



## NEW HAMPSHIRE NATURAL HERITAGE BUREAU

DRED - DIVISION OF FORESTS & LANDS

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# Rare Animal List for New Hampshire

Including species listed as threatened or endangered  
under the NH Endangered Species Conservation Act of 1979

July 2013

This list is maintained in cooperation with the



## Nongame & Endangered Wildlife Program

New Hampshire Fish & Game Department  
11 Hazen Drive, Concord, NH 03301  
(603) 271-2462



## A Quick Overview of the NH Natural Heritage Bureau's Purpose and Policies

The Natural Heritage Bureau is mandated by the Native Plant Protection Act of 1988 (NH RSA 217-A) to determine protective measures and requirements necessary for the survival of native plant species in the state, to investigate the condition and degree of rarity of plant species, and to distribute information regarding the condition and protection of these species and their habitats.

The Natural Heritage Bureau provides information to facilitate informed land-use decision-making. We are not a regulatory agency; instead, we work with landowners and land managers to help them protect the State's natural heritage and meet their land-use needs.

The Natural Heritage Bureau has three facets:

***Inventory*** involves identifying new occurrences of sensitive species and classifying New Hampshire's biodiversity. We currently study more than 630 plant and animal species and 190 natural communities. Surveys for rarities on private lands are conducted only with landowner permission.

***Tracking*** is the management of occurrence data. Our database currently contains information about more than 6,000 plant, animal, and natural community occurrences in New Hampshire.

***Interpretation*** is the communication of Natural Heritage Bureau information. Our goal is to cooperate with public and private land managers to help them *protect* rare species populations and exemplary natural communities.



The Nongame & Endangered Wildlife Program of the NH Fish & Game Department coordinates protection efforts for the state's wildlife that are not hunted, fished, or trapped. The Nongame Program works closely with the NH Natural Heritage Bureau to maintain a database of rare and imperiled wildlife populations throughout the state. Locational information about rare animals in the Natural Heritage Bureau database compliments a habitat-based database for all of New Hampshire's wildlife that is managed by the NH Fish & Game Department.

### ***Animals Tracked by the Nongame Program and the NH Natural Heritage Bureau***

The following list is our current assessment of the status of the state's rarest and most imperiled animal species. The Nongame Program has developed the list in cooperation with researchers, conservation organizations such as the Audubon Society of New Hampshire, knowledgeable amateur biologists, and the NH Natural Heritage Bureau. We obtained wildlife locations from sources including museum specimens, personal contacts, the scientific literature, and through extensive field research. It is important for readers to remember that this list is dynamic – as new discoveries are made or populations are lost, species may be added to or removed from the list.

For each species, we have provided the following information:

***Common Name*** Common names are provided for all species that have them. Many insect species, particularly moths, do not have common names, so either general terms such as "A Noctuid Moth" are used or no name is given ("—").

***Scientific Name*** Scientific names are standardized with the scientific names used by other Natural Heritage programs throughout the United States, Canada, the Caribbean, Latin America, and South America.

***Global & State Ranks*** When considering the rarity of a species, it is important to consider the status of a species both in New Hampshire and across its total range. The degree of rarity within New Hampshire is noted with a "State Rank" and throughout its range with a "Global Rank." Ranks are on a scale of 1 to 5, with a 1 indicating critical imperilment, a 3 indicating that the species is vulnerable, and a 5 indicating that the species is secure. Some species, such as the dwarf wedgemussel (*Alasmidonta heterodon*), are critically imperiled both globally and in New Hampshire. Other species, such as the upland sandpiper (*Bartramia longicauda*), are very rare in New Hampshire (S1) but quite common in other parts of their range (G5).

The rankings for wildlife are based more on the degree of imperilment than on the number of occurrences in the state, although abundance certainly plays a role in assessing a species' long-term viability in New Hampshire. Some species, such as the fish crow (*Corvus ossifragus*) have only a few occurrences in New Hampshire but, since they are expanding northward into the state, they are considered to be vulnerable but not imperiled. Blandings turtles (*Emydoidea blandingii*), on the other hand, appear to be distributed fairly broadly across the state, but populations are extremely small and vulnerable to habitat loss, so they are considered to be vulnerable.

In this technical list, we have noted the full global and state ranks. The codes are defined on pages iii and iv.



### ***Listing***

A portion of New Hampshire's rare animals are listed as "threatened" or "endangered" under the NH Endangered Species Conservation Act of 1979 (NH RSA 212-A). "Endangered" species are those in danger of being extirpated from the state, while "threatened" species face the possibility of becoming "endangered." A subset of these species are also listed under the federal Endangered Species Act of 1973. In New Hampshire, an additional "special concern" list contains (a) species that could become "threatened" in the foreseeable future if conservation actions are not taken or that were recently recovered enough to be removed from the endangered and threatened category and (b) species for which a large portion of their global or regional range (or population) occurs in New Hampshire and where actions to protect these species habitat will benefit the species' global population. Species that do not meet the criteria for "endangered", "threatened", or "special concern", but that are still biologically rare, as indicated by the State and Global Ranks, are also listed as rare in New Hampshire.

### ***Known Sites***

There has not been a comprehensive search of the state for rare species, so we are frequently finding or learning about previously unknown populations. Further, many populations have not been checked since they were originally found, sometimes more than 50 years ago, so we do not know the status of these populations. We have therefore separated known sites into two sub-categories: those last seen more than 20 years ago, and those reported within the last 20 years. This distinction helps show the state of our knowledge about a given species and the need for additional research. If no locations are indicated in the list (- -), the species is known to have once occurred in the state, but specific sites are not in our database.

### ***You Can Help!***

Our biologists can only cover so much ground, so we are constantly seeking information from other sources. Knowledgeable recommendations for adding or removing species from the list of "endangered" and "threatened" species are always welcomed. Further, locational information about any of the species we track will help make our database more complete and therefore more useful for land-use planning. A form for reporting rare animal species that you find is attached to the back of this list. It is the policy of the NH Natural Heritage Bureau not to survey on private property without landowner permission, so please respect your neighbor's privacy. Thank you!

If you have any questions or need additional information, please do not hesitate to contact us.

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### ***Explanation of Global and State Rank Codes***

Ranks describe rarity both throughout a species' range (globally, or "G" rank) and within New Hampshire (statewide, or "S" rank). The rarity of sub-species and varieties is indicated with a taxon ("T") rank. For example, a G5T1 rank shows that the species is globally secure (G5) but the sub-species is critically imperiled (T1).

<i>Code</i>	<i>Examples</i>	<i>Description</i>
<b>1</b>	G1 S1	Critically imperiled because extreme rarity (generally one to five occurrences) or some factor of its biology makes it particularly vulnerable to extinction.
<b>2</b>	G2 S2	Imperiled because rarity (generally six to 20 occurrences) or other factors demonstrably make it very vulnerable to extinction.
<b>3</b>	G3 S3	Either very rare and local throughout its range (generally 21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction because of other factors.
<b>4</b>	G4 S4	Widespread and apparently secure, although the species may be quite rare in parts of its range, especially at the periphery.
<b>5</b>	G5 S5	Demonstrably widespread and secure, although the species may be quite rare in parts of its range, particularly at the periphery.
<b>U</b>	GU SU	Status uncertain, but possibly in peril. More information needed.
<b>H</b>	GH SH	Known only from historical records, but may be rediscovered. A G5 SH species is widespread throughout its range (G5), but considered historical in New Hampshire (SH).
<b>X</b>	GX SX	Believed to be extinct. May be rediscovered, but evidence indicates that this is less likely than for historical species. A G5 SX species is widespread throughout its range (G5), but extirpated from New Hampshire (SX).

The following modifiers indicate that there is some question about a species' rank.

<i>Code</i>	<i>Examples</i>	<i>Description</i>
<b>Q</b>	G5Q GHQ	Questions or problems may exist with the species' or sub-species' taxonomy, so more information is needed.
<b>?</b>	G3? S3?	The rank is uncertain due to insufficient information at the state or global level, so more inventories are needed. When no rank has been proposed the rank may be "G5T?" or "S?"

The following modifiers indicate when the breeding status of a migratory species is considered separately from individuals passing through or not breeding within the New Hampshire. These modifiers are only attached to state ranks.

<i>Code</i>	<i>Example</i>	<i>Description</i>
<b>B</b>	SHB	Indicates the breeding status in New Hampshire of a migratory species.
<b>N</b>	S1N	Indicates the non-breeding status in New Hampshire of a migratory species. These species are typically over-wintering birds with regular aggregation areas that could be conservation targets.



Breeding-status modifiers may be used alone or in combinations. For example:

- |         |  |
|---------|--|
| S3B     | Breeding occurrences are uncommon (S3B), and the species does not over-winter in New Hampshire.  |
| SUB,S1N | The breeding status of the species is unknown (SUB), and any wintering site is critically imperiled or extremely rare (S1N) regardless of breeding status. |

When ranks are somewhat uncertain or the species' status appears to fall between two ranks, the ranks may be combined. For example:

- |            |  |
|------------|--|
| G4G5       | The species may be globally secure (G5), but appears to be at some risk (G4).  |
| G5T2T3     | The species is globally secure (G5), but the sub-species is somewhat imperiled (T2T3).   |
| G4?Q       | The species appears to be relatively secure (G4), but more information is needed to confirm this (?). Further, there are questions or problems with the species' taxonomy (Q). |
| G3G4Q S1S2 | The species is globally uncommon (G3G4), and there are questions about its taxonomy (Q). In New Hampshire, the species is very imperiled (S1S2).                               |



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
<b>Invertebrates - Mollusks</b>						
Brook Floater ( <i>Alasmidonta varicosa</i> )	G3	S1	--	E	3	29
Dwarf Wedge Mussel ( <i>Alasmidonta heterodon</i> )	G1G2	S1	E	E	6	8
Eastern Pond Mussel ( <i>Ligumia nasuta</i> )	G4	S1	--	SC	2	6
<b>Invertebrates - Ants &amp; Wasps</b>						
Fen Ant ( <i>Lasius minutus</i> )	GNR	S1	--	--	-	2
<b>Invertebrates - Beetles</b>						
A Tiger Beetle ( <i>Cicindela ancocisconensis</i> )	G3	S1S3	--	--	-	2
A Tiger Beetle ( <i>Cicindela longilabris</i> )	G5	S2S4	--	--	-	1
A Tiger Beetle ( <i>Cicindela patruela</i> )	G3	SH	--	--	-	-
Beach-dune Tiger Beetle ( <i>Cicindela hirticollis</i> )	G5	SH	--	--	1	-
Cobblestone Tiger Beetle ( <i>Cicindela marginipennis</i> )	G2	S1	--	E	-	5
Elusive Hydroporus Diving Beetle ( <i>Hydroporus elusivus</i> )	GNRQ	SH	--	--	-	-
Margined Tiger Beetle ( <i>Cicindela marginata</i> )	G5	S1	--	--	1	-
Puritan Tiger Beetle ( <i>Cicindela puritana</i> )	G1G2	SH	T	E	-	-
<b>Invertebrates - Butterflies &amp; Moths</b>						
-- ( <i>Agrotis stigmata</i> )	G4	SU	--	--	-	1
-- ( <i>Apantesis carlotta</i> )	G5	SU	--	--	-	1
-- ( <i>Catocala pretiosa pretiosa</i> )	G4T2	SX	--	--	-	-
-- ( <i>Papaipema lysimachiae</i> )	G4	SNR	--	--	2	-
-- ( <i>Sthenopis auratus</i> )	G3G4	SU	--	--	-	-
-- ( <i>Syngrapha microgamma nearctica</i> )	G5T4	SU	--	--	-	-
-- ( <i>Syngrapha montana</i> )	G4	SU	--	--	-	-
-- ( <i>Virbia lamae</i> )	G4	S1S2	--	--	-	-
-- ( <i>Xanthorhoe algidata</i> )	G4G5	S2S3	--	--	2	-
-- ( <i>Xestia staudingeri</i> )	GH	SH	--	--	-	-
A Geometrid Moth ( <i>Carsia sororiata alpinata</i> )	G5T2Q	S2	--	--	-	-
A Geometrid Moth ( <i>Euchlaena madusaria</i> )	G4	S1	--	--	-	1
A Geometrid Moth ( <i>Eulithis destinata triangulata</i> )	G5TNR	S2	--	--	-	-
A Geometrid Moth ( <i>Hesperumia sulphuraria</i> )	G5	SNR	--	--	-	-
A Geometrid Moth ( <i>Metarranthia apiciaria</i> )	G1G3	S1	--	--	2	-
A Geometrid Moth ( <i>Xanthorhoe ramaria</i> )	G5	S2S3	--	--	1	-
A Moth ( <i>Gazoryctra hyperborea</i> )	G5	S1S3	--	--	1	-
A Moth ( <i>Grammia quenseli</i> )	G5	S2	--	--	3	-
A Moth ( <i>Gynaephora rossii</i> )	G5	S2	--	--	2	-
A Noctuid Moth ( <i>Acronicta hamamelis</i> )	G4?	S1	--	--	-	2
A Noctuid Moth ( <i>Acronicta lanceolaria</i> )	G4	S3	--	--	1	-
A Noctuid Moth ( <i>Acronicta spinigera</i> )	G4	SNR	--	--	-	-
A Noctuid Moth ( <i>Anarta melanopa</i> )	G5	SNR	--	--	9	-
A Noctuid Moth ( <i>Andropolia contacta</i> )	G5	SH	--	--	1	-
A Noctuid Moth ( <i>Apamea burgessi</i> )	G4	SU	--	--	-	1
A Noctuid Moth ( <i>Apamea cristata</i> )	G4	SH	--	--	-	-
A Noctuid Moth ( <i>Chaetagnathia cerata</i> )	G3G4	S1S2	--	--	5	-
A Noctuid Moth ( <i>Chytonix sensilis</i> )	G4	S1S2	--	--	2	1
A Noctuid Moth ( <i>Cucullia speyeri</i> )	G4	S3	--	--	1	-
A Noctuid Moth ( <i>Eucoptocnemis fimbriaris</i> )	G4	S1	--	--	2	1
A Noctuid Moth ( <i>Euxoa dissona</i> )	G5	S2	--	--	1	-



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
A Noctuid Moth ( <i>Euxoa pleuritica</i> )	G4	S1	--	--	3	-
A Noctuid Moth ( <i>Feltia manifesta</i> )	G4	SH	--	--	2	-
A Noctuid Moth ( <i>Hadena capsularis</i> )	G5	SH	--	--	1	-
A Noctuid Moth ( <i>Hydraecia immanis</i> )	G4	SU	--	--	-	-
A Noctuid Moth ( <i>Idia diminuendis</i> )	G4G5	S2S4	--	--	3	2
A Noctuid Moth ( <i>Lasionycta leucocycla hampa</i> )	G5T1T3	S2	--	--	1	-
A Noctuid Moth ( <i>Lasionycta subdita</i> )	G4	S1S2	--	--	2	-
A Noctuid Moth ( <i>Lemmeria digitalis</i> )	G4	SH	--	--	1	-
A Noctuid Moth ( <i>Lithophane thaxteri</i> )	G4	SU	--	--	2	1
A Noctuid Moth ( <i>Platyperigea meralis</i> )	G4	S1	--	--	2	-
A Noctuid Moth ( <i>Sphinx canadensis</i> )	G4	SH	--	--	1	-
A Noctuid Moth ( <i>Sympistis funesta</i> )	G5	S2	--	--	2	-
A Noctuid Moth ( <i>Sympistis melaleuca</i> )	G5	S1	--	--	1	-
A Noctuid Moth ( <i>Xestia atrata</i> )	G5	SH	--	--	-	-
A Noctuid Moth ( <i>Xestia fabulosa</i> )	G4	S2	--	--	2	-
A Noctuid Moth ( <i>Xestia homogena</i> )	G4	S1S2	--	--	2	-
A Noctuid Moth ( <i>Xestia imperita</i> )	G5	S2S3	--	--	1	-
A Noctuid Moth ( <i>Xestia okakensis</i> )	G4	SH	--	--	1	-
A Noctuid Moth ( <i>Xestia scropolana</i> )	G4	SH	--	--	1	-
A Noctuid Moth ( <i>Xestia speciosa</i> )	G5	S2S3	--	--	1	-
A Noctuid Moth ( <i>Zale curema</i> )	G3G4	S2	--	--	-	1
A Noctuid Moth ( <i>Zale obliqua</i> )	G5	S2	--	--	-	2
A Noctuid Moth ( <i>Zale sp. 1 nr. lunifera</i> )	G3G4	S1	--	--	-	2
Appalachian Brown ( <i>Satyrodes appalachia</i> )	G4	S1?	--	--	1	1
Atlantis Fritillary ( <i>Speyeria atlantis</i> )	G5	SNR	--	--	-	-
Aureolaria Seed Borer ( <i>Pyrrhia aurantiago</i> )	G3G4	SU	--	--	1	-
Barred Itame ( <i>Speranza subcessaria</i> )	G4	SH	--	--	1	-
Barrens Chaetagnalea ( <i>Chaetagnalea tremula</i> )	G5	SNR	--	--	-	1
Barrens Daggermoth ( <i>Acrionicta albarufa</i> )	G3G4	SNR	--	--	-	-
Barrens Itame ( <i>Speranza exonerata</i> )	G3G4	S1S2	--	SC	-	2
Barrens Xylotype ( <i>Xylotype capax</i> )	G4	S2	--	SC	4	2
Blueberry Gray ( <i>Glena cognataria</i> )	G4	S3?	--	--	1	1
Blueberry Sallow Moth ( <i>Sympistis dentata</i> )	G4	S2	--	--	1	2
Bog Elfin ( <i>Callophrys lanoraieensis</i> )	G3G4	SH	--	--	1	-
Bog Tiger Moth ( <i>Grammia speciosa</i> )	G5	SU	--	--	-	-
Boomerang Dart Moth ( <i>Xestia perquiritata</i> )	G5	S2S3	--	--	3	-
Broad-lined Catopyrrha ( <i>Catopyrrha coloraria</i> )	G3G4	S1	--	SC	1	-
Brown-bordered Geometer Moth ( <i>Eumacaria madopata</i> )	G4	S2S4	--	--	1	1
Clemens' Sphinx ( <i>Sphinx luscitiosa</i> )	G4	SU	--	--	-	-
Cobweb Skipper ( <i>Hesperia metea</i> )	G4	S3	--	--	3	2
Columbine Duskywing ( <i>Erynnis lucilius</i> )	G4	S1	--	--	4	-
Currant Spanworm Moth ( <i>Speranza ribearia</i> )	G4	SX	--	--	1	-
Delaware Skipper ( <i>Anatrytone logan</i> )	G5	S3S4	--	--	-	1
Dusted Skipper ( <i>Atrytonopsis hianna</i> )	G4G5	S3?	--	--	1	1
Early Hairstreak ( <i>Erora laeta</i> )	GU	SU	--	--	-	-
Edwards' Hairstreak ( <i>Satyrium edwardsii</i> )	G4	S3	--	--	1	1
False Pine Looper ( <i>Nepytia pellucidaria</i> )	GU	S1	--	--	-	2
Frosted Elfin ( <i>Callophrys irus</i> )	G3	S1	--	E	4	3





Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
Golden Borer ( <i>Papaipema cerina</i> )	G2G4	SH	--	--	-	-
Graceful Clearwing ( <i>Hemaris gracilis</i> )	G3G4	S2S3	--	--	6	2
Hackberry Butterfly ( <i>Asterocampa celtis</i> )	G5	S2?	--	--	1	-
Henry's Elfin ( <i>Callophrys henrici</i> )	G5	S2S3	--	--	1	-
Hermit Sphinx ( <i>Lintneria eremitus</i> )	G4	SH	--	--	1	-
Hessel's Hairstreak ( <i>Callophrys hesseli</i> )	G3G4	S1	--	--	1	1
Hoary Comma ( <i>Polygonia gracilis</i> )	G5	S1	--	--	3	1
Hoary Edge ( <i>Achalarus lyciades</i> )	G4G5	SNA	--	--	-	-
Hoary Elfin ( <i>Callophrys polios</i> )	G5	SH	--	--	-	-
Horace's Dusky Wing ( <i>Erynnis horatius</i> )	G5	SU	--	--	1	-
Jutta Arctic ( <i>Oeneis jutta</i> )	G5	S3S4	--	--	-	-
Karner Blue Butterfly ( <i>Lycaeides melissa samuelis</i> )	G5T2	S1	E	E	4	1
Laurentian Skipper ( <i>Hesperia comma laurentina</i> )	G5T5	SNR	--	--	-	-
Little Glassywing ( <i>Pompeius verna</i> )	G5	SU	--	--	-	1
Mulberry Wing ( <i>Poanes massasoit</i> )	G4	S1S3	--	--	-	1
New Jersey Tea Span Worm ( <i>Apodrepanulatrix liberaria</i> )	G3	S1S2	--	--	1	1
No Common Name ( <i>Catocala sp. 1 nr. jair</i> )	G5	S1S2	--	--	-	1
Noctuid Moth ( <i>Zale submediana</i> )	G4	S3	--	--	1	2
Olive Hairstreak ( <i>Callophrys gryneus</i> )	G5	SH	--	--	-	-
Persius Dusky Wing ( <i>Erynnis persius persius</i> )	G5T1T3	S1	--	E	5	1
Phyllira Tiger Moth ( <i>Grammia phyllira</i> )	G4	S1	--	SC	3	1
Pine Barrens Zanclognatha Moth ( <i>Zanclognatha martha</i> )	G4	S1	--	SC	-	4
Pine Devil ( <i>Citheronia sepulcralis</i> )	G4	SX	--	--	3	-
Pine Pinion Moth ( <i>Lithophane lepida lepida</i> )	G4T1T3	S1S2	--	T	-	1
Pinion Moth ( <i>Xylena thoracica</i> )	G4	S2	--	--	1	2
Pink Sallow ( <i>Psectraglaea carnosa</i> )	G3	SH	--	--	4	-
Plum Sphinx ( <i>Sphinx drupiferarum</i> )	G4	SU	--	--	-	1
Satyr Anglewing ( <i>Polygonia satyrus</i> )	G5	SU	--	--	-	-
Semirelict Underwing ( <i>Catocala semirelecta</i> )	G5	SH	--	--	-	-
Silvery Crescentspot ( <i>Chlosyne nycteis</i> )	G4G5	SH	--	--	-	-
Sleepy Duskywing ( <i>Erynnis brizo brizo</i> )	G5T5	S2	--	SC	3	-
Southern Pine Sphinx ( <i>Lapara coniferarum</i> )	G5	S1S2	--	--	-	1
Southern Variable Dart Moth ( <i>Xestia elimata</i> )	G5	S3S4	--	--	-	2
Spiny Oakworm ( <i>Anisota stigma</i> )	G5	SH	--	--	2	-
The Anointed Sallow ( <i>Pyreferra ceromatica</i> )	GU	SX	--	--	-	-
The Cora Moth ( <i>Cerma cora</i> )	G3G4	S1S2	--	SC	2	1
The Tawny Emperor ( <i>Asterocampa clyton</i> )	G5	SNA	--	--	1	-
Twilight Moth ( <i>Lycia rachelae</i> )	G4G5	S2	--	--	1	1
Two-spotted Skipper ( <i>Euphyes bimacula</i> )	G4	S3S4	--	--	-	-
White Mountain Butterfly ( <i>Oeneis melissa semidea</i> )	G5T2	S2	--	T	-	2
White Mountain Fritillary ( <i>Boloria chariclea montinus</i> )	G5T2	S1	--	E	-	3
Wild Indigo Duskywing ( <i>Erynnis baptisiae</i> )	G5	S1	--	--	1	2



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
<b>Invertebrates - Dragonflies &amp; Damselflies</b>						
Arrowhead Spiketail ( <i>Cordulegaster obliqua</i> )	G4	S2	--	--	-	14
Banded Pennant ( <i>Celithemis fasciata</i> )	G5	S1	--	--	-	2
Big Bluet ( <i>Enallagma durum</i> )	G5	S1	--	--	-	2
Black Meadowhawk ( <i>Sympetrum danae</i> )	G5	S1	--	--	-	6
Blue Corporal ( <i>Ladona deplanata</i> )	G5	S1	--	--	-	3
Blue-fronted Dancer ( <i>Argia apicalis</i> )	G5	S2	--	--	1	8
Brook Snaketail ( <i>Ophiogomphus aspersus</i> )	G4	SNR	--	--	-	2
Carolina Saddlebags ( <i>Tramea carolina</i> )	G5	S1	--	--	-	4
Citrine Forktail ( <i>Ischnura hastata</i> )	G5	S2	--	--	-	14
Comet Darner ( <i>Anax longipes</i> )	G5	S1	--	--	-	3
Coppery Emerald ( <i>Somatochlora georgiana</i> )	G3G4	S1	--	SC	-	1
Ebony Boghaunter ( <i>Williamsonia fletcheri</i> )	G4	S3	--	SC	1	26
Forcipate Emerald ( <i>Somatochlora forcipata</i> )	G5	S2	--	--	2	8
Great Blue Skimmer ( <i>Libellula vibrans</i> )	G5	S1	--	--	-	1
Incurvate Emerald ( <i>Somatochlora incurvata</i> )	G4	S1S2	--	--	-	7
Lake Emerald ( <i>Somatochlora cingulata</i> )	G5	S2S3	--	--	1	16
Little Bluet ( <i>Enallagma minusculum</i> )	G4	SNR	--	--	-	3
Lyre-tipped Spreadwing ( <i>Lestes unguiculatus</i> )	G5	S1	--	--	2	3
Martha's Pennant ( <i>Celithemis martha</i> )	G4	S2S3	--	--	-	22
Mocha Emerald ( <i>Somatochlora linearis</i> )	G5	S1	--	--	-	4
Needham's Skimmer ( <i>Libellula needhami</i> )	G5	S1	--	--	-	3
New England Bluet ( <i>Enallagma laterale</i> )	G3G4	S1	--	--	-	2
Ocellated Emerald ( <i>Somatochlora minor</i> )	G5	S1S2	--	--	3	7
Pine Barrens Bluet ( <i>Enallagma recurvatum</i> )	G3	S1	--	SC	-	1
Pygmy Snaketail ( <i>Ophiogomphus howei</i> )	G3	S2	--	--	-	8
Rainbow Bluet ( <i>Enallagma antennatum</i> )	G5	S1	--	--	-	1
Rapids Clubtail ( <i>Gomphus quadricolor</i> )	G3G4	S1S2	--	SC	1	8
Ringed Boghaunter ( <i>Williamsonia lintheri</i> )	G3	S2	--	E	-	13
Ringed Emerald ( <i>Somatochlora albicincta</i> )	G5	S2	--	--	2	5
Riverine Clubtail ( <i>Stylurus amnicola</i> )	G4	S2S3	--	SC	-	11
Seaside Dragonlet ( <i>Erythrodiplax berenice</i> )	G5	S2	--	--	-	12
Sedge Darner ( <i>Aeshna juncea</i> )	G5	S1	--	--	2	3
Skillet Clubtail ( <i>Gomphus ventricosus</i> )	G3	S1	--	SC	1	6
Somatochlora franklini ( <i>Somatochlora franklini</i> )	G5	S1S2	--	--	1	6
Southern Pygmy Clubtail ( <i>Lanthus vernalis</i> )	G4	S2	--	--	-	11
Sparkling Jewelwing ( <i>Calopteryx dimidiata</i> )	G5	S2	--	--	-	9
Spatterdock Darner ( <i>Rhionaeschna mutata</i> )	G4	S2S3	--	--	-	21
Spine-crowned Clubtail ( <i>Gomphus abbreviatus</i> )	G3G4	SNR	--	--	-	2
Spot-winged Glider ( <i>Pantala hymenaea</i> )	G5	S2	--	--	-	8
Subarctic Bluet ( <i>Coenagrion interrogatum</i> )	G5	S1	--	--	-	2
Subarctic Darner ( <i>Aeshna subarctica</i> )	G5	S2	--	--	1	7
Swamp Darner ( <i>Epiaeschna heros</i> )	G5	S1	--	--	-	6
Taiga Bluet ( <i>Coenagrion resolutum</i> )	G5	S2S3	--	--	3	14
Tule Bluet ( <i>Enallagma carunculatum</i> )	G5	S2	--	--	1	7
Zebra Clubtail ( <i>Stylurus scudderi</i> )	G4	S1?	--	--	-	1



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
<b>Invertebrates - Mayflies</b>						
A Mayfly ( <i>Ameletus browni</i> )	G3G4	S1	--	--	-	-
A Mayfly ( <i>Ameletus tertius</i> )	G4	S1	--	--	-	-
<b>Vertebrates - Fish</b>						
Alewife ( <i>Alosa pseudoharengus</i> )	G5	S5	--	SC	-	-
American Brook Lamprey ( <i>Lampetra appendix</i> )	G4	S1	--	E	1	1
American Eel ( <i>Anguilla rostrata</i> )	G4	S3	--	SC	43	134
Atlantic Sturgeon ( <i>Acipenser oxyrinchus</i> )	G3	S1	--	--	1	-
Banded Sunfish ( <i>Enneacanthus obesus</i> )	G5	S3	--	SC	7	23
Blueback Herring ( <i>Alosa aestivalis</i> )	G5	S4	--	SC	-	-
Bridle Shiner ( <i>Notropis bifrenatus</i> )	G3	S2	--	T	2	20
Finescale Dace ( <i>Phoxinus neogaeus</i> )	G5	S3	--	SC	5	1
Lake Whitefish ( <i>Coregonus clupeaformis</i> )	G5	S3	--	SC	8	-
Northern Redbelly Dace ( <i>Phoxinus eos</i> )	G5	S3	--	SC	4	8
Rainbow Smelt ( <i>Osmerus mordax</i> )	G5	S3	--	SC	-	-
Redfin Pickerel ( <i>Esox americanus americanus</i> )	G5T5	S3	--	SC	10	22
Round Whitefish ( <i>Prosopium cylindraceum</i> )	G5	S1	--	SC	1	2
Sea Lamprey ( <i>Petromyzon marinus</i> )	G5	S3	--	SC	-	5
Shortnose Sturgeon ( <i>Acipenser brevirostrum</i> )	G3	SH	E	E	-	-
Sunapee Trout ( <i>Salvelinus alpinus</i> )	G5	SX	--	--	-	-
Swamp Darter ( <i>Etheostoma fusiforme</i> )	G5	S3	--	SC	3	10
<b>Vertebrates - Amphibians</b>						
Blue-spotted Salamander ( <i>Ambystoma laterale</i> )	G5	S3	--	SC	-	-
Fowler's Toad ( <i>Bufo fowleri</i> )	G5	S3	--	SC	2	4
Jefferson Salamander ( <i>Ambystoma jeffersonianum</i> )	G4	S2S3	--	SC	2	2
Jefferson/Blue-spotted Salamander Complex ( <i>Ambystoma hybrid pop. 3</i> )	GU	S2S3	--	--	-	8
Marbled Salamander ( <i>Ambystoma opacum</i> )	G5	S1	--	E	1	4
Northern Leopard Frog ( <i>Rana pipiens</i> )	G5	S3	--	SC	1	17
Slimy Salamander ( <i>Plethodon glutinosus</i> )	G5	SH	--	--	1	-
<b>Vertebrates - Reptiles</b>						
Blanding's Turtle ( <i>Emydoidea blandingii</i> )	G4	S1	--	E	50	659
Eastern Box Turtle ( <i>Terrapene carolina</i> )	G5	S1	--	SC	3	5
Eastern Hognose Snake ( <i>Heterodon platirhinos</i> )	G5	S1	--	E	13	28
Northern Black Racer ( <i>Coluber constrictor constrictor</i> )	G5T5	S2	--	T	7	47
Smooth Green Snake ( <i>Opheodrys vernalis</i> )	G5	S3	--	SC	4	56
Spotted Turtle ( <i>Clemmys guttata</i> )	G5	S2	--	T	11	108
Timber Rattlesnake ( <i>Crotalus horridus</i> )	G4	S1	--	E	10	2
Wood Turtle ( <i>Glyptemys insculpta</i> )	G4	S3	--	SC	4	189
<b>Vertebrates - Birds</b>						
American Pipit ( <i>Anthus rubescens</i> )	G5	S2B	--	SC	-	1
American Three-toed Woodpecker ( <i>Picoides dorsalis</i> )	G5	S2	--	T	3	4
Arctic Tern ( <i>Sterna paradisaea</i> )	G5	S1B	--	SC	-	2
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	G5	S2	--	T	-	88
Bank Swallow ( <i>Riparia riparia</i> )	G5	S3B	--	SC	-	-
Cerulean Warbler ( <i>Dendroica cerulea</i> )	G4	S3B	--	SC	1	1
Cliff Swallow ( <i>Petrochelidon pyrrhonota</i> )	G5	S3B	--	SC	-	-



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
Common Loon ( <i>Gavia immer</i> )	G5	S2B	--	T	-	288
Common Moorhen ( <i>Gallinula chloropus</i> )	G5	S2B	--	SC	2	3
Common Nighthawk ( <i>Chordeiles minor</i> )	G5	S1B	--	E	3	6
Common Tern ( <i>Sterna hirundo</i> )	G5	S2B	--	T	3	6
Eastern Meadowlark ( <i>Sturnella magna</i> )	G5	S3B	--	SC	-	-
Golden Eagle ( <i>Aquila chrysaetos</i> )	G5	SHB	--	E	-	-
Golden-winged Warbler ( <i>Vermivora chrysoptera</i> )	G4	S2B	--	SC	4	-
Grasshopper Sparrow ( <i>Ammodramus savannarum</i> )	G5	S2B	--	T	2	10
Henslow's Sparrow ( <i>Ammodramus henslowii</i> )	G4	SHB	--	--	1	-
Horned Lark ( <i>Eremophila alpestris</i> )	G5	S3B	--	SC	-	4
Least Bittern ( <i>Ixobrychus exilis</i> )	G5	S1B	--	SC	2	2
Least Tern ( <i>Sterna antillarum</i> )	G4	SHB	--	E	-	-
Loggerhead Shrike ( <i>Lanius ludovicianus</i> )	G4	SHB	--	--	-	-
Marsh Wren ( <i>Cistothorus palustris</i> )	G5	S3B	--	--	-	1
Nelson's Sparrow ( <i>Ammodramus nelsoni</i> )	G5	S3B	--	SC	-	2
Northern Harrier ( <i>Circus cyaneus</i> )	G5	S1B	--	E	4	7
Osprey ( <i>Pandion haliaetus</i> )	G5	S3B	--	SC	4	99
Peregrine Falcon ( <i>Falco peregrinus anatum</i> )	G4T4	S2	--	T	4	8
Pied-billed Grebe ( <i>Podilymbus podiceps</i> )	G5	S2B	--	T	14	14
Piping Plover ( <i>Charadrius melodus</i> )	G3	S1B	T	E	-	1
Purple Martin ( <i>Progne subis</i> )	G5	S1B	--	SC	9	9
Roseate Tern ( <i>Sterna dougallii dougallii</i> )	G4T3	S1B	E	E	-	1
Rusty Blackbird ( <i>Euphagus carolinus</i> )	G4	S3B	--	SC	-	8
Saltmarsh Sparrow ( <i>Ammodramus caudacutus</i> )	G4	S3B	--	SC	-	8
Seaside Sparrow ( <i>Ammodramus maritimus</i> )	G4	S1B	--	SC	1	-
Sedge Wren ( <i>Cistothorus platensis</i> )	G5	S1B	--	E	2	2
Sora ( <i>Porzana carolina</i> )	G5	S3B	--	SC	1	1
Upland Sandpiper ( <i>Bartramia longicauda</i> )	G5	S1B	--	E	2	4
Vesper Sparrow ( <i>Poocetes gramineus</i> )	G5	S2S3B	--	SC	6	6
Willet ( <i>Catoptrophorus semipalmatus</i> )	G5	S3B	--	SC	-	5
<b>Vertebrates - Mammals</b>						
American Marten ( <i>Martes americana</i> )	G5	S2	--	T	2	142
Canada Lynx ( <i>Lynx canadensis</i> )	G5	S1	T	E	-	1
Eastern Cougar ( <i>Felis concolor cougar</i> )	G5THQ	SH	E	--	-	-
Eastern Red Bat ( <i>Lasiurus borealis</i> )	G5	S3?B	--	SC	-	-
Gray Wolf ( <i>Canis lupus</i> )	G4	SX	--	E	-	-
Harbor Seal ( <i>Phoca vitulina</i> )	G5	S4N	--	--	-	-
Hoary Bat ( <i>Lasiurus cinereus</i> )	G5	S3B	--	SC	-	-
Indiana Bat ( <i>Myotis sodalis</i> )	G2	SNA	E	--	-	-
Little Brown Myotis ( <i>Myotis lucifugus</i> )	G3	S1	--	--	-	-
New England Cottontail ( <i>Sylvilagus transitionalis</i> )	G3	S1	--	E	-	21
Northern Bog Lemming ( <i>Synaptomys borealis sphagnicola</i> )	G4T3Q	S1	--	SC	2	1
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	G1G3	S1	--	SC	-	9
Silver-haired Bat ( <i>Lasionycteris noctivagans</i> )	G5	S3B	--	SC	-	-
Small Footed Bat ( <i>Myotis leibii</i> )	G1G3	S1	--	E	-	5
Tricolored Bat ( <i>Perimyotis subflavus</i> )	G3	S1	--	SC	1	1



Name	Rank		Listing		Known sites	
	Global	State	Federal	State	<1993	1993+
<b>Vertebrates - Bat Hibernacula</b>						
Bat hibernaculum ( <i>Bat Hibernaculum</i> )	GNR	S1	--	--	-	13

**Rank Prefix:**

G = Global Rank  
 S = State Rank  
 T = Global or State Rank for a subspecies or variety

**Rank Suffix:**

1 = Critically imperiled  
 2 = Imperiled  
 3 = Vulnerable  
 4 = Apparently secure  
 5 = Secure  
  
 B = Breeding population  
 N = Non-breeding population  
  
 H = Occurred historically, not seen recently  
 X = Extirpated  
  
 NR / U = Not ranked / Unknown  
 Q = Questionable taxonomy  
 ? = Uncertain

**Listing Codes:**

E = Endangered  
 T = Threatened

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 ? = Uncertain

**Listing Codes:**

E = Endangered  
 T = Threatened  
 SC = Special Concern

## Rare Species Occurrence Record

Please fill out this form to report the location of a rare plant or animal species to the New Hampshire Natural Heritage Bureau. Required information is indicated by an asterisk; other items are desirable but not required.

Rare species lists are at: [www.nhnaturalheritage.org](http://www.nhnaturalheritage.org)

Call (603) 271-2214 with any questions. Thank you!

If sent to NHB as a Word document, use the naming convention "Name Town Mon dd", where "Name" = what was seen (common or scientific) and town, month & day are where & when it was seen, e.g., "Loon Squam Aug 12" or "Scirpus longii Derry Sep 12".

### What and When

* Scientific Name:	
Common Name:	
* Date(s) Observed:	
* Who Observed It:	Phone # or email:

### Location

Town Name:
* Map. Attach a map with the location marked. Ideally, use a USGS topographic map. If you hand-sketch the map, be sure to include a north arrow, scale, and landmarks such as roads and major water bodies. If you provide GPS coordinates, please tell us the model of the unit and the datum (e.g., WGS 84 or NAD 83). Directions. Write this as if you are telling someone how to get back to the exact site:

### Taxonomy

* How did you identify the species? What traits helped you decide that you had seen this species? What similar species did you consider and how did you exclude them? Photos showing <b>key characteristics</b> are welcome. A specimen is usually required to document a new plant population, however, an entire plant should never be collected if there are < 20 plants present.
* Certainty of ID (1=dubious, 5=absolutely positive):
If a specimen was collected, collector, collection number, and where the specimen is stored:

## Biology

\* How many? If there are a few, count them. If there are a lot, estimate (e.g. 50-100)

Plants: how are they distributed, in how large an area? For example: "In a tight clump about 2 feet square" or "Scattered over a 30 x 60 foot area"

Evidence of reproduction? Plants: flowers/fruit/seed. Animals: nests/youngsters... etc.

Local surroundings: what do you see when you look around the area? Is it a steep slope or the middle of a swamp? What are the most common plants?

## Conservation Status (if known):

\* Land ownership: name of owner (private) or area (if public).

Phone number of owner (if known):

Is the landowner aware that you are reporting this find to NH Heritage? Y/N

Factors that indicate how secure the occurrence is (e.g. evidence of disturbance / owner is interested in protecting it...)