

10 V.S.A. Appendix § 10, Vermont Endangered and Threatened Species Rule

1.0 Authority

This rule is adopted pursuant to 10 V.S.A., §§ 5402, 5403 and 5408 which provide that the Secretary “shall adopt by rule a state-endangered species list and a state-threatened species list,” and may “adopt rules for the protection and conservation of endangered and threatened species.”

2.0 Purpose

The purpose of this rule: is to identify and list species of wild plants and animals that have been determined by the Secretary to be endangered and threatened in Vermont so that they may be protected under the law. The rule also sets out a process for Takings and Possession permits.

3.0 Definitions

3.1 “Endangered Species” means those species whose continued existence as viable components of the state’s wild flora or fauna is determined to be in jeopardy or determined to be an "endangered species" under the federal Endangered Species Act.

3.2 “Listed species” means any species that appears on the List in Section 5.0 of this rule, or has been determined to be threatened or endangered by other relevant law.

3.3 “Secretary” means ~~is~~ the Secretary of the Agency of Natural Resources except where otherwise specified.

3.4 “Take and taking” ~~means with respect to wildlife~~ means pursuing, shooting, hunting, killing, capturing, trapping, snaring and netting fish, birds and quadrupeds and all lesser acts, such as disturbing, harrying or worrying or wounding or placing, setting, drawing or using any net or other device commonly used to take fish or wild animals, whether they result in the taking or not; and shall include every attempt to take and every act of assistance to every other person in taking or attempting to take fish or wild animals, provided that when taking is allowed by law, reference is had to taking by lawful means and in lawful manner, and with respect to wild plants means uprooting, transplanting, cutting, injuring or killing or any attempt to do the same or assisting another who is doing or is attempting to do the same, consistent with the definitions found in 10 V.S.A. §§5401 (14) and 4001(23).

3.5 “Threatened Species” means those species that are likely within the foreseeable future to become Endangered.

4.0 ~~Procedures~~ Permits for Taking and Possession

- 4.1 No person shall take or possess an endangered or threatened species, except when exempted as provided for in 10 V.S.A. §5408.
- 4.2 Pursuant to 10 V.S.A. §5408(a) the Secretary may, after receiving the advice of the Endangered Species Committee, ~~be~~ grant permits for the taking and possession of an endangered or threatened species: for scientific purposes; to enhance the propagation of species; to prevent or mitigate economic hardship; for zoological exhibition; for educational purposes; for noncommercial cultural or ceremonial purposes to a person for the collection and possession of a dead salvage bird or parts thereof, including bird feathers, provided that the permit issued complies with federal requirements regarding collection and possession of migratory birds and the bird was legally acquired, transferred from an individual who acquired it legally, or found dead and the permittee had no part in the intentional killing of the bird; or for a special purpose consistent with the purpose of the Federal Endangered Species Act (*see* 16 U.S.C. §1531(b)).
- 4.3 An applicant for a Taking and Possession permit shall submit an administratively complete application to the Secretary, specifying for which purpose(s) the permit is required, as listed in 10 V.S.A. §5408(a).
- 4.4 An administratively complete application shall include all information deemed necessary by the Secretary to evaluate the application. An application shall include a description of the possible impacts due to the proposed action, and a plan for conservation or mitigation. The fee or mitigation proposal as required by 10 V.S.A ch. 123 shall accompany the application.
- 4.5 Avoidance and Minimization
 - a. Applicants for Taking and Possession permits shall have the burden to show that reasonable steps have been taken in order to avoid and minimize takings. The Applicant must provide information that demonstrates:
 - i. The proposed activity cannot practicably be designed to avoid taking and still satisfy the basic project purpose; and
 - ii. If avoidance of taking of a listed species cannot practicably be achieved, the proposed activity has been planned to minimize adverse impacts on the listed species.
 - b. The Secretary may require an applicant to submit additional information that the Secretary considers necessary to make a decision on the issuance or denial of a permit. The Secretary may dismiss the application without prejudice if the requested information is not provided to the Secretary within sixty (60) days of the Secretary's request.
 - c. In determining whether the burden has been met, the Secretary shall evaluate the potential effect of any proposed activity on the basis of both its direct and

immediate effects, as well as on the basis of any cumulative or on-going effects on the listed species.

4.6 Mitigation

- a. Mitigation may be required when full compliance with the requirements of 4.5 of this rule is insufficient to achieve no taking.
 - i. Mitigation may include permanent conservation of habitat in which the same species exists, ongoing monitoring of conserved areas, and treatment of conserved areas for the purposes of restoration or propagation of listed species.
 - ii. The compensation may also include payment of fees to a state “in-lieu fee” program or mitigation fund approved by the Secretary.

4.7 Hearings

- a. The Secretary may conduct a non-adversarial, public hearing in order to evaluate the application. Such a hearing will be held within 60 (sixty) days of the receipt of the administratively complete application.
- b. When a petition has been denied and no public hearing has been held, the Applicant may request in writing to the Secretary that a hearing be held regarding the proposed activity. The Secretary will conduct a hearing within 30 (thirty) days of receipt of the request.

4.8 Permit Conditions

- a. The Secretary may require, as part of an issued permit, conditions for the protection and conservation of endangered species, per 10 V.S.A. ch. 123.

4.9 The Secretary shall inform an applicant of a decision to approve or deny a permit no more than ~~360~~ (sixty) days following an application being deemed administratively complete unless the Secretary determines there is just cause.

4.10 The Secretary maintains continuing jurisdiction over activity permitted under this rule and may, at any time, order the permittee to undertake remedial measures to ensure the protection and conservation of listed species.

5.0 Listing

5.1 The following list of plants and animals is adopted as the Vermont Endangered and Threatened Species List pursuant to 10 V.S.A., chapter 123.

5.2 PLANTS

APIACEAE-PARSLEY FAMILY

<i>Sanicula canadensis</i> var. <i>canadensis</i> L.	Short-styled snakeroot	T	1
<i>Sanicula canadensis</i> var. <i>grandis</i> Fern.	Greater short-styled snakeroot	T	1
<i>Taenidia integerrima</i> (L.) Drude	Yellow pimpernel	T	1

ARACEAE-ARUM FAMILY

<i>Arisaema dracontium</i> (L.) Schott	Green dragon	T	1
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ASCLEPIADACEAE-MILKWEED FAMILY

<i>Asclepias amplexicaulis</i> Sm.	Blunt-leaved milkweed	T	1
<i>Asclepias tuberosa</i> L.	Butterfly-weed	T	1
<i>Asclepias verticillata</i> L.	Whorled Milkweed	E	11

ASPLENIACEAE-SPLEENWORT FAMILY

<i>Asplenium montanum</i> Willd.	Mountain spleenwort	T	1
<i>Asplenium viride</i> Huds.	Green spleenwort	T	1
* (<i>Asplenium trichomanes-ramosum</i> L.)			

ASTERACEAE-ASTER FAMILY

<i>Eupatorium sessilifolium</i> L.	Sessile-leaved boneset	E	4
<i>Helianthus strumosus</i> L.	Harsh sunflower	T	1
<i>Lactuca hirsuta</i> Muhl. ex Nutt.	Hairy lettuce	T	5
<i>Nabalus boottii</i> D.C.	Boott's rattlesnake-root	E	1
* (<i>Prenanthes boottii</i> (DC.) A. Gray)			
<i>Omalothea sylvatica</i> (L.) Schultz-Bip. & F.W.Schultz	Woodland cudweed	E	4
<i>Petasites frigidus</i> var. <i>palmatum</i> (Ait.) Cronq.	Sweet coltsfoot	T	1
<i>Polymnia canadensis</i> L.	White-flowered leafcup	E	5,A
<i>Solidago odora</i> <u>ssp. odora</u> Ait. *(<i>Solidago odora</i> Ait.)	Sweet goldenrod	T	1
<i>Solidago ulmifolia</i> Muhl. ex Willd.	Elm-leaved goldenrod	E	4,A

BETULACEAE-BIRCH FAMILY

<i>Betula minor</i> (Tuckerman) Fern.	Dwarf birch	E	11
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BLECHNACEAE-CHAIN-FERN FAMILY

<i>Woodwardia virginica</i> (L.) Sm.	Virginia chain-fern	T	1
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BORAGINACEAE-BORAGE FAMILY

<i>Cynoglossum virginianum</i> var. <i>boreale</i> (Fern.) Cooperrider	Northern wild comfrey	T	1
<i>Hackelia deflexa</i> (Wahlenb) Opiz ssp. <i>americana</i> (Gray) A. & D. Löve	Nodding stickseed	T	1

BRASSICACEAE-MUSTARD FAMILY

Arabidopsis lyrata (L.) O'Kane & Al-Shehbaz *(Arabis lyrata L.)	Lyre-leaved rock-cress	T	1
Boechera stricta (Graham) Al-Shehbaz *(Arabis drummondii A.Gray)	Drummond's rock-cress	E	4
Braya humilis (C.A. Mey.) B.L. Rob.	Northern rock-cress	T	1
<u>Draba cana Rydb.</u> *(<u>Draba breweri var. cana (Rydb.) Rollins</u>)	<u>Hoary draba</u>	T	1
Draba glabella Pursh	Smooth draba	T	1
Rorippa aquatica (Eaton) E.J. Palmer & Steyermark *(Neobeckia aquatica (Eaton) Greene)	Lake-cress	T	1

BRYACEAE-BRYUM MOSS FAMILY

Plagiobryum zieri (Hedw.) Lindb.	A moss	E	3
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CAPRIFOLIACEAE-HONEYSUCKLE FAMILY

Viburnum edule (Michx.) Raf.	Squashberry	T	1
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CARYOPHYLLACEAE-PINK FAMILY

Minuartia marcescens (Fern.) House	Marcescent sandwort	T	1
Minuartia rubella (Wahlenb.) Hiern	Marble sandwort	T	1

CISTACEAE-ROCK-ROSE FAMILY

Crocanthemum bicknellii (Fern.) Janchen *(Helianthemum bicknellii Fern.)	Plains frostweed	T	1
Hudsonia tomentosa Nutt.	Beach heather	E	1
Lechea mucronata Raf.	Hairy pinweed	E	4

CLUSIACEAE-ST. JOHN'S-WORT FAMILY

Hypericum ascyron L.	Great St. John's-wort	T	1
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CONVOLVULACEAE-MORNING-GLORY FAMILY

Calystegia spithamea <u>ssp. spithamea</u> (L.) Pursh *(<u>Calystegia spithamea (L.) Pursh</u>)	Low bindweed	T	1
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CORNACEAE-DOGWOOD FAMILY

Cornus florida L.	Flowering dogwood	T	1
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CRASSULACEAE-STONECROP FAMILY

Rhodiola rosea L. *(Sedum rosea L. Scop.)	Roseroot	T	1
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CUPRESSACEAE-CYPRESS FAMILY

Juniperus horizontalis Moench Creeping juniper T 1

CYPERACEAE-SEDGE FAMILY

Carex arcta Boott Contracted sedge E 4
Carex atratiformis Britt. Blackish sedge T 1
Carex buxbaumii Wahlenb. Buxbaum's sedge E 1
Carex capillaris ssp. capillaris L. Capillary sedge T 1
 *(*Carex capillaris* L.)
Carex chordorrhiza Ehrh. ex L. f. Creeping sedge E 4
Carex foenea Willd. Bronze sedge E 4
Carex garberi Fern. Garber's sedge T 1
Carex livida (Wahlenb.) Willd. Pale sedge T 1
Carex muehlenbergii var. *enervis* Boott Nerveless Muehlenberg sedge T 1
 Schkuhr ex Willd.
Carex muehlenbergii var. *muehlenbergii* Muehlenberg's sedge T 1
 Schkuhr ex Willd.
Carex oligocarpa Schkuhr ex Willd. Few-fruited sedge E 4
Carex richardsonii R. Br. Richardson's sedge E 1
Carex siccata Dewey Hay sedge E 4
Carex vaginata Tausch Sheathed sedge E 4
Cyperus diandrus Torr. Low cyperus E 3
Cyperus houghtonii Torr. Houghton's cyperus T 1
Eleocharis quinqueflora Few-flowered spike rush T 1
 (Hartmann) O. Schwarz
 *(*Eleocharis pauciflora* (Lightf.) Link)
Fimbristylis autumnalis Autumn fimbristylis E 4
 (L.) Roem. & Schult.
Rhynchospora capillacea Torr. Capillary beak-rush T 1
Scirpus ancistrochaetus Schuyler Barbed-bristle bulrush E 4,A
Trichophorum planifolium Bashful bulrush E 4,A
 (Spreng.) Palla
 *(*Scirpus verecundus* Fern.)

DIAPENSIACEAE-DIAPENSIA FAMILY

Diapensia lapponica ssp. lapponica L. Diapensia E 1
 *(*Diapensia lapponica* L.)

DRYOPTERIDACEAE-WOOD-FERN FAMILY

Dryopteris filix-mas (L.) Schott Male fern T 1
Woodsia alpina (Bolton) S.F. Gray Alpine woodsia E 1

EQUISETACEAE-HORSETAIL FAMILY

Equisetum palustre L. Marsh horsetail T 1

ERICACEAE-HEATH FAMILY

Pterospora andromedea Nutt.	Pinedrops	E	4
Pyrola asarifolia <u>ssp. asarifolia</u> Michx. *(Pyrola asarifolia Michx.)	Bog wintergreen	T	4
Pyrola minor L.	Lesser pyrola	E	1
Rhododendron maximum L.	Great laurel	T	1
Vaccinium stamineum L.	Deerberry	E	5

FABACEAE-PEA FAMILY

Astragalus canadensis <u>var. canadensis</u> L. *(Astragalus canadensis L.)	Canadian milk-vetch	T	1
Astragalus robbinsii var. jesupii Egglst. & Sheldon	Jesup's milk-vetch	E	1
Crotalaria sagittalis L.	Rattlebox	T	1
Desmodium cuspidatum (Muhl. ex Willd.) DC. ex Loud.	Large-bracted tick-trefoil	E	4
Desmodium rotundifolium DC.	Prostrate tick-trefoil	T	1
Lathyrus japonicus var. maritimus (L.) Kartesz & Gandhi *(Lathyrus maritimus (L.) Bigelow)	Beach-Pea	T	1
Lathyrus palustris L.	Marsh vetchling	T	1
Lespedeza frutescens (L.) Hornem *(Lespedeza violacea auct. non (L.) Pers) ¹	Violet bush-clover	T	1
Lespedeza hirta <u>ssp. hirta</u> (L.) Hornem. *(Lespedeza hirta (L.) Hornem.)	Hairy bush-clover	T	4
Lupinus perennis L.	Wild lupine	E	6,A
Senna hebecarpa (Fern.) Irwin & Barneby	Wild senna	T	1

FAGACEAE-BEECH FAMILY

Quercus ilicifolia Wangenh.	Scrub oak	E	4
Quercus prinoides Willd.	Dwarf chinquapin oak	E	7

GENTIANACEAE-GENTIAN FAMILY

Gentiana andrewsii Griseb.	Fringe-top closed gentian	T	1
Gentianella amarella (L.) Boerner	Felwort	T	1
Gentianella quinquefolia (L.) Small	Stiff gentian	T	1

HYDROPHYLLACEAE-WATERLEAF FAMILY

Hydrophyllum canadense L.	Broad-leaved waterleaf	T	1
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¹ Lespedeza violacea (L.) Pers. is now what was formerly known as L. intermedia (S. Watts) Britton and is not listed.

ISOETACEAE-QUILLWORT FAMILY

Isoetes engelmannii A. Braun	Engelmann's quillwort	T	1
<u>Isoetes viridimontana</u>	<u>Green Mountain quillwort</u>	E	11
<u>M. Rosenthal and W.C. Taylor</u>			

JUNCACEAE-RUSH FAMILY

Juncus greenei Oakes & Tuckerm.	Greene's rush	E	4
Juncus militaris Bigelow	Soldier rush	E	4
Juncus secundus Beauv. ex Poir.	Secund rush	E	4

JUNCAGINACEAE-ARROW-GRASS FAMILY

Triglochin maritima L.	Arrow-grass	E	8
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LAMIACEAE-MINT FAMILY

Agastache nepetoides (L.) Kuntze	Yellow giant hyssop	T	1
Agastache scrophulariifolia (Willd.) Kuntze	Purple giant hyssop	T	1
<u>Blephilia hirsuta var. glabrata (Fern.)</u>	<u>Smooth wood-mint</u>	T	1
<u>*(Blephilia hirsuta (Pursh.) Benth.)</u>			
Blephilia hirsuta var. hirsuta (Pursh.) Benth.	Hairy wood-mint	T	1
<u>*(Blephilia hirsuta (Pursh.) Benth.)</u>			
Dracocephalum parviflorum Nutt.	American dragonhead	T	1
Physostegia virginiana (L.) Benth.	Obedient plant	T	1
Pycnanthemum incanum (L.) Michx.	Hoary mountain mint	E	4

LENTIBULARIACEAE-BLADDERWORT FAMILY

Utricularia resupinata B.D. Greene ex Bigelow	Northeastern bladderwort	T	1
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LILIACEAE-LILY FAMILY

Allium canadense var. canadense L. <u>*(Allium canadense L.)</u>	Wild garlic	T	1
Anticlea glauca (Nutt.) Kunth	White camas	E	10

LYGODIACEAE-CLIMBING FERN FAMILY

Lygodium palmatum (Bernh.) Sw.	Climbing fern	E	1
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MAGNOLIACEAE-MAGNOLIA FAMILY

<u>Liriodendron tulipifera L.</u>	<u>Tulip tree</u>	E	11
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MELASTOMATACEAE-MEADOW-BEAUTY FAMILY

Rhexia virginica L.	Virginia meadow-beauty	T	1
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MORACEAE-MULBERRY FAMILY

Morus rubra L.	Red mulberry	T	1
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NYMPHAEACEAE-WATER-LILY FAMILY

Nymphaea leibergii Morong Pygmy water-lily E 7

ONAGRACEAE-EVENING-PRIMROSE FAMILY

Ludwigia polycarpa Short & Peter Many-fruited false-loosestrife E 1

OPHIOGLOSSACEAE-ADDER'S-TONGUE FAMILY

Botrychium manganense Vict. Mangan moonwort E 1

ORCHIDACEAE-ORCHID FAMILY

Aplectrum hyemale (Muhl. ex Willd.) Nutt. Putty-root T 1

Arethusa bulbosa L. Arethusa T 1

Calypso bulbosa var. *americana* (R. Br. ex Ait. f.) Luer ~~Calypso~~ Fairy slipper T 1
 *(*Calypso bulbosa* (L.) Oakes)

Corallorhiza odontorhiza var. *odontorhiza* (Willd.) Nutt. Autumn coral-root T 1
 *(*Corallorhiza odontorhiza* (Willd.) Nutt.)

Cypripedium arietinum Ait. f. Ram's head lady's-slipper T 1

Isotria medeoloides (Pursh) Raf. Small whorled pogonia E 4

Isotria verticillata Raf. Large whorled pogonia T 1

Liparis liliifolia (L.) L.C. Rich. ex Ker-Gawl. Lily-leaved twayblade T 1

~~*Listera auriculata* Wieg. Auricled twayblade E 1~~

~~*Listera australis* Lindl. Southern twayblade E 1~~

Malaxis monophyllos var. *brachypoda* (Gray) Morris & Eames White adder's mouth T 1
 *(*Malaxis brachypoda* (A.Gray) Fern.)

Neottia auriculata (Wieg.) Szlach. Auricled twayblade E 1
 *(*Listera auriculata* Wieg.)

Neottia bifolia (Raf.) Baumbach Southern twayblade E 1
 *(*Listera australis* Lindl.)

Platanthera flava var. *herbiola* (L.) Lindl. Tubercled orchis T 1
 (R. Br. ex Ait. f.) Luer
 *(*Platanthera flava* (L.) Lindl.)

Platanthera hookeri (Torr. ex Gray) Lindl. Hooker's orchis T 1

Triphora trianthophora (Sw.) Rydb. Three-bird orchid T 1

OROBANCHACEAE-CANCER-ROOT FAMILY

Castilleja septentrionalis Lindl. Northern painted-cup T 1

PAPAVERACEAE-POPPY FAMILY

Corydalis aurea Willd. Golden corydalis T 1

PINACEAE-PINE FAMILY

Pinus banksiana Lamb. Jack pine T 1

PLANTAGINACEAE- PLANTAIN FAMILY

Hippuris vulgaris L. Mare's tail E 4

Veronicastrum virginicum (L.) Farw. Culver's-root E 1

POACEAE-GRASS FAMILY

Ammophila breviligulata Champlain beach grass E 1

ssp. champlainensis (Seymour) Walker, Paris & Barrington ex Barkworth
*(*Ammophila champlainensis* Seymour)

Anthoxanthum monticola ssp. monticola Alpine sweet-grass T 1
(Bigelow) Veldkamp

*(*Hierochloa alpina* (Swartz) R. & S. ; *Anthoxanthum monticola* (Bigelow) Veldkamp)

Calamagrostis pickeringii A. Gray, Man. Pickering's reed-grass E 8

Calamagrostis stricta ssp. inexpansa Bentgrass E 4
(Gray) C.W.Greene

Glyceria acutiflora Torr. Sharp manna-grass E 4

Panicum flexile (Gattinger) Scribn. Stiff witch-grass E 4

Piptatheropsis ~~*Piptatherum*~~ *pungens* Slender mountain-rice T 4
(Torr. ex Spreng.) ~~Dorn~~ Romasch., P.M. Peterson, & Soreng

*(*Oryzopsis pungens* (Torr.) Hitchc.; *Piptatherum pungens* (Torr ex Spreng.) Dorn)

Sphenopholis nitida (Biehler) Scribn. Shiny wedgegrass E 4

Sphenopholis obtusata (Michx.) Scribn. Blunt sphenopholis E 4

Sporobolus compositus (Poir.) Merr. Rough dropseed E 1

*(*Sporobolus asper* (Michx.) Kunth)

Vulpia octoflora (Walt.) Rydb. Eight-flowered fescue E 4

POLEMONIACEAE-PHLOX FAMILY

Polemonium vanbruntiae Britt. Eastern Jacob's ladder T 1

POLYGONACEAE-BUCKWHEAT FAMILY

Polygonum douglasii Greene Douglas' knotweed E 4

PRIMULACEAE-PRIMROSE FAMILY

Primula mistassinica Michx. Bird's-eye primrose T 1

PTERIDACEAE-MAIDENHAIR-FERN FAMILY

Adiantum viridimontanum Paris Green Mountain maidenhair-fern T 5

RANUNCULACEAE-BUTTERCUP FAMILY

Anemone multifida var. multifida Poir. Early thimbleweed E 1

*(*Anemone multifida* Poir.)

Hydrastis canadensis L. Golden-seal E 1

Ranunculus allegheniensis Britt. Allegheny ~~buttercup~~ crowfoot T 4

RHAMNACEAE-BUCKTHORN FAMILY			
Ceanothus herbaceus Raf.	Prairie red-root	E	1
ROSACEAE-ROSE FAMILY			
Potentilla litoralis Rydb.	Northern cinquefoil	E	4
* (Potentilla pensylvanica var. bipinnatifida (Douglas) T. & G.)			
Prunus americana Marsh.	Wild plum	T	1
Prunus susquehanae Willd.	Susquehanna sand cherry	E	10
Rosa acicularis <u>ssp. sayi Lindl.</u>	Needle-spine rose	E	4
<u>(Schwein.) W.H. Lewis</u>			
<u>*(Rosa acicularis Lindl.)</u>			
RUBIACEAE-MADDER FAMILY			
Galium labradoricum (Wieg.)Wieg.	Bog bedstraw	T	1
SALICACEAE-WILLOW FAMILY			
Salix planifolia Pursh	Tea-leaved willow	T	1
Salix uva-ursi Pursh	Bearberry willow	E	1
SCHEUCHZERIAEAE-SCHEUCHZERIA FAMILY			
Scheuchzeria palustris L.	Pod-grass	T	1
SPARGANIACEAE-BUR-REED FAMILY			
Sparganium natans L.	Lesser bur-reed	T	4
SPHAGNACEAE-SPHAGNUM FAMILY			
Sphagnum subfulvum Sjors	A peat moss	E	3
*(Sphagnum nitidum Warnstorf)			
TOFIELDIACEAE- FALSE ASPHODEL FAMILY			
Triantha glutinosa (Michx.)Baker	Sticky false-asphodel	T	1
*(Tofieldia glutinosa (Michx.) Baker)			
ULMACEAE- ELM FAMILY			
Ulmus thomasi Sarg.	Rock elm	T	8
VALERIANACEAE-VALERIAN FAMILY			
Valeriana uliginosa	Marsh valerian	E	1
(Torr. & Gray) Rydb.			
VIOLACEAE-VIOLET FAMILY			
Viola lanceolata <u>ssp. lanceolata L.</u>	Lance-leaved violet	T	1
<u>*(Viola lanceolata L.)</u>			

XYRIDACEAE-YELLOW-EYED GRASS FAMILY

Xyris montana Ries	Yellow-eyed grass	T	1
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5.3 AMPHIPODS

CRANGONYCTIDAE-A GAMMARID AMPHIPOD FAMILY

Stygobromus borealis	Taconic cave amphipod	E	5
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5.4 INSECTS

5.4.1

APIDAE-BEE FAMILY

Bombus affinis	Rusty-patched Bumble Bee	E	11
Bombus ashtoni	Ashton Cuckoo Bumble Bee	E	11
Bombus terricola	Yellow-banded Bumble Bee	T	11

5.4.2 No enforcement shall be taken and no permit shall be required for the taking of threatened or endangered bees:

- a. for the application of pesticides unless:
 - i. The pesticide was not applied in accordance with the applicable federally approved label and state Agency of Agriculture, Food, and Markets (AAFM) regulations or permits; or
 - ii. The Secretary of the Agency of Natural Resources after consultation with the Secretary of the Agency of Agriculture, has notified a person of the likely presence of threatened or endangered bees, has advised the person to avoid taking the bees or to obtain a permit, and the person has failed to prevent a taking or obtain a permit.
- b. for otherwise legal activities such as, silviculture, mowing, road maintenance, construction, and painting and staining unless: the Secretary of the Agency of Natural Resources, has notified a person of the likely presence of threatened or endangered bees, has advised the person to avoid taking the bees or to obtain a permit, and the person has failed to prevent a taking or obtain a permit.
- c. for aerial spraying or other activities under the direction of the Vermont Department of Health (VDH) to address public health threats such as arbovirus. The Secretary shall coordinate with AAFM and VDH to reduce the likelihood of taking bees.

5.4.3 The Secretary may develop best management practices (BMPs) to avoid and minimize the taking of bees. The Secretary shall consult with the AAFM, the Vermont Agency of Transportation, VDH, and any other interested state agency prior to finalizing the BMPs.

5.4.4

CICINDELIDAE-TIGER BEETLE FAMILY

Cicindela hirticollis	Hairy-necked tiger beetle	T	5
Cicindela marginipennis	Cobblestone tiger beetle	T	1
Cicindela puritana	Puritan tiger beetle	T	5

5.5 MOLLUSKS

MARGARITIFERIDAE-PEARL MUSSEL FAMILY

Margaritifera margaritifera	Eastern pearlshell	T	5
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UNIONIDAE-UNIONID MUSSEL FAMILY

Alasmidonta heterodon	Dwarf wedgemussel	E	4,A
Alasmidonta varicosa	Brook floater	T	5
Anodontoides ferussacianus	Cylindrical papershell	E	6
Lampsilis ovata	Pocketbook	E	6
Lasmigona costata	Fluted-shell	E	6
Leptodea fragilis	Fragile papershell	E	6
Ligumia recta	Black sandshell	E	6,B
Potamilus alatus	Pink heelsplitter	E	6
Pyganodon grandis	Giant floater	T	6

5.6 FISH

ACIPENSERIDAE-STURGEON FAMILY

Acipenser fulvescens	Lake sturgeon	E	1
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ICTALURIDAE-NORTH AMERICAN FRESHWATER CATFISH FAMILY

Noturus flavus	Stonecat	E	5
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PERCIDAE- PERCH FAMILY

Ammocrypta pellucida	Eastern sand darter	T	1
Percina copelandi	Channel darter	E	6

PETROMYZONTIDAE-LAMPREY FAMILY

Ichthyomyzon fossor	Northern brook lamprey	E	4,A
<u>Lethenteron Lampetra</u> -appendix <u>*(Lampetra appendix)</u>	American brook lamprey	T	1

5.7 AMPHIBIANS

BUFONIDAE-TOAD FAMILY

<u>Anaxyrus fowleri</u>	<u>Fowler's toad</u>	<u>E</u>	<u>11</u>
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HYLIDAE-NEW WORLD TREE FROG FAMILY

Pseudacris maculata	Boreal chorus frog	E	10
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5.8 REPTILES

COLUBRIDAE-COLUBRID SNAKE FAMILY

Coluber constrictor	North American racer	T	7
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Pantherophis alleghaniensis	Eastern ratsnake	T	7
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*(Elaphe obsoleta)

EMYDIDAE-BOX TURTLE AND POND TURTLE FAMILY

Clemmys guttata	Spotted turtle	E	6,C
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SCINCIDAE-SKINK FAMILY

Plestiodon fasciatus	Common five-lined skink	E	1
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*(Eumeces fasciatus)

TRIONYCHIDAE-SOFTSHELL TURTLE FAMILY

Apalone spinifera	Spiny softshell	T	1
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VIPERIDAE-VIPER AND PIT VIPER FAMILY

Crotalus horridus	Timber rattlesnake	E	1
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5.9 BIRDS

ACCIPITRIDAE-HAWK AND EAGLE FAMILY

Haliaeetus leucocephalus	Bald eagle	E	1
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CAPRIMULGIDAE-NIGHTJAR FAMILY

Antrostomus Caprimulgus <u>Caprimulgus vociferus</u>	<u>Eastern whip-poor-will</u>	T	10
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*(Caprimulgus vociferus)

Chordeiles minor	Common nighthawk	E	10
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EMBERIZIDAE-AMERICAN SPARROW AND RELATIVES FAMILY

Ammodramus henslowii	Henslow's sparrow	E	1
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Ammodramus savannarum	Grasshopper sparrow	T	6
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ICTERIDAE-BLACKBIRD FAMILY

<u>Euphagus carolinus</u>	<u>Rusty blackbird</u>	E	11
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LANIIDAE-SHRIKE FAMILY

Lanius ludovicianus	Loggerhead shrike	E	1
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LARIDAE-GULL AND TERN FAMILY

Chlidonias niger	Black tern	E	7,B
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Sterna hirundo	Common tern	E	2,A
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PHASIANIDAE-TURKEY, GROUSE, PHEASANT AND PARTRIDGE FAMILY			
Falciennis canadensis	Spruce grouse	E	2
SCOLOPACIDAE-SANDPIPER, SNIPE AND RELATIVES FAMILY			
Bartramia longicauda	Upland sandpiper	E	7,A
TROGLODYTIDAE-WREN FAMILY			
Cistothorus platensis	Sedge wren	E	6,A
5.10 MAMMALS			
FELIDAE-CAT FAMILY			
Puma concolor cougar	Eastern mountain lion	E	1
*(Felis concolor cougar)			
Lynx canadensis	Canada lynx	E	1
MUSTELIDAE-WEASEL FAMILY			
Martes americana	American marten	E	1
VESPERTILIONIDAE-EVENING BAT AND VESPER BAT FAMILY			
Myotis leibii	Eastern small-footed bat	T	1
Myotis lucifugus	Little brown bat	E	9
Myotis septentrionalis	Northern long-eared bat	E	9
Myotis sodalis	Indiana bat	E	1
Perimyotis subflavus	Tri-colored bat	E	10

Date listed:

1 = 04-13-87

2 = 07-30-88

3 = 06-23-89

4 = 11-09-91

5 = 12-07-94

6 = 03-18-99

7 = 04-23-05

8 = 02-16-11

9 = 07-15-11

10 = 11-15-12

11 = XX-XX-XX

A = listed as threatened on 04-13-87

B = listed as threatened on 12-07-94

C = listed as threatened on 06-23-89

*Indicates a name change (synonym or different taxonomic level) from a previous Vermont Endangered and Threatened Species list