

last updated 8/25/04										
Scientific name	Synonyms	Common name	TNC G/N rank ¹	Natural Heritage S rank ²	State list ³	RFSS ⁴	WMNF Occurrence ⁵	Habitat summary	Comments ⁶	
AMPHIBIANS										
<i>Ambystoma jeffersonianum</i>		Jefferson salamander	G4 N4	NH:S2S3		N	likely	Mixed wetland and forested habitat. Vernal to semi-permanent pools are preferred breeding areas. Surrounding habitat usually mature forest with rocky soils, a duff layer, pit and mound topography, large (>10 cm) logs, and relatively closed canopy. Usually below 1700' elevation. Southern edge of WMNF is the northern edge of species' range	more easily impacted by fragmentation and habitat change than blue-spotted (Faccio, Jackson); hybridizes with blue-spotted salamanders, where species is uncertain two are addressed as a complex due to difficulty in identifying to species and variety of hybrids; where pure populations occur, is of even greater concern than in hybridized populations (Jackson); NE Tech Group species of concern due to risk of disappearing from northeast, lack of data, and hybridization with blue spotted; Jefferson or blue-spotted known on or near WMNF, but uncertain which species it was; no information on historic or current conditions to determine outcomes on WMNF, but tracked because panel assumed outcomes would be similar to GMNF (C current, D in future) because of similar management	
BIRDS										
<i>Falco peregrinus anatum</i>		American peregrine falcon	G4T3 N3	NH:S1 ME:S2B/S1S2N	NH:E ME:E	Y	known	Rocky cliffs, often near water. Forages in open areas.	recently delisted from federally endangered; tracked because is a Sensitive species for at least 5 years after delisting.	
<i>Haliaeetus leucocephalus</i>		Bald eagle	G4 N4	NH:S1 ME:S4	NH:E ME:T	ESA	N/A	Nest in large coniferous trees at edges of large bodies of water with abundant fish.	uncommon, edge of range; nesting not known or likely on Forest due to lack of suitable habitat; tracked because it is a federally listed species that probably forages on Forest so Forest is required to address potential impacts; panel agreed species has increased to or beyond historic conditions regionally	
<i>Dendroica castanea</i>		Bay-breasted warbler	G5 N5B	NH:S4B ME:S5		N	known	Primarily mature coniferous forests (though mixed forests used) up to 4000'. Prefers the thick lower vegetation at edges of small forest openings.	ecologically important as may have kept budworm at endemic levels in old spruce-fir stands (Foss); Partners In Flight Area 28 priority 1 species, BCR 14 highest priority species; viability concern in NH due to limited availability of mature spruce-fir forest (Foss); WMNF manages most of available habitat in state and management affects habitat suitability, so tracked on WMNF; most of Forest is moving toward improved habitat and species not a viability concern for Forest in near-term	
<i>Catharus bicknelli</i>		Bicknell's thrush	G4 N4BN	NH:S2S3B ME:S3B	ME:SC	Y	known	Spruce, fir, birch, and krummholz communities of high elevations.	NE Tech Group species of concern due to risk of disappearing from the Northeast; WMNF manages large portion of available habitat in species' global range; tracked because it is a Sensitive species; decline in outcome is anticipated due to increased recreational use	
<i>Gavia immer</i>		Common loon	G5 N4B N5N	NH:S3B/SZN ME:S4S5	NH:T	Y	known	Lakes and ponds at least ¼ mile long. Nests at water's edge. Often on islands. Require adequate prey base of small fish, amphibians to feed young. Needs little or no human disturbance	threats to habitat; vulnerable to disturbance; stable/increasing populations because recovering from historic declines; WMNF population lower than surrounding areas due to lack of habitat; panel felt that loon is probably a D outcome in NH, but is still viable, which we have defined as a C outcome, so recorded as C-D; panel agreed that loon levels are probably topping out in NH and can never rise higher than a C due to loss of habitat to development; tracked because of outcomes and because is RFSS	
<i>Podilymbus podiceps</i>		Pied-billed grebe	G5 N5	NH:S1B/SZN ME:S4B	NH:E	N	known	Waterbodies usually ≥ 12 acres with both open water and emergent vegetation.	NE Tech Group species of concern due to risk of declining populations and lack of data with suspected declines; main threats are loss and degradation of large, emergent wetlands; NH populations decreasing; known from Deer Hill bog on WMNF in ME, uncertain if breeding there but found during breeding season; wetland habitat range-wide and regionally has decline substantially in the past, but what outcome that indicates is uncertain; panelists agreed that species is still viable, so leaned toward a C outcome regionally; only one occurrence on WMNF, based on extensive habitat surveys, makes Forest viability a concern and no other animal species on the list could act as a surrogate.	

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<i>Euphagus carolinus</i>		Rusty blackbird	G5 N5	NH:S2 ME:S3N/S3S4B	NH:SC ME:SC	N	known	Prefers northern ponds, wetlands, beaver ponds typically between 1000' to 4000' in elev. Nests found in spruce and fir.	panel indicated very little is known about historic populations because was not really identified as a separate species until mid 20th century; outcomes based purely on stability of breeding habitat, but loss of wintering habitat in recent years is key concern; uses a portion of the habitats used by 3-toed woodpeckers and face some of same threats related to clearcutting in habitat, but woodpecker does not face wintering ground threat or risk from association with grackles and starlings and habitat is enough different that one is not a surrogate for the other; uncertain whether WMNF management is really likely to affect rusty blackbird, but harvest was one threat so kept on list to document potential for impact
<i>Picoides tridactylus</i>		Three-toed woodpecker	G5 N5	NH:S1 ME:S3	NH:T ME:SC	N	known	Year-round resident of spruce/fir zone, which typically occurs above 2500'. Breeds in mature coniferous forest with clumps of snags, including at least some 10-12" in diameter. May prefer flooded or swampy areas.	uncommon, edge of range; high elevation habitat on WMNF not in jeopardy, but rare on Forest; panel indicated WMNF manages most of available habitat in NH, although Forest probably has less than was available historically due to past logging; outcomes probably stable on WMNF though could improve with aging of conifer forests; retained as species of concern because of B-C outcome and high concentration on WMNF; no other species on the list would be a surrogate for snag requirements
FISH									
<i>Salmo salar</i>		Atlantic salmon	G5 N4	NH:S4 ME:S3		N	known	Larger streams of the Merrimack and Connecticut River watersheds. Also Saco River watershed below Hiram Falls.	NE Tech Group species of concern due to declining populations, lack of data with suspected declines, high portion of range in the northeast; massive restoration effort underway in New England; declining nationally; distinct population segment in Gulf of Maine listed under ESA; threats are numerous and success of reintroduction program is questionable (DMiller); no current viable populations, potential for reproduction in future with restoration (Ferguson); WMNF has non-native strain of a native species; strain qualifies as a desired non-native and restoration efforts imply viability concern, though none of the standard outcomes (A-E) really apply to a non-native taxon
INSECTS									
<i>Nephrocera slossonae</i>		a big-headed fly	??			N	known	Old growth northern hardwood or mixed coniferous forest above 1500'. Non-aquatic.	common in the Bowl RNA; apparently endemic to NH; 4 of 5 known occurrences are in WMNF; recommended for inclusion by Burger; serves as surrogate for another <i>Nephrocera</i> species that uses similar habitat
<i>Lordithon niger</i>		Black lordithon rove beetle	GU NNR			N	known	Old growth northern hardwood or mixed coniferous forest below 2500'.	considered rare throughout its range; very little known about species, but two of 3 known occurrences in NH are from WMNF; amount of survey effort in state is unknown; recommended for inclusion by Chandler; serves as a surrogate for another <i>Lordithon</i> species that is found in similar habitat
<i>Cicindela ancocisconensis</i>		Boulder beach tiger beetle	G3 N3	NH:S1S3 ME:SNR		N	H / likely	Open sand or mix of sand and cobble along permanent streams of mid-sized rivers; feed and live on the sandy areas exposed by receding rivers; common in Saco River basin downstream of WMNF.	not at real risk (Chandler); known from very few locations and it is not known why, so may be of concern (Bell); known historically from the WMNF, but sites have not been revisited recently; all recent NH locations have been from Conway area just off-Forest where habitat is more abundant; WMNF habitat limited and at edge of range, so probably not abundant if still occurs, which Chandler thinks is likely; if still on Forest, G and N ranks would make it a Sensitive species
<i>Williamsonia fletcheri</i>		Ebony boghaunter	G3G4 N3N4	NH:SU ME:S3?	ME:SC	N	known	Found in low elevation sphagnum bogs adjacent to coniferous or mixed coniferous/deciduous forested areas. Absent from most bogs without sphagnum. Larvae may develop in shallow pools (6" to 12") in sedge fens or among sphagnum mats with open pools and not choked with heaths. It appears to utilize openings within the forest rather than completely open upland habitat.	rarely encountered due to early flight and because it flies away from larval habitat, rarely montane in ME (Brunelle); kept on list based on expert opinion that it is of concern, global and national ranks, and known occurrence on WMNF; G-rank and occurrence on Forest make it an automatic RFSS

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<i>Somatochlora forcipata</i>		Forcinate emerald	G5 N4	NH:SNR ME:SNR		N	historic?	Found in spring-fed streamlets trickling through subalpine hillside fens with floating vegetation or in pools associated with flowing groundwater in fen areas. Avoid open, sunny fen areas. Eggs deposited in mud-bottomed streamlet pools.	survey data suggests not rare in ME, probably an S3 (DeMaynadier); rare in NH, probably in WMNF (Chandler); type specimen from White Mountain region, with other known sites in Forest (White & Morse); kept on list based on expert opinion that it is of concern and rare in New Hampshire, and historic occurrences on WMNF with no reason to believe they are not still present
<i>Lanthis vernalis</i>		Southern pygmy clubtail	G4 N4	NH:SNR ME:SNR		N	likely	Lives in small, shady spring-fed creeks, preferring clean sandy or mud substrates and shallow water.	rare (DeMaynadier); substrate habitat is limited on the WMNF, occurring in scattered short stretches; Brunelle indicated it is likely on WMNF; given limited habitat, probably uncommon to rare on Forest therefore kept on list
<i>Oeneis melissa semidea</i>		White Mountain butterfly	G5T2 N2	NH:S2		Y	known	Alpine. Prefers sedge meadows. Larva feed on Bigelow's Sedge; adults feed on several alpine plants.	locally abundant and well distributed in the alpine zone; adequately protected at all sites; unthreatened on a range-wide basis; T and N ranks and known occurrence make it a Sensitive species for WMNF, so kept on list
<i>Boloria titania montinus</i>	<i>Boloria chariclea montina</i> , <i>Boloria montinus montina</i>	White Mountain fritillary	G5T2 N2	NH:S2		Y	known	Alpine. Inhabits lush, moist areas near sheltered spots, wet springs, and rocky outcrops above 4500'. Alpine goldenrod is primary adult food plant. Larval host unknown may be blueberry or willow.	restricted to White Mountains; locally abundant throughout Presidential Range, and stable over years, so not a viability concern (Chandler, Kiel); T and N ranks and known occurrence make it a Sensitive species for WMNF, so kept on list
MAMMALS									
<i>Martes americana</i>		American marten	G5 N5	NH:S2 ME:S5	NH:T	N	known	Inhabits coniferous, mixed, and deciduous forest that is 30+' tall with at least 80 ft ² of basal area. Prefers structural complexity in stands, including large hollow trees and downed logs.	population stable to increasing in NH, largely due to reintroductions (Kantor); habitat more diverse than previously thought, but landscape-level condition critical; panel was uncertain about outcomes for WMNF, but probably currently a C; future for WMNF depends on several factors mostly beyond WMNF control, but could go up or down; kept on list due to potential for decline to where viability is a definite concern, even though decline probably would not be due to Forest management
<i>Lynx canadensis</i>		Canada lynx	G5 N4?	NH:S1 ME:S2	NH:E ME:SC	ESA	historic	Favors coniferous or mixedwood forests frequented by snowshoe hare. Travel corridors include ridges, saddles, and riparian corridors. Prefers log piles and root wads for denning	federally threatened; considered extirpated; required to evaluate and manage according to Lynx Conservation Assessment and Strategy; WMNF probably had breeding historically and likely to see dispersing animals in next decade, but whether they will remain is uncertain due to limited habitat; extirpated from WMNF and NH so outcome E current, future outcome on WMNF uncertain because unknown if will disperse to forest and remain
<i>Felis concolor cougar</i>		Eastern cougar	G5TH NH	NH:SH ME:SH		ESA	historic	Large expanses of forested habitat, with adequate prey base (deer).	federally endangered; identified by the FWS as a species to be evaluated for WMNF activities, therefore must be included; species has been extirpated from northeast; nearest known extant population (may not be same taxon) is probably MN; occasional sightings locally, but nothing concrete; taxonomy is uncertain and would change range-wide outcomes, but locally have been extirpated with no sign of imminent return, so given E outcome by panel
<i>Myotis leibii</i>		Eastern small-footed bat	G3 N3	NH:S1 ME:S1S2	NH:E ME:SC	Y	known	Winter hibernacula are cool, drafty areas in mines and caves. Requires caves and old buildings for roost sites. May also roost in rock crevices or trees. Prefers softwood habitat where spruce and hemlock dominate. May use include aspen and openings. Likely forages in riparian habitats and open areas.	NE Tech Group species of concern due to lack of data with suspected declines and high portion of range in northeast; probably more common than currently thought, need more info to determine true status (Hicks); one known hibernaculum near WMNF; not enough information on populations, current or past, to know if numbers have changed or are of viability concern; probably has always been rare; number of hibernacula has decreased regionally with use of mines; tracked because G and N ranks and known occurrence make it a Sensitive species

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<i>Myotis sodalis</i>		Indiana bat	G2 N2	NH:SRF		ESA	known	Roosts in trees (>9" DBH) primarily under exfoliating bark in upland and riparian forest. Prefers dead or nearly dead trees. Forages in and around tree canopy in upland and riparian forests as well as open habitats. Adjacent water source important.	one male seen on WMNF 10 years ago, probably a vagrant; panel agreed species is not likely on the WMNF; NH Fish and Game indicates it is "falsely reported"; Forest must track because identified as a federally listed species for the WMNF by USFWS
<i>Synaptomys borealis</i>		Northern bog lemming	G4T3Q N1	NH:SH ME:S1	ME:T	Y	known	Prefers sedge meadows and bogs. Other habitats include riparian areas, openings, krummholz, and softwoods. Requires moist to wet loose soils. Prefers dense herbaceous or mossy understory. Uses burrows.	NE Tech Group species of concern due to high portion of range in northeast and other concerns; Have almost no information on the status of this species, very hard to find and probably always had low numbers; habitat has not changed substantially on the WMNF over time, but unknown if populations have changed; tracked because T and N ranks and known occurrence make it a Sensitive species
<i>Canis lupus</i>		Timber wolf	G4 N4	NH:SX ME:SH		ESA	historic	Large expanses of forested habitat, with adequate prey base (deer, beaver).	federally listed, inclusion required; reintroduction probably would be necessary to have population on WMNF, legislation was passed in NH to ban reintroduction by State; habitat is suitable on Forest, but human tolerance is a concern; extirpated with no sign of imminent return without reintroduction, so given E outcome by panel
REPTILES									
<i>Glyptemys insculpta</i>		Wood turtle	G4 N4	NH:S3 ME:S4	ME:SC	Y	known	Riparian areas of slower moving streams. Wooded or heavily vegetated stream banks as well as fields and meadows used for foraging. Hibernates in sandy stream bottoms or muddy banks. Sandy and gravelly areas adjacent to the stream used for nesting sites.	NE Tech Group identified as a species of concern for all reasons and indicated species warrants consideration for federal listing; Panel felt that species is in better condition on Forest than off, but not better than a C and heading down due to limited habitat and loss of connections to off-forest populations; populations probably always low on WMN, but are declining substantially off-Forest
PLANTS									
<i>Arabis missouriensis</i>		Missouri rock cress	G5?Q N5?	NH:S1S2 ME:S1	NH:T ME:T	N	known	Semi-open conditions of richer sites in the WMNF. Typically south or west-facing slopes below 1500'. Often rocky, incl. talus and cliffs. Associated spp include red oak, ash, basswood, sugar maple.	only having one population, which is made up of feeble plants, is a key concern for WMNF (panel); there is taxonomic question and difficulty in distinguishing from <i>A. laevigata</i> (FC); WMNF contains 20% of NH population (NHNH12)
<i>Arnica lanceolata</i>		Hairy arnica	G3 N2	NH:S1 ME:S2	NH:T ME:T	Y	known	Alpine ravines, streambanks, cliffs, and rock ledges. Alpine descending to below treeline along rocky streambanks and cascades.	WMNF contains 75% of NH population (NHNH12); panel indicated future outcome would tend toward C if specific sites are not protected; G and N ranks and known occurrence make it a Sensitive species for WMNF, so kept on list
<i>Betula minor</i>	<i>Betula borealis</i>	Dwarf white birch	G4?Q N1N2	NH:S1S2 ME:S1	NH:C ME:E	Y	known	Common across the alpine. Bogs and wet alpine slopes and summits. Acidic rocky barrens and peaks.	pop appears stable (FS); WMNF contains 100% of NH population (NHNH12); panel indicated outcome B in Presidentials and C on lesser summits; N rank and known occurrence makes it a Sensitive species for WMNF, so kept on list
<i>Calamagrostis pickeringii</i>		Pond reed bent grass	G4 NNR	NH:S2S3 ME:S1	NH:T ME:T	N	known	Acid peats or sands, gravels and shores. Uses a variety of habitats including bogs, wet shores, ditches, and dry streambeds, especially in the mountains, but also at low elevations. Sunny, gravel areas of rivers close to the high water mark.	WMNF contains 58% of NH population; panel said may decline due to increased hiking, probably not real problem unless there is an increase in trail numbers/density; tracked because impacts could come from management that will change between alternatives

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<i>Calamagrostis stricta</i> <i>ssp. inexpansa</i>	<i>Calamagrostis stricta</i> <i>var. inexpansa</i> ; <i>Calamagrostis stricta</i> <i>var. lacustris</i> ; <i>Calamagrostis lacustris</i> ; <i>Calamagrostis inexpansa</i>	Pond reedgrass	G5T5 NNR	NH:SU ME:S1	NH:E ME:E	Y	known	Wet cliffs and ledges, river and stream banks, bogs, fens, seeps, and wet alpine	taxon includes <i>C. lacustris</i> , which is Sensitive species due to G3Q global ranking (FS); <i>C. lacustris</i> is currently listed as threatened in NH; WMNF contains a substantial portion of the NH populations of <i>C. stricta</i> <i>ssp. inexpansa</i> and <i>C. lacustris</i> (NHNH12); future outcomes not given by panel because genetic questions could influence it; kept on list because includes taxon currently listed as Sensitive
<i>Cardamine bellidifolia</i>		Alpine bittercress	G5 NNR	NH:S1 ME:S1	NH:E ME:E	Y	known	Cold ravines or on wet mossy rocks in the alpine area.	uncommon; population appears stable, but decreased from historic levels; limited threats (FS); WMNF contains 100% of NH population (NHNH12); tracked because is a Sensitive species
<i>Cardamine concatenata</i>	<i>Dentaria laciniata</i>	Cut-leaved toothwort	G5 N?	NH:S1 ME:S1	NH:E ME:E	N	H / possible	Rich woods, wooded bottoms, and calcareous talus slopes and ledges.	uncertain if historic occurrence on WMNF is extant as NHNHI does not identify a WMNF occurrence, but has one near; possible may occur in couple other spots (panel); outcome is C or D now depending on whether historic site is still there, moving toward D due to risks from rock climbing pressure
<i>Carex backii</i>		Rocky Mountain sedge	G4 NNR	NH:SNR ME:S3	NH:C	N	likely	Shady, calcareous to neutral, dry-mesic, rocky oak-hardwood and limestone hardwood habitat.	genetic isolation and related vulnerability is key concern from panel; expert panel indicated it is likely on the Forest and gave current and future outcomes that are viable, but near the threshold (C now and into the future). Several activities controlled or affected by the Forest could affect populations; no other SVE species uses shady calcareous to neutral rocky oak-hardwood habitat, so no surrogate available, therefore kept on list
<i>Carex baileyi</i>		Bailey's sedge	G4 N4	NH:S1S2 ME:SH	NH:T ME:SC	Y	known	Swamps, wetlands, disturbed openings, mixedwoods, ditches. Prefers wet soil conditions.	no knowledge of limiting factors, so outcomes unknown (panel); tracked on WMNF because is a Sensitive species
<i>Carex capillaris</i>	<i>Carex capillaris ssp. capillaris</i>	Hair-like sedge	G5 NNR	NH:S1 ME:S1S2	NH:T ME:T	N	known	Calcareous snowbank communities, wet rocks in alpine, and wetter areas of dry-mesic heath alpine habitats.	WMNF contains 100% of the population (NHNH12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected
<i>Carex capitata ssp. arctogena</i>		Head-like sedge	G5T4? NNR	NH:S1	NH:T	N	known	Wet meadows, along streambanks, or in seepy areas in the alpine, often on gravelly acidic soils.	WMNF contains 100% of NH extant population (NHNH12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected
<i>Carex cumulata</i>		Piled-up sedge	G4? N4?	NH:S2 ME:SU	NH:T	Y	known	Open ledges, cliffs, dry sandy soils, bogs, open woods, clearings. Favors open, sunny location. Only known to occur at one site in southern portion of WMNF.	WMNF contains 33 of NH population (NHNH12); could decline due to lack of disturbance and resulting succession; kept because of potential for decline and it's a Sensitive species
<i>Carex scirpoidea</i>		Bulrush sedge	G5 N5	NH:S1 ME:S2	NH:T ME:T	N	known	Strongly associated with rocky summits, outcrops, and cliffs. In NH, only known from open ledges and subalpine habitats.	WMNF contains 33% of NH population (NHNH12); panel indicated B outcome at best for Forest due to limited distribution and possible threats from hiking and rock climbing, at least on WMNF; tracked on WMNF because potential threat is recreation use, which is an issue in revision
<i>Carex wiegandii</i>		Wiegand's sedge	G3 N3	NH:S1S2 ME:S3	NH:T ME:SC	Y	known	Boggy or peaty soils, boreal bogs.	WMNF contains 100% of NH population (NHNH12); no future outcomes provided by panel; probably naturally rare; tracked because is a Sensitive species
<i>Castilleja septentrionalis</i>		Pale painted cup	G5 NNR	NH:S1 ME:S3	NH:T ME:SC	N	known	Cool, wet ravines, along alpine brooks, and in wet alpine and subalpine meadows. Soil conditions vary by location from moist organic soil to gravelly soil to calcareous cliffs. Good representative of the snowbank/wet meadow/streamside ravine alpine communities.	WMNF contains 100% of NH population (NHNH12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected

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<i>Chenopodium foggii</i>		Fogg's goosefoot	G3Q N3	NH:SNR ME:S1?	NH:E? ME:SC	N	known	In New England, limited to high pH rock habitats	Arthur Haines (pers comm) indicated that all sites of <i>C. boscianum</i> reported by Pease were actually <i>C. foggii</i> , which is rare and limited to high pH rock habitats; Information from Arthur Haines on proper identification of <i>C. boscianum</i> occurrences as <i>C. foggii</i> was provided after panels, so species was not tracked prior to 9/2002. NHHNB has accepted Haines' reclassification of occurrences of <i>C. boscianum</i> as <i>C. foggii</i> and proposes to list <i>C. foggii</i> as endangered. <i>C. boscianum</i> is currently listed as endangered in NH; while it is not the same name, the occurrences are the same, so effectively they are protected. Only extant occurrence in NH and one of four historic are tracked as on WMNF
<i>Cynoglossum virginianum</i> var. <i>boreale</i>	<i>Cynoglossum boreale</i>	Northern wild comfrey	G5T4 N3N4	NH:S1 ME:S1	NH:E ME:E	N	H / likely	Occurs mainly in rich mesic woods (hardwood and oak-hardwood) on sandy or rocky soil where light is available to the understory. Favors southern and western aspects. May also occur on ledges.	only historical records from pre-1940 on WMNF (FS); plant has low site fidelity so lack of relocation of historic sites may not indicate extirpation, but does indicate a concern for species viability on the Forest because historic sites have been looked for and not found and no new sites have been located, though they probably exist (panel)
<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	<i>Cypripedium pubescens</i> ; <i>Cypripedium calceolus</i> var. <i>pubescens</i>	Large yellow lady slipper	G5T5 N4N5	NH:S2 ME:SNR	NH:T	N	likely	Rich deciduous woods and swamps, often along the edges of spring run-off streams.	disposition of taxa in NE unclear (FC); panel did not provide outcomes for WMNF because uncertain if occurs on Forest; NHHNB data in 2002 indicates two populations within about 0.25 miles of the WMNF boundary, one of which is within few hundred feet of NFS land, but neither are on it; Dan Sperrdoto indicated strong possibility on WMNF - have recent unconfirmed report on Forest by credible person; kept because rare in state, likely to occur on Forest, and Forest management could impact species
<i>Dicentra canadensis</i>		Squirrel corn	G5 N5	NH:S2S3 ME:S1	NH:T ME:T	Y	known	Rich, moist, deciduous woods and talus	WMNF contains 29% of NH population (NHHN12); WMNF has only a few sites due to lack of suitable calcium rich habitat; can be affected by Forest management; is rare but not at risk; tracked because is a Sensitive species
<i>Dryopteris goldiana</i>		Goldie's wood-fern	G4 N4	NH:S2 ME:S2	NH:T ME:SC	Y	known	Rich, damp woods of calcareous soils.	WMNF contains 20% of NH population (NHHN12); known from WMNF along the AT; tracked because is a Sensitive species
<i>Euphrasia oakesii</i>		Oakes eyebright	G4 N1	NH:S1 ME:S1	NH:E ME:E	Y	known	Alpine. Exposed gravelly slopes or ledges or open ledgy areas	alpine outcomes were B-C; panel indicated there are unverified extirpations that could indicate a concern if they are real; tracked because is a Sensitive species
<i>Festuca prolifera</i>	<i>Festuca rubra</i> var. <i>prolifera</i>	Proliferous red rescue	GU N1N2	NH:S1 ME:S1	NH:E ME:E	Y	known	Alpine. Rocky or peaty soils.	WMNF contains 100% of NH population (NHHN12); panel indicated future outcome would tend toward C if specific sites are not protected; tracked because is a Sensitive species
<i>Galium kamtschaticum</i>		Boreal bedstraw	G5 N3	NH:S2 ME:S2	NH:C ME:SC	N	known	Prefers somewhat rich seep habitats with non-channelized flowing surface water; found in cool, wet hardwood, mixed, or conifer woods, swamps, and streambanks	NHHNB has not tracked occurrences until recently; documented in two locations during NHHNB surveys on the Forest; tracked because N3 ranking and known occurrence will make it an automatic Sensitive species at the next list update
<i>Geocaldon lividum</i>		Northern comandra	G5 N5	NH:S2 ME:S2	NH:T ME:SC	Y	known	Peat bogs at high altitudes. Damp humus in spruce-fir woods at mid to high elevation	WMNF contains 50% of NH population (NHHN12); has potential to decline on WMNF with continued trail and recreational use (panel); kept due to potential for decline from recreation, which is a Revision issue
<i>Geum peckii</i>		Mountain avens	G2 N2	NH:S2	NH:T	Y	known	Moist alpine areas. Occurs rarely at low elevation sites, in rocky streams.	WMNF contains 90% of NH population (NHHN12); nearly endemic to WMNF; tracked because is a Sensitive species due to G and N ranks
<i>Harrimanella hypnoides</i>	<i>Cassiope hypnoides</i>	Moss bell-heather	G5 N2	NH:S2 ME:S1	NH:T ME:T	N	known	Snowbank communities, wet seeps, ledges, and crevices in alpine habitats.	WMNF contains 100% of NH population (NHHN12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected
<i>Isotria medeoloides</i>		Small whorled pogonia	G2 N2	NH:S2 ME:S2	NH:E ME:E	ESA	known	Deciduous and mixedwood forest at low elevations on moderate slopes, often with sparse to moderate ground cover, a relatively open understory canopy, and small canopy gaps.	federally threatened and known on Forest, so must be addressed; WMNF contains 4% of NH populations (NHHN12); potential for outcome to decline depending on deer herbivory and management at sites

Scientific name	Synonyms	Common name	TNC G/N rank ¹	Natural Heritage S rank ²	State list ³	RFSS ⁴	WMNF Occurrence ⁵	Habitat summary	Comments ⁶
<i>Juglans cinerea</i>		Butternut	G3G4 N3N4	NH:S1S2 ME:SU	NH:C	Y	known	Rich, moist, alluvial soils and dry, rocky hillsides with limestone. Old farmsteads.	significant decline range-wide due to fungus <i>Sirococcus clavignenti-juglandaceanum</i> (NS); probably doing a bit better on Forest because canker isn't as prevalent here, but still declining and trees are isolated (panel)
<i>Listera auriculata</i>		Auricled twayblade	G3 N2N3	NH:S1 ME:S2	NH:E ME:T	Y	known	Alluvial areas along rivers and ponds, alder thickets, and coniferous swamps.	WMNF contains 33% of NH population (NHNH12); tracked on Forest because is a Sensitive species due to G and N ranks
<i>Listera convallarioides</i>		Broad-leaved twayblade	G5 NNR	NH:S2 ME:SNR	NH:T	Y	known	Thickets, mossy forested or partially open seeps in spruce/fir, northern hardwood, and northern white cedar forests; base of wet seepy ledges.	WMNF contains 33% of NH population (NHNH12); not rare in ME (Cameron); tracked on WMNF because is a Sensitive species
<i>Listera cordata</i>		Heartleaf twayblade	G5 NNR	NH:S2 ME:SNR	NH:T	Y	known	Wet woods and sphagnum bogs; common in scrub; may prefer sub-alpine; bases of wet, seepy ledges; mossy forested or partially open seeps in spruce/fir, northern hardwood, and northern white cedar forests.	uncommon; fragile; known threats include management, although pop appears stable (FS); WMNF contains 56% of NH population (NHNH12); not rare in ME (Cameron); panel did not provide outcomes for WMNF; tracked on WMNF because is a Sensitive species
<i>Loiseleuria procumbens</i>		Alpine azalea	G5 NNR	NH:S2 ME:S1	NH:T ME:T	N	known	Exposed dry-mesic heath alpine areas including alpine heath snowbank and the Diapensia-azalea-rosebay dwarf shrubland communities.	WMNF contains 91% of NH population (NHNH12); off-Forest population may soon be extirpated, making WMNF populations more important, but additional changes aren't expected in the future (panel)
<i>Luzula confusa</i>		Northern woodrush	G5 N?	NH:S1 ME:S1	NH:E ME:T	N	historic	In WMNF, appears to be limited to wet ravine alpine and subalpine communities.	not well surveyed for, so probably still around (Sperduto); nothing in records to indicate whether historic sites have been searched for in last 20 years; most recent observation for any site is 1966; panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected
<i>Minuartia glabra</i>	<i>Arenaria groenlandica</i> <i>var. glabra</i>	Smooth sandwort	G4 NNR	NH:S1S2 ME:S2	NH:T ME:SC	N	known	Species prefers rocky summits and outcrops up to 3000 ft in elevation. When found in forested habitat, it is in openings created by rocky ledges.	WMNF contains 25% of NH population (NHNH12); uncertain if trampling by hikers is a limiting factor; if so, then likely to decline in next 20 years; if not then will probably remain stable; <i>Paronychia argyrocoma</i> uses similar habitat at higher elevations and faces trampling and succession threats, but elevation difference may prevent it from being good surrogate; kept on list because WMNF manages fair portion of state population and due to uncertainty about impacts from increasing recreational use, which is a Revision issue
<i>Nabalus bootii</i>	<i>Prenanthes bootii</i>	Boott's rattlesnake root	G2 N2	NH:S1 ME:S1	NH:T ME:E	Y	known	Alpine meadows	panel indicated future outcome would tend toward C if specific sites are not protected; G and N ranks and known occurrence make this a Sensitive species for the WMNF
<i>Oligoneuron album</i>	<i>Aster ptarmicoides</i> ; <i>Solidago ptarmicoides</i>	Prairie goldenrod	G5 N5	NH:S1	NH:E	N	known	Occurs primarily on dry, calcareous cliffs and ledges. May also occur in open fields, streambanks, and roadsides. All known NH occurrences are on calcareous soil or bedrock.	currently "B at best" on Forest according to panel; panel indicated C in future on lands managed by WMNF, with potential decline being due to increased hiking pressure; other species have similar threats, but none have same habitat needs so no surrogate available; kept due to potential for decline due to recreation, which is a Revision issue
<i>Omalotheca supina</i>	<i>Gnaphalium supinum</i>	Mountain cudweed	G5 N1	NH:S1 ME:S1	NH:E ME:E	Y	known	Gravelly slopes and ravines at high altitudes	population declining (FS); WMNF contains 100% of NH population (NHNH12); tracked on WMNF because is a Sensitive species
<i>Osmorhiza berteroi</i>	<i>Osmorhiza chilensis</i>	Mountain sweet cicely	G5 NNR	NH:SH ME:S4	NH:E	Y	known	Rich, moist, deciduous woods; talus.	threats to species include timber harvest (FS); not at-risk in ME (MNAP); rare in NH (Sperduto); of concern on WMNF because historic locations have been searched for and not found - uncertain if initial identifications were incorrect, if locations searched were not quite right, or if sites are gone, but if they are gone outcome would be lower than a C; one known extant population on WMNF appears stable
<i>Oxyria digyna</i>		Mountain sorrel	G5 NNR	NH:S1	NH:T	N	known	Moist, rocky slopes and ledges; alpine streamsides and ravines; snowbanks and headwalls. Above 3500' in northern New England.	WMNF contains 100% of NH population (NHNH12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected

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<i>Panax quinquefolius</i>		American ginseng	G3G4 N3N4	NH:S2 ME:S2	NH:T ME:E	Y	known	Rich, rocky, deciduous, woods. Semi-mesic forests w/ rocky, thick humus of colluvial soils.	may be significant decline from collecting (FC); WMNF contains 38% of NH population (NHNH12); automatic RFSS due to rounded G3 ranking; already declined from historic and could continue to decline if demand and price for this species remain high (panel)
<i>Paronychia argyrocoma</i>	<i>Paronychia argyrocoma</i> <i>var. albimontana</i>	White Mountain silverling	G4 N4	NH:S3 ME:S1	NH:T ME:T	Y	known	Mid-elevation rocky summits, ledges, and cliffs; sand/gravel barrens of Saco River between Bartlett and Fryeburg.	susceptible to trampling (FS); WMNF contains 43% of NH population (NHNH12); tracked on WMNF because is a Sensitive species and threatened by recreation use, which is a Revision issue
<i>Persicaria vivipara</i>	<i>Polygonum viviparum</i> ; <i>Bistorta vivipara</i>	Viviparous knotweed	G5 NNR	NH:S1 ME:S1	NH:T ME:E	N	known	Wet, mossy rocks, cool or damp slopes, gravels, and seeps in alpine and subalpine areas.	WMNF contains 100% of NH population (NHNH12); on list because panel indicated lower outcome than most other alpine species because 3 subpopulations have been lost; potential for decline in future due to natural erosion at one site
<i>Petasites frigidus</i> var. <i>palmaris</i>		Sweet coltsfoot	G5T5 NNR	NH:S1 ME:SNR	NH:E	Y	known	Swampy woods, meadows with calcareous soils, white cedar swamps, seeps.	restricted to rare habitat; population appears stable (FS); WMNF contains 50% of extant NH population (NHNH12); habitat declined from historic but should be stable now and into future unless requires disturbance (panel); tracked on WMNF because is a Sensitive species
<i>Phleum alpinum</i>		Alpine timothy	G5 NNR	NH:S2 ME:S2	NH:T ME:T	N	known	In NH, uses wet meadows, wet ravines, and damp shores in the alpine zone.	WMNF contains 100% of NH population (NHNH12); panel indicated future outcome of snowbank/wet ravine communities could decline if specific sites are not protected; populations in some places are blinking on and off, appears that populations are naturally more jumpy than other species, making outcome less certain (panel); kept on list to help ensure sites are protected
<i>Pinus banksiana</i>		Jack pine	G5 N5	NH:S1S2 ME:S4	NH:T	N	known	Rocky summits, rock outcrops and ledges; favors well-drained loamy sands but is more often found on dry, gravelly or sandy sites, including those along pond shores. In WMNF, occurs from 2200-4000' elevation.	WMNF contains 43% of NH population (NHNH12); could trend down on WMNF due to lack of regeneration from lack of fire (panel); no other species has need for fire regime so would not be covered by surrogate species
<i>Piptatherum canadense</i>	<i>Oryzopsis canadensis</i>	Canada mountain ricegrass	G5 NNR	NH:S1 ME:S2	NH:E ME:SC	Y	known	Rocky openings just below treeline and extends into krummholz zone.	panel indicated B outcome at best and no information on reasons for rarity and therefore no basis for future outcome; tracked on WMNF because is a Sensitive species
<i>Poa laxa</i> ssp. <i>fernaldiana</i>	<i>Poa fernaldiana</i>	Wavy bluegrass	G5?T3 N2N3	NH:S2S3 ME:S1	NH:E ME:E	Y	known	Cliffs; alpine gardens in Presidential and Franconia Mts.	WMNF contains 83% of NH population (NHNH12); T and N ranks make it a Sensitive species on the WMNF
<i>Poa pratensis</i> ssp. <i>alpigena</i>	<i>Poa alpigena</i>	Alpine meadow grass	G5 N?	NH:SH ME:SU	NH:E	N	H / known	In NH, uses nutrient poor soils in alpine/subalpine dry-mesic heath and meadow communities.	rare in NH and New England (Spertuto); WMNF contains 100% of known occurrences in New England; Arthur Haines reports a recent sighting on the WMNF, but not officially recognized when list developed and still identified as historic in NH.
<i>Polygonum douglasii</i>		Douglas knotweed	G5 N4N5	NH:S1 ME:S2	NH:T ME:T	N	known	Prefers exposed rocky slopes and hillside ledges in well-drained soil where little other vegetation grows. Can also grow in nutrient-enriched hardwood forests.	WMNF contains 50% of NH population (NHNH12); an annual that may not occur in the same sites from year to year (Carlson); closest species in habitat and threats is jack pine, which has very different biology and requires fire for regeneration, while fire could be positive or negative for Polygonum depending on intensity and timing, therefore jack pine not a good surrogate; recreation use and succession are potential limiting factors that can be affected by WMNF so kept on list
<i>Potamogeton confervoides</i>		Algae-like pondweed	G4 N3N4	NH:S2S4 ME:S3	NH:C ME:SC	N	known	Occurs in strongly acidic soft-water bogs, lakes and ponds at a variety of elevations. Also found in slow-flowing acidic streams. Likes muddy shores with lots of vegetation; typically found at depths of less than 15', though water can be deeper. Not known to occur in beaver ponds.	globally and nationally ranked somewhat rare, but not rare locally, so maintaining New England populations is important to the species as a whole; WMNF outcomes are B-C currently and "C or better" in the future; habitat used is broader than only other aquatic plant species on WMNF list, so no surrogate available; expert panel recommended monitoring of WMNF populations.
<i>Potentilla robbinsiana</i>		Robbin's cinquefoil	G1 N1	NH:S1	NH:E	Y	known	Alpine zone in Presidential Range of White Mountain National Forest	WMNF contains 100% of NH population (NHNH12); recently delisted from federal endangered status due to agreement on conservation approach and reintroduction efforts on the WMNF; now a Sensitive species on WMNF

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<i>Pyrola asarifolia</i>		Pink wintergreen	G5 NNR	NH:S2 ME:S4	NH:E	Y	known	Rich, moist woods and bogs of calcareous soils. Moist alluvial soil of lower river terrace forests. Spruce/fir forests.	may be affected by logging (FS); WMNF contains 50% of known extant NH population (NHNH12); outcome for WMNF marginal due to limited habitat and few occurrences, but none are likely to be substantially impacted; tracked on WMNF because is a Sensitive species
<i>Rhinanthus minor</i> ssp. <i>groenlandicus</i>		Yellow rattle	G5T5? NNR	NH:SU ME:SNR	NH:C	N	known	Snowbank, wet ravine, and wet meadows in alpine/subalpine zone.	Difficult to determine native vs. introduced spp (FC); previously <i>Rhinanthus crista-galli</i> was tracked as a Candidate in NH, but during list revision they determined that <i>R. crista-galli</i> is a non-native weed and <i>R. minor</i> ssp. <i>groenlandicus</i> is the native alpine species of concern (Sperduto); WMNF contains 100% of NH population (NHNH12); snowbank/wet ravine community addressed in alpine panel notes, but species info not covered by either alpine or rock panel; kept because tied primarily to snowbank communities by panel and panel indicated future outcome for these communities could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities
<i>Rhododendron lapponicum</i>		Lapland rosebay	G5 NNR	NH:S2 ME:S1	NH:C ME:T	N	known	Strongly associated with dry-mesic heath communities in the alpine. Tolerant of desiccation; occurs on well-drained, thin, acidic, gravel-stoney soils. Does not grow on rock outcrops.	WMNF contains 100% of NH population (NHNH12); more narrowly distributed than some alpine species, so greater potential for risk in future and no good surrogate
<i>Salix argyrocarpa</i>		Silver willow	G4 NNR	NH:S1 ME:S1	NH:T ME:E	N	known	Moist soils in alpine or subalpine streamsides and ravines.	WMNF contains 100% of NH population (NHNH12); panel indicated future outcome could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected
<i>Salix herbacea</i>		Dwarf willow	G5 NNR	NH:S1S2 ME:S1	NH:T ME:T	N	known	Snowbank/wet ravine alpine system. In NH, typically occurs in cool, wet ravines, snowbank communities, and along alpine brooks. Grassy, sandy, or rocky places in alpine areas; often on thinner soils than other snowbank/wet ravine species.	WMNF contains 100% of NH population (NHNH12); panel indicated that currently human disturbance is not a concern because people can't/don't get to it, but rock climbing may become a concern in the future; kept because in snowbank system and rock climbing concern can be affected by WMNF
<i>Salix pellita</i>		Satin willow	G5 NNR	NH:S1 ME:SNR	NH:T	N	known	Wetland obligate. Uses river or stream banks, floodplain forest/moist thickets, forested swamps and lake or pond shores.	In NH, only in Coos co., at least one location is on WMNF (Sperduto); outcomes uncertain; historical occurrence indicates possible decline, but without indication of recent survey efforts or determination of whether original identification was correct; outcomes of C-D are based on assumption that WMNF occurrence was this species and is truly historic (panel); kept on list because only one known occurrence on the Forest, so viability is a concern whether that occurrence is extant or historic
<i>Sanicula trifoliata</i>		Three-leaved black snakeroot	G4 N4	NH:S2 ME:SNR	NH:T	N	known	Limy deciduous woods below 1500'. Most occurrences on steep slopes. Appears to associate w/ dense lush ground cover and relatively closed canopy but has been found near clearcuts and cliffs which may indicate it takes advantage of sunny conditions.	WMNF contains 25% of NH population (NHNH12); panel said unknown if has declined since historic conditions, but there are so few occurrences that viability on WMNF is a concern
<i>Saxifraga paniculata</i> ssp. <i>neogaea</i>	<i>Saxifraga aizoon</i> var. <i>neogaea</i> ; <i>Saxifraga paniculata</i>	Livelong saxifrage	G5T5? NNR	NH:S1 ME:S1	NH:E ME:SC	Y	known	Alpine. Exposed, calcareous gravels and rocks. Cold circumneutral cliffs.	WMNF contains 50% of NH population (NHNH12); panel indicated outcome is "B at best" on Forest, but with stable, persistent populations; kept because is Sensitive species
<i>Saxifraga rivularis</i>		Alpine brook saxifrage	G5? NNR	NH:S1	NH:E	N	known	Alpine ravines, wet and mossy areas, wet cliffs, and some dry-mesic heath alpine/subalpine communities. May benefit from reduced competition associated with moderate disturbance. May be a nitrophile.	WMNF contains 50% of NH population (NHNH12); generally secure, but rarer than some other species and harder to find, so outcome is slightly lower (B- to C) and kept on list

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<i>Sibbaldia procumbens</i>		Arizona cinquefoil	G5 NNR	NH:S1	NH:E	N	known	Snowbank/wet meadow/streamside alpine communities	WMNF contains 100% of NH populations (NHNH12); future outcome tending toward C if specific sites are not protected, therefore kept to ensure sites are protected
<i>Silene acaulis</i> var. <i>exscapa</i>		Moss campion	G5T5 N5	NH:S1 ME: SX	NH:T ME: PE	Y	known	Moist, alpine meadows. Gravelly barrens.	ME lists <i>Silene acaulis</i> as a whole, not just the variety (MNAP); WMNF contains 100% of NH population (NHNH12); tracked because is a Sensitive species
<i>Solidago calcicola</i>	<i>Solidago x calcicola</i>	Rock goldenrod	G4G5Q	NH:SH ME:HYB	NH:C ME:PE	N	H / likely	Moist rich woods, rocky or gravelly thickets, talus and cliffs.	some consider this a hybrid between <i>Solidago macrophylla</i> and another spp.; NH considers it a full species, rare and only in mountains (Sperduto); only historic occurrences on WMNF, but no indication if they have been revisited in several decades so unknown if still there; if not, outcome is D-E; panel expected that if people look, it is probably present on Forest still so outcome might be higher; only forest edge rock species so no surrogate available and uncertainty of status kept it on list
<i>Sphagnum andersonianum</i>		Anderson's sphagnum	G3? NNR	NH:S2?		N	known	known from low hummocks in very poor ericaceous fens, weakly minerotrophic (Cleavitt)	rounded rank = G3; not known from VT (McQueen); G3 rank makes it an automatic RFSS for WMNF; proposed for listing in NH as threatened
<i>Sphagnum angermanicum</i>		Angerman's sphagnum	G3G4 NNR	NH:S1 ME:SNR		N	known	known from poor fens, including at edges of ponds, weakly minerotrophic (Cleavitt)	rounded rank = G3; often grows among sedges at the margins of ponds (NS); not known from VT (McQueen); G3 rank makes it an automatic RFSS for WMNF; proposed for listing in NH as endangered
<i>Sphagnum brevifolium</i>		a sphagnum	??	NH:SH		N	known	poor to intermediate fens; seems to use a variety of locations within peatlands; arctic-alpine species not likely to occur in lower montane fens	not known from VT (McQueen); proposed for listing in NH as endangered; Sperduto believes it still occur on the Forest, they found more suitable habitat at the known site locality than has ever been surveyed
<i>Sphagnum flavicomans</i>		a sphagnum	G3 NNR	NH:S1S2		N	known	medium to tall hummocks in bogs and poor fens, oligotrophic to weakly minerotrophic (Cleavitt); <i>Sphagnum flavicomans</i> is an indicator species for the <i>Sphagnum rubellum/Vaccinium oxycoccus</i> dwarf heath moss lawn in New Hampshire (Sperduto et al 2000)	not known from VT (McQueen); G3 rank makes it an automatic RFSS on WMNF; proposed for listing in NH as endangered
<i>Sphagnum lindbergii</i>		Lindberg's sphagnum	G5? NNR	NH:S1		N	known	In New Hampshire, <i>Sphagnum lindbergii</i> is restricted to alpine and subalpine peatlands (Cleavitt 1996); weakly minerotrophic, forming carpets in high elevation heath balds and bogs (Cleavitt); prefers peatlands with full sun, low to medium nutrient levels, and pH of 4.0-6.0	not known from VT (McQueen); proposed for listing in NH as endangered; restriction to alpine and subalpine habitats makes it unique compared to other Sphagnum species evaluated; Crawford Path goes through the bog it occurs in
<i>Sphagnum majus</i> ssp. <i>norvegicum</i>		a sphagnum	G5?T? NNR	NH:S2		N	known	lawns in poor sedge fens and pond margins, weakly minerotrophic (Cleavitt)	not known from VT (McQueen); proposed for listing in NH as threatened; kept on list to represent peatland lawn and pond edge species
<i>Sphagnum pylaesii</i>		Pylaes' sphagnum	G4 NNR	NH:S2		N	known	forms mats over moist or wet rock or is submerged in fen pools; oligotrophic to weakly minerotrophic; prefers acidic conditions	not known from VT (McQueen); proposed for listing in NH as threatened; occurrence on wet rocks as well as peatlands makes it unique compared to other Sphagnum species evaluated
<i>Spiraea septentrionalis</i>	<i>Spiraea alba</i> var. <i>septentrionalis</i>	Alpine meadow-sweet	G2? N1N2	NH:SNR ME:S1	NH:C ME:SC	N	known	Cool wet ravines and snowbank communities in alpine and subalpine habitats.	genetic work indicates taxon var. is distinct, restricted to alpine zone, NH will start tracking (Sperduto); known on WMNF (Crow); community addressed in rock and alpine panel notes, but species info not covered by either panel; panel indicated future outcome for snowbank communities in which it occurs could decline if specific sites are not protected and it is not appropriate to identify a focal species for snowbank alpine communities; kept on list to help ensure sites are protected

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<i>Symphotrichum ciliolatum</i>	<i>Aster ciliolatus</i>	Ciliated aster	G5 N?	NH:SH ME:SNR	NH:T	N	H / likely	Open woods and dry to moist thickets, shores, and clearings; occurs in openings in pine barrens and dry northern hardwood and red spruce-hardwood forest, and likes clearings and roadsides. Prefers scattered small or large openings in the forest canopy, but not necessarily early-successional forest habitat. Uses poor soils and sometimes rocky sites and talus.	outcome for WMNF depends on whether historic occurrences are really historic, which is unknown; no other SVE species uses dry-mesic hardwood or mixed hw-sw forests on sandy to rocky soils and needs canopy openings, therefore no surrogate available; since cannot immediately determine if historic populations are extirpated and no surrogate is available, kept on list
<i>Triphora trianthophora</i>		Nodding pogonia	G3G4 NNR	NH:S2 ME:S1	NH:T ME:T	Y	known	Mid-elevation beech hardwoods usually on south-facing slopes. Rich, deep humus.	WMNF contains 22% of NH population (NHNH12); WMNF lost mature hardwood habitat historically and now has low number of occurrences, so is a C outcome; Rounded global rank of G3 makes this an automatic RFSS
<i>Utricularia resupinata</i>		Northeastern bladderwort	G4 NNR	NH:SNR ME:S2	NH:C ME:E	N	likely	Pond, lake and bog shores and margins as well as some wet ditches. Prefers clear, acidic waters with sandy, muddy, or peaty shores. May require low water levels to bloom, and needs a slightly higher than average water temperature.	known very close to the WMNF and hard to ID due to lack of flowers; panel gave current and future outcomes that are viable, but near the threshold (C now and in future); management could affect water levels; need for water level fluctuation means there is no suitable surrogate species
<i>Vaccinium boreale</i>		Alpine blueberry	G4 N3	NH:S3 ME:S2	NH:C ME:T	Y	known	Alpine bogs, meadows of Presidential and Franconia Mts.	WMNF contains 91% of NH Population (NHNH12); N ranking and known occurrence makes it a Sensitive species for WMNF
<i>Vahlodea atropurpurea</i>	<i>Deschampsia atropurpurea</i>	Mountain hairgrass	G5 NNR	NH:S2 ME:S1	NH:C ME:PE	N	known	In northern New England, is limited to the alpine/subalpine zone, especially herbaceous snowbanks communities.	WMNF contains 100% of NH population (NHNH12); not a concern for WMNF in ME (Cameron); MNAP proposes to upgrade to Endangered from Possibly extirpated; kept because in snowbank/wet ravine system and human disturbance concern can be affected by WMNF

¹ Global, Trinomial (subspecies), and National Rankings - from Association for Biodiversity Information - Natureserve website

G1, T1, or N1 = critically imperiled
G2, T2, or N2 = imperiled
G3, T3, or N3 = vulnerable
G4, T4, or N4 = apparently secure
G5, T5, or N5 = secure
GH, TH, or NH = historic, possibly extirpated
G?, T?, or N? = unranked
GU, TU, or NU = unrankable (usually lack of info)
Q = at end of ranking, means taxon has questionable taxonomy

³ State List

C = Candidate for future state listing (NH only)
E = Endangered species, protected under state law
PE = Possibly extirpated (ME only)
T = Threatened species, protected under state law
SC = Species of Special Concern (ME only)

² State Rankings - from Heritage program, State website, or NatureServe website

S1 = critically imperiled
S2 = imperiled
S3 = vulnerable
S4 = apparently secure
S5 = secure
SA = accidental
SX = presumed extirpated
SH = possibly extirpated
SR = reported
SRF = reported falsely
SZ = migratory transient
SE = exotic
S? = unranked
SU = unrankable (usually lack of info)
HYB = hybrid
S1B = ranked S1 for breeding
S1N = ranked S1 for non-breeding

Scientific name	Synonyms	Common name	TNC G/N rank ¹	Natural Heritage S rank ²	State list ³	RFSS ⁴	WMNF Occurrence ⁵	Habitat summary	Comments ⁶
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⁴RFSS - species delisted under the Endangered Species Act in the last five years, having global (G), trinomial (subspecies) (T), or national (N) ranks of 1-3, or identified as Sensitive by the WMNF based on a risk evaluation that considered abundance, distribution, population trend, habitat integrity, and population vulnerability.

Y = Listed for the WMNF on the Regional Forester's Sensitive Species list
N = Not listed for the WMNF on the Regional Forester's Sensitive Species list
ESA = Federally listed as endangered or threatened

⁵ Occurrence

known = documented on lands managed by the White Mountain National Forest
likely = not documented on Forest, but experts think it occurs on Forest
H = historic (documented, but all known occurrences have not been seen for at least 20 years)

⁶ Comment Sources

Bell = Ross Bell, University of Vermont
Brunelle = Paul Brunelle, odonate specialist
Cameron = Don Cameron, Maine Natural Areas Program
Carle = Frank Carle, Rutgers University
Carlson = Carlson, B.D. 1999. Threatened and endangered species in forests of Maine. 175 pp.
Chandler = Don Chandler, University of New Hampshire
Crow = Garrett Crow, University of New Hampshire
DeGraaf = New England Wildlife: Habitat, Natural History, and Distribution, either 1986 edition by DeGraaf and Rudis or 2000 edition by DeGraaf and Yamasaki
DeMaynadier = Phillip DeMaynadier, Maine Department of Inland Fisheries and Wildlife (MDIF&W)
DMiller = Don Miller, NH Fish and Game, Fisheries Division
ESA = Endangered Species Act
GMNF = Green Mountain National Forest's sensitive species review
Faccio = Steve Faccio, Vermont Institute of Natural Science
FC = Brumback, W.E. and L.J. Mehrhoff. 1996. Flora Conservanda: New England. The New England Plant Conservation Program (NEPCoP) list of plants in need of conservation. Rhodora 98 (895)
Ferguson = Mark Ferguson, VT Nongame and Heritage Program
Foss = Carol Foss, Audubon Society of New Hampshire
FS = Forest Service notes from the February 2000 updating of the Regional Forester Sensitive Species (RFSS) list
Haines = Arthur Haines, botanist and field taxonomist
Hicks = Al Hicks, NY State Department of Environmental Conservation
Jackson = Scott Jackson, University of Massachusetts Cooperative Extension
Kanter = John Kanter, NH Fish and Game, Non-Game Program
Kiel = Warren J. Kiel, lepidoptera collector
MNAP = Maine Natural Areas Program rare plant fact sheets (www.state.me.us/pub/conservation/mnap/factsheet)
NE Tech Group = Northeast Endangered Species and Wildlife Diversity Technical Committee, documented in Wildlife Species of Regional Conservation Concern in the Northeastern United States, 1999
NHNHI = New Hampshire Natural Heritage Inventory. 2000. Rare and Imperiled Plants of New Hampshire. State of New Hampshire Department of Resource and Economic Development. Concord, NH .
NHNHI2 = New Hampshire Natural Heritage Inventory. October 16, 2000. Plants tracked by NH Heritage with one or more known occurrences within the White Mountain National Forest.
NS = Association for Biodiversity Information's NatureServe website (www.natureserve.com)
Panel = group of local experts gathered together to discuss SVE species status, needs, and limiting factors for the WMNF and GMNF
Sperduto = Dan Sperduto, New Hampshire Natural Heritage Inventory
White & Morse = Odonata (Dragonflies) of New Hampshire: An Annotated List by H.B. White, III and W.J. Morse, 1973

SVE Expert Panel Outcomes

A group of experts was gathered to discuss a set of animal or plant species and provide information not readily available from the literature. Panels were held May-December 2002. Panelists were asked to indicate the current condition (or outcome) of each species. The following choices were provided:

Outcome A: Habitat is distributed broadly across the taxon's historic range and is of sufficient quality to support the type and degree of intrademe and metapopulation interactions that the taxon would characteristically engage in if it were not habitat limited.

Outcome B: Habitat across the taxon's historic range is reduced in quality or quantity. Local demes may be extirpated. Metapopulation interactions are adversely altered, but the taxon generally retains the geographic extent typical of the historic district.

Outcome C: Habitat across the taxon's historic range is reduced in quality or quantity. Local demes have been extirpated. Metapopulation interactions are adversely altered throughout most or in significant portions of the taxon's range. The geographic extent of the taxon is reduced.

Outcome D: Habitat across the taxon's historic range is much reduced in quality or quantity. A majority of the historic populations have been extirpated. Metapopulation interactions are essentially precluded. The geographic extent of the taxon is significantly reduced.

Outcome E: Habitat across the taxon's historic range is much reduced in quantity and quality. A majority of the historic populations have been extirpated. Metapopulation interactions are essentially precluded. The geographic extent of the taxon is reduced so much that the taxon would benefit from the protections of the Endangered Species Act.

For the purpose of these outcomes, a taxon's "historic range" is equated to its range prior to European settlement.

Each outcome has multiple aspects to it, addressing habitat quantity and quality, local demes, metapopulation interactions, and geographic extent. When a taxon may meet the conditions of one outcome for some aspects and other aspects for another, it may be appropriate to identify a range of current or expected outcomes.

Scientific name	Synonyms	Common name	TNC G/N rank ¹	Natural Heritage S rank ²	State list ³	RFSS ⁴	WMNF Occurrence ⁵	Habitat summary	Comments ⁶
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Note on vascular plant taxonomy:

Scientific Name: follows Flora of North America for taxa published; then follows Kartesz, J.T. 1999. A Synonymized Checklist and Atlas with Biological Attributes for the Vascular Flora of the United States, Canada, and Greenland. First Edition. Note that bold indicates the accepted taxonomy in Kartesz; in cases where FNA disagrees with Kartesz, the FNA taxonomy is used but the bolded taxon will be a synonym base on Kartesz

Synonyms: not comprehensive - only includes those found on any published at-risk list for New England; consequently, may include some synonyms at odds with Kartesz. Every attempt has been made to cross-check sources so that no duplicate taxa occur simply due to variation in scientific names; however, may still be errors.