

Nebraska Conservation and Environmental Review Tool (CERT): Terminology used in the Tables of the CERT Report

Nebraska Natural Heritage Program
Nebraska Game and Parks Commission
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Overview of CERT report tables

Tables in the CERT report provide information about mapped features that overlap spatially with the project review area (or are within some distance of the area). For protected areas, for example, if a project review area overlaps with a wildlife management area (WMA), then the report includes the name of the WMA. The WMA is included even if it overlaps with just a small part of the project review area.

For species and natural communities, in some cases the original information about the location is such that the location can not be mapped precisely. For example if the original location was provided as a particular township, range, and section, the location may be mapped as a 1-square mile section. The true location would be somewhere in the mapped polygon. In such cases, even if the project review area overlaps the mapped feature, the feature itself may have been observed near, rather than in, the project review area.

Terms Relating to Species/Natural Communities

The tabular information on species and natural communities is provided to help the user understand the conservation status as well as the legal status of species and natural communities in the vicinity of the project.

CERT users can get more information about species and natural communities from a variety of sources. For example, **species conservation assessments** for several at-risk species of Nebraska can be found here: <http://outdoornebraska.gov/naturallegacyproject>. **NatureServe Explorer** (<http://explorer.natureserve.org>) is a good place to get information about the biology and conservation status of plant and animal species across their ranges. **Range maps and descriptions of Nebraska's natural communities**, as well as the plant species typical of those communities, can be found under 'Range maps for natural communities' here: <http://outdoornebraska.gov/naturalheritageprogram>.

The CERT tables contain information on 'documented occurrences' and 'potential occurrences.' A documented occurrence for a species or community (collectively referred to as an 'element of conservation') is a location at which the element has actually been observed at some point in time. A potential occurrence is a location at which the species may occur, based on range maps or distribution models (see Data Type below).

Below are explanations for table headings and for values that you may see under these headings.

Scientific Name:	the scientific name of the species (or subspecies) or natural community used at the state level by the Nebraska Natural Heritage Program
Common Name:	the common name used at the state level by the Nebraska Natural Heritage Program. Note that for natural communities the scientific and common names are the same.
USFWS:	Status under the federal Endangered Species Act. E=Endangered T=Threatened
State:	State status. Status under the Nebraska Nongame and Endangered Species Conservation Act or the Nebraska Administrative Code. E=Endangered T=Threatened NC=Nongame Species in Need of Conservation.
SGCN:	In Nebraska's State Wildlife Action Plan (SWAP), called the Nebraska Natural Legacy Plan (Schneider et al 2011), Species of Greatest Conservation Need (SGCN) are divided into two groups, Tier 1 and Tier 2. The SGCN list was revised in 2018 (Schneider et al 2018).

Tier 1 species are those that are globally or nationally most at-risk of extinction and which occur in Nebraska. **Tier 2 species** are typically those that are not at-risk from a global or national perspective but are rare or imperiled within Nebraska.

If a species appears in the table but does not have an SGCN value, it means that the species is not classified under the criteria of the Legacy Plan as an SGCN species but is still tracked by the Nebraska Natural Heritage Program. Most such cases are plants, as NENHP tracks plants ranked S1 to S3 but the Legacy Plan excludes S3 plants from the list of SGCN species.

USFS: A value of ‘S’ indicates the species is designated by the USDA Forest Service as a sensitive species for the region that includes Nebraska, as recorded in the database of the Nebraska Natural Heritage Program. There may be a lag time between when changes to that list are made by USFS and when they are incorporated into the data provided via the CERT, so users should contact the USFS to obtain the most up-to-date status information.

Srank: State conservation status rank of the species or natural community. A lower number indicates a greater degree of imperilment, e.g., S1 indicates the species is critically imperiled within the state. For explanations of each possible Srank see below.

Grank: Global conservation status rank of species or natural community. A lower number indicates a greater degree of imperilment, e.g., G1 indicates the species is critically imperiled globally. For explanations of each possible Grank see below.

Data Type: For potential occurrences of species based on models or range maps, the ‘data type’ may be ‘**Range**’ or ‘**Model**.’

Range: A ‘range’ is an area in which the species might occur provided there is suitable habitat. The data used are for current ranges rather than historical ranges. Thus an area in which a given species formerly occurred is not included if there is a high degree of confidence on the part of NGPC biologists that the species no longer occurs there. Species, particularly those highly mobile such as birds, may occur outside of their range in locations in which the species is generally described as ‘accidental’ or ‘vagrant.’ Range maps do not include such locations.

Model: In the context of the CERT, a model consists of a portion of the range. Typically the model eliminates unsuitable habitat in order to provide a more specific depiction of the potential distribution of the species. There are, however, some gray areas between model and range. For example the ‘model’ for river otter shows one-square mile hexagons within the range that have suitable habitat. For a given one-square mile

hexagon there may be only a small portion of it that constitutes suitable habitat.

Definitions of Natural Heritage Conservation Status Ranks

Global Ranks (Grank)

Grank is the numeric rank (G1 through G5) of the conservation status or relative endangerment globally of species or ecological communities. Primary factors used in determining rank for species are population size, number of occurrences, viability of occurrences, population trend and threats. Secondary factors are geographic distribution, environmental specificity, protection and management, and intrinsic vulnerability.

G1 = Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. (Typically 5 or fewer occurrences or very few remaining individuals or acres)

G2 = Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction throughout its range. (6 to 20 occurrences or few remaining individuals or acres)

G3 = Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single western state, a physiographic region in the East) or because of other factors making it vulnerable to extinction throughout its range. (21 to 80 occurrences)

G4 = Widespread, abundant, and apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery. Thus, the Element is of long-term concern. (81 to 300 occurrences)

G5 = Demonstrably widespread, abundant, and secure globally, though it might be quite rare in parts of its range, especially at the periphery. (More than 300 occurrences)

G#G# = Numeric range rank: A range between two of the numeric ranks. Denotes a range of uncertainty about the exact rarity of the Element.

GU = Unrankable: Status is uncertain, needs more information.

GH = Historical: Of historical occurrence throughout its range, i.e., formerly part of the established biota, with the expectation that it may be rediscovered.

GX = Extinct: Believed to be extinct throughout its range with virtually no likelihood that it will be rediscovered.

Subrank:

T = Taxonomic subdivision: rank applies to a subspecies or variety.

Qualifiers:

? = Inexact: denotes inexact numeric rank.

Q = Questionable taxonomy: taxonomic status is questionable; numeric rank may change with taxonomy.

State Ranks (Srank)

Srank is a numeric rank (S1 through S5) of conservation status or relative endangerment within the state of species or ecological communities. Primary factors used in determining rank for species are population size, number of occurrences, viability of occurrences, population trend and threats. Secondary factors are geographic distribution, environmental specificity, protection and management, and intrinsic vulnerability.

S1 = Critically imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state (Typically 5 or fewer occurrences or very few remaining individuals or acres)

S2 = Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. (6 to 20 occurrences or few remaining individuals or acres)

S3 = Rare and uncommon in the state. (21 to 80 occurrences)

S4 = Widespread, abundant, and apparently secure in the state, with many occurrences, but the Element is of long-term concern. (81 to 300 occurrences)

S5 = Demonstrably widespread, abundant, and secure in the state, and essentially ineradicable under present conditions. (More than 300 occurrences)

S#S# = Numeric range rank: A range between two of the numeric ranks. Denotes a range of uncertainty about the exact rarity of the Element.

SA = Accidental: Accidental or casual in the state (i.e., infrequent and far outside usual range).

SE = Exotic, established in the state. May be native elsewhere in North America.

SH = Historical: Element occurred historically in the state, (with the expectation that it may be rediscovered), perhaps having not been verified in the past 20 years and suspected to be still extant.

SR = Reported from the state, but without persuasive documentation which would provide a basis for either accepting or rejecting the report.

SRF = Reported falsely: Element erroneously reported in the state and the error has persisted in the literature.

SSYN = Synonym: Element reported as occurring in the state, but state does not recognize the taxon; therefore the Element is not ranked by the state.

SU = Unrankable: Status is uncertain, needs more information.

SX = Extirpated: Element is believed to be extirpated from the state.

S? = Unranked: Element is not yet ranked in the state. B = Breeding.

N = Non-breeding, regularly occurring, usually migratory.

Other Terms Appearing in Tables

Biologically Unique Landscape

Biologically Unique Landscapes (BULs) are a set of priority landscapes that, if properly managed, would conserve the majority of Nebraska's biological diversity.

The name of any BUL intersecting with the project area analyzed will be included in the tabular information of the CERT report, along with a link to more information on the BUL.

BULs were identified in Nebraska's State Wildlife Action Plan [Schneider, R., K. Stoner, G. Steinauer, M. Panella, and M. Humpert. 2011 (eds). The Nebraska Natural Legacy Project: State Wildlife Action Plan. 2nd ed. The Nebraska Game and Parks Commission, Lincoln, NE]. For more information on the Legacy Project, including a link to the document, see URL:

<http://outdoornebraska.gov/naturallegacyproject>

To see information about all the BULs, along with photos, go to <http://bit.ly/2EN8nMR>

Large Intact Block of Habitat for At-risk Species

Large Intact Blocks of Habitat for At-risk Species are large areas where there is less fragmentation of the landscape relative to other areas of the Great Plains. Maintaining large intact blocks of habitat helps to maintain populations of many at-risk species.

For more information on how Large Intact Blocks were identified, refer to the document describing the CERT map layers (found on the CERT 'Resources' tab).