

TERMINOLOGY AND DEFINITIONS

November 2018

ELEMENTS

The North Carolina Natural Heritage Program (NC NHP) 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.”

TAXONOMIC GROUP

A taxonomic group is the broad biological group into which the element falls. Most are well known, such as mammals, crayfish, and mosses. Less familiar groups are *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 *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 NAME

Plant names follow those used in “Flora of the Southern and Mid-Atlantic States” by Alan Weakley (2018 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.

COMMON NAME

Plant names follow those used in “Flora of the Southern and Mid-Atlantic States” by Alan Weakley (2018 draft). For the most part, animal names follow those found in NatureServe Explorer (<http://www.natureserve.org/explorer/>).

STATUS AND RANK CODES

Definitions of the state and federal protection status for plants and animals differ. The North Carolina Natural Heritage Program (NCNHP) also maintains Watch Lists for species of plants and animals that are rare or uncommon, are not well studied, or are otherwise threatened with serious decline but for which current information does not justify placement on the Rare List by NCNHP.

EXPLANATION OF RANK CODES FOR NATURAL COMMUNITIES

Natural Heritage Programs and the NatureServe Network have developed a consistent method for evaluating the relative imperilment of species and ecological communities. Status and rank codes for natural community types are derived from the Natural Heritage Database (2015). An S or G rank involving two numbers indicates uncertainty of rank. For instance, a G2G3 rank indicates that the community appears to warrant either a G2 or a G3 ranking, but existing data do not allow that determination to be made. Number of occurrences is given as a general guide. Ranks also depend on other factors that affect vulnerability, including extent of occurrences, range, trends, and threats.

N.C. RANK

RANK	DEFINITION
S1	Critically imperiled in North Carolina because of extreme rarity or because of some factor making it especially vulnerable to extirpation from the state. Typically 1-5 occurrences and/or less than 2,000 acres occupied in the state.

S2	Imperiled in North Carolina because of rarity or because of some factor making it very vulnerable to extirpation from the state. Typically 6-20 occurrences and/or 2,000-10,000 acres occupied in the state.
S3	Rare or uncommon in North Carolina. Typically 21-100 occurrences and/or 10,000-50,000 acres occupied in the state.
S4	Apparently secure in the state.
S5	Demonstrably secure in the state.
S ?	Rank uncertain.

GLOBAL RANK

RANK	DEFINITION
G1	Critically imperiled globally because of extreme rarity or because of some factor making it especially vulnerable to extinction throughout its range. Typically 5 or fewer occurrences and/or less than 2,000 acres occupied globally.
G2	Imperiled globally because of rarity or because of some factor making it very vulnerable to extinction throughout its range. Typically 6-20 occurrences and/or 2,000-10,000 acres occupied globally.
G3	Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range or because of other factors making it vulnerable to extinction throughout its range. Typically 21-100 occurrences and/or 10,000-50,000 acres occupied globally.
G4	Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
G5	Demonstrably secure globally, though it may be quite rare in parts, especially at the periphery.
G ?	Uncertain rank.
G_Q	Questionable taxonomy that may reduce conservation priority. Distinctiveness of this entity as a type or subtype at the current level is questionable.

EXPLANATION OF STATUS AND RANK CODES FOR PLANTS

Status Codes

In North Carolina, Endangered, Threatened, and Special Concern species have legally protected status through the North Carolina Plant Conservation Program (NCPCP). The Natural Heritage Program maintains computerized records and GIS map files on Significantly Rare species, as well as species considered extirpated in the state.

United States Status is designated by the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Marine Fisheries Service (USNMFS) in accordance with the U.S. Endangered Species Act of 1973 (USESA), as amended. Plants and plant varieties, (including fungi and lichens), animal species and subspecies, and vertebrate populations are considered for Endangered or Threatened status according to the criteria established under the USESA. Proposals and determinations to add taxa or populations to the Lists of Endangered and Threatened Wildlife and plants are published in the Federal Register. Additionally, the USFWS and the USNMFS periodically publish a Notice of Review or Notice of Reclassification in the Federal Register that presents an updated list of plant and animal taxa that are regarded as candidates or proposed for possible addition to the Lists of Endangered and Threatened Wildlife and Plants. Contact the Asheville or Raleigh Ecological Services Field Offices for more information.

N.C. STATUS – PLANTS

N.C. STATUS CODE	STATUS	DEFINITION
E	Endangered	Any native or once-native species of higher taxon of plant whose continued existence as a viable component of the state's flora is determined to be in jeopardy or any species of plant determined to be an Endangered species pursuant to the Endangered Species Act. (GS19B-106:202.12.)
T	Threatened	Any native or once-native 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, or one that is designated as a Threatened species pursuant to the Endangered Species Act. (GS19B-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	This is a NCNHP designation. Any species which has not been listed by the NCPCP as an Endangered, Threatened, or Special Concern species, but which exists in the state (or recently occurred in the state) in small numbers (generally 1-100 statewide populations) and has been determined by the NCNHP to need monitoring. Significantly Rare species include species of historical occurrence with some likelihood of rediscovery in the state and species substantially reduced in numbers by habitat destruction, direct exploitation, or disease. Species considered extirpated in the state, with little likelihood of rediscovery, are given no N.C. status (unless already listed by the NCWRC or NCPCP as E, T, or SC).
SR-L	Significantly Rare- 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	Significantly Rare- Throughout	The species is rare throughout its range (fewer than 100 populations total).
SR-D	Significantly Rare- Disjunct	The species is disjunct to North Carolina from a main range in a different part of the country or world.
SR-P	Significantly Rare- 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 that are unusual in North Carolina.

N.C. STATUS CODE	STATUS	DEFINITION
SR-O	Significantly Rare-Other	The range of the species is sporadic or cannot be described by the other Significantly Rare categories.
W_	Watch List	This is an NCNHP designation for any other species believed to be rare and of conservation concern in the state but not warranting active monitoring at this time.
W1	Rare but Relatively Secure	Species whose status in N.C. is relatively well known and 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 Rare List. Many of these species were formerly on the Rare List; they are retained in this category because they require a lower level of continued monitoring to ensure their long-term security.
W2	Rare but Questionable Taxonomy	Species 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 List. This category has been used for named and unnamed taxa that currently appear to have some significant chance of being proven valid.
W3	Rare but Questionable Documentation	Species that have been reported from N.C. without adequate documentation. These species should be listed at a higher level when their reported occurrence in N.C. 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.
W4	Rare but Possibly Not Native	Species known to occur in N.C. that current data suggest are not native to N.C. but whose native occurrence is plausible. Some of these species were previously listed at a higher level, but field investigations suggest that all known N.C. occurrences are introductions.
W5	Rare because of Severe Decline to Population or Habitat	Species that have declined sharply in N.C. but 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 N.C., 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 N.C.
W6	Regionally Rare	Species that 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.

N.C. STATUS CODE	STATUS	DEFINITION
W7	Poorly Known in NC	Species with inadequate information about their distribution and rarity in N.C. These are generally species not previously listed as rare in N.C. but which appear to be so based on herbarium or museum records and field experience of NCNHP staff, consultants, and cooperating scientists. Further information is needed to determine the true status of these species in N.C.

U.S. STATUS – PLANTS

FEDERAL STATUS CODE	STATUS	DEFINITION
E	Endangered	A taxon that is in danger of extinction throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).
T	Threatened	A taxon that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).
C	Candidate	Taxa for which the USFWS 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 USFWS encourages state and other federal agencies as well as other affected parties to give consideration to these taxa in environmental planning [Federal Register, 5 December 1996 Volume 61(235):64481]. Taxa formerly considered “Category 1” are now considered “Candidate.”

Ranking System

Natural Heritage Programs and the NatureServe Network have developed a consistent method for evaluating the relative imperilment of both species and ecological communities. These assessments led to the designation of a conservation status rank. These ranks provide an estimate of extinction risk. Conservation rank values have been assigned over the past 30 years by the NCNHP, NatureServe, and a large number of collaborators in government agencies, universities, natural history museums, botanical gardens, and other conservation organizations. This information has been developed primarily to help in guiding conservation and informing environmental planning and management.

Conservation ranks are either state (S) or global (G) and are based on a one-to-five scale, ranging from critically imperiled (S1 or G1) to demonstrably secure (S5 or G5). These assessments are based on the best available information, considering a variety of factors such as abundance, distribution, population trends, and threats. Global ranks apply to the status of a species throughout its range. The system is widely used by nationwide agencies and organizations, as the best available scientific and objective assessment of a species' rarity throughout its range.

A rank involving two numbers indicates uncertainty of rank. For example, an S2S3 or a G2G3 rank indicates that the species may be S2 or S3 (or G2 or G3), but that existing data do not allow that determination to be made.

N.C. RANK – PLANTS

N.C. RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
S1	1-5	Critically Imperiled	Critically imperiled 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	6-20	Imperiled	Imperiled 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	21-100	Vulnerable	Vulnerable to extinction either because rare or uncommon, 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 to 10,000 individuals.
S4	101-1,000	Apparently Secure	Apparently secure and widespread, usually with more than 100 occurrences and more than 10,000 individuals.
S5	1,001+	Secure	Common, widespread, and abundant. Essentially ineradicable under present conditions. Typically with considerably more than 100 occurrences and more than 10,000 individuals.
SH	0?	Historical	Of historical occurrence, 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. Note: an element is not automatically assigned an SH (or SX) rank if it has not been verified in the past 20 years; some effort must have been made to locate or relocate occurrences.
SX	0	Presumed Extirpated	Believed to be extirpated. Has not been located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
SU	Unknown	Unrankable	Currently unrankable due to lack of information or substantially conflicting information about status or trends. More information is needed.
SNR	Unknown	Not Ranked	Statewide rank not yet assessed.
SNA	N/A	Not Applicable	A conservation status rank is not applicable because the element is not a suitable target for conservation for one of these reasons: <ul style="list-style-type: none"> • Hybrid – an interspecific hybrid without conservation value;

N.C. RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
			<ul style="list-style-type: none"> • Exotic Origin – not native to North Carolina; • Accidental/Nonregular – outside usual range and not regularly found in North Carolina; • Not Confidently Present – never documented as present in NC; • Synonym – the taxon is not recognized by the NCNHP.
S ?	---	Uncertain	Denotes inexact or uncertain numeric rank.

GLOBAL STATUS - PLANTS

GLOBAL RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
G1	1-5	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) or acres (<2,000) or linear miles (<10).
G2	6-20	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) or acres (2,000 to 10,000) or linear miles (10 to 50).
G3	21-100	Vulnerable	Vulnerable globally either because very rare throughout its range, found only in a restricted range (even if abundant at some locations), or other factors making it vulnerable to extinction. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
G4	101-1,000	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	1,001+	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.
GH	0?	Historical	Known only from historical occurrences, but with some expectation that it may be rediscovered. May still be extant; further searching is needed.

GLOBAL RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
GX	0	Presumed Extinct	Believed to be extinct throughout its range (e.g., passenger pigeon) with virtually no likelihood that it will be rediscovered. Not located despite intensive searches of historical sites and other appropriate habitat.
GU	Unknown	Unrankable	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends; need more information.
GNR	Unknown	Not Ranked	Global rank not yet assessed.
G_T_	---	Subspecies or Variety Rank	The rank of a taxonomic 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.
G_?	---	Uncertain	Denotes inexact or uncertain numeric rank.
G_Q	---	Questionable Taxonomy	Taxonomic classification 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 element having a lower-priority conservation status rank.

EXPLANATION OF STATUS AND RANK CODES FOR ANIMALS

Status Codes

In North Carolina, Endangered, Threatened, and Special Concern species have legally protected status through the North Carolina Wildlife Resources Commission (NCWRC). The Natural Heritage Program maintains computerized records and GIS map files on Significantly Rare species, as well as species considered extirpated in the state.

United States Status is designated by the U.S. Fish and Wildlife Service (USFWS) and the U.S. National Marine Fisheries Service (USNMFS) in accordance with the U.S. Endangered Species Act of 1973 (USESA), as amended. Plants and plant varieties, (including fungi and lichens), animal species and subspecies, and vertebrate populations are considered for Endangered or Threatened status according to the criteria established under the USESA. Proposals and determinations to add taxa or populations to the Lists of Endangered and Threatened Wildlife and plants are published in the Federal Register. Additionally, the USFWS and the USNMFS periodically publish a Notice of Review or Notice of Reclassification in the Federal Register that presents an updated list of plant and animal taxa that are regarded as candidates or proposed for possible addition to the Lists of Endangered and Threatened Wildlife and Plants. Contact the Asheville or Raleigh Ecological Services Field Offices for more information.

N.C. STATUS – ANIMALS

N.C. STATUS 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 to be in jeopardy or any species of wild animal

N.C. STATUS CODE	STATUS	DEFINITION
		determined to be an Endangered species pursuant to the Endangered Species Act. (G.S. 113-25.)
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. (G.S. 113-25.)
SC	Special Concern	Any species of wild animal native or once-native to North Carolina which is determined by the NCWRC to require monitoring but which may be taken under regulations adopted under the provisions of the Article. (G.S.113-25)
SR	Significantly Rare	This is a NCNHP designation. Any species which has not been listed as an Endangered, Threatened, or Special Concern species, but which exists in the state (or recently occurred in the state) in small numbers (generally 1-100 statewide populations) and has been determined by the NCNHP to need monitoring. Significantly Rare species include species of historical occurrence with some likelihood of rediscovery in the state and species substantially reduced in numbers by habitat destruction, direct exploitation, or disease. Species considered extirpated in the state, with little likelihood of rediscovery, are given no N.C. status (unless already listed by the NCWRC or NCPCP as E, T, or SC).
SR-G	---	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	This is an NCNHP designation for any other species believed to be rare and of conservation concern in the state but not warranting active monitoring at this time.
W1	Population Decline in NC	Species that are known to be declining in North Carolina . The distribution or population sizes of such species in the state are fairly well known; loss of habitat is not necessarily a factor.
W2	Rare but Relatively Secure	Species whose status in N.C. is relatively well known and 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 Rare List. Many of these species were formerly on the Rare List; they are retained in this category because they require a lower level of monitoring to ensure their long-term security.
W3	Poorly Known in NC	Species with inadequate information about their distribution and rarity in N.C. These are generally species which appear to be rare based on museum records and field experience of NCNHP staff, consultants, and cooperating scientists. Further information is needed to determine the true status of

N.C. STATUS CODE	STATUS	DEFINITION
		these species in N.C.
W4	Rare but Questionable Documentation	Species that have been reported from N.C. without adequate documentation. These species should be listed at a higher level when their reported occurrence in N.C. 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.
W5	Threat to Habitat	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 vehicles on beaches), among other types of threats. Threats can also include use of pesticides, acid rain, fire suppression, over-collection by zoologists, and other factors.
W6	Rare but Believed Not Native	Species known to occur in N.C. that current data suggest are not native to N.C. but whose native occurrence is plausible. Some of these species were previously listed at a higher level, but field investigations suggest that all known N.C. occurrences are introductions.

U.S. STATUS – ANIMALS

U.S. STATUS CODE	STATUS	DEFINITION
E	Endangered	A taxon that is in danger of extinction throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).
T	Threatened	A taxon that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (Public Law 93-205 87 Stat. 884).
C	Candidate	Taxa for which the USFWS 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 USFWS encourages state and other federal agencies as well as other affected parties to give consideration to these taxa in environmental planning (Federal Register, 28 February 1996). Taxa formerly considered “Category 1” are now considered “Candidate.”

U.S. STATUS CODE	STATUS	DEFINITION
BGPA	Bald and Golden Eagle Protection Act	In the 9 July 2007 Federal Register (72:37346-37372), the bald eagle was declared recovered and removed (delisted) from the Federal List of Threatened and Endangered Wildlife. After delisting, the Bald and Golden Eagle Protection Act (Eagle Act)(16U.S.C. 668-668d) becomes the primary law protecting bald eagles. The Eagle Act prohibits take of bald and golden eagles and provides a statutory definition of “take” that includes “disturb.” The USFWS has developed National Bald Eagle Management Guidelines to provide guidance to land managers, landowners, and others as to how to avoid disturbing bald eagles. For additional information please see http://www.fws.gov/migratorybirds/baldeagle.htm .
EXP	Experimental Population	A taxon listed as experimental (either essential or nonessential). Experimental, nonessential populations of endangered species (e.g., red wolf) are treated as threatened species on public land, for consultation purposes, and a species proposed for listing on private land.
P_	Proposed	Species proposed in the Federal Register as a status different from its current federal status.
T (S/A)	Threatened due to Similarity of Appearance	Section 4 (e) of the USESA 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 USESA [Federal Register 4 November 1997, Volume 62(213):59605-59623].
T-4(d)	Threatened with a 4(d) Rule	Section 4(d) of the ESA allows special regulations for threatened species that modify normal ESA protections when it is determined that such a modification is necessary and advisable to provide for the conservation of that species. A 4d rule is specific to the particular plant or animal for which it was created. For additional information, see http://www.fws.gov/midwest/endangered/mammals/nlba/ .

Ranking System

Natural Heritage Programs and the NatureServe Network have developed a consistent method for evaluating the relative imperilment of both species and ecological communities. These assessments led to the designation of a conservation status rank. These ranks provide an estimate of extinction risk. Conservation rank values have been assigned over the past 30 years by the NCNHP, NatureServe, and a large number of collaborators in government agencies, universities, natural history museums, botanical gardens, and other conservation organizations. This information has been developed primarily to help in guiding conservation and informing environmental planning and management.

Conservation ranks are either state (S) or global (G) and are based on a one-to-five scale, ranging from critically imperiled (S1 or G1) to demonstrably secure (S5 or G5). These assessments are based on the best

available information, considering a variety of factors such as abundance, distribution, population trends, and threats. Global ranks apply to the status of a species throughout its range. The system is widely used by nationwide agencies and organizations, as the best available scientific and objective assessment of a species' rarity throughout its range.

A rank involving two numbers indicates uncertainty of rank. For example, an S2S3 or a G2G3 rank indicates that the species may be S2 or S3 (or G2 or G3), but that existing data do not allow that determination to be made.

N.C. RANK – ANIMALS

N.C. RANK	NUMBER OF EXTANT OCCURRENCES	DESIGNATION	DESCRIPTION
S1	1-5	Critically Imperiled	Critically imperiled 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	6-20	Imperiled	Imperiled 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	21-100	Vulnerable	Vulnerable to extinction either because rare or uncommon, 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 to 10,000 individuals.
S4	101-1,000	Apparently Secure	Apparently secure and widespread, usually with more than 100 occurrences and more than 10,000 individuals.
S5	1,001+	Secure	Common, widespread, and abundant. Essentially ineradicable under present conditions. Typically with considerably more than 100 occurrences and more than 10,000 individuals.
SH	0?	Historical	Of historical occurrence, 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. Note: an element is not automatically assigned an SH (or SX) rank if it has not been verified in the past 20 years; some effort must have been made to locate or relocate occurrences.
SX	0	Presumed Extirpated	Believed to be extirpated. Has not been located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

N.C. RANK	NUMBER OF EXTANT OCCURRENCES	DESIGNATION	DESCRIPTION
SU	Unknown	Unrankable	Currently unrankable due to lack of information or substantially conflicting information about status or trends. More information is needed.
SNR	Unknown	Not Ranked	Statewide rank not yet assessed.
SNA	N/A	Not Applicable	A conservation status rank is not applicable because the element is not a suitable target for conservation for one of these reasons: <ul style="list-style-type: none"> • Hybrid – an interspecific hybrid without conservation value; • Exotic Origin – not native to North Carolina; • Accidental/Nonregular – outside usual range and not regularly found in North Carolina; • Not Confidently Present – never documented as present in NC; • Synonym – the taxon is not recognized by the NCNHP.
S_B	1-?	Breeding	Rank of the breeding population in the state. Used for migratory species only. Ex: Bachman's sparrow (<i>Peucaea aestivalis</i>) is S3B,S2N).
S_N	1-?	Nonbreeding	Rank of the nonbreeding population in the state. Used for migratory species only. Ex: Bachman's sparrow.
S_?	---	Uncertain	Denotes inexact or uncertain numeric rank.

GLOBAL RANK – ANIMALS

GLOBAL RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
G1	1-5	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) or acres (<2,000) or linear miles (<10).
G2	6-20	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) or acres (2,000 to 10,000) or linear miles (10 to 50).
G3	21-100	Vulnerable	Vulnerable globally either because very rare throughout its range, found only in a restricted range (even if abundant at some locations), or other factors making it vulnerable to extinction.

GLOBAL RANK	NUMBER OF EXTANT POPULATIONS	DESIGNATION	DESCRIPTION
			Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
G4	101-1,000	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	1,001+	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.
GH	0?	Historical	Known only from historical occurrences, but with some expectation that it may be rediscovered. May still be extant; further searching is needed.
GX	0	Presumed Extinct	Believed to be extinct throughout its range (e.g., passenger pigeon) with virtually no likelihood that it will be rediscovered. Not located despite intensive searches of historical sites and other appropriate habitat.
GU	Unknown	Unrankable	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends; need more information.
GNR	Unknown	Not Ranked	Global rank not yet assessed.
G_T_	---	Subspecies or Variety Rank	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.
G ?	---	Uncertain	Denotes inexact or uncertain numeric rank.
G_Q	---	Questionable Taxonomy	Taxonomic classification 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 element having a lower-priority conservation status rank.