Help and Definitions

October 2013

TERMINOLOGY

The Natural Heritage Program collects information on 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".

Significant natural heritage areas are sites (terrestrial and aquatic) that are of special biodiversity significance as identified by the Natural Heritage Program. A site's significance may be due to the presence of rare species, exemplary or unique natural communities, or other important ecological features. The areas shown represent the approximate boundaries of these ecologically significant sites.

Managed Areas are for the most part a diverse collection of fee simple properties and easements that are managed solely for conservation. It does, however, include a number of properties and easements that are not primarily managed for conservation, but that are of conservation interest. This conservation interest ranges from properties and easements which support rare species and intact, high-quality natural communities to those that are open spaces in places where open space is scarce. The property and easement boundaries in this shapefile were acquired from a wide variety of sources, and in some cases their boundaries are approximate. Because of these inaccuracies, this shapefile is intended to be used as an aid to conservation planning only and not as a substitute for land survey data. Inclusion of an area in this shapefile in no way implies that the area is accessible to the public.

NOTES ON USE

Database Search

- Partial search terms are acceptable. For example, if you are unsure of the correct spelling for *Brachyelytrum septentrionale*, you could enter the beginning letters of either the genus or species in the Scientific Name field; either "brac" or "sept" would return the correct records. "b" or "s" would also return the correct species, however the search would also return all records whose scientific name contained a "b" or "s".

- By default, element occurrence records are summarized by county.

  - To summarize records by 7.5-minute (1:24,000 scale) USGS topographic maps, the, click the "Topo Map" radio button in the "Summarize results by" line.

  - To summarize results for the statewide status of elements, choose "Statewide" in the "Summarize results by" line.

- For distribution maps, click on the scientific or common name of an element in the table of results from a county or topographic map database search. Note that there are no maps for the statewide summary.

- Clicking on a column name in the results table will sort all entries in that column; clicking a second time on the column name will reverse the sort.

- By default, 10 entries of the results table per page are displayed; to display more, up to a maximum of 100 rows, choose a different value from the "Show xx entries per page" dropdown.

- The results can be further refined by entering a text in the "Filter search results" field. Entries not containing the entered text will be removed from the results table.

- The total number of results returned is displayed at the bottom of the results table.

- Page through the results using the arrows or page numbers displayed in the lower right-hand corner of the table of results.

- Clicking the "Download Results' button will give you the option of saving the results table to comma-separated-values file. This type of file can be opened with most spreadsheet programs, including Microsoft Excel.

- The data are updated in January, April, July, and October. The date when the data were last updated is noted on the website.

Map Viewer

- The Map Viewer works best when viewed on the Chrome web browser. It works reasonably well using newer versions of Firefox and Internet Explorer. Use of Internet Explorer 8 or older is not suggested.

- Results are displayed for significant natural heritage areas by default. To display results for managed areas, click the appropriate radio button in the "SHOW RESULTS FOR" section above the results table.

- Clicking on a column name will sort all entries in that column; clicking a second time on the column name will reverse the sort.

- By default, 10 entries of the results table per page are displayed; to display more, up to a maximum of 100 rows, choose a different value from the "Show xx entries per page" dropdown.

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ELEMENT OCCURRENCE DEFINITIONS

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.

Scientific and Common Names. 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.

State (Protection) Status. Definitions of the state protection statuses for plants and animals differ. Each is described in separate sections below.

Animal protection statuses are designated by the Wildlife Resources Commission and the Natural Heritage Program (N.C. 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 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 animal species which has not been listed by the 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 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 protection status (unless already listed by the Wildlife Resources Commission as E, T, or SC).
SR-G	Game Animal	The species is a game animal or a furbearer, and therefore by law cannot be listed for State protection as E, T, or SC.
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. These categories and the descriptions of them have been developed by the Natural Heritage Program. See the Watch List descriptions below for a more complete discussion.

The following five watch categories have been devised to indicate the reasons for each species' current placement(s). A number of species have been placed in two Watch Categories, because it is believed they may be "in trouble" for at least two reasons. For example, the Red-breasted Nuthatch has a rather small breeding population in the state, in the higher elevations of the mountains, giving it a W2 status. However, as a portion of the breeding population occurs in the spruce-fir zone, which is undergoing degradation of the canopy, it is also given a W5 status, as well.

Watch Category 1 (W1) includes species that are known to be declining in North Carolina, for one reason or another. The distribution or population sizes of such species in the state are fairly well known; loss of habitat is not necessarily a factor. A large number of species are known to be declining in the state, such as Neotropical migrant birds, but the species in this category must have an N.C. Rank of S3S4 or higher (S3, S2, S1, etc.). Examples: Rusty Blackbird, Spotted Turtle, Bull Chub.

Watch Category 2 (W2) includes species that are rare to uncommon in North Carolina, but are not necessarily considered to be declining or otherwise in trouble. Generally speaking, the distribution or population sizes of such species in the state are fairly well known. Examples: Willow Flycatcher, Pine Woods Snake, Spotted Sunfish.

Watch Category 3 (W3) includes species that are poorly known in North Carolina, but are not necessarily considered to be declining or otherwise in trouble. The distribution and population sizes of such species are not well known; this is especially true for a large number of invertebrates, as well as secretive or nocturnal vertebrates. Examples: Striped Mud Turtle, Sandhills Salamander, Banner Clubtail.

Watch Category 4 (W4) includes species reported from North Carolina without adequate documentation. These species should be listed at a higher level, if their reported occurrence in North Carolina is true. This category includes sight records of uncertain validity, old and vague reports for which no documentation has

appeared, specimens that cannot be verified as being taken in the state, and, in a few cases, more recent reports for which we have not yet received documentation. Example: Smooth Green Snake, Cumberland Crayfish Ostracod, Elusive Clubtail.

Watch Category 5 (W5) includes species with increasing amounts of threats to its habitat, whether or not populations are known to be declining. These threats can include loss of habitat (e.g., the dramatic loss of maritime forests), degradation of habitat (e.g., pollution and sedimentation of rivers and streams), and disturbance to the habitat (e.g., humans and their vehicles on beaches), among other types of threats. Threats can also include use of pesticides, acid rain, fire suppression, over-collection by zoologists, and varied other factors. Examples: American Kestrel, Bigeye Chub, Phaon Crescent.

Plant protection statuses are determined by the Plant Conservation Program (N.C. Department of Agriculture) and the Natural Heritage Program (N.C. 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. (This is a Natural Heritage Program designation.)

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 plant species not listed by the 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. These categories and the descriptions of them have been developed by the Natural Heritage Program. See the Watch List descriptions below for a more complete discussion.

The watch list has been divided into seven categories as follows:

Watch Category 1 (W1 - rare, but relatively secure) includes rare species whose status in North Carolina is relatively well known and which appear to be relatively secure at this time. While still notably rare, these species do not currently require site-specific monitoring and so are not on the main list (E, T, C, SR, or SC). Many of these species were formerly on the main list; they are retained in this category because they require a lower level of continued monitoring to ensure their long-term security. NCNHP maintains paper files on W1 species and requests occurrence data.

Watch Category 2 (W2 - rare, but taxonomically questionable) includes species with questionable taxonomy, including taxa of dubious validity and taxa under study and potentially to be named. If further study reveals that these are valid taxa, they would warrant addition to the Rare Plant List as Endangered, Threatened, Candidate, or Significantly Rare. This category has been used for named and unnamed taxa which currently appear to have some significant chance of being proven valid. We request data on taxonomic validity, as well as data on localities and populations.

Watch Category 3 (W3 - rare, but uncertain documentation) includes species which have been reported from North Carolina without adequate documentation. These species should be listed at a higher level when their reported occurrence in North Carolina is verified. This category includes sight records, old and vague reports for which no documentation has appeared, and, in a few cases, more recent literature reports for which we have not yet received documentation. We request data documenting native occurrence in North Carolina, as well as locality and population data.

Watch Category 4 (W4 - rare, but believed not native) includes species known to occur in North Carolina which current data suggest are not native to North Carolina, but whose native occurrence is plausible. Some of these species were previously listed at a higher level, but field investigations suggest that all known North Carolina occurrences are introductions. We request data documenting the native occurrences of the species in North Carolina.

Watch Category 5a (W5a - rare because of severe decline) includes species which have declined sharply in North Carolina, but which do not appear yet to warrant site-specific monitoring. Most species in this category

have undergone declines of more than 50% (in many cases more than 90%) from their pre-Columbian status. Reasons for decline include exotic pests or pathogens, massive modification of the landscape, suppression of natural fires, and failure of reproduction. Because many of these species were once abundant or even dominant in parts of North Carolina, they may still be fairly common or frequently encountered, despite the strong decline. If current trends continue, however, many of these species will be threatened with extirpation in all or a major part of their ranges in North Carolina. NCNHP does not actively maintain files on W5b species occurrences.

Watch Category 5b (W5b - exploited plants) includes widespread species, at least within their physiographic province, that are in commercial demand and are often collected and sold in high volume. Such high volume collection can cause local extirpation and is not sustainable in the long run. This category has been created to bring attention to the issue before commercial collection of these species reaches the point where they become rare. Not included in this category are species that are already listed in other sections of this rare plant list. The NCNHP requests information on illegal collection incidents, but does not otherwise maintain files on W5b species occurrences. NCNHP does not actively maintain files on W5b species occurrences.

Watch Category 6 (W6 - regionally rare) includes species which are rare in one region of North Carolina, while being uncommon to abundant within another region. These regional rarities, generally within-state disjuncts, are significant for protection of genetic variation and long-term viability of species. NCNHP does not actively maintain files on W6 species occurrences.

Watch Category 7 (W7 - rare and poorly known) includes species with inadequate information about their distribution and rarity in North Carolina. These are generally species which have not been previously listed as rare in North Carolina, but which appear to be so, based on herbarium records and field experience of NCNHP staff, consultants, and cooperating scientists. Further information is needed in order to determine the true status of these species in North Carolina. We request locality and population data on these species.

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).
T(S/A)	Threatened due to Similarity of Appearance	"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

CODE	STATUS	DEFINITION
		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 crocodilians, 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).]
C	Candidate	"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'.
BGPA	Bald and Golden Eagle Protection Act	Bald Eagles were removed from the federal list of threatened and endangered species on August 9, 2007, and are no longer protected under the Endangered Species Act. However, Bald Eagles remain protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The Bald and Golden Eagle Act prohibits anyone from taking, possessing, or transporting a Bald Eagle (*Haliaeetus leucocephalus*) or Golden Eagle (*Aquila chrysaetos*), or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit. For more information, see the Code of the Federal Register: 50 Part 22 or visit the USFWS website http: www.fws.gov/midwest/MidwestBird/EaglePermits/index.html
FSC	Federal Species of Concern (also known as "Species at Risk")	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

CODE	STATUS	DEFINITION
		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).
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.
P_	Proposed	A species which has been formally proposed in the Federal Register for listing as Endangered or Threatened

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

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.
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.)

CODE	RANK	DESCRIPTION
?	Uncertain	Indicates an inexact or uncertain numeric rank. (Used as qualifier of above ranks, e.g., "S2?".)

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.
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.

CODE	RANK	DESCRIPTION
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.

County or Topographic Map Status. This value summarizes what is known about the current existence status of the element for the county or topographic map.

STATUS	DESCRIPTION
Current	There is at least one record for the element in the region that has been seen recently.
Historical	Either the element has not been found in recent surveys in the region; or it has not been surveyed recently enough to be confident they are still present; or the occurrence is thought to be destroyed.
Obscure	The date the element was last observed in the region is uncertain.

Habitat Comment. The known habitats of a species are noted. These should not be regarded as the only possible habitats of the species in the state; our knowledge of the flora and fauna of North Carolina is still imperfect.

SIGNIFICANT NATURAL HERITAGE AREA DEFINITIONS

Site Name. The name given to the Significant Natural Heritage Area by NC Natural Heritage Program staff.

Acres. Acreage of the polygon.

(Element) Representational Rating. This rating is designed to indicate an SNHA's potential to contribute to a collection of the best sites for each tracked element within the state.

REPRESENTATIONAL RATING	DEFINITION
R1 (Exceptional)	Site contains one of the best two examples of G1 or G2 elements*.
R2 (Very High)	Site contains the 3rd or 4th best examples in the state of G1-G2 elements, and/or one of the best two examples of other elements.
R3 (High)	Site contains the 5th to 8th best examples in the state of G1-G2 elements and/or the 3rd to 6th best occurrences of other elements.
R4 (Moderate)	Site contains the 9th to12th best examples in the state of G1-G2 elements within it and/or the 7th to 10th best occurrences of other elements.
R5 (General)	Site contains one or more viable occurrences that are not among the 12 best of G1-G2 elements or among the ten best for other elements.
R? (Unranked)	A representational value was unable to be assigned to the site.

*G-ranks are a measure of global imperilment: G1=critically imperiled, G2=imperiled, G3=vulnerable, G4=apparently secure, G5=secure. G-ranks are assigned following NatureServe methodology.

(Element) Collective Rating. This rating evaluates the conservation value of each SNHA based on the number of tracked elements present, and the rarity of those elements, weighted in terms of both global imperilment (G-rank) and state imperilment (S-rank). The score of a site is calculated by summing the cumulative scores of the extant elements in the site, based on weights assigned to each level of G-rank and S-rank.

ELEMENT COLLECTIVE RATING	MINIMUM NUMBER OF ELEMENTS
C1 (Exceptional)	10
C2 (Very High)	7
C3 (High)	4
C4 (Moderate)	2
C5 (General)	1
C? (Unranked)	Unable to assign a value

Owner The owners of the site.

ACRONYMN	OWNER
ASU	Appalachian State University
CATW	Catawba College
CHC	Chowan College
CHER	Cherokee Indian Reservation
CLC	Catawba Lands Conservancy
CLL	Carolina Land and Lakes RC&D
CMLC	Carolina Mountains Land Conservancy
CTNC	Conservation Trust of North Carolina
CWMTF	NC DENR, Clean Water Management Trust Fund
DUKE	Duke University
ECSU	Elizabeth City State University
ECU	East Carolina University
ERA	Eno River Association
FCNC	Foothills Conservancy of North Carolina
FEL	Felburn Foundation
HBF	Highlands Biological Foundation
HCC	High Country Conservancy
HCLT	Highlands-Cashiers Land Trust
HSWLT	Humane Society Wildlife Land Trust
JCC	Johnston Community College
LOCAL	Local government (county or municipal)
LRC	Lumber River Conservancy
LTCNC	Land Trust for Central North Carolina
LTLT	Land Trust for the Little Tennessee
MCC	Martin Community College
NAS	National Audubon Society
NCA	NC Arboretum
NCAQU	NC DENR, Aquariums
NCBGF	North Carolina Botanical Garden Foundation
NCCF	North Carolina Coastal Federation
NCCLT	North Carolina Coastal Land Trust
NCDA	NC Department of Agriculture
NCDCM	NC DENR, Division of Coastal Management
NCDCR	NC Department of Cultural Resources
NCDMF	NC DENR, Division of Marine Fisheries
NCDOA	NC Department of Administration
NCDOC	NC Department of Corrections
NCDOT	NC Department of Transportation
NCDPR	NC DENR, Division of Parks and Recreation
NCDPS	NC Department of Public Safety
NCEEP	NC DENR, Ecosystem Enhancement Program

ACRONYMN	OWNER
NCFF	North Carolina Forestry Foundation
NCFS	NC Department of Agriculture, Forest Service
NCGTP	North Carolina Global TransPark
NCHHS	NC Department of Health and Human Services
NCHS	North Carolina Herpetological Society
NCMNS	NC DENR, Museum of Natural Sciences
NCNG	NC National Guard
NCNHP	NC DENR, Natural Heritage Program
NCPA	NC State Ports Authority
NCPCP	NC Department of Agriculture, Plant Conservation Program
NCSU	North Carolina State University
NCWRC	NC Wildlife Resources Commission
NCZOO	NC DENR, Zoological Park
NENHC	Northeast New Hanover Conservancy
NSL	National Scout Lands
PAC	Pacolet Area Conservancy
PCC	Piedmont Community College
PLC	Piedmont Land Conservancy
PRV	Private
PW	Public Waters
RCC	Rockingham Community College
SAFC	Southern Appalachian Forest Coalition
SAHC	Southern Appalachian Highlands Conservancy
SALT	Sandhills Area Land Trust
SCC	Sandhills Community College
SWCD	Soil and Water Conservation District
TCF	The Conservation Fund
TLC	Triangle Land Conservancy
TMF	The Mattamuskeet Foundation
TNC	The Nature Conservancy
TRLC	Tar River Land Conservancy
UNCA	University of North Carolina - Asheville
UNCC	University of North Carolina - Charlotte
UNCCH	University of North Carolina - Chapel Hill
UNCW	University of North Carolina - Wilmington
USACE	US Army Corps of Engineers
USCG	US Coast Guard
USDOD	US Department of Defense
USEPA	US Environmental Protection Agency
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USNPS	US National Park Service
USVOA	US Voice of America
WCU	Western Carolina University

MANAGED AREAS DEFINITIONS

Managed Area Name. The name of the managed area.

Acres. Acreage of managed area. If the managed area has multiple parts, the acreage of the individual part is given.

Owner. The owner of the property, or, if the area is an easement, the holder of the easement.

Owner Type. Categorizes the ownership or easement type:

TYPE	DEFINITION
Dedicated Nature Preserve	The area is subject to an easement with the State to protect and maintain the significant natural features of the area. For more details, see the DNP shapefile.
Easement	The area indicated is subject to an easement held by the entity listed in the Owner field.
Federal	The Government of the United States of America owns the property.
Local	A local government entity, e.g., county or city, owns the property.
Management Agreement	A cooperative agreement between the land owner and conservation organization to manage the property in a manner beneficial to a species or natural community.
Private	A private individual or organization owns the property.
Registered Heritage Area	The owner of the area has signed a non-binding agreement to protect and maintain the significant natural features of the area.
State	The State of North Carolina owns the property.