

North Carolina Natural Heritage Program
Element Occurrences
January 2013

The Natural Heritage Element Occurrences (or NHEO) shapefile identifies occurrences of rare plants and animals, exemplary or unique natural communities, and important animal assemblages (e.g., heronries and colonial waterbird nesting sites). Collectively, these plants, animals, natural communities, and animal assemblages are referred to as "elements of natural diversity" or simply as "elements". Specific occurrences of these elements are referred to as "element occurrences" or simply "EOs".

Records for the Blue Ridge Parkway are not included in the shapefile. You must contact the Blue Ridge Parkway if you need information for this area.

Because these data can quickly become outdated, the North Carolina Natural Heritage Program (Office of Conservation, Planning, and Community Affairs, Department of Environment and Natural Resources, MSC 1601, Raleigh, NC 27699-1601) should be contacted before use of the data set to ensure data currency. Please use the following format when acknowledging products derived from this data set:

North Carolina Natural Heritage Program. 2013. Biotics Database. Department of
Environment and Natural Resources, Raleigh, North Carolina.

While efforts have been made to ensure that these data are accurate and reliable, the North Carolina Natural Heritage Program cannot assume liability for any damages or misrepresentation caused by any inaccuracies in the data.

Projection: North Carolina State Plane, **datum:** NAD83, **units:** meters

Attributes

EO_ID

Element Occurrence Identifier. A number that uniquely identifies the element occurrence.

SCI_NAME

Scientific Name. Plant names follow those used in "Flora of the Southern and Mid-Atlantic States" by Alan Weakley (2011 draft). For the most part, animal names follow those found in NatureServe Explorer (<http://www.natureserve.org/explorer/>). Names of natural communities are from a "Guide to the Natural Communities of North Carolina, Fourth Approximation" by Michael P. Schafale, 2012.

EO_NUM

Element Occurrence Number. A sequential number that uniquely identifies a specific occurrence of an element. Occurrences for a given element are numbered sequentially as they

are entered in our database, but due to deletions and record merges, there may be gaps in the sequence.

COM_NAME

Common Name. Plant names follow those used in "Flora of the Southern and Mid-Atlantic States" by Alan Weakley (2011 draft). For the most part, animal names follow those found in NatureServe Explorer (<http://www.natureserve.org/explorer/>).

SURVEYDATE

Survey Date. The most recent survey date for element occurrence. Format of the dates is: yyyy-mm-dd.

LAST_OBS

Last Observed Date. The date on which the element occurrence was most recently observed. Format of the dates is: yyyy-mm-dd. When the date is not precisely known, examples of possible values are:

| | |
|--------------|----------------------------|
| 2001-08 | During August 2003 |
| 1953 | During 1953 |
| 1871-Pre | Before 1871 |
| 1995-Post | After 1995 |
| 1975-Spr | In the spring of 1968 |
| 1992-Sum | In the summer of 1992 |
| 1975-Fall | In the fall of 2001 |
| 1960-1961-Wi | In the winter of 1960-61 |
| 1955-Circa | Sometime around 1955 |
| 1990s | Sometime during the 1990's |
| 2002-2005 | Between 2002 and 2005 |
| 1998? | Possibly 1998 |

FIRST_OBS

First Observed Date. The date on which the element occurrence was first observed. Format of the dates is: yyyy-mm-dd. See LAST_OBS above for examples of possible values when the date is not precisely known.

EO_STATUS

Element Occurrence Status. A summary of the Element Occurrence Rank (see below).

| Status | Description |
|---------------|--|
| Current | The occurrence was observed recently. |
| Historical | Either the element has not been found in recent surveys; or it has not been surveyed recently enough to be confident they are still present; or the occurrence is thought to be destroyed. |

| Status | Description |
|---------------|--|
| Obscure | The date the element was last observed is uncertain. |

EO_RANK

Element Occurrence Rank. Indicates the estimated viability of the element occurrence.

| Rank | Definition |
|-------------|---|
| A | The EO has excellent estimated viability/ecological integrity. |
| B | The EO has good estimated viability/ecological integrity. |
| C | The EO has fair estimated viability/ecological integrity. |
| D | The EO has poor estimated viability/ecological integrity. |
| E | The EO has recently been verified to still exist, but there is insufficient information to estimate its viability/ecological integrity. |
| F | Recent surveys failed to relocate an EO previously reported, but there is no evidence the EO has been destroyed. |
| H | The EO is old, and if surveyed recently, surveys failed to find it, but there is no evidence it is destroyed. |
| NR | The EO has not yet been assigned a rank. |
| U | The EO cannot be assigned a rank because of insufficient information. |
| X | The EO is known to be destroyed |
| ? | There is uncertainty about the rank (used as a qualifier of the above ranks) |

NOTE: For occurrences with a mixed rank (e.g., "AC"), the actual rank is uncertain and lies between the range specified.

ACCURACY

The accuracy is an estimate of how much of the element occurrence, as mapped, is believed to be actually occupied by the element. This uncertainty can result from doubt about the exact location of an observation, which in turn is affected by survey techniques, equipment, and the nature of information we receive from observers. Values are:

| Accuracy | Description |
|-----------------|--|
| Very High | Greater than 95% of the mapped area is occupied by the element. |
| High | Between 80% and 95% of the mapped area is occupied by the element. |
| Medium | Between 20% and 80% of the mapped area is occupied by the element. |

| Accuracy | Description |
|-----------------|---|
| Low | Between 5% and 20% of the mapped area is occupied by the element. |
| Very Low | Less than 5% of the mapped area is occupied by the element. |
| Unknown | The percentage of the mapped area occupied by the element is unknown. |
| blank | Accuracy has not been assigned to record. |

STATE_STAT

State Protection Status. Definitions of the state protection statuses for plants and animals differ. Animal protection statuses are designated by the Wildlife Resources Commission and the Natural Heritage Program (NC Department of Environment and Natural Resources). Endangered, Threatened, and Special Concern species of mammals, birds, reptiles, amphibians, freshwater fishes, and freshwater and terrestrial mollusks have legal protection status in North Carolina (Wildlife Resources Commission). The Significantly Rare designation indicates rarity and the need for population monitoring and conservation action. (This is a N.C. Natural Heritage Program designation.)

| CODE | STATUS | DEFINITION |
|-------------|-----------------|--|
| E | Endangered | "Any native or once-native species of wild animal whose continued existence as a viable component of the State's fauna is determined by the Wildlife Resources Commission to be in jeopardy or any species of wild animal determined to be an 'endangered species' pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987). |
| T | Threatened | "Any native or once-native species of wild animal which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, or one that is designated as a threatened species pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987). |
| SC | Special Concern | "Any species of wild animal native or once-native to North Carolina which is determined by the Wildlife Resources Commission to require monitoring but which may be taken under regulations adopted under the provisions of this Article." (Article 25 of Chapter 113 of the General Statutes; 1987). |

| CODE | STATUS | DEFINITION |
|-------------|--------------------|--|
| SR | Significantly Rare | Any species which has not been listed by the N.C. Wildlife Resources Commission as an Endangered, Threatened, or Special Concern species, but which exists in the state (or recently occurred in the state) in small numbers and has been determined by the N.C. Natural Heritage Program to need monitoring. Significantly Rare species include "peripheral" species, whereby North Carolina lies at the periphery of the species' range (such as Hermit Thrush), as well as species of historical occurrence with some likelihood of re-discovery in the state. Species considered extirpated in the state, with little likelihood of re-discovery, are given no N.C. Status (unless already listed by the N.C. Wildlife Resources Commission as E, T, or SC). |
| SR-G | Game Animal | Species is a game animal or a furbearer, and therefore (by law) cannot be listed for State protection as E, T, or SC. |

Plant protection statuses are determined by the Plant Conservation Program (NC Department of Agriculture) and the Natural Heritage Program (NC Department of Environment and Natural Resources). Endangered, Threatened, and Special Concern species are protected by state law (Plant Protection and Conservation Act, 1979). Significantly rare designations indicate rarity and the need for population monitoring and conservation action.

| CODE | STATUS | DEFINITION |
|-------------|----------------------------|--|
| E | Endangered | "Any species or higher taxon of plant whose continued existence as a viable component of the State's flora is determined to be in jeopardy" (GS 19B 106: 202.12). (Information on permitting regulations for NC Endangered, Threatened, and Special Concern species can be found at www.ncplant.com) |
| T | Threatened | "Any resident species of plant which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (GS 19B 106:202.12). |
| SC-V | Special Concern-Vulnerable | "Any species or higher taxon of plant which is likely to become a threatened species within the foreseeable future"(NCAC 02 NCAC 48F .0401). |
| SC-H | Special Concern-Historical | "Any species or higher taxon of plant that occurred in North Carolina at one time, but for which all known populations are currently considered to be either historical or extirpated." "(NCAC 02 NCAC 48F .0401). |
| SR | Significantly Rare | Any species not listed by the N.C. Plant Conservation Program as Endangered, Threatened, or Candidate, which is rare in North |

Carolina, generally with 1-100 populations in the state, frequently substantially reduced in numbers by habitat destruction (and sometimes also by direct exploitation or disease).

| | | |
|------|------------|---|
| SR-L | Limited | The range of the species is limited to North Carolina and adjacent states (endemic or near endemic). These are species that may have 20-50 populations in North Carolina, but fewer than 100 populations rangewide. The preponderance of their distribution is in North Carolina and their fate depends largely on conservation here. |
| SR-T | Throughout | The species is rare throughout its range (fewer than 100 populations total). |
| SR-D | Disjunct | The species is disjunct to North Carolina from a main range in a different part of the country or world. |
| SR-P | Peripheral | The species is at the periphery of its range in North Carolina. These species are generally more common somewhere else in their ranges, occurring in North Carolina peripherally to their main ranges, mostly in habitats which are unusual in North Carolina. |
| SR-O | Other | The range of the species is sporadic or cannot be described by the other Significantly Rare categories |
| W | Watch List | Any other species believed to be rare and of conservation concern in the state but not warranting active monitoring at this time (see the Watch List section for a more complete discussion). |

FED_STAT

Federal Protection Status. This status is designated by the U.S. Fish and Wildlife Service. Federally listed Endangered and Threatened species are protected under the provisions of the Endangered Species Act of 1973, as amended through the 100th Congress. Unless otherwise noted, definitions are taken from the *Federal Register*, Vol. 56, No. 225, November 21, 1991 (50 CFR Part 17).

| CODE | STATUS | DEFINITION |
|-------------|---------------|---|
| E | Endangered | A taxon “which is in danger of extinction throughout all or a significant portion of its range” (Endangered Species Act, Section 3). |
| T | Threatened | A taxon “which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (Endangered Species Act, Section 3). |

| CODE | STATUS | DEFINITION |
|-------------|--|--|
| T(S/A) | Threatened due to Similarity of Appearance | <p>“Section 4 (e) of the [Endangered Species] Act authorizes the treatment of a species (subspecies or population segment) as endangered or threatened even though it is not otherwise listed as endangered or threatened if -- (a) the species so closely resembles in appearance an endangered or threatened species that enforcement personnel would have substantial difficulty in differentiating between the listed and unlisted species; (b) the effect of this substantial difficulty is an additional threat to an endangered or threatened species; and (c) such treatment of an unlisted species will substantially facilitate the enforcement and further the policy of the Act.” (Federal Register, November 4, 1997). [The American Alligator is listed as T (S/A) due to Similarity of Appearance with other rare crocodylians, and the southern population of the Bog Turtle is listed as T(S/A) due to Similarity of Appearance with the northern population of the Bog Turtle (which is federally listed as Threatened and which does not occur in North Carolina).]</p> |
| C | Candidate | <p>"Taxa for which the [Fish and Wildlife] Service has on file enough substantial information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened. Proposed rules have not yet been issued because this action is precluded at present by other listing activity. Development and publication of proposed rules on these taxa are anticipated. The Service encourages State and other Federal agencies as well as other affected parties to give consideration to these taxa in environmental planning." (Federal Register, February 28, 1996). Taxa formerly considered as 'Category 1' are now considered as 'Candidate'.</p> |
| FSC | Federal Species of Concern (also known as "Species at Risk") | <p>Formerly defined as a taxon under consideration for which there is insufficient information to support listing. "... the [Fish and Wildlife] Service is discontinuing the designation of Category 2 species as candidates in this notice. The Service remains concerned about these species but further biological research and field study are needed to resolve the conservation status of these taxa. Many species of concern will be found not to warrant listing, either because they are not threatened or endangered or because they do not qualify as species under the definition in the [Endangered Species] Act. Others may be found to be in greater danger of extinction than some present candidate taxa. The Service is working with the States and other private and public interests to assess their need for protection under the Act. Such species are the pool from which future candidates for listing will be drawn." (Federal Register, February 28, 1996).</p> |

| CODE | STATUS | DEFINITION |
|-------------|--------------------------------------|--|
| XN | Nonessential Experimental Population | The Endangered Species Act permits the reintroduction of endangered animals as "nonessential experimental" populations. Such populations, considered nonessential to the survival of the species, are managed with fewer restrictions than populations listed as endangered. "Section 10 (j) of the Endangered Species Act of 1973, as amended, provides for the designation of introduced populations of federally listed species as nonessential experimental. This designation allows for greater flexibility in the management of these populations by local, state, and Federal agencies. Specifically, the requirement for Federal agencies to avoid jeopardizing these populations by their actions is eliminated and allowances for taking the species are broadened." (U.S. Fish and Wildlife Service, 1995). |
| D | De-listed | Species has been proposed by the U.S. Fish and Wildlife Service for de-listing from the List of Endangered and Threatened Wildlife. However, at the present time, the species is still on the List of Endangered and Threatened Wildlife and is thus protected under the Endangered Species Act. Because such species still have legal Federal protection, the NHP will maintain existing records on the species, though new records might not necessarily be added. If the status becomes law prior to the next publication of the NHP Rare Animal List, the Program will remove the Federal designation from its database (and thus the species will no longer appear on printouts of Federally listed species). NHP may or may not continue to track the species, depending on its legal State status and other factors such as overall abundance and range in the state. |

S_RANK

State Conservation Status Rank. Natural Heritage Programs and NatureServe have developed a consistent method for evaluating the relative imperilment of both species and ecological communities. These assessments lead to the designation of a conservation status rank. For plant and animal species these ranks provide an estimate of extinction risk. This information has been developed by the NC Natural Heritage Program, NatureServe, and a large number of collaborators in government agencies, universities, natural history museums and botanical gardens, and other conservation organizations. This information has been developed primarily to help in guiding conservation and informing environmental planning and management. Conservation status ranks are based on a one to five scale, ranging from critically imperiled (S1) to demonstrably secure (S5). These status assessments are based on the best available information, considering a variety of factors such as abundance, distribution, population trends, and threats.

| CODE | RANK | DESCRIPTION |
|-------------|----------------------|--|
| S1 | Critically imperiled | Critically imperiled in North Carolina due to extreme rarity or some factor(s) making it especially vulnerable to extirpation (local extinction) from the state. Typically 5 or fewer occurrences or very few remaining individuals (<1,000). |
| S2 | Imperiled | Imperiled in North Carolina due to rarity or some factor(s) making it very vulnerable to extirpation from the state. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000). |
| S3 | Vulnerable | Vulnerable to extinction in North Carolina either because rare or uncommon, or found only in a restricted range (even if abundant at some locations), or due to other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals. |
| S4 | Apparently Secure | Apparently secure and widespread in North Carolina, usually with more than 100 occurrences and more than 10,000 individuals. |
| S5 | Secure | Common, widespread, and abundant in North Carolina. Essentially ineradicable under present conditions. Typically with considerably more than 100 occurrences and more than 10,000 individuals. |
| S#S# | Range Rank | A numeric range rank (e.g., S2S3) is used to indicate uncertainty about the exact status of the element. |
| SH | Historical | Occurred in North Carolina historically, with some expectation that it may be rediscovered. Its presence may not have been verified in the past 20 years. Upon verification of an extant occurrence, SH-ranked elements would typically receive an S1 rank. |
| SX | Presumed Extirpated | Believed to be extirpated in North Carolina and has not been located despite intensive searches of historical sites and other appropriate habitat. |
| SU | Unrankable | Currently cannot be assigned a rank in North Carolina due to lack of information or substantially conflicting information about status or trends. Need more information. |
| SNR | Not Ranked | Rank in North Carolina not yet assessed. |
| SNA | Not Applicable | A conservation status rank is not applicable because the element is not a suitable target for conservation because it is (1) an interspecific hybrid without conservation value, (2) not native to North Carolina, (3) outside its usual range and not regularly found in North Carolina, (4) never confidently documented as present in North Carolina, or (5) a taxon not confidently documented as present in North Carolina. |

| CODE | RANK | DESCRIPTION |
|-------------|-------------|--|
| B | Breeding | Rank of breeding population in North Carolina. Used for migratory species only. (Used as qualifier of above ranks, e.g., S5B.) |
| N | Nonbreeding | Rank of non-breeding population in North Carolina. Used for migratory species only. (Used as qualifier of above ranks, e.g., S3N.) |
| ? | Uncertain | Indicates an inexact or uncertain numeric rank. (Used as qualifier of above ranks, e.g., "S2?".) |

G_RANK

Global Conservation Status Rank. Global conservation status ranks are assigned by NatureServe (formerly the science branch of The Nature Conservancy) staff biologists and contract biologists, based on a consensus of scientific experts, the individual natural heritage programs, and the Natural Heritage Network. They apply to the status of a species throughout its range. This system is widely used by other agencies and organizations, as the best available scientific and objective assessment of a species' rarity throughout its range.

| CODE | RANK | DESCRIPTION |
|-------------|----------------------|--|
| G1 | Critically imperiled | Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. Typically five or fewer occurrences or very few remaining individuals (<1,000), acres (<2,000), or linear miles (<10). |
| G2 | Imperiled | Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction. Typically 6 to 20 occurrences, or few remaining individuals (1,000 to 3,000), acres (2,000 to 10,000), or linear miles (10 to 50). |
| G3 | Vulnerable | Vulnerable globally either because very rare throughout its range found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals. |
| G4 | Apparently Secure | Uncommon but not rare (although it may be rare in parts of its range, particularly on the periphery) and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern. Typically more than 100 occurrences and more than 10,000 individuals. |
| G5 | Secure | Common, widespread, and abundant (although it may be rare in parts of its range, particularly on the periphery). Not vulnerable in most of its range. Typically with considerably more than 100 occurrences and more than 10,000 individuals. |

| CODE | RANK | DESCRIPTION |
|-------------|-----------------------|---|
| G#G# | Range Rank | A rank involving two numbers indicates uncertainty of rank. For example, a G2G3 rank indicates that the species may be a G2 or a G3, but that existing data do not allow that determination to be made. |
| GH | Historical | Known from only historical occurrences, but with some expectation that it may be rediscovered. May still be extant; further searching is needed. |
| GX | Presumed Extinct | Believed to be extinct throughout its range with virtually no likelihood that it will be rediscovered. Not located despite intensive searches of historical sites and other appropriate habitat. |
| GU | Uncertain | Currently cannot be assigned a rank due to lack of information or due to substantially conflicting information about status or trends; need more information. |
| GNR | Not Ranked | Global rank not yet assessed. |
| GNA | Not Applicable | A conservation status rank is not applicable because the Element is not a suitable target of conservation activities. A rank is not assigned either because it is (1) an interspecific hybrid without conservation value; or (2) the element is a product of domestication or cultivation. |
| T# | Intraspecific Taxon | The rank of a subspecies or variety. As an example, G4T1 would apply to a subspecies of a species with an overall rank of G4, but the subspecies warranting a rank of G1. |
| ? | Inexact or Uncertain | Denotes inexact or uncertain numeric rank. Used as qualifier of above ranks. |
| Q | Questionable taxonomy | Questionable taxonomy that may reduce conservation priority. Distinctiveness of this entity as a taxon at the current level is questionable. Resolution of this uncertainty may result in change from a species to a subspecies or inclusion of this taxon in another taxon, with the resulting species having a lower-priority conservation status rank. Used as qualifier of above ranks. |

TYPE

Characterizes the type of habitat of preferred by the element.

| Type | Description |
|-------------|--|
| Terrestrial | Either the element is a species primarily found in terrestrial habitats, or it is a terrestrial community. |
| Wetland | Either the element is a species primarily found in wetland habitats, or it is a wetland community. |
| Aquatic | The element is an aquatic species. |

TAXO_GROUP

Taxonomic Group. A taxonomic group is the broad biological group into which the element falls. Most are well known, such are mammals, crayfish, and mosses. Less familiar groups are (1) *natural communities*, which are a distinct and reoccurring assemblage of populations of plants, animals, bacteria, and fungi naturally associated with each other and their physical environment; and (2) *animal assemblages*, which are a concentration of animal species using the same site for a phase of their life cycle (feeding, reproduction, migration, hibernating, etc.), e.g. bird colonies, bat or reptile hibernacula, concentrations of migrating shorebirds, multispecific spawning grounds, or multispecific mussel habitats.

HAB_COM

Habitat Comment. The physiographic provinces in which the element occurs and it's known habitats are noted. These should not be regarded as the only possible provinces and habitats of the species in the state; our knowledge of the fauna of North Carolina is still very imperfect. . The format is "physiographic province: habitat comment", e.g., "PM: shaly open woods and roadside". (Note: there is no habitat comment for animal assemblages and natural communities.) The physiographic provinces are:

| ABBR. | PROVINCE | DESCRIPTION |
|--------------|---------------------------|---|
| M | Mountains (Blue Ridge) | All parts of North Carolina west of the foot of the Blue Ridge Escarpment. |
| P | Piedmont | All parts of North Carolina east of the foot of the Blue Ridge Escarpment and west of the Fall Line, including outlying "foothill" ranges, such as the Brushy, Uwharrie, Sauratown, and South mountains. |
| S | Sandhills | The southwestern portion of the Coastal Plain province consisting mostly of deep aeolian sands of the Middendorf and Pinehurst formation (portions of Cumberland, Harnett, Hoke, Lee, Moore, Richmond, Scotland, and Montgomery counties). The Sandhills are actually part of the Coastal Plain but are here distinguished because of their distinctive geomorphology and vegetation. |
| C | Coastal Plain | All parts of North Carolina east of the Fall Line, but excluding the Sandhills region and those portions associated with tidal water (ocean, sounds, barrier islands, and mainland brackish or salt marshes). |
| T | Tidewater | That part of the state associated with tidal water, such as the ocean and barrier islands, sounds, estuaries and mainland brackish or salt marshes. |

ELCODE

Element Code. An alphanumeric code which uniquely identifies the element. Useful for taxonomic sorting or filtering.

DATA_SENS

Data Sensitive Element. Element is potentially subject to poaching or harassment.

- Y Yes, information on element is sensitive.
- N No, information is not sensitive

[Please do not make the location of sensitive species known! For example, when making maps using these data, either do not label sensitive species or obscure their location.](#)

HQR

North Carolina Department of Transportation High-quality Resource.

High-quality resources include:

- Fish with a global rank of G1, G2 or G3 and a state rank of S1 or S2,
- State or Federally Endangered or Threatened mussels, and
- Aquatic and wetland vascular plants with a global rank of G1 or G2 and a State Rank of S1 or S2.

Excluded are:

- Destroyed or historic occurrences, and
- Occurrences with poorly know locations.

Values are:

- Y The element occurrence is considered a High-quality Resource.
- N The element occurrence is not considered a High-quality Resource.

PRIN_EO_ID

Principal EO Identifier. If the occurrence is a sub-EO, then this is the EO_ID of the parent EO. Zero otherwise.

NB_SUB_EOS

Number of sub-EOs. If the record is a parent EO, then this is the number of sub-EOs it has. Zero otherwise.

ACRES

Acreege of the Element Occurrence.

MIN_ELEV

Minimum elevation at which the occurrence was observed (in feet). Records without an elevation have a value of -1.

MAX_ELEV

Maximum elevation at which the occurrence was observed (in feet).). Records without an elevation have a value of -1.

SURVEYSITE

Name of the survey site where the occurrence is located.

DIRECTIONS

Description of location of occurrence. (Note: string is truncated to 255 characters.)

EO_DATA

Element Occurrence Data. A summary of the data collected on the occurrence. (Note: string is truncated to 255 characters.)

SURVEYORS

Name(s) of the person(s) who collected field survey information on the occurrence. (Note: string is truncated to 255 characters.)

GEN_DESC

General Description. General description of the area where the occurrence is, including a list of adjacent communities. (Note: string is truncated to 255 characters.)

PROT_COM

Protection Comments. Comments on any legal protection needed to ensure continued existence of the occurrence, and the chances and means of fulfilling those needs. (Note: string is truncated to 255 characters.)

MGMT_COM

Management Comments. Comments on any management needed to ensure continued existence of the occurrence, as well as the chances and means of fulfilling those needs. (Note: string is truncated to 255 characters.)

REFERENCE

Information on reference(s) associated with the occurrence. (Note: string is truncated to 255 characters.)