unknown - Unknown age
Yearling	Yearling - Has not completed its second year
Young	Young - In the early stages of development

### A.8 dom\_GB\_ASPECT

**GeoBOB Aspect range of values.** This is a short integer type range domain with allowable values between -1 and 360.

### A.9 dom\_GB\_BAIT\_TYPE

GeoBOB Bait Type Code. The type of bait used for the survey.

Code	Description
Cat Food	Cat Food
Jelly	Jelly
None	None

Code	Description
Oats	Oats
Other	Other
Peanut Butter	Peanut Butter
Tame Fresh Meat	Tame Fresh Meat
Wild Fresh Meat	Wild Fresh Meat

## A.10 dom\_GB\_COLL\_TYPE

GeoBOB Collection Type Code. The reason for making a collection of a plant or animal.

Code	Description	
Audio	Audio - an animal sound recorded in order to determine species identity	
Cast	Cast - The indigestible matter expelled by owls/raptors	
Commercial	Commercial - Collected to make a profit	
DNA	DNA - Any genetic material that determines individual hereditary characteristic	
Depredation	Depredation - Permitted take of animals threatening human, livestock, crops	
Hair	Hair - A portion of hair found	
ID Tag	ID Tag - Identification tag or band assigned for tracking purposes	
Museum	Museum - Museum collection	
Necropsy	Necropsy - The examination of a dead animal	
None	None - No collection made	
Other	Other - The collection type does not appear in the list of values	
Pellets/Scat	Pellets/Scat - Animal droppings	
Photo	Photo - any photograph taken at the species Observation point	
Seedbank	Seedbank - Seeds collected for storage	
Voucher	Voucher - Any type of collection made to help document identity	

### A.11 dom\_GB\_CONDITION

GeoBOB Condition Code. Species condition description.

Code	Description
Dead	Dead - No longer living
Excellent	Excellent - Better than average
Fair	Fair - Less than average
Good	Good - Normal
Injured	Injured - Physical damage
Live	Live - A living animal

Code	Description
Poor	Poor - Poor
Shell	Shell - An empty shell
Sick	Sick - Physical illness
Unknown	Unknown - Condition is unknown

### A.12 dom\_GB\_ELVTN

**GeoBOB Elevation range of values.** This is a long integer type range domain with allowable values between -1 and 20000.

### A.13 dom\_GB\_FTR\_CONDITION

Feature Condition Code. Used to record the usability of a feature on the date it was visited.

Code	Description
Not Applicable	Not Applicable - Condition is not relevant.
Unknown	Unknown - Condition was or cannot be determined.
Unusable	Unusable - The feature is no longer useable
Usable	Usable - The feature is usable

### A.14 dom\_GB\_FTR\_STATUS

GeoBOB Feature Status Code. A description of the feature occupancy status.

Code	Description
Admin use	Admin use - feature use by target species not determined, but managed as if used by species
Assumed occupancy	Assumed occupancy - it is assumed that the feature is occupied
In use	In use - feature is being used
Not in use	Not in use - feature is not being used
Potential use	Potential use - there is potential for the feature to be used
Unknown	Unknown - feature status was not recorded

### A.15 dom\_GB\_FTR\_TYPE

GeoBOB Feature Type Code. Records the type of object or area that is being or may be used by the species of interest.

Code	Description
Agricultural Land	Agricultural Land - Land used for raising crops or livestock
Bank	Bank - Ground bordering a stream, lake, road, etc.

Code	Description
Bark	Bark - Attached, loose, or detached bark
Bedrock	Bedrock - Solid rock that underlies any surface material
Bird/Bat Box	Bird/Bat Box - Box made to provide shelter for birds/bats
Bog	Bog - Water-logged area with low-nutrient, acidic soil
Bole	Bole - Trunk portion of tree
Boulder	Boulder - Rock fragments larger than a cobble
Branch	Branch - Woody limb of a tree or shrub
Bridge	Bridge - Any structure that provides access over an obstacle
Brush/Slash Pile	Brush/Slash Pile - A mound of cut or woody debris
Building	Building - A human-made structure
Burrow	Burrow - A hole in the ground made by an animal
Burrow System	Burrow System - A group of burrow entrances
Cave	Cave - An underground hollow with an opening
Cavity	Cavity - A hollow or hole, usually in a tree
Cliff	Cliff - Steep or overhanging rock face
Cobble	Cobble - Particles larger than a pebble, smaller than a boulder (>64 mm)
Communal Day Roost	Communal Day Roost - (Bats)
Communal Night Roost	Communal Night Roost - (Bats)
Crevice	Crevice - Narrow opening or recess
Dead Shrub	Dead Shrub - Any shrub that is no longer living
Deciduous Leaves	Deciduous Leaves - Leaf debris from a deciduous tree
Den	Den - A shelter often used for giving birth
Ditch	Ditch - A long narrow excavation in the earth
Duff	Duff - Organic top layer of forested soils
Dung/Scat	Dung/Scat - Animal droppings
Fen	Fen - A nutrient-rich wetland that is less acidic than a bog
Fence	Fence - A barrier to mark off a boundary
Forb	Forb - Herbaceous plant other than grass
Fungi	Fungi - Any type of fungus used as substrate
Gravel	Gravel - Rock particles mostly larger than sand (>2mm)
Guzzler/Cistern	Guzzler/Cistern - A water catchment system
Hibernaculum	Hibernaculum - The shelter of a hibernating animal (bats)
Hive	Hive - A structure that houses bees or other invertebrates
Human Structure	Human Structure - Any structure made by humans (i.e. house)
Lake	Lake - A large inland body of standing water
Ledge	Ledge - Narrow shelf on a rock wall or cliff face

Code	Description
Lichen	Lichen - Any type of lichen used as substrate
Litter	Litter - Vegetative debris on the forest floor
Log	Log - The large trunk of a fallen tree.
Marsh	Marsh - soft wet land with monocots
Meadow	Meadow - Meadow where moisture level is unknown
Meadow-Dry	Meadow-Dry - A meadow with no wetland features
Meadow-Moist	Meadow-Moist - A meadow with only seasonally saturated soil
Meadow-Wet	Meadow-Wet - A meadow with year-round saturated soil
Mine	Mine - Excavation for the extraction of mineral deposits
Mineral Deposit	Mineral Deposit - Area of naturally occurring mineral material
Moss	Moss - Any type of moss used as substrate
Needles	Needles - A litter layer of evergreen needles
Nest	Nest - Natural nest built by wildlife
Nest BW	Nest BW - Natural wildlife nest on Branch Whorl
Nest CAV	Nest CAV - Natural wildlife nest in tree Cavity
Nest FT	Nest FT - Natural wildlife nest in Forked Top
Nest MT	Nest MT - Natural wildlife nest in Mistletoe Cluster
Nest NNV	Nest NNV -Natural wildlife nest assumed present based on sign. No Nest Visible.
Nest PBC	Nest PBC - Natural wildlife nest in Palmate Branch Cluster
Nest SB	Nest SB - Natural wildlife nest on Single Large Branch
Nest Structure	Nest Structure - Human made nest structure
Opening/Clearing	Opening/Clearing - A piece of land with few or no trees amongst a wooded area
Other	Other - The feature is not listed in the list of values
Pasture	Pasture - Land used for grazing livestock or wildlife
Pebble	Pebble - Particles larger than a granule (>2mm), smaller than a cobble (<64mm)
Pole/Post	Pole/Post - A long, typically wooden, rod
Pond	Pond - Body of standing water smaller than a lake
Potential Habitat	Potential Habitat - Habitat with the potential to support a species
Reintroduction Site	Reintroduction Site
Riparian	Riparian - Land areas directly influenced by a body of water
Road	Road - Any type of road that can be used as a feature
Rock	Rock - Unspecified rock type
Rock Garden-Moist	Rock Garden-Moist - On steep rocky slopes with moist conditions
Rock Outcrop	Rock Outcrop - Part of a rock formation that appears above the surface
Rookery	Rookery - The breeding ground for sea birds or seals
Rootwad	Rootwad - Root mass of a fallen tree

Code	Description
Sand	Sand - Smaller than a granule (<2mm), larger than a silt grain
Sand Dune	Sand Dune - Loose sand piled up by the wind
Seep	Seep - Small area where liquid percolates slowly to the top
Shrub	Shrub - Any type of shrub used as feature
Silt	Silt - Smaller than sand, larger than a clay particle (1/16 - 1/256 mm)
Snag	Snag - A standing dead tree or a stump
Soil	Soil - Unspecified soil type
Spring	Spring - A spring with unspecified temperature
Spring-Cold	Spring-Cold - A cold-water spring
Stem	Stem - The main branch of a live shrub or herbaceous plant
Stock tank/trough	Stock tank or Stock tank/trough
Stream	Stream - Unspecified stream type
Stream-Ephemeral	Stream-Ephemeral - Flows seasonally
Stream-Perennial	Stream-Perennial - Flows year-round
Stump	Stump - The remaining base after a tree has been felled
Swamp	Swamp - Land covered with water and thick vegetation
Talus	Talus - Pile of rock rubble below a cliff or chute
Trail	Trail - A trail created by animals
Tree	Tree - Any type of tree
Vernal Pool	Vernal Pool - An ephemeral water body with restricted drainage
Waterfall	Waterfall - A sudden, nearly vertical drop in a stream
Woody Debris	Woody Debris - Any dead wood in contact with the ground
Unknown	Unknown

## A.16 dom\_GB\_FTR\_USE

GeoBOB Feature Use Code. A description of how the feature is being or could be used.

Code	Description
Basking/Loafing	Basking/Loafing - Lying in the sun for warmth
Breeding/Mating	Breeding/Mating - Breeding or mating activities other than courtship
Communal Roost	Communal Winter Roost
Day Roost	Day Roost
Feeding	Feeding - Used for feeding
Hibernation	Hibernation - Used for hibernation
In	In - Species occurs in (or within) the feature
Macrohabitat	Macrohabitat - The large-scale habitat feature

Code	Description
Maternity	Maternity - Provides shelter for birthing/brooding
Near	Near - Species occurs near the feature
Nest RTV	Nest RTV - Nest for Red Tree Vole
Nesting	Nesting - Using or building a place to rear young
Night Roost	Night Roost
On	On - Species occurs on the feature
Other	Other - Other use (describe in Feature Notes)
Perch	Perch - A place for sitting or resting
Plucking Post	Plucking Post - Used during prey handling
Rearing	Rearing - Used for rearing young
Roost	Roost - A place for sleep
Seasonal	Seasonal - Used during a particular season
Shelter	Shelter - Used for cover
Substrate	Substrate - Surface on which an organism grows or is attached
Under	Under - Species occurs under the feature
Unknown	Unknown
W/F/T	Watering/Foraging/Traveling

### A.17 dom\_GB\_GENDER

GeoBOB Gender Code. Code to describe the gender of a species.

Code	Description
Female	Female - An individual that bears young
Hermaphrodite	Hermaphrodite - Having both male and female reproductive organs
Male	Male - An individual that does not bear young.
Unknown	Unknown - Gender was not determined/recorded

## A.18 dom\_GB\_LANDFORM

GeoBOB Landform Code. Refers to the general geomorphic structure and shape of habitat.

Code	Description
ALFA	ALFA - Alluvial Fan
ALLU	ALLU - Alluvium
ALVA	ALVA - Alluvial Valley
BALA	RETIRED: Badlands
BALD	BALD - Bald

Code	Description
BASI	BASI - Basin
BAY	BAY - Bay
BENC	BENC - Bench
BLUF	BLUF - Bluff
BOLS	BOLS - Bolson
BOTT	BOTT - Bottomland
BR	BR - Bar
BREA	BREA - Break
CANY	CANY - Canyon
CHAN	CHAN - Channel
CIRQ	CIRQ - Cirque
CLIF	CLIF - Cliff
COAS	COAS - Coast
COFA	COFA - Colluvial Fan
COLL	COLL - Colluvium
COPL	COPL - Coastal Plain
DELT	DELT - Delta
DEPR	DEPR - Depression
DEST	DEST - Depositional Stream Terrace
DIVI	DIVI - Divide
DRAI	DRAI - Drainage
DRAW	DRAW - Draw
DUFI	DUFI - Dune Field
FLAT	FLAT - Flat
FLOO	FLOO - Floor
FLPL	FLPL - Floodplain
FOOT	FOOT - Foothills
GAP	GAP - Gap
GLID	GLID - Glide
GLUP	GLUP - Glaciated Uplands
GORG	RETIRED: Gorge
HEAD	HEAD - Headwall
HIGH	HIGH - Highland
HILL	HILL - Hills
HISL	RETIRED: Hillslope
HUMM	HUMM - Hummock

Code	Description
INBA	INBA - Intermontane Basin
ISLA	ISLA - Island
KNOB/MOUD	KNOB/MOUD - Knob and/or Mound
KNOL	RETIRED: Knoll
LAKE	LAKE - Lake
LAPA	LAPA - Lava Plain
LAPL	LAPL - Lava Plateau
LEDG	LEDG - Ledge
LOWL	LOWL - Lowlands
MORA	MORA - Moraine
MOUN	MOUN - Mountain
MOVA	RETIRED: Mountain Valley
NOTC	NOTC - Notch
OTHER	OTHER - OTHER
PEAK	PEAK - Peak
PENI	PENI - Peninsula
PLAI	PLAI - Plains
PLAT	PLAT - Plateau
PLAYA	PLAYA - alkali flat or salt pan
POND	POND - pond (aquatic mollusks)
PONDO	Pond - other
POOL	POOL - Pool
POTH	POTH - Pothole
RANG	RANG - Range
RAVI	RAVI - Ravine
RIDG	RIDG - Ridge
RIFF	RIFF - Riffle
RIPA	RIPA - Riparian
RISE	RETIRED: Rise
RIVE	RIVE - River
RTVA	RTVA - Rift Valley
SADD	SADD - Saddle
SAND	SAND - Sandhills
SCAB	SCAB - Scabland
SCAR	RETIRED: Scarp
SCRE	SCRE - Scree

Code	Description
SEEP	SEEP - Seep
SLLO	RETIRED: Slope (Lower)
SLMI	RETIRED: Slope (Middle)
SLOU	SLOU - Slough
SLUN	RETIRED: Slope (Unspecified)
SLUP	RETIRED: Slope (Upper)
SPRING	SPRING - spring (aquatic mollusks)
SPUR	RETIRED: Spur
STREAM	STREAM - stream (aquatic mollusks)
STREAM REACH	STREAM REACH - All or portion of a stream/reach
STTE	STTE - Stream Terrace (Undifferentiated)
SWAL	SWAL - Swale
TABL	RETIRED: Tableland
TALU	TALU - Talus
TIPL	TIPL - Till Plain
TREN	TREN - Trench
UPLA	RETIRED: Upland
VALL	VALL - Valleys
VNOT	RETIRED: V-Notch
WASH	WASH - Wash
WETL	WETL - Wetland

### A.19 dom\_GB\_LIGHT\_INDEX

GeoBOB Light Index Code. Describes the amount of sun that hits a species Observation point.

Code	Description
Full Shade	Full Shade - Does not receive any direct sunlight
Full Sun	Full Sun - Receives direct sunlight
Part Shade	Part Shade - Receives filtered sunlight
Unknown	Unknown

### A.20 dom\_GB\_MIGRATION\_SRC

GeoBOB Migration Source Code. The source of the data if it was migrated into the dataset.

Code	Description
BATGrid	BATGrid - Bat Grid Database

Code	Description
BLM	BLM - Bureau of Land Management
BLMOR010_Local	BLMOR010_Local - Lakeview District Local Dataset
BLMOR020_Local	BLMOR020_Local - Burns District Local Dataset
BLMOR030_Local	BLMOR030_Local - Vale District Local Dataset
BLMOR050_Local	BLMOR050_Local - Prineville District Local Dataset
BLMOR080_Local	BLMOR080_Local - Salem District Local Dataset
BLMOR090_Local	BLMOR090_Local - Eugene District Local Dataset
BLMOR100_Local	BLMOR100_Local - Roseburg District Local Dataset
BLMOR110_Local	BLMOR110_Local - Medford District Local Dataset
BLMOR120_Local	BLMOR120_Local - Coos Bay District Local Dataset
BLMOR130_Local	BLMOR130_Local - Spokane District Local Dataset
CNDDB	CNDDB - CA Natural Diversity Database
CNHP	CNHP - California Natural Heritage Program
EDT	EDT - Electronic Data Transfer
GSCHMIDT	GSCHMIDT - Greg Schmitt amphibian records
Herbarium	Herbarium - Herbarium specimen
IsaacsBE	IsaacsBE - Bald Eagle Database
IsaacsPF	IsaacsPF - Peregrine Falcon Database
JointFireSci	JointFireSci - BLM/FS Joint Fire Sciences Study
KSDB	KSDB - Known Sites Database
LGEISER	LGEISER - Linda Geiser lichen records
Museum	Museum - Museum specimen
ODFW	ODFW - Oregon Department of Fish and Wildlife
ORBIC	ORBIC - Oregon Biodiversity Information Center
OSU	OSU - Oregon State University
PCGPIPE	PCGPIPE - Pacific Connector Gas Pipeline
PygmyRabbit	PygmyRabbit - Pygmy Rabbit Database
RNAUMAN	RNAUMAN - Rich Nauman amphibian records
RTV	RTV - 2012_RTV_migration
Strat Surveys	Strat Surveys - Strategic Surveys Program
USFS	USFS - U.S. Forest Service
USFWS_GE	USFWS_GE - USFWS Golden Eagle Data 2011 - 2014
USGS	USGS - U.S. Geological Survey
Unknown	Unknown - Unknown source
WADNR	WADNR - Washington Department of Natural Resources
WDFW	WDFW - Washington Department of Fish & Wildlife

Code	Description
Xerces	Xerces - Xerces Society

### A.21 dom\_GB\_OBS\_TYPE

GeoBOB Observation Type Code. The type of detection by which species presence was determined.

Code	Description	
Aural	Aural - The animal was only heard	
Burrow	Burrow - Burrow	
Camera Set	Camera Set - Detected by remotely triggered photo	
Capture	Capture - Detected by physical capture	
DNA	DNA - Presence determined from DNA genetic analysis	
DNA and Visual	Species detected by seeing it at time of eDNA collection and from DNA analysis	
Excrement	Excrement - Only excrement was observed	
Feather	Feather - A feather was found	
Found Dead	Found Dead - The animal detected was found dead	
Hair Sample	Hair Sample - A portion of hair found	
Kill Site	Kill Site - An area where evidence of a kill was observed	
Nest (Invert)	Nest (Invert) - Species-specific nest with evidence of recent use	
Other	Other - The observation type is not listed	
Radio Telemetry	Radio Telemetry - Determined by a signal from a transmitter	
Shell	Shell - Only a shell was observed	
Sign	Sign - Sign	
Track	Track - Only tracks were observed	
Ultrasonic Recording	Audio (Ultrasonic) Recording	
Unknown	Unknown - Unknown observation type	
Visual	Visual - The animal or plant was seen	
Visual and Aural	Visual and Aural - The animal was detected by seeing it and hearing it	
Voucher Specimen	Voucher Specimen - A specimen was collected for further analysis	

### A.22 dom\_GB\_PRESENCE

GeoBOB Presence Code. The type of detection by which species presence was determined.

Code	Description
N	N - Species was absent
V	V - Pending Expert Verification
X	X - Presence/Absence is not applicable

Code	Description
Y	Y - Species was present

### A.23 dom\_GB\_PROTOCOL

GeoBOB Protocol Name Code. The name of the protocol used to complete a survey.

Code	Description
2009 USGS CSF	2009 USGS Columbia Spotted Frog Site Assessment Survey Protocol
Amphibians S&M, Version 3.0, 10/99.	Amphibians S&M, Version 3.0, 10/99.
Amphibians. Heyer et al 1994. Meas. & Mon. Biol. Div.: Stnd. Meth.	Amphibians. Heyer et al. 1994. Meas. & Mon. Biol. Div.: Stnd. Meth.
Aquatic Amphibian Survey Protocol, Fellers & Freel, 1995	Aquatic Amphibian Survey Protocol, Fellers & Freel, 1995
Aquatic Mollusk S&M, 2003. Strayer and Smith. Am. Fish. Soc. Mon.	Aquatic Mollusk S&M, 2003. Strayer and Smith. Am. Fish. Soc. Mon.
Aquatic Mollusk S&M, Version 2.0, 10/29/97	Aquatic Mollusk S&M, Version 2.0, 10/29/97
Bat Echolocation Monitoring, Weller and Baldwin, 2011	Using Echolocation Monitoring to Model Bat Occupancy and Inform Mitigations
Black-backed Woodpecker Acoustic Nest Search. Halstead, K.E. and J.L. Stephens. 2015.	Black-backed Woodpecker Acoustic Nest Search. 2015.
Bryophytes S&M, Version 2.0, 12/03/99	Bryophytes S&M, Version 2.0, 12/03/99
Burrowing Owl. Conway and Simon, 2003	Comparison of Detection Probability Associated with Burrowing Owl Survey Methods
Bury, RB and R Sisk, 1997	Bury, RB and R Sisk, 1997
CSF, 2001 Monitoring Report	Columbia Spotted Frog, 2001 Monitoring Report
CVS Grid Survey Protocol for S&M Red Tree Vole, Version 1.2, 2/2002	CVS Grid Survey Protocol for S&M Red Tree Vole, Version 1.2, 2/2002
CVS Grid Survey, S&M Bryophytes, Lichens, Vascular Plants 5/30/2001	CVS Grid Survey Protocol for S&M Bryophytes, Lichens, Vasc. Plants rev.5/30/2001
CVS Grid Survey, S&M Fungi v. 1.5, am. 5/25/2001	CVS Grid Survey Protocol for S&M Fungal species, v. 1.5, am. 5/25/2001
CVS Grid Survey, S&M Mollusks v. 2.1, rev. 3/1/2001	CVS Grid Survey Protocol for Survey and Manage Mollusks, v. 2.1, rev. 3/1/2001
Call-and-Response Survey, Takats et al 2001. (owl)	Call-and-Response Survey, Takats et al 2001.
Call-and-Response, Fuller & Mosher 1981. (goshawk)	Call-and-Response, Fuller & Mosher 1981. (goshawk)
Forest Health Monitoring Protocol	Forest Health - McCune et.al - Repeatability of community data
Fungi S&M Cat. B Equiv.	Fungi Category B Survey and Manage Equivalent Effort, Version 1.0, Feb. 2012
Fungi S&M, Version 2.0, 5/13/98	Fungi S&M, Version 2.0, 5/13/98

Code	Description
Golden Eagle 2010	Interim Golden Eagle Inventory and Monitoring Protocols. Pagel et.al. 2010
Great Gray Owl S&M, April, 1995	Great Gray Owl S&M, April, 1995
Great Gray Owl S&M, April, 1995; adjusted 1997	Great Gray Owl S&M, April, 1995; adjusted 1997
Great Gray Owl S&M, Version 3.0, 1/12/2004	Great Gray Owl S&M, Version 3.0, 1/12/2004
Great Gray Owl S&M, Version 4.0, 10/2016	Great Gray Owl S&M, Version 4.0, 10/2016
Ground Squirrel Surveys, WDFW, 2003	Protocol for Washington Ground Squirrel Surveys, WDFW, 2003
Johnson's hairstreak butterfly survey protocol	Johnson's Hairstreak Butterfly (Callophrys johnsoni) Survey Protocol for WA & OR
Kit Fox 2012-2014	2012-2014 Reconnaissance Survey for Kit Foxes in Southeastern Oregon
Landbirds, Ralph et al., 1993	Handbook of Field Methods for Monitoring Landbirds (Ralph et al., 1993)
Lichens S&M, Version 2.1, 9/22/03	Lichens S&M,Version 2.1, 9/22/03
Mardon Skipper 1.0 draft, 2006	Mardon Skipper 1.0 draft, May 5, 2006. Seitz et al. FS R6 & BLM
NABat Protocol 2019	North American Bat Monitoring Program. Rodriguez, et al., 2019
National Lynx Survey	National Lynx Survey
None	None - No protocol used
ODFW 2018-2020 Visual Encounter Survey Protocol for Western Pond Turtles	ODFW 2018-2020 Visual Encounter Survey Protocol for Western Pond Turtles
ODFW FYLF eDNA	ODFW Foothill Yellow-legged Frog eDNA Survey 2021-2022
Ormsbee, Pat. Bat Grid Draft Protocol	Ormsbee, Pat. Bat Grid Draft Protocol 6/27/07.
Other	Other - Protocol not in list provided
Prineville District Mussel Survey Design, 2020	Prineville District Mussel Survey Design: Reach Evaluation and Design Management
RTV 2012	Red Tree Vole Survey Protocol Version 3.0, 11/2012
Rangewide Monitoring Protocol (Hatfield et al. 2013a)	Rangewide Monitoring Protocol (Hatfield et al. 2013a)
Raptor Inventory, Ministry of Sustainable Resrc Mgmt	Inventory Methods for Raptors: Standards for Components of British Colum. 2001
Recent Kit Fox Detections, Milburn and Hiller, 2013	Recent Kit Fox Detections at their Northern-Most Extent in SE Oregon, 2013.
Red Tree Vole S&M, Version 2.0, 2/2000	Red Tree Vole S&M, Version 2.0, 2/2000
Red Tree Vole S&M, Version 2.1, 10/2002	Red Tree Vole S&M, Version 2.1, 10/2002
Red Tree Vole S&M, Version 2.2, 5/2003	Red Tree Vole S&M, Version 2.2, 5/2003
Rombough 2005. Modified for YLF from Fellers and Freel, 1995.	Rombough 2005. Modified for YLF from Fellers and Freel, 1995.

Code	Description	
Salamander S&M (Siskiyou Mt), Version 3.0, 10/18/99	Siskiyou Mt Salamander S&M, Version 3.0, 10/18/99	
Siuslaw hairy-necked tiger beetle	Siuslaw hairy-necked tiger beetle	
Sporocarp Survey Protocol for Macrofungi	Sporocarp Survey Protocol for Macrofungi: Version 1.0. December 2008	
Surveying for Pygmy Rabbits, Ulmschneider et al., 2008	Surveying for Pygmy Rabbits (Brachylagus idahoensis) (Ulmschneider et al., 2008)	
Surveying for Pygmy Rabbits, unpub. Ulmschneider et al, 2004 draft	Surveying for Pygmy Rabbits, unpub. Ulmschneider et al, 2004 draft.	
Terrestrial Mollusk S&M, Version 2.0, 10/29/97	Terrestrial Mollusk S&M, Version 2.0, 10/29/97	
Terrestrial Mollusk S&M, Version 3.0, 02/21/2003	Terrestrial Mollusk S&M, Version 3.0, 02/21/2003	
Vascular Plants S&M, Version 2.0, 12/1998	Vascular Plants S&M, Version 2.0, 12/1998	
WDFW Grouse Survey Protocol, 2004	WDFW Grouse Survey Protocol, 2004	
Western Asio flammeus, Miller et al. 2020	Western Asio flammeus Landscape Survey Protocol Version: 2020a. Miller et al.	
Western Pond Turtle Survey & Monitoring	Western pond turtle survey and monitoring plan (Working Draft). USFS.	
White-tailed Jackrabbits and Black-tailed Jackrabbits, Schaible, 2007	Status, Distribution, and Density of White-tailed Jackrabbits and Black-tailed	
Zielinski and Kucera, USDA General Technical Report 157, 1995	Zielinski and Kucera, USDA General Technical Report 157, 1995	

# A.24 dom\_GB\_RELIABILITY

**GeoBOB Reliability Code.** A ranking of how reliable the Observation record is, based on the expertise of the identifier and/or verifier.

Code	Description
Excellent	Excellent - High confidence that the identification is correct
Fair	Fair - Some uncertainty that the identification is correct
Good	Good - Likely that the identification is correct
Poor	Poor - Unlikely that the identification is correct
Unknown	Unknown - Reliability unknown or not recorded

# A.25 dom\_GB\_REPOSITORY

GeoBOB Repository Code. The code and name of the repository that stores a species collection.

Code	Description
AMNH	AMNH - American Museum of Natural History, New York, NY
ANSP	ANSP - Academy of Natural Sciences, Philadelphia, PA

Code	Description
ASU	ASU - Arizona State Univ. Department of Zoology, Tempe, NC
AW	AW - Andy Warren Personal Collection
BLMCA017	BLMCA017 - Bishop Field Office
BLMCA330	BLMCA330 - Arcata Field Office
BLMOR900	BLMOR900 - BLM - Oregon State Office
BLMORB00	BLMORB00 - Burns District
BLMORC00	BLMORC00 - Coos Bay District
BLMORC04	BLMORC04 - Myrtlewood Resource Area
BLMORL00	BLMORL00 - Lakeview District
BLMORL04	BLMORL04 - Klamath Falls Resource Area
BLMORL05	BLMORL05 - Lakeview Resource Area
BLMORM00	BLMORM00 - Medford District
BLMORM05	BLMORM05 - Butte Falls Resource Area
BLMORM06	BLMORM06 - Ashland Resource Area
BLMORM07	BLMORM07 - Grants Pass Resource Area
BLMORN00	BLMORN00 - Northwest Oregon District
BLMORN02	BLMORN02 - Marys Peak Field Office
BLMORN03	BLMORN03 - Siuslaw Field Office
BLMORN04	BLMORN04 - Tillamook Field Office
BLMORN05	BLMORN05 - Upper Willamette FO
BLMORP00	BLMORP00 - Prineville District
BLMORR00	BLMORR00 - Roseburg District
BLMORR04	BLMORR04 - Swiftwater Resource Area
BLMORR05	BLMORR05 - South River Resource Area
BLMORV00	BLMORV00 - Vale District
BLMORV05	BLMORV05 - Baker Resource Area
BLMORW02	BLMORW02 - Wenatchee Resource Area
BLMORW03	BLMORW03 - Border Resource Area
CAS	CAS - California Academy of Sciences, San Francisco, CA
CFSL Mollusk Taxa Ex	RETIRED CFSL Mollusk Taxa Ex - Corv. FSL S & M Prog Mlsk Txa Expert Vch C
CIC	CIC - College of Idaho, Caldwell - (now called Albertson College of Idaho)
CM	CM - Carnegie Museum of Natural History, Pittsburg, PA
DUKE	DUKE - Duke Univ., Durham, NC
EOU	EOU - Eastern Oregon University
FMNH	FMNH - Field Museum of Natural Hist., Chicago, IL

Code	Description
FOCL	FOCL - Fort Clatsop National Memorial
FOVA	FOVA - Fort Vancouver National Historic Site
FS0603	RETIRED FS0603 - Gifford Pinchot National Forest
FS0606	RETIRED FS0606 - Mt. Hood National Forest
FS061103	RETIRED FS061103 - Gold Beach Ranger District
FS0612	RETIRED FS0612 - Siuslaw National Forest
FS0615	RETIRED FS0615 - Umpqua National Forest
FS061506	RETIRED FS061506 - North Umpqua Ranger District
FS0618	RETIRED FS0618 - Willamette National Forest
HSC	HSC - Herbarium, Biol. Sciences Dept., Humboldt State Univ., Arcat
INHS	INHS - Illinois Natural History Survey - Champaign, IL
LAM	LAM - Los Angeles Museum Herbarium Botany Section, Nat. Hist. Museum
LSUMZ	LSUMZ - Louisiana State Univ. Museum of Nat. Sci, Baton Rouge, LA
MICH	MICH - Herbarium, Univ. of Michigan, Ann Arbor, MI
NW_BatHub_OSUC	NW Bat Hub, HERS Lab, Oregon State University-Cascades
NY	NY - Herbarium, New York Botanical Garden
ODFW	ODFW - OSIS, Oregon Dept. of Fish and Wildlife, Corvallis, OR
OLYM	OLYM - Olympic National Park, Port Angeles, WA
ONHP	ONHP - Oregon Natural Heritage Program, Portland, OR
OS	OS - Oregon State Univ. Dept. of Fish and Wildlife, Corvallis, OR
OSAC	OSAC - Oregon State Arthropod Collection, OSU, Corvallis, OR
OSAC (JH)	OSAC (JH) - John Hinchliff Personal Collection
OSAC (KS)	OSAC (KS) - Ken Smith Personal Collection
OSC	OSC - Herbarium, Botany and Plant Pathology Dept., OSU, Corvallis, OR
OSUM	OSUM - Oregon State University Mammal Collections
PNW	PNW - Pacific Northwest Forest & Range Experiment Station, Corvall
PSM	PSM - Univ. of Puget Sound Slater Museum, Tacoma, WA
PSUM	PSUM - Portland State University Museum of Vertebrate Biology
P_APPLEGAR	P_APPLEGAR - John Applegarth, Eugene, OR
P_BRZOSKA	P_BRZOSKA - David Brzoska, U of K NHM, Lawrence, KS
P_BURKE	P_BURKE - Thomas Burke, Olympia, WA
P_DEIXIS	P_DEIXIS - DEIXIS Consultants Private Collection, Seattle, WA
P_DERR	P_DERR - Chiska Derr's Private Herbarium, Amboy, WA
P_HARPEL	P_HARPEL - Judy Harpel, Brush Prairie, WA
P_JOHNSON	P_JOHNSON - Walter Johnsons private collection. Minneapolis, Minnesota.
P_MCCORKLE	P_MCCORKLE - Personal collection Dr. David V. McCorkle

Code	Description
P_MCCUNE	P_MCCUNE - Bruce McCune's Private Herbarium, Oregon State Univ., Corval
P_MCHENRY	P_MCHENRY - G.Y. McHenry private collection
P_NORVELL	P_NORVELL - Lorelei Norvell, Private Herbarium, Portland, OR
P_OTHER	P_OTHER - Insufficient detail on owner & location of private collection given
P_PAULSON	P_PAULSON - Dennis Paulsons private collection. Seattle, WA 98115
P_ROSENTRE	P_ROSENTRE - Roger Rosentreter, Boise, ID
P_ROTH	P_ROTH - Barry Roth's Private Collection, San Francisco, CA
P_WAGNER	P_WAGNER - David Wagner, Eugene, OR
P_WARREN	P_WARREN - Personal collection Dr. Andrew D. Warren - Gainesville FL
RC	RC - Rehabilitation Center (San Francisco)
RMRS	RMRS - USFS Rocky Mountain Research Station, Missoula, MT.
RW	RW - Robert Wisseman Personal Collection
SBMNH	SBMNH - Santa Barbara Museum of Natural Hist., Santa Barbara, CA
SFSU	SFSU - Harry D.Thiers Herbarium, Biology Dept., San Francisco State
SOC	SOC - Herbarium, Southern Oregon State College, Ashland, Oregon
SOU	SOU - Southern OR University
UBC	UBC - Herbarium, Botany Dept, Univ. of British Columbia, Vancouver
UC	UC - Univ. Herbarium, Univ. of Calif., Berkeley, CA
UCM	UCM - Univ. of Colorado Museum, Boulder, CO
UHF	UHF - University of Helsinki, Finland
UMM	UMM - Univ. of Montana Division of Biological Sciences, Missoula,
UMMZ	UMMZ - Univ. of Michigan Museum of Zoology, Ann Arbor, MI
UNK	UNK - Unknown repository
UO_NORWAY	UO_NORWAY - University of Oslo, Norway
USNM	USNM - National Museum of Natural Hist., Smithsonian Inst., Wash.,
USU_LB	USU_LB - Utah State University, Logan Bee Lab
UW	UW - Univ. of Washington Burke Museum, Seattle, WA
WHIS	WHIS - Whiskeytown National Park
WS	WS - Herbarium, Washington State Univ., Pullman, WA
WSP	WSP - Washington State Univ., Pullman, WA
WTU	WTU - Herbarium, Botany Dept., Univ. of Washington, Seattle, WA
WWB	WWB - Western Washington Univ. Herbarium, Bellingham, WA
XER	XER - The Xerces Society

## A.26 dom\_GB\_REPRO\_STATUS

GeoBOB Reproductive Status Code. The reproductive status of the species.

Code	Description
Drone	Drone - A male from a hive or colony
Lactating	Lactating
Non-Repro	Non-Repro - No evidence of reproduction
Not Applicable	Not Applicable -Was observed outside the reproductive season
Null Parous	Null Parous
Parous	Parous
Post-lactating	Post-lactating
Pregnant	Pregnant
Queen	Queen - The primary reproductive female of a hive or colony
Repro	Repro - Evidence of reproduction
Testes/epididymides	Testes/epididymides enlarged & visible
Unknown	Unknown - Reproductive status unknown
Worker	Worker - A female from a hive or colony that is not a queen

# A.27 dom\_GB\_SCENT\_LURE\_TYPE

**GeoBOB Scent Lure Type Code.** The type of scent lure used for the survey.

Code	Description
Beaver Lure	Beaver Lure
Canine Lure	Canine Lure - e.g., canine force
Feline Lure	Feline Lure
None	None
Other Lure	Other Lure
Skunk/Mustelid Lure	Skunk/Mustelid Lure - e.g., Gusto
Ungulate Lure	Ungulate Lure

## A.28 dom\_GB\_SITE\_STATUS

GeoBOB Site Status Code. A description of the occupancy of the Site during the most recent visit.

Code	Description
Extirpated	Extirpated - Species no longer present locally and habitat removed
Introduced	Introduced - Flora Site created by planting species at site.
Occupied	Occupied - Location occupied by species
Undetected	Undetected - Not observed but not ruled out

Code	Description
Unknown	Unknown - Not known if species is present locally
Unoccupied	Unoccupied - Location not occupied by species

## A.29 dom GB SLOPE

**GeoBOB slope range of values.** This is a short integer type range domain with allowable values between -1 and 200.

#### A.30 dom GB SOIL MOISTURE

GeoBOB Soil Moisture Code. A description of the amount of moisture in the soil.

Code	Description
Dry	Dry - No moisture present
Inundated/Flooded	Inundated/Flooded - Covered with water
Moist	Moist - Slightly wet
Wet	Wet - Saturated

#### A.31 dom\_GB\_SOIL\_TEXT

GeoBOB Soil Texture Code. Describes the soil texture (composition).

Code	Description
Clay	Clay
Clay Loam	Clay Loam
Loam	Loam
Other	Other (specify)
Sand	Sand
Sandy Loam	Sandy Loam
Silt	Silt
Silt Loam	Silt Loam

#### A.32 dom GB SPCS AMPHIBIAN

**Amphibian Species Code.** Species codes for amphibians. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom\_GB\_SPCS\_AMPHIBIAN.xls">https://gis.blm.gov/ORDownload/Domains/dom\_GB\_SPCS\_AMPHIBIAN.xls</a>.

### A.33 dom\_GB\_SPCS\_BIRD

**Bird Species Code.** Species codes for birds. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom\_GB\_SPCS\_BIRD.xls">https://gis.blm.gov/ORDownload/Domains/dom\_GB\_SPCS\_BIRD.xls</a>.

#### A.34 dom GB SPCS BRYOPHYTE

**Bryophyte Species Code.** Species codes for bryophytes. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom">https://gis.blm.gov/ORDownload/Domains/dom</a> GB SPCS BRYOPHYTE.xls.

#### A.35 dom GB SPCS CLS

**Species Class Code.** A number that represents the species taxonomic class or species group. Used as a subtype field to allow for separate species domains in the SPCS CD field.

Code	Description
1	Dicot
2	Gymnosperms
3	Lycophyte
4	Monocot
5	Pteridophytes
6	Bryophyte
7	Fungus
8	Lichen
9	Liverwort
11	Amphibian
12	Bird
13	Invertebrate
14	Mammal
15	Mammal-Bat
16	Mollusk
17	Reptile

#### A.36 dom GB SPCS CYANBAC

**Cyanobacteria Species Code.** Species codes for cyanobacteria. This is a lengthy domain used by multiple datasets. For the full list of values go to:

https://gis.blm.gov/ORDownload/Domains/dom GB SPCS CYANBAC.xls.

#### A.37 dom\_GB\_SPCS\_DICOT

**Dicot Species Code.** Species codes for dicot plants. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom">https://gis.blm.gov/ORDownload/Domains/dom</a> GB SPCS DICOT.xls.

## A.38 dom\_GB\_SPCS\_FUNGUS

**Fungus Species Code.** Species codes for fungus species. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS FUNGUS.xls.

## A.39 dom\_GB\_SPCS\_GYMNOSPERMS

**Gymnosperms Species Code.** Species codes for gymnosperm plants. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS GYMNOSPERMS.xls.

## A.40 dom\_GB\_SPCS\_INVERTEBRATE

**Invertebrate Species Code.** Species codes for invertebrates. This is a lengthy domain used by multiple datasets. For the full list of values go to:

https://gis.blm.gov/ORDownload/Domains/dom GB SPCS INVERTEBRATE.xls.

#### A.41 dom GB SPCS LICHEN

**Lichen Species Code.** Species codes for lichen plants. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS LICHEN.xls.

## A.42 dom\_GB\_SPCS\_LIST

GeoBOB Species List Code. The published list of species that was used for the survey.

Code	Description
ISSSSP2008	ISSSSP2008 - BLM OR/WA State Director's Special Status Species List Feb 2008
ISSSSP2011	ISSSSP2011 - BLM OR/WA State Director's Special Status Species List Dec 2011
ISSSSP2015	ISSSSP2015 - BLM OR/WA State Director's Special Status Species List July 2015
ISSSSP2019	ISSSSP2019 - BLM OR/WA State Director's Special Status Species List March 2019
ISSSSP2021	ISSSSP2021 - BLM OR/WA State Director's Special Status Species List Aug 2021
SM2001	SM2001 - Survey and Manage Species List (2001)
SM2003	SM2003 - Survey and Manage Species List (December 2003)

#### A.43 dom GB SPCS LIVERWORT

**Liverwort Species Code.** Species codes for liverworts. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom">https://gis.blm.gov/ORDownload/Domains/dom</a> GB SPCS LIVERWORT.xls.

## A.44 dom\_GB\_SPCS\_LYCOPHYTE

**Lycophyte Species Code.** Species codes for lycophyte plants. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS LYCOPHYTE.xls.

## A.45 dom\_GB\_SPCS\_MAMMAL

**Mammal Species Code.** Species codes for mammals. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom">https://gis.blm.gov/ORDownload/Domains/dom</a> GB SPCS MAMMAL.xls.

## A.46 dom\_GB\_SPCS\_MAMMALBAT

**Mammal Bat Species Code.** Species codes for bats. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom GB SPCS MAMMALBAT.xls">https://gis.blm.gov/ORDownload/Domains/dom GB SPCS MAMMALBAT.xls</a>.

## A.47 dom\_GB\_SPCS\_MOLLUSK

**Mollusk Species Code.** Species codes for mollusks. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS MOLLUSK.xls.

#### A.48 dom\_GB\_SPCS\_MONOCOT

**Monocot Species Code.** Species codes for monocot plants. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom GB SPCS MONOCOT.xls.

## A.49 dom\_GB\_SPCS\_PTERIDOPHYTES

**Pteridophytes Species Code.** Species codes for pteridophytes. Codes inherited from the USDA Plants Database. This is a lengthy domain used by multiple datasets. For the full list of values go to: https://gis.blm.gov/ORDownload/Domains/dom\_dom\_GB\_SPCS\_PTERIDOPHYTES.xls.

### A.50 dom GB SPCS REPTILE

**Reptile Species Code.** Species codes for reptiles. This is a lengthy domain used by multiple datasets. For the full list of values go to: <a href="https://gis.blm.gov/ORDownload/Domains/dom">https://gis.blm.gov/ORDownload/Domains/dom</a> SPCS REPTILE.xls.

#### A.51 dom GB SRV METH

**GeoBOB Survey Method Code.** The method used to complete the survey.

Code	Description
Acoustic, Man. Rov.	Acoustic, Manual Roving Survey - Non-stationary Acoustic Surveys done manually
Acoustic, Rem. Stn.	Acoustic, Remote Station - A station established to sample bat frequencies
Aerial Survey	Aerial Survey - Survey done from a plane or helicopter

Code	Description
Area Constrained	Area Constrained - Any survey where the search area is limited
Bait Station	Bait Station - Specific location where bait is left to attract an animal
Belt Transect	Belt Transect - A transect with designated width & length
Breeding Bird Survey	Breeding Bird Survey
Call Stations	Call Stations - Animal was called from one or many locations
Camera	Camera - A camera or video recorder was set to be triggered
Camera/ Hair Trap	Camera/ Hair Trap - Method used to collect hair and take a photo of animal
Casual Observation	Casual Observation - No formal survey or method used
Ccall_Wlk_Thrgh	Ccall_Wlk_Thrgh - Continuous Calling Walk Through
Cluster Buster	Cluster Buster
Complete	Complete - A visual exam of 100 percent of the area
Cursory	Cursory - A quick walk-through of a survey area
Fixed Stations	Fixed Stations - The same stations are used repeatedly
General Survey	RETIRED: General Survey
Group Belt Transect	Group Belt Transect - Clusters of belt transects
Hair Trap	Hair Trap - Method used to collect hair from a designated spot
Hand Net	Hand Net
Harp Trap	Harp Trap
ITE_RTV	Individual Tree Exam - Red Tree Vole. Survey of all potential nest trees in project area
Incidental	Incidental - Observation made while surveying for another species
Individual Tree Exam	Individual Tree Exam - Search of individual trees
Intuitive Controlled	Intuitive Controlled - Intensive searches of suitable habitats within survey areas
Key Feature Sample	Key Feature Sample - Time constrained in area with many key features
Line Transect	Line Transect - A transect with no width
Lynx Analysis Unit	Lynx Analysis Unit (LAU)
MLT_RTV	Modified Line Transect - Red Tree Vole
Mist Net	Mist Net - A fine net generally used to catch bats
Mod_Line_Trans	Modified Line Transect
Monitoring	RETIRED: Monitoring
Other	Other - The survey type does not appear in the list of values
Passive Acoustic ARU	Passive acoustic monitoring using autonomous recording unit (ARU)
Pitfall Trap	Pitfall Trap - A pit in the ground is used to trap an animal
Point Counts	Point Counts - Surveys using predetermined discrete point locations
Project Clearance	RETIRED: Project Clearance
Quadrat	Quadrat - Areas of specified standard size are sampled

Code	Description
Random Sample Surv	Random Sample Survey
Research Site	RETIRED: Research Site
Road Survey	Road Survey - Survey conducted from a road
SLT_RTV	Stands With Large Trees - Red Tree Vole. Used alone or w/MLT where view restricted.
SM_Component_2	RETIRED: SM_Component_2
SSS Survey	RETIRED: SSS Survey
Scat Dog	Scat Dog - A Survey using dogs to detect wildlife feces
Spotlight	Spotlight - Using a spotlight at night to determine species presence
Telemetry	Telemetry - Radio telemetry locations are used to identify an individual
Time Constrained	Time Constrained - Any survey with a minimum search time
Unspecified	Unspecified - Survey method was not recorded
Variable Plot	Variable Plot - Plots of various sizes are used

# A.52 dom\_GB\_SRV\_TYPE

GeoBOB Survey Type Code. The reason for doing a survey.

Code	Description
CVS/FIA Strat Surv	RETIRED: Strategic survey on a CVS plot.
Follow-up	Follow-up - A visit done to confirm a species report
GOBIG	RETIRED - GOBIG
Incidental	Incidental - Observation made while surveying for another species
Inventory	Inventory - List of species recorded in a survey
Known Site Strat Sur	RETIRED: Strategic survey on a known site.
Monitoring	Monitoring - Planned & repeated visits to existing observations/sites
Other Non_Strat Surv	RETIRED: Other non-strategic surveys
Other Strategic Surv	RETIREDOther Strategic Surv
Pre-Disturbance	RETIRED - Pre-Disturbance - Pre-Disturbance
Project Clearance	Project Clearance - Surveys done prior to project implementation
Purposive	Purposive - Surveys done in areas where the species is expected to occur
Research	Research - Done for research purposes only
Species-Specific	RETIRED - Species-Specific
Unspecified	Unspecified - Survey type not recorded

# A.53 dom\_GB\_STAND\_STRCT

GeoBOB Stand Structure Code. Describes the canopy layers at the point or area.

Code	Description
Even/Legacy	RETIRED:Even-aged stand with legacy structures
Even/Live Resid	Even/Live Resid - Even-aged stand with live residual trees
Multiple	Multiple - Multiple canopy layers
Single	Single - Single canopy layer
Two	Two - Two canopy layers
Unspecified	Unspecified - Unspecified

# A.54 dom\_GB\_SUBSTRATE

**GeoBOB Substrate Code.** The substance that typifies the species habitat. In the case of habitat -frequently rock type.

Code	Description
Ash Soil	Ash Soil - Soil derived from a rhyolitic event.
Bank	Bank - Ground bordering a stream, lake, road, etc.
Bark	Bark - Attached, loose, or detached
Bog	Bog - Water-logged area with low-nutrient, acidic soil
Boulder	Boulder - Rock fragments larger than a cobble
Branch	Branch - Woody limb of a living tree or shrub
Cliff	Cliff - Steep or overhanging rock face
Cobble	Cobble - Particles larger than a pebble, smaller than a boulder
Ditch	Ditch - A long narrow excavation in the earth
Duff	Duff - Organic top layer of forested soils
Dung/Scat	Dung/Scat - Animal excrement
Fen	Fen - A nutrient-rich wetland that is less acidic than a bog
Fungi	Fungi - Any type of fungus used as substrate
Gravel	Gravel - Rock particles between 2 and 75 mm in diam
Human Structure	Human Structure - A structure made by humans (specify)
Lake	Lake - A large inland body of standing water
Ledge	Ledge - Narrow shelf on a rock wall or cliff face
Lithosol	Lithosol - A shallow soil comprised mostly of bedrock
Litter	Litter - Vegetative debris (specify) covering the majority of the soil surface
Log	Log - The large trunk of a fallen tree
Macrophyte	Macrophyte - Large aquatic plant
Meadow	Meadow - Meadow where moisture level is unknown

Code	Description
Meadow Dry	Meadow Dry - Meadow with no wetland features
Meadow Moist	Meadow Moist - Meadow with only seasonally saturated soil
Meadow Wet	Meadow Wet - Meadow with year-round saturated soil
Moss	Moss - Any type of moss used as substrate
Mud	Mud - Mixture of water and silt- or clay-sized earth material
Nest	Nest - Natural nest built by wildlife
Other	Other - Other substrate not included in this list of values.
Pebble	Pebble - Particles larger than a granule, smaller than a cobble
Pond	Pond - Body of standing water smaller than a lake
Quarry	Quarry - An area used for rock or gravel extraction
Road	Road - Improved or maintained roads
Roadside	Roadside - The disturbed area adjacent to a road surface
Rock Basalt	Rock Basalt
Rock Conglomerate	Rock Conglomerate
Rock Granite	Rock Granite
Rock Igneous	Rock Igneous
Rock Limestone	Rock Limestone
Rock Metamorphic	Rock Metamorphic
Rock Outcrop	Rock Outcrop - Part of a rock formation that appears above the surface
Rock Sandstone	Rock Sandstone
Rock Sedimentary	Rock Sedimentary
Rock Shale	Rock Shale
Rock Ultramafic	Rock Ultramafic
Rock Unspecified	Rock Unspecified
Rock Volcanic	Rock Volcanic
Rootwad	Rootwad - Root mass of a fallen tree
Sand	Sand - 0.05 - 2 mm rock particles
Sand Beach	Sand Beach - Sand on the shore of a body of water
Sand Dune	Sand Dune - Loose sand piled up by the wind
See Notes Field	See Notes Field - More than one substrate type or detailed explanation necessary
Shrub	Shrub - Typically a many-stemmed woody perennial < 8ft tall
Silt	Silt - Smaller than sand, larger than a clay particle (0.002 - 0.05 mm)
Snag	Snag - A standing dead tree or a stump
Soil Serpentine	Soil Serpentine
Soil Unspecified	Soil Unspecified - Unspecified soil type
Stem	Stem - The main branch of a live shrub or herbaceous plant

Code	Description
Stump	Stump - The remaining base after a tree has been felled
Talus	Talus - Pile of rock rubble below a cliff or chute
Tree	Tree - Any type of tree
Tree Trunk	Tree Trunk
Twig	Twig
Unspecified	Unspecified - No data given about substrate
Water	Water - Any place where the water is above the ground (specify)
Woody Debris	Woody Debris - Any dead wood in contact with the ground

# A.55 dom\_GB\_THREAT

**GeoBOB Threat Type Code.** Codes for factors that may have adverse effects on the persistence of the species at a given location.

Code	Description
Abiotic	Abiotic (specify)
Collecting	Collecting
Competition	Competition (specify)
Development	Development
Erosion	Erosion (specify)
Fire Direct	Fire Direct
Fire Exclusion	Fire Exclusion
Fire Other	Fire Other (specify)
Fire Suppression	Fire Suppression (specify)
Grazing Direct	Grazing Direct
Grazing Indirect	Grazing Indirect
Herbivory	Herbivory (specify)
Human Activity	Human Activity (specify)
Hydrological Change	Hydrological Change (specify)
Insects	Insects (specify)
Invasive/Exotic Species	Invasive/Exotic Species (specify)
Mining	Mining (specify)
Mitigation	Mitigation
Not Protected	Not Protected
Off Road Vehicles	Off Road Vehicles
Other	Other
Pathogen/Disease	Pathogen/Disease (specify)

Code	Description
Pipelines	Pipelines
Pollution	Pollution (specify)
Recreation	Recreation
Riparian Disturbance	Riparian Disturbance
Road/Trail	RETIRED: Road/Trail
Road Construction	Road Construction
Road Maintenance	Road Maintenance
Road Other	Road Other (specify)
Succession	Succession
Timber	Timber (specify)
Trampling	RETIRED: Trampling
Treatment Mechanical	Treatment Mechanical (specify)
Treatment Other	Treatment Other (specify)
Treatment Spray	Treatment Spray (specify)
Unknown	Unknown
Wild Horses	Wild Horses
Wildlife	Wildlife (specify)

## A.56 dom\_PCT100

Percentage (0-100). This is a short integer type range domain with allowable values between 0 and 100.

## A.57 dom\_PCT100\_Neg

Percentage (-1-100). This is a short integer type range domain with allowable values between -1 and 100.

## A.58 dom JURIS CODE

**Jurisdiction Organization Code.** Management entity that has administrative responsibilities or jurisdiction for a geographic location.

Code	Description
BL	BL - Bureau of Land Management
BP	BP - Bonneville Power Administration
BR	BR - Bureau of Reclamation
CE	CE - Corps of Engineers
CG	CG - U.S. Coast Guard
DA	DA - U.S. Dept. of Agriculture (Except the Forest Service)

Code	Description
DD	DD - U.S. Dept. of Defense (Except the Corps of Engineers)
FA	FA - Federal Aviation Administration
FC	FC - Federal Energy Regulatory Commission
FS	FS - U.S. Forest Service
FW	FW - U.S. Fish and Wildlife Service
GS	GS - U.S. Geological Survey
GSA	GSA - General Services Administration
IA	IA - Bureau of Indian Affairs and Tribal Units
LG	LG - Local Government
NP	NP - National Park Service
PV	PV - Private Lands
PVI	PVI - Private, Industrial
PVN	PVN - Private, NonIndustrial
PVU	PVU - Private, Urban
SDT	SDT - State Transportation Department
ST	ST - State Managed Lands
STF	STF - State Forests
STL	STL - State Division of Lands
STP	STP - State Parks
STW	STW - State Wildlife Refuges
UN	UN - Undetermined

## A.59 dom\_TEMPERATURE\_F

**Temperature range of values.** This is a short integer type range domain with allowable values between -1 and 110.

## A.60 dom\_WND\_CND

Wind Condition. Describes the predominant wind condition. Codes are sorted in logical order.

Code	Description
Calm	Calm - no wind
Light Breeze	Light Breeze - does not affect detection
Moderate Wind	Moderate Wind - may affect detection
Windy	Windy - affects detection
Gusty Wind	Gusty Wind - Gusty wind with periods of calm (affects detection part of time)

# A.61 dom\_YN

Yes/No Flag Code.

Code	Description
Y	Yes
N	No
U	Unknown