Data Dictionary for
Observation Data
Transcription Reports from the
Colorado Natural Heritage Program

This Data Dictionary defines terms used in Observation Data Reports exported by the Colorado Natural Heritage Program (CNHP) from our Biodiversity Tracking and Conservation System (BIOTICS) database.

Element
A biodiversity unit of conservation attention and action for which a Heritage Conservation Status Rank is assigned.

Elements may be recognized at any taxonomic level (although typically are only recognized at the species level and below for organisms, and the Ecological System, Alliance, and Association levels for communities).

Elements may also be recognized for biodiversity units for which there is no systematic hierarchy (e.g., animal assemblages, community Complexes).

Elements may be native or exotic at a particular location and collectively represent the full array of biological and ecological diversity for the geographic area covered. Elements may serve as the targets of Heritage inventory. Typically, these targets include native, regularly occurring vulnerable species (including infraspecific taxa and populations) and exemplary ecological communities.

Observation Data:
This dataset includes species observations as points, lines or polygons. Observations are mapped for elements on CNHP's "wachlist", or lower priority species, and have minimal attribute information. If you have a question regarding an observation, please provide the SF_ID when contacting CNHP.

Source Feature ID:
A unique, sequentially assigned number for each point stored in CNHP's datasystem. If you have a question regarding a particular observation, please reference the source feature ID.

Shape ID:
Features developed within BIOTICS Mapper are identified using a sequential system generated number that uniquely identifies each feature. The Feature ID is the Shape ID.

Elcode:
The element code is a unique code assigned to each element (species or natural community) and has the following structure: *element group/higher taxonomy/genus/species/infraspecific taxon*

Element Global ID:
A sequentially assigned number generated in BIOTICS for each element (species, subspecies or natural community). This is the global ID used by the NatureServe and the Colorado Natural Heritage Program.

Element Subnational ID:
Unique state identifier for an Element.

Global Scientific Name:
The global scientific name of the element.

Global Imperilment Rank
The global element rank that best characterizes the relative rarity or endangerment of the element worldwide. Factors other than the number of occurrences may be considered when assigning a global rank. Global ranks are derived primarily by staff at the Central Heritage Conservation Science Department, unless CNHP has lead responsibility for that element.

Domain values for Global Imperilment Rank are:
        G1 - Globally critically imperiled; typically 5 or fewer occurrences

        G2 - Globally imperiled; typically 6 to 20 occurrences
        G3 - Globally vulnerable; typically 21 to 100 occurrences
        G4 - Globally apparently secure; usually > 100 occurrences
        G5 - Globally demonstrably secure although it may be rare in parts of its range

        G#G# - A range between two of the numeric ranks; indicates uncertainty about
                the rarity of the element
        G? - Unranked; element is not yet ranked globally
        GU - Unrankable; not enough information is known
        GH - Historically known with hopes of rediscovery
        GX - Extinct; unlikely to be rediscovered
        T# - Rank applies to a subspecies or variety
        Q - Taxonomic status is questionable
        C - Element is extant only in captivity or cultivation
        GNR – Not ranked globally

Subnational Scientific Name:
State scientific name for an Element.

Subnational Imperilement Rank:
The state element rank that best characterizes the relative rarity or endangerment of the element statewide. Factors other than the number of occurrences may be considered when assigning a state rank. State ranks are derived by CNHP staff.

Domain values for State Imperilment Rank are:
        S1 - State critically imperiled; typically 5 or fewer occurrences
        S2 - State imperiled; typically 6 to 20 occurrences

S3 - State vulnerable; typically 21 to 100 occurrences
S4 - State apparently secure; usually > 100 occurrences
S5 - State demonstrably secure
S#S# - A range between two of the numeric ranks; indicates uncertainty about the rarity
      of the element
S? - Unranked; element is not yet ranked in the state
SU - Unrankable; not enough information is known
SH - Historically known with hopes of rediscovery
SX - Extinct; unlikely to be rediscovered
SE - An exotic established in the state; native to a nearby region
SA - Accidental; includes species (usually birds or butterflies) recorded once or twice or
      only at very great intervals, hundreds or thousands of miles outside their usual range
B - Rank refers to the breeding population of the element
N - Rank refers to the nonbreeding population of the element
C - Element is extant only in captivation or cultivation
SNR – Not ranked in the state

State Common Name:
State common name for an Element.

Fed ESA Status:
The federal legal status of the species as assigned by the U.S. Fish and Wildlife Service (USFWS). Blank values indicate no state legal status per USFWS.

Domain values for U.S. Endangered Species Act Status:
C - ESA Candidate
LE - Listed Endangered
LE, LT - Listed as Endangered in a portion of the species' range and listed as Threatened in the rest of the species' range
LT - Listed Threatened
PT - Proposed Threatened
LE-PDL - Listed Endangered, proposed delisting
LE, XN - All of the species' infraspecific taxa worldwide are listed as Endangered or as a nonessential experimental population

Sensitive Status on:
Denotes species considered sensitive by the U.S. Forest Service and/or the Bureau of Land Management (does NOT include ESA status).
Attribute_Domain_Values:
BLM - Legal status assigned by the Bureau of Land Management
FS - Legal status assigned by the U.S. Forest Service
FS/BLM - Legal status assigned by both the U.S. Forest Service and the Bureau of Land Management
*Blank values indicate no federal legal status per BLM or USFS

State Prot Status:
The state legal status of vertebrate or invertebrate species as assigned by the Colorado Division of Wildlife (CDOW). Blank values indicate no state legal status per CDOW.

Domain Values for State Protection Status are:
> E - State endangered; elements of native wildlife whose prospects for survival or recruitment within this state are in jeopardy
> T - State threatened; elements that are not in immediate jeopardy of extinction, but are vulnerable due to small numbers, restricted throughout its range, or experiencing low recruitment or survival
> SC- Special concern

CNHP Sensitive Element:
Indicates whether or not a species or subspecies is considered sensitive by CNHP staff. Elements are frequently labeled sensitive due to collection value, but other factors can be used to determine element sensitivity. CNHP's sensitive species list is a collaborative effort between CNHP and local experts. Refer to http:\\www.cnhp.colostate.edu\list.html for a complete list of CNHP's sensitive elements. Source Descriptor:

Source Locator:
A description of the location of a component Source Feature Observation.

Conceptual Source Type:
Conceptual characterization of an observed feature as a simplified cartographic unit (a point, line, or polygon) that would result from mapping the underlying field data, depending on the size of the observation (i.e., areal extent) compared with the minimum mapping unit (mmu) for the scale map being used. Specifically, observations smaller in all dimensions than the mmu are conceptual points, those larger in all dimensions than the mmu are conceptual polygons, and those larger in one dimension and smaller in the other are conceptual lines.

Locational Uncertainty Type:
Value that indicates the type of inaccuracy in the mapped location of an observation (i.e., Source Feature) compared with its actual on-the-ground location. This is determined on the basis of the underlying observation data (specifically its size as compared with the minimum mapping unit (mmu), indicated as the conceptual feature type), and the amount and direction of the variability between the recorded and actual locations.

Domain values for Locational Uncertainty Type are:
> Negligible - locational variability that is less than or equal to half the appropriate mmu in any direction
> Linear - locational variability that is greater than half the mmu and extends along an axis
> Areal Delimited - locational variability that is greater than the mmu in more than one direction, and which can be delimited by a boundary

Areal Estimated - locational variability that is greater than half the mmu in more than one direction, but that varies in extent such that a boundary cannot be drawn

Locational Uncertainty Distance Class:
Value that indicates the estimated distance, selected from a defined set of ranges (i.e., classes), to be applied as a buffer representing the locational uncertainty associated with data having areal estimated uncertainty.
Domain values for Locational Uncertainty Distance Class are (in meters):
>6.25 - 25
>25 - 50
>50 - 100
>100 - 200
>200 - 400
>400 - 800
>800 - 1500
>1500 - 4000
custom distance

Locational Uncertainty Distance:
Estimated distance to be applied as a buffer representing the locational uncertainty associated with a feature having areal estimated uncertainty.

Digitizing Base:
Domain Values for Digitizing Base are:
1:24,000 Quad - Digital
1:24,000 Quad - Paper
1:40,000 Quad - Digital
1:50,000 Quad - Digital
1:100,000 Quad - Digital
GPS - 3 meter accuracy
GPS - 5 meter accuracy
GPS - 25 meter accuracy
GPS - DOQ 1m

Digitizing Comments: -
Comments pertaining to the digitizing of the observation.
Mapping Comments: -
Comments pertaining to the mapped location. Typically this is only filled out by CNHP if the directions or map were incomplete or difficult to interpret.

Observer:
The expert that observed the element at the mapped location.

Obs Date:
The date the element was observed at the mapped location.