

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
SUMMARY OF PUBLIC COMMENTS
EXPLANATORY STATEMENT FOR FINAL REGULATIONS

Proposed amendments to sections 26-306-4, 26-306-5, and 26-306-6 of the Regulations of Connecticut State Agencies.

Proposed Amendments to Endangered, Threatened, and Species of Special Concern

STATEMENT OF PURPOSE: As authorized pursuant to CGS section 26-306, the proposed amendments are to update the lists of species which are endangered, threatened or of special concern. Pursuant to CGS 26-307, the commissioner of the Department of Environmental Protection (DEEP) is required to review, at least every five years, the designation of species to determine whether species should be: (1) Added or removed from the list; or, if necessary, (2) change the designation.

The Department held a public hearing to receive comments on the proposed amendment on March 31, 2015. The hearing record was open until April 14, 2015 at 4:30 pm for submission of written comments. Following is the wording of the proposed amendment as presented at the public hearing, a summary of comments received and the Department's responses, and the recommended final wording for the amendment.

Proposed Amendments at Time of Public Hearing of March 31, 2015

Section 1. Section 26-306-4 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-4. List of endangered species

(a) The following mammal species are determined to be endangered:

Cryptotis parva	Least shrew
<u>Myotis leibii</u>	<u>Eastern small-footed bat</u>
<u>Myotis lucifugus</u>	<u>Little brown bat</u>
<u>Myotis septentrionalis</u>	<u>Northern long-eared bat</u>
Myotis sodalis	Indiana bat
<u>Perimyotis subflavus</u>	<u>Tri-colored bat</u>

(b) The following bird species are determined to be endangered:

Accipiter striatus	Sharp-shinned hawk
Ammodramus savannarum	Grasshopper sparrow
Asio otus	Long-eared owl
Bartramia longicauda	Upland sandpiper

Botaurus lentiginosus	American bittern
Chordeiles minor	Common nighthawk
Circus cyaneus	Northern harrier
Cistothorus platensis	Sedge wren
Eremophila alpestris	Horned lark
Gallinula chloropus	Common moorhen
Icteria virens	Yellow-breasted chat
[Laterallus jamaicensis]	[Black rail]
	[(nesting population only)]
Melanerpes erythrocephalus	Red-headed woodpecker
Podilymbus podiceps	Pied-billed grebe
Poocetes gramineus	Vesper sparrow
Rallus elegans	King rail
	(nesting population only)
Sterna dougallii	Roseate tern
Tyto alba	Barn owl
Vermivora chrysoptera	Golden-winged warbler

(c) The following reptile species are determined to be endangered:

Crotalus horridus	Timber rattlesnake
Dermodochelys coriacea	Leatherback
Glyptemys muhlenbergii	Bog turtle
Lepidochelys kempii	Atlantic ridley

(d) The following amphibian species are determined to be endangered:

Ambystoma laterale	Blue-spotted salamander
	(diploid populations)
Scaphiopus holbrookii	Eastern spadefoot

(e) The following fish species are determined to be endangered:

Acipenser brevirostrum	Shortnose sturgeon
<u>Acipenser oxyrinchus oxyrinchus</u>	<u>Atlantic sturgeon</u>
[Lampetra] <u>Lethenteron</u> appendix	American brook lamprey
Lota lota	Burbot
Osmerus mordax	Rainbow smelt
	(anadromous populations only)

(f) The following invertebrate species are determined to be endangered:

Alasmidonta heterodon	Dwarf [wedge mussel] <u>wedgemussel</u>
Alasmidonta varicosa	Brook floater
Amblyscirtes vialis	Common roadside skipper
Anarta luteola	Noctuid moth
<u>Apodrepanulatrix liberaria</u>	<u>New Jersey tea inchworm</u>
Calephelis borealis	Northern metalmark
Callophrys hesseli	Hessel's hairstreak
Catocala herodias gerhardi	Herodias underwing

<u>Celastrina neglectamajor</u>	<u>Appalachian blue</u>
<u>Chytonix sensilis</u>	<u>Barrens Chytonix</u>
Cicindela lepida	Dune ghost tiger beetle
Cicindela puritana	Puritan tiger beetle
Epeoloides pilosula	Macropis cuckoo
Erynnis lucilius	Columbine duskywing
Erynnis persius persius	Persius duskywing
<u>Eubaphe meridiana</u>	<u>Little beggar</u>
Eubbranchipus holmanii	Fairy shrimp
<u>Euphyes bimacula</u>	<u>Two-spotted skipper</u>
Grammia phyllira	Phyllira tiger moth
Grammia speciosa	Bog tiger moth
<u>Haematopota rara</u>	<u>Lace-winged horse fly</u>
Hemileuca maia maia	[Buck] <u>Barrens buck</u> moth
Hybomitra longiglossa	Horse fly
Lampsilis cariosa	Yellow [lamp mussel] <u>lampmussel</u>
<u>Magiccicada septendecula</u>	<u>Little 17-year periodical cicada</u>
[Metarranthis apiciaria]	[Barrens metarranthis moth]
[Papaipema appassionata]	[Pitcher plant borer]
<u>Papaipema leucostigma</u>	<u>Columbine borer</u>
<u>Papaipema marginidens</u>	<u>Brick-red borer moth</u>
Phyllonorycter ledella	Labrador tea tentiform leafminer
<u>Schinia gracilenta</u>	<u>Slender flower moth</u>
<u>Speyeria atlantis</u>	<u>Atlantis fritillary butterfly</u>
<u>Tibicen auletes</u>	<u>Northern dusk-singing cicada</u>
Williamsonia lintneri	[Banded bog skimmer] <u>Ringed boghaunter</u>
<u>Zale curema</u>	<u>Black-eyed zale</u>

(g) The following plant species are determined to be endangered:

Abies balsamea	Balsam fir (native populations only)
Agalinis acuta	Sandplain [gerardia] <u>agalinis</u>
Agastache nepetoides	Yellow giant hyssop
Agastache scrophulariifolia	Purple giant hyssop
Ageratina aromatica	Small white snakeroot
Angelica lucida	Sea-coast angelica
Arceuthobium pusillum	Dwarf mistletoe
<u>Aristida purpurascens</u>	<u>Arrowfeather</u>
Aristida tuberculosa	Beach needle grass
Asclepias viridiflora	Green milkweed
<u>Bidens eatonii</u>	<u>Eaton's beggarticks</u>
Bouteloua curtipendula	[Side-oats] <u>Sideoats</u> grama-grass
Carex alata	Broadwing sedge
Carex backii	[Sedge] <u>Back's sedge</u>
Carex barrattii	Barratt's sedge

Carex buxbaumii	Brown bog sedge
Carex castanea	Chestnut-colored sedge
Carex exilis	[Sedge] <u>Meager sedge</u>
Carex magellanica	[Sedge] <u>Boreal bog sedge</u>
Carex polymorpha	Variable sedge
Carex pseudocyperus	Cyprus-like sedge
<u>Carex reznicekii</u>	<u>Reznicek's sedge</u>
Carex schweinitzii	Schweinitz's sedge
Carex viridula	Little green sedge
Carex willdenowii	Willdenow's sedge
<u>Castilleja coccinea</u>	<u>Indian paintbrush</u>
Chamaelirium luteum	Devil's-bit
Cheilanthes lanosa	Hairy lip-fern
Cirsium horridulum	Yellow thistle
Coeloglossum viride	Long-bracted green orchid
Crassula aquatica	Pygmyweed
Cryptogramma stelleri	Slender cliff-brake
Cypripedium reginae	Showy lady's-slipper
[Dalibarda repens]	[Dew-drop]
Desmodium cuspidatum	Large-bracted tick-trefoil
[Desmodium humifusum]	[Trailing tick-trefoil]
Dichantherium scabriusculum	[Panic grass] <u>Tall swamp rosette-panicgrass</u>
Diplazium pycnocarpon	Narrow-leaved glade fern
Dryopteris campyloptera	Mountain wood-fern
Echinodorus tenellus	Bur-head
Eleocharis equisetoides	[Horse-tail spike-rush] <u>Horsetail spikesedge</u>
Eleocharis quadrangulata var. crassior	[Spike-rush] <u>Square-stemmed spikesedge</u>
Equisetum pratense	Meadow horsetail
Equisetum scirpoides	Dwarf scouring rush
Eriocaulon parkeri	Parker's pipewort
Eupatorium album	White thoroughwort
Eurybia radula	Rough aster
Floerkea proserpinacoides	False mermaid-weed
Galium labradoricum	Bog bedstraw
Gentianella quinquefolia	Stiff gentian
[Hasteola suaveolens]	[Sweet-scented Indian-plantain]
Hudsonia ericoides	Golden-heather
Hydrastis canadensis	[Golden seal] <u>Goldenseal</u>
Hydrocotyle umbellata	Water pennywort
Hydrocotyle verticillata	Whorled pennywort
Isotria medeoloides	Small whorled pogonia
Lachnanthes [<u>caroliniana</u>] <u>caroliniana</u>	Carolina redroot
	(native populations only)
Leptochloa fusca ssp. fascicularis	Saltpond grass

Ligusticum [<u>scoticum</u>] <u>scoticum</u>	Scotch lovage
Linnaea borealis ssp. americana	Twinflower
Linum sulcatum	Yellow flax
Liparis liliifolia	Lily-leaved twayblade
Ludwigia sphaerocarpa	Globe-fruited false-loosestrife
Lycopodiella alopecuroides	Foxtail clubmoss
Lythrum alatum	Winged loosestrife
[Malaxis bayardii]	[Bayard's white adder's mouth]
Malaxis brachypoda	White adder's-mouth
Malaxis unifolia	Green adder's-mouth
Milium effusum	Tall millet-grass
<u>Minuartia glabra</u>	<u>Mountain sandwort</u>
Moehringia macrophylla	Large-leaved sandwort
Moneses uniflora	One-flower wintergreen
[Morus rubra]	[Red mulberry]
Muhlenbergia capillaris	Long-awn hairgrass
Myriophyllum alterniflorum	Slender water-milfoil
Myriophyllum pinnatum	Cutleaf water-milfoil
[Oclemena X blakei]	[Blake's aster]
Oclemena nemoralis	Bog aster
Oligoneuron album	Prairie goldenrod
Oligoneuron rigidum	Stiff goldenrod
Onosmodium virginianum	Gravel-weed
<u>Ophioglossum pusillum</u>	<u>Northern adder's-tongue</u>
<u>Ophioglossum vulgatum</u>	<u>Southern adder's-tongue</u>
<u>Packera anonyma</u>	<u>Small's ragwort</u>
<u>Packera paupercula</u>	<u>Balsam groundsel</u>
[Paspalum laeve]	[Field paspalum]
Pellaea glabella	Smooth cliff-brake
Pinus resinosa	Red pine
	(native populations only)
Piptatherum pungens	Slender mountain ricegrass
Pityopsis falcata	Sickle-leaved golden aster
Platanthera blephariglottis	White-fringed orchid
<u>Platanthera ciliaris</u>	<u>Yellow-fringed orchid</u>
Polygala cruciata	Field milkwort
[Polygala nuttallii]	[Nuttall's milkwort]
Polygala senega	Seneca snakeroot
Polymnia canadensis	Small-flowered leafcup
Potamogeton confervoides	[Pondweed] <u>Tuckerman's pondweed</u>
Potamogeton friesii	Fries' pondweed
Potamogeton hillii	Hill's pondweed
Potamogeton ogdenii	Ogden's pondweed
Potamogeton strictifolius	Straight-leaved pondweed

[Pycnanthemum clinopodioides]	[Basil mountain-mint]
Pycnanthemum torrei	Torrey mountain-mint
Ranunculus ambigenus	Water-plantain spearwort
Ranunculus cymbalaria	Seaside crowfoot
Rhynchospora capillacea	[Capillary beak-rush] <u>Needle beaksedge</u>
Rhynchospora scirpoides	Long-beaked [bald rush] <u>beaksedge</u>
Ribes triste	Swamp red currant
<u>Rubus dalibarda</u>	<u>Dew-drop</u>
Sabatia stellaris	Marsh pink
Sagittaria cuneata	[Waputo] <u>Northern arrowhead</u>
<u>Sagittaria teres</u>	<u>Quill-leaved arrowhead</u>
<u>Salix exigua</u>	<u>Sandbar willow</u>
Salix pedicellaris	Bog willow
Saururus cernuus	Lizard's tail
Scheuchzeria palustris ssp. americana	Pod grass
Scleria pauciflora var. caroliniana	Few-flowered nutrush
Scleria reticularis	Reticulated nutrush
Scleria triglomerata	[Nutrush] <u>Whip nutrush</u>
Scutellaria integrifolia	Hyssop skullcap
Scutellaria parvula var. missouriensis	Small skullcap
<u>Senecio suaveolens</u>	<u>Sweet-scented Indian-plantain</u>
Sparganium fluctuans	Floating bur-reed
Sparganium natans	Small bur-reed
Sporobolus clandestinus	Rough dropseed
Sporobolus heterolepis	Northern dropseed
Sporobolus neglectus	Small dropseed
Stachys hyssopifolia	Hyssop-leaf hedge-nettle
Taenidia integerrima	Yellow pimpernel
Trichostema brachiatum	False pennyroyal
Triosteum angustifolium	Narrow-leaved horse gentian
Triphora trianthophora	Nodding pogonia
<u>Trisetum spicatum</u>	<u>Narrow false oats</u>
Utricularia resupinata	[Bladderwort] <u>Resupinate bladderwort</u>
Uvularia grandiflora	Large-flowered bellwort
Vaccinium myrtilloides	Velvetleaf blueberry
<u>Viola adunca</u>	<u>Hook-spurred violet</u>
Viola brittoniana	Coast violet
<u>Viola renifolia</u>	<u>Kidney-leaf white violet</u>
Waldsteinia fragarioides	Barren strawberry
Xyris smalliana	Small's yellow-eyed
Zizia aptera	Golden Alexanders

Sec. 2. Section 26-306-5 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-5. List of threatened species

(a) The following mammal species are determined to be threatened:

None

(b) The following bird species are determined to be threatened:

<u>Accipiter gentilis</u>	<u>Northern goshawk</u>
Ammodramus maritimus	Seaside sparrow
[Anas discors]	[Blue-winged teal]
	[(nesting population only)]
Ardea alba	Great egret
Asio flammeus	Short-eared owl
	(wintering populations)
Charadrius melodus	Piping plover
Egretta thula	Snowy egret
Falco peregrinus	Peregrine falcon
[Falco sparverius]	[American kestrel]
Haematopus palliatus	American oystercatcher
Haliaeetus leucocephalus	Bald eagle
Ixobrychus exilis	Least bittern
[Progne subis]	[Purple martin]
<u>Sturnella magna</u>	<u>Eastern meadowlark</u>
Sternula antillarum	Least tern

(c) The following reptile species are determined to be threatened:

Caretta caretta	Loggerhead
Chelonia mydas	Atlantic green turtle
[Eumeces] <u>Plestiodon fasciatus</u>	Five-lined skink

(d) The following amphibian species are determined to be threatened:

Gyrinophilus porphyriticus	Northern spring salamander
Plethodon glutinosus	Northern slimy salamander

(e) The following fish species are determined to be threatened:

[Acipenser oxyrinchus oxyrinchus]	[Atlantic sturgeon]
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(f) The following invertebrate species are determined to be threatened:

Abagrotis nefascia benjamini	Coastal heathland cutworm
<u>Anthopotamus verticis</u>	<u>Tusked sprawler</u>
<u>Apamea inordinata</u>	<u>Apamea moth</u>
[Apodrepanulatrix liberaria]	[New Jersey tea inchworm]
<u>Atylotus ohioensis</u>	<u>Tabanid fly</u>
<u>Bombus terricola</u>	<u>Yellow-banded bumble bee</u>
Callophrys irus	Frosted elfin
Calopteryx dimidiata	Sparkling jewelwing
[Celastrina neglectamajor]	[Appalachian blue]

<u>Cicindela tranquebarica</u>	<u>Dark-bellied tiger beetle</u>
<u>Cordulegaster erronea</u>	<u>Tiger spiketail</u>
<u>Dargida rubripennis</u>	<u>Pink streak</u>
<u>Drasteria graphica atlantica</u>	<u>False heather underwing</u>
<u>Enallagma doubledayi</u>	<u>Atlantic bluet</u>
<u>Enallagma recurvatum</u>	<u>Pine barrens bluet</u>
<u>Erynnis brizo</u>	<u>Sleepy duskywing</u>
<u>Euchlaena madusaria</u>	<u>Scrub euchlaena</u>
<u>Eucosma morrisoni</u>	<u>Morrison's mosaic</u>
<u>Eumacaria latiferrugata</u>	<u>Brown-bordered geometer</u>
[<u>Euphyes bimacula</u>]	[<u>Two-spotted skipper</u>]
[<u>Euxoa violaris</u>]	[<u>Violet dart moth</u>]
<u>Exyra fax</u>	<u>Pitcher plant moth</u>
[<u>Faronta rubripennis</u>]	[<u>Pink streak</u>]
[<u>Gomphus adelphus</u>]	[<u>Mustached clubtail</u>]
<u>Gomphus descriptus</u>	<u>Harpoon clubtail</u>
<u>Gomphus fraternus</u>	<u>Midland clubtail</u>
<u>Gomphus quadricolor</u>	<u>Rapids clubtail</u>
<u>Hemaris gracilis</u>	<u>Slender clearwing</u>
<u>Hetaerina americana</u>	<u>American rubyspot</u>
[<u>Hybomitra frosti</u>]	[<u>Horse fly</u>]
<u>Hybomitra trepida</u>	<u>Horse fly</u>
<u>Hybomitra typhus</u>	<u>Horse fly</u>
<u>Lapara coniferarum</u>	<u>Pine sphinx</u>
<u>Leucorrhinia glacialis</u>	<u>Crimson-ringed whiteface</u>
<u>Merycomyia whitneyi</u>	<u>Tabanid fly</u>
<u>Papaipema appassionata</u>	<u>Pitcher plant borer</u>
<u>Papaipema duovata</u>	<u>Seaside goldenrod stem borer</u>
[<u>Papaipema leucostigma</u>]	[<u>Columbine borer</u>]
<u>Paraleptophlebia assimilis</u>	<u>Mayfly</u>
<u>Phaneta clavana</u>	<u>Lanced phaneta</u>
<u>Progomphus obscurus</u>	<u>Common sanddragon</u>
<u>Psectraglaea carnosia</u>	<u>Pink sallow</u>
<u>Pyrrhia aurantiago</u>	<u>Aureolaria seed borer</u>
<u>Schinia septentrionalis</u>	<u>Northern flower moth</u>
<u>Somatochlora georgiana</u>	<u>Coppery emerald</u>
<u>Speranza [exornata] exonerata</u>	<u>Barrens itame</u>
[<u>Speyeria atlantis</u>]	[<u>Atlantis fritillary butterfly</u>]
<u>Stylurus amnicola</u>	<u>Riverine clubtail</u>
<u>Sympistis dentata</u>	<u>Toothed apharetra moth</u>
<u>Tabanus fulvicallus</u>	<u>Horse fly</u>
<u>Thaumatopsis edonis</u>	<u>Grassland thaumatopsis</u>
[<u>Zale curema</u>]	[<u>Noctuid moth</u>]
[<u>Zale submediana</u>]	[<u>Noctuid moth</u>]
<u>Zanclognatha martha</u>	[<u>Noctuid moth</u>] <u>Pine barrens</u> <u>zanclognatha</u>

Zanclognatha theralisNoctuid moth

(g) The following plant species are determined to be threatened:

Alopecurus aequalis	[Orange foxtail] <u>Short-awned meadow-foxtail</u>
Andromeda polifolia var. glaucophylla	Bog rosemary
Anemone canadensis	Canada anemone
Asplenium ruta-muraria	Wallrue spleenwort
<u>Betula pumila</u>	<u>Swamp birch</u>
[Bidens beckii]	[Water-marigold]
[Bidens eatonii]	[Eaton's beggars-tick]
<u>Calamagrostis stricta ssp. inexpansa</u>	<u>Reed bentgrass</u>
Carex alopecoidea	Foxtail sedge
Carex crawei	Crawe's sedge
Carex cumulata	Clustered sedge
Carex davisii	Davis' sedge
Carex limosa	[Sedge] <u>Mud sedge</u>
[Castilleja coccinea]	[Indian paintbrush]
Corydalis flavula	Yellow corydalis
Eriophorum vaginatum var. spissum	Hare's tail
Eurybia spectabilis	Showy aster
Gaylussacia [dumosa var.] bigeloviana	Dwarf huckleberry
[Helianthemum propinquum]	[Low frostweed]
Houstonia longifolia	Longleaf bluet
Hudsonia tomentosa	[False] <u>Woolly beach-heather</u>
Ilex glabra	Inkberry
	(native populations only)
<u>Krigia biflora</u>	<u>Two-flowered cynthia</u>
Lipocarpa micrantha	Dwarf bulrush
Maianthemum trifolium	Three-leaved false Solomon's-seal
[Minuartia glabra]	[Mountain sandwort]
Myriophyllum sibiricum	Northern water-milfoil
[Ophioglossum pusillum]	[Adder's-tongue]
[Packera paupercula]	[Ragwort]
Panicum amarum var. amarum	[Panic grass] <u>Bitter panicgrass</u>
<u>Paspalum laeve</u>	<u>Field paspalum</u>
Pedicularis lanceolata	Swamp lousewort
Petasites frigidus var. palmatus	Sweet coltsfoot
[Platanthera ciliaris]	[Yellow-fringed orchid]
<u>Polygala nuttallii</u>	<u>Nuttall's milkwort</u>
Populus heterophylla	Swamp cottonwood
Potamogeton [pusillus ssp.] gemmiparus	Capillary pondweed
Potamogeton vaseyi	Vasey's pondweed
Rhododendron groenlandicum	Labrador tea
Rhynchospora macrostachya	[Beaked rush] <u>Tall beaksedge</u>

Rotala ramosior	Toothcup
[Salix exigua]	[Sandbar willow]
Schoenoplectus acutus	Hard-stemmed bulrush
Schoenoplectus torreyi	Torrey bulrush
<u>Senna hebecarpa</u>	<u>Wild senna</u>
Sibbaldiopsis tridentata	Three-toothed cinquefoil
Silene stellata	Starry [champion] <u>campion</u>
Spergularia canadensis	Canada sand-spurry
Sporobolus cryptandrus	Sand dropseed
<u>Stachys hispida</u>	<u>Hispid hedge-nettle</u>
Streptopus amplexifolius	White mandarin
Thuja occidentalis	Northern white cedar
	(native populations only)
Trollius laxus	Spreading globe flower
<u>Viburnum prunifolium</u>	<u>Smooth black-haw</u>
Xyris montana	Northern yellow-eyed grass

Sec. 3. Section 26-306-6 of the Regulations of State Agencies is amended to read as follows:

Sec. 26-306-6. List of species of special concern

(a) The following mammal species are determined to be species of special concern:

*Canis lupus	Gray wolf
Lasionycteris noctivagans	Silver-haired bat
Lasiurus borealis	Red bat
Lasiurus cinereus	Hoary bat
[*Myotis leibii]	[Eastern small-footed bat]
*Neotoma magister	Eastern woodrat
Phocoena phocoena <u>ssp. phocoena</u>	Harbor porpoise
*Puma concolor cougar	Eastern cougar
Synaptomys cooperi	Southern bog lemming

*Believed Extirpated

(b) The following bird species are determined to be species of special concern:

Aegolius acadicus	Northern saw-whet owl
Ammodramus caudacutus	Saltmarsh sharp-tailed sparrow
*Ammodramus henslowii	Henslow's sparrow
Buteo platypterus	Broad-winged hawk
Caprimulgus vociferus	Whip-poor-will
Dolichonyx oryzivorus	Bobolink
Egretta caerulea	Little blue heron
Empidonax alnorum	Alder flycatcher
<u>Falco sparverius</u>	<u>American kestrel</u>
Gavia immer	Common loon

*Numenius borealis	Eskimo curlew
Nyctanassa violacea	Yellow-crowned night-heron
[Parula americana]	[Northern parula]
Passerculus sandwichensis	Savannah sparrow
Passerculus sandwichensis ssp. princeps	Ipswich sparrow (wintering population)
Plegadis falcinellus	Glossy ibis
<u>Progne subis</u>	<u>Purple martin</u>
<u>Setophaga americana</u>	<u>Northern parula</u>
<u>Setophaga cerulea</u>	<u>Cerulean warbler</u>
Sterna hirundo	Common tern
[Sturnella magna]	[Eastern meadowlark]
Toxostoma rufum	Brown thrasher

*Believed Extirpated

(c) The following reptile species are determined to be species of special concern:

<u>Clemmys guttata</u>	<u>Spotted turtle</u>
Glyptemys insculpta	Wood turtle
Heterodon platirhinos	Eastern hognose snake
<u>Malaclemys terrapin terrapin</u>	<u>Northern diamondback terrapin</u>
[Liochlorophis] <u>Opheodrys vernalis</u>	Smooth green snake
Terrapene carolina carolina	Eastern box turtle
Thamnophis sauritus	Eastern ribbon snake

(d) The following amphibian species are determined to be species of special concern:

Ambystoma jeffersonianum	Jefferson salamander "complex"
Ambystoma laterale	Blue-spotted salamander "complex"
<u>Necturus maculosus</u>	<u>Mudpuppy</u>
Rana pipiens	Northern leopard frog

(e) The following fish species are determined to be species of special concern:

Alosa aestivalis	Blueback herring
<u>Carcharias taurus</u>	<u>Sand tiger shark</u>
Catostomus catostomus	Longnose sucker
<u>Cottus cognatus</u>	<u>Slimy sculpin</u>
Enneacanthus obesus	Banded sunfish
<u>Liparis atlanticus</u>	<u>Atlantic seasnail</u>
Notropis bifrenatus	Bridle shiner
<u>Ulvaria subbifurcata</u>	<u>Radiated shanny</u>

(f) The following invertebrate species are determined to be species of special concern:

*Acronicta albarufa	Barrens dagger moth
<u>Acronicta falcula</u>	<u>Corylus dagger moth</u>
<u>Acronicta fragilis</u>	<u>Fragile dagger moth</u>
*Acronicta lanceolaria	[Noctuid moth] <u>Pointed dagger moth</u>

Agonum darlingtoni	Ground beetle
Agonum mutatum	Ground beetle
Agrotis stigmata	Spotted dart moth
Amara chalcea	Ground beetle
[Anthopotamus verticis]	[Tusked sprawler]
[Apamea burgessi]	[Apamea moth]
[Apamea inordinata]	[Apamea moth]
Apamea lintneri	[Apamea moth] <u>Sand wainscot moth</u>
Argyrostrotis anilis	Short-lined chocolate
[Atylotus ohioensis]	[Tabanid fly]
Badister transversus	Ground beetle
Bembidion carinula	Ground beetle
Bembidion lacunarium	Ground beetle
Bembidion planum	Ground beetle
Bembidion pseudocautum	Ground beetle
Bembidion quadratum	Ground beetle
Bembidion semicinctum	Ground beetle
Bembidion simplex	Ground beetle
*Bombus affinis	[Affable bumblebee] <u>Rusty-patched bumble bee</u>
*Bombus ashtoni	Ashton's [bumblebee] <u>cuckoo bumble bee</u>
[Bombus terricola]	[Yellowbanded bumblebee]
Brachinus cyanipennis	Bombardier beetle
Brachinus fumans	Bombardier beetle
Brachinus medius	Bombardier beetle
Brachinus ovipennis	Bombardier beetle
Brachinus patruelis	Bombardier beetle
Callophrys henrici	Henry's elfin
*Callophrys polios	Hoary elfin
[*Calosoma wilcoxi]	[Ground beetle]
<u>Cambarus bartonii</u>	<u>Common crayfish</u>
[*]Carabus serratus	Ground beetle
[*Carabus sylvosus]	[Ground beetle]
Carabus vinctus	Ground beetle
<u>Catocala badia badia</u>	<u>Bay underwing moth</u>
*Catocala pretiosa pretiosa	Precious underwing moth
Chaetagnatha cerata	[Noctuid moth] <u>Waxed sallow</u>
*Chlosyne harrisii	Harris' checkerspot
*Chlosyne nycteis	Silvery checkerspot
*Cicindela dorsalis dorsalis	Northeastern beach tiger beetle
Cicindela formosa generosa	[Pine barrens] <u>Big sand tiger beetle</u>
Cicindela hirticollis	[Tiger] <u>Hairy-necked tiger beetle</u>
Cicindela marginata	[Tiger] <u>Saltmarsh tiger beetle</u>
*Cicindela purpurea	[Tiger] <u>Purple tiger beetle</u>
[Cicindela tranquebarica]	[Dark-bellied tiger beetle]
*Citheronia regalis	Regal moth
[*]Coccinella novemnotata	[C9] <u>Nine-spotted lady beetle</u>

Crangonyx aberrans	Mystic Valley amphipod
*Cucullia speyeri	[Noctuid moth] <u>Speyer's paint</u>
<u>Derrima stellata</u>	<u>Pink star moth</u>
<u>Dichagyris acclivis</u>	<u>Noctuid moth</u>
<u>Digrammia equivocata</u>	<u>Equivocal looper</u>
* <u>Drasteria occulta</u>	<u>Drasteria moth</u>
[*] <u>Eacles imperialis imperialis</u>	Imperial moth
<u>Enallagma daeckii</u>	<u>Attenuated bluet</u>
Enallagma minusculum	Little bluet
Enallagma pictum	Scarlet bluet
Erynnis horatius	Horace's duskywing
*Erynnis martialis	Mottled duskywing
[Euchlaena madusaria]	[Scrub euchlaena]
[Eucoptocnemis fimbriaris]	[Noctuid moth]
*Eulimnadia agassizii	Clam shrimp
[Eumacaria latiferrugata]	[Brown-bordered geometer]
Euphyes dion	Sedge skipper
Euxoa pleuritica	[Noctuid] <u>Fawn brown dart moth</u>
<u>Euxoa violaris</u>	<u>Violet dart moth</u>
[Exyra fax]	[Pitcher plant moth]
<u>Fagitana littera</u>	<u>Marsh fern moth</u>
*Fossaria galbana	[Lymnaeid snail] <u>Boreal fossaria</u>
Fossaria rustica	Lymnaeid snail
Geopinus incrassatus	Ground beetle
* <u>Glena cognataria</u>	<u>Blueberry gray moth</u>
<u>Gomphus adelphus</u>	<u>Mustached clubtail</u>
Gomphus vastus	Cobra clubtail
Gomphus ventricosus	Skillet clubtail
Goniops chrysocoma	Horse fly
Gyraulus circumstriatus	[Aquatic snail] <u>Disc Gyro</u>
Harpalus caliginosus	Ground beetle
Harpalus [eraticus] <u>erraticus</u>	Ground beetle
Helluomorphoides praeustus bicolor	Ground beetle
<u>Hybomitra frosti</u>	<u>Horse fly</u>
Hybomitra [luridus] <u>lurida</u>	Horse fly
[Hybomitra trepida]	[Horse fly]
[Hybomitra typhus]	[Horse fly]
*Hydraecia immanis	Hop vine borer moth
<u>Hyparpax aurora</u>	<u>Pink prominent</u>
Ladona deplanata	Blue corporal dragonfly
[Lepipolys perscripta]	[Noctuid moth]
Leptodea ochracea	Tidewater mucket
<u>Lethe eurydice</u>	<u>Eyed brown</u>
Ligumia nasuta	Eastern [pond mussel] <u>pondmussel</u>
[*] <u>Lithophane lemmeri</u>	Lemmer's noctuid moth
[*] <u>Lithophane viridipallens</u>	Pale green pinion moth

Lomamyia flavicornis	Yellow-horned beaded lacewing
*Lordithon niger	Black lordithon rove beetle
Loxandrus vulneratus	Ground beetle
Lycaena epixanthe	Bog copper
Lycaena hyllus	Bronze copper
Macropis ciliata	Fringed loosestrife oil-bee
Margaritifera margaritifera	Eastern [pearl shell] <u>pearlshell</u>
Melitara prodenialis	Eastern cactus-boring moth
Meropleon ambifuscum	Newman's brocade
[Merycomyia whitneyi]	[Tabanid fly]
<u>Metarranthis apiciaria</u>	<u>Barrens metarranthis moth</u>
*Mixogaster johnsoni	Syrphid fly
Nebria lacustris lacustris	Ground beetle
*Nicrophorus americanus	American burying beetle
[*Omophron tessellatum]	[Ground beetle]
[Oncocnemis riparia]	[Dune oncocnemis]
[*Panagaeus fasciatus]	[Ground beetle]
*Papaipema circumlucens	Hops-stalk borer moth
[Papaipema duovata]	[Seaside goldenrod stem borer]
*Papaipema maritima	Maritime sunflower borer moth
*Papaipema sciata	Culvers root [bore] <u>borer</u> moth
[Paraleptophlebia assimilis]	[Mayfly]
<u>Parasa indetermina</u>	<u>Stinging rose caterpillar moth</u>
Photedes inops	<u>Spartina borer moth</u>
[*Polygonia progne]	[Gray comma]
Pomatiopsis lapidaria	Slender walker
[Procambarus acutus]	[Whiteriver crayfish]
*Pyreferra ceromatica	Annoited sawfly moth
[Rhodoecia aurantiago]	[Aureolaria seed borer]
[Sargus fasciatus]	[Soldier fly]
[Satyrodes eurydice]	[Eyed brown]
[*Scaphinotus elevatus]	[Ground beetle]
Scaphinotus viduus	Ground beetle
Schinia spinosae	[Noctuid] <u>Apinose flower moth</u>
*Sideridis maryx	<u>Maroonwing moth</u>
Somatochlora elongata	Ski-tailed emerald
[Spartiniphaga inops]	[Spartina borer moth]
*Speyeria idalia	Regal fritillary
Sphodros niger	Purse web spider
Stagnicola catascopium	[Lymnaeid snail] <u>Woodland pondsnail</u>
Stonemyia isabellina	Tabanid fly
Stygobromus tenuis tenuis	Piedmont groundwater amphipod
<u>Sympistis perscripta</u>	<u>Scribbled sawfly moth</u>
<u>Sympistis riparia</u>	<u>Dune Sympistis</u>
Synurella chamberlaini	Coastal pond amphipod
[Tabanus fulvicallus]	[Horse fly]

[Tetragonoderus fasciatus]
 [Tibicen auletes]
 Valvata sincera
 Valvata tricarinata
 Zale obliqua
 *Zale submediana

[Ground beetle]
 [Cicada]
 Boreal turret snail
 Turret snail
 [Noctuid moth] Oblique zale
Gray spring zale

*Believed Extirpated

(g) The following plant species are determined to be species of special concern:

Acalypha virginica	Virginia copperleaf
*Amaranthus pumilus	Sea-beach amaranth
<u>Anemone acutiloba</u>	<u>Sharp-lobed hepatica</u>
*Angelica venenosa	Hairy angelica
*Antennaria howellii ssp. petaloidea	Field pussytoes
*Aplectrum hyemale	Puttyroot
*Arethusa bulbosa	[Arethusa] <u>Dragon's-mouth</u>
Aristida longespica var. <u>geniculata</u>	Needlegrass
[Aristida purpurascens]	[Arrowfeather]
[Aristolochia serpentaria]	[Virginia snakeroot]
Asclepias purpurascens	Purple milkweed
*Asclepias variegata	White milkweed
Asplenium montanum	Mountain spleenwort
Atriplex glabriuscula	[Orache] <u>Bracted orache</u>
[Betula pumila]	[Swamp birch]
<u>Bidens beckii</u>	<u>Beck's water-marigold</u>
*Blephilia ciliata	Downy wood-mint
*Blephilia hirsuta	Hairy [woodmint] <u>wood-mint</u>
Bolboschoenus maritimus ssp. paludosus	Bayonet grass
Bolboschoenus novae-angliae	Salt marsh bulrush
*Botrychium simplex	Little grape fern
[Calamagrostis stricta ssp. inexpansa]	[Reed bentgrass]
* <u>Calystegia silvatica</u>	<u>Short-stalked false bindweed</u>
*Calystegia spithamea	Low bindweed
Cardamine douglassii	Purple cress
Carex aestivalis	Summer sedge
Carex aquatilis [var. aquatilis] <u>ssp. altior</u>	[Sedge] <u>Water sedge</u>
Carex bushii	[Sedge] <u>Bush's sedge</u>
*Carex collinsii	[Collins] <u>Collins' sedge</u>
*Carex crawfordii	Crawford sedge
[*]Carex foenea	Bronze sedge
Carex formosa	Handsome sedge
Carex hitchcockiana	Hitchcock's sedge
Carex molesta	Troublesome sedge
*Carex nigromarginata	Black-edge sedge

Carex novae-angliae	New England sedge
Carex oligocarpa	Eastern few-fruited sedge
*Carex oligosperma	Few-seeded sedge
*Carex pauciflora	Few-flowered sedge
Carex prairea	Prairie sedge
[Carex squarrosa]	[Sedge]
Carex sterilis	Diocious sedge
Carex trichocarpa	[Sedge] <u>Hairy-fruited sedge</u>
Carex tuckermanii	Tuckerman's sedge
Carex typhina	[Sedge] <u>Cattail sedge</u>
<u>Celastrus scandens</u>	<u>American bittersweet</u>
[*Cercis canadensis]	[Eastern redbud]
	[(native populations only)]
*Chenopodium rubrum	[Coast blite] <u>Red goosefoot</u>
* <u>Coleataenia longifolia ssp. elongata</u>	<u>Long-leaved redtop-panicgrass</u>
Corallorhiza trifida	Early coral root
* <u>Crocanthemum dumosum</u>	<u>Bushy frostweed</u>
<u>Crocanthemum propinquum</u>	<u>Low frostweed</u>
[*Croton willdenowii]	[Elliptical rushfoil]
* <u>Crotonopsis elliptica</u>	<u>Elliptical rushfoil</u>
*Cuphea viscosissima	Blue waxweed
*Cuscuta coryli	Hazel dodder
*Cynoglossum virginianum	Wild comfrey
*Cypripedium arietinum	Ram's-head lady's-slipper
Cypripedium parviflorum	Yellow lady's-slipper
Deschampsia [caespitosa] <u>caespitosa</u>	Tufted hairgrass
Desmodium glabellum	Dillenius' tick-trefoil
*Desmodium sessilifolium	Sessile-leaf tick-trefoil
Dicentra canadensis	Squirrel corn
[Dichanthelium ovale var. addisonii]	[Panic grass]
* <u>Dichanthelium ovale ssp.</u>	<u>Stiff-leaved rosette-panicgrass</u>
<u>pseudopubescens</u>	
* <u>Dichanthelium sphaerocarpon var.</u>	[Panic grass] <u>Round-fruited rosette-panicgrass</u>
<u>isophyllum</u>	
* <u>Dichanthelium xanthophysum</u>	[Panic grass] <u>Pale-leaved rosette-panicgrass</u>
[Diospyros virginiana]	[Persimmon]
* <u>Doellingeria infirma</u>	<u>Appalachian white-aster</u>
Draba reptans	Whitlow-grass
*Drosera filiformis	Thread-leaf sundew
<u>Drymocallis arguta</u>	<u>Tall cinquefoil</u>
Dryopteris goldiana	Goldie's fern
*Eleocharis microcarpa var. filiculmis	[Spike-rush] <u>Small-fruited spikesedge</u>
Elymus wiegandii	Wiegand's wild rye
<u>Endodeca serpentaria</u>	<u>Virginia snakeroot</u>

*Equisetum palustre	Marsh horsetail
[Eurybia X herveyi]	[Hervey's aster]
*Gamochaeta purpurea	Purple cudweed
Gaultheria hispidula	Creeping snowberry
*Geranium bicknellii	Bicknell's northern crane's-bill
*Goodyera repens var. ophioides	Dwarf rattlesnake plantain
[*Helianthemum dumosum]	[Bush rockrose]
[Hepatica nobilis var. acuta]	[Sharp-lobed hepatica]
*Heteranthera reniformis	Kidneyleaf mud-plantain
Honckenya peploides	Seabeach sandwort
Hottonia inflata	Featherfoil
*Huperzia [selago] <u>appressa</u>	Fir clubmoss
*Hybanthus concolor	Green violet
Hydrophyllum virginianum	Virginia waterleaf
*Hypericum adpressum	Creeping St. John's-wort
Hypericum ascyron	Great St. John's-wort
*Juncus debilis	Weak rush
[Krigia biflora]	[Two-flowered cynthia]
* <u>Lechea racemulosa</u>	<u>Illinois pinweed</u>
Lespedeza repens	Creeping bush-clover
Liatris [scariosa var.] novae-angliae	[Blazing star] <u>New England blazing-star</u>
Lilaeopsis chinensis	Lilaeopsis
Limosella australis	Mudwort
*Linum intercursum	Sandplain flax
[Liquidambar styraciflua]	[Sweet gum]
	[(native populations only)]
*Ludwigia polycarpa	Many-fruited false-loosestrife
Lycopus amplexans	Clasping-leaved water-horehound
Lygodium palmatum	Climbing fern
*Lyonia mariana	Stagger-bush
* <u>Malaxis bayardii</u>	<u>Bayard's white adder's mouth</u>
Mitella nuda	Naked miterwort
*Nuphar advena	Large yellow pond lily
* <u>Nuphar microphylla</u>	Small yellow pond lily
*Oenothera fruticosa	Sundrops
Opuntia humifusa	Eastern prickly pear
Orontium aquaticum	Golden club
*Orthilia secunda	One-sided pyrola
Oxalis violacea	Violet wood-sorrel
Panax quinquefolius	American ginseng
[*Panicum rigidulum var. elongatum]	[Tall flat panic-grass]
*Panicum verrucosum	Warty panic grass
*Paronychia fastigiata	Hairy forked chickweed
*Paspalum setaceum var. psammophilum	[Bead grass] <u>Thin paspalum</u>

*Phaseolus polystachios var. polystachios	Wild kidney bean
<u>Phragmites americanus</u>	<u>American reed</u>
Plantago virginica	Hoary plantain
*Platanthera dilatata	Tall white bog orchid
Platanthera flava var. herbiola	Pale green orchid
*Platanthera hookeri	Hooker's orchid
*Platanthera orbiculata	Large round-leaved orchid
[Podostemum ceratophyllum]	[Threadfoot]
*Polanisia dodecandra	Clammy-weed
<u>Polygala ambigua</u>	<u>Alternate milkwort</u>
[*]Polygonum glaucum	Seabeach knotweed
[Potentilla arguta]	[Tall cinquefoil]
*Prunus alleghaniensis	Alleghany plum
*Prunus maritima var. gravesii	Grave's beach plum
*Puccinellia [tenella ssp. alaskana] <u>pumila</u>	Goose grass
Quercus macrocarpa	Bur oak
*Ranunculus flammula var. [filiformis] <u>reptans</u>	Creeping spearwort
[Ranunculus longirostris]	[White water-crowfoot]
[*]Ranunculus pensylvanicus	Bristly buttercup
*Rhus aromatica	Fragrant sumac (native populations only)
Ribes glandulosum	Skunk currant
*Ribes lacustre	Swamp black currant
Ribes rotundifolium	Wild currant
*Rosa nitida	Shining rose
Rubus cuneifolius	Sand [bramble] <u>blackberry</u>
*Rumex [maritimus] <u>persicarioides</u>	Sea-side dock
*Sabatia dodecandra	Large marsh pink
Sagittaria subulata	[Arrowleaf] <u>Awl-leaved arrowhead</u>
Salix petiolaris	Slender willow
[Salix serissima]	[Autumn willow]
Schizachne purpurascens	Purple oat
*Schwalbea americana	Chaffseed
*Scirpus georgianus	Georgia bulrush
*Scirpus longii	Long's bulrush
*Scleria verticillata	Low nutrush
[Senna hebecarpa]	[Wild senna]
*Smilax hispida	Bristly greenbriar
*Solidago aestivalis	<u>Early wrinkle-leaved goldenrod</u>
*Solidago latissimifolia	Elliott's goldenrod
[*Solidago rugosa var. sphagnophila]	[Early wrinkle-leaved goldenrod]
Spiranthes tuberosa var. grayi	Little ladies'-tresses
[Stachys tenuifolia]	[Smooth hedge-nettle]

Stellaria borealis	Northern stitchwort
*Symphyotrichum prenanthoides	Crooked-stem aster
Trichomanes intricatum	Appalachian gametophyte
*Trichophorum alpinum	[Cotton]Alpine bulrush
[Trisetum spicatum]	[Spiked false oats]
*Vaccinium vitis-idaea ssp. minus	Mountain cranberry
*Valerianella radiata	Beaked corn-salad
*Veratrum latifolium	Hybrid bunchflower
*Verbena simplex	Narrow-leaved vervain
*Viburnum nudum	Possum haw
[Viburnum prunifolium]	[Smooth black-haw]
[Viola adunca]	[Hook-spurred violet]
Viola canadensis	Canada violet
*Viola hirsutula	Southern wood violet
Viola nephrophylla	Northern bog violet
[*Viola renifolia]	[Kidney-leaf white violet]
Viola selkirkii	Great-spurred violet
[*Viola striata]	[Striped violet]
[Vitis X novae-angliae]	[New England grape]

*Believed Extirpated

Public Comments Received and the Department's Responses

Comment: Three members from the Connecticut Falconers Association expressed concern that the Northern goshawk (*Accipiter gentilis*) has been added to the list of threatened species, and because of this designation will no longer be allowed as a falconry bird in Connecticut. They requested specific information and/or data as to the justification for listing the Northern goshawk as a threatened species.

Response: The DEEP's Wildlife Division consults with experts from around the State to review and revise the list of endangered, threatened, and special concern species. Based on surveys and declining extant populations, the bird working group submitted a petition to add the Northern goshawk to the list of threatened species. Call back surveys were conducted between 2005-2008 using methods developed by Fuller and Mosher (1981) and refined by DEEP to estimate the abundance and distribution of Northern goshawks statewide. Surveys were conducted with a five-minute silent observation period, followed by a five minute intermittent broadcast of great horned owl vocalizations. Surveyors were instructed to play call back if any raptor was observed during 5 minute silent period, to avoid unnecessary disturbance. Surveys were conducted around the State six times between March and July each. Analysis of survey techniques demonstrated that detection probability for Northern goshawk for each survey visit was 40-60%. With 6 repeated visits each year, probability of detection over the course of each survey year was 97-100%. Over the course of the 4 years of surveys 488 survey points at least 181 independent sites were visited at least one year. Survey points were spread across 162 Breeding Bird Atlas Blocks (Bevier 1994 for blocks).

Survey locations were primarily selected, but influenced by ability to access land. Therefore, State land has the highest percentage due to ease of access and prior knowledge of habitat types. (Table 1) Collectively these properties were then evaluated by land use. (Table 2) Considering that 60% of the survey locations were State land, accounts for 61% being open to the public or light recreational use, and chosen because the recreational and disturbed aspects were less of an issue.

Considering that Northern goshawks preferred habitat that is mature woodlands with areas near clearings and the forest edge, the range of forest patch acres was an important element of the survey. (Table 3) The areas were then refined with percent of canopy and coniferous forest cover. (Tables 4 and 5) Canopy cover and forest cover data were collected through visual estimation by trained surveyors at each point location. Also considering that Northern goshawks prefer large trees and a high canopy closure with an open understory, the 67% of canopy of 50 to over 80%, increased the possibility to locate these raptors.

Between 2005 through 2008, 319 sites (consisting of multiple points per site) were surveyed. Northern goshawks were observed at least once at 6%, 3.6%, 1.1%, and 0% of sites at least once at 6%, 3.6%, 1.1%, and 0% of sites in 2005-2008 respectively. Results of the survey note only two sites with a confirmed nest, all other observations were restricted to one observation in one year, with no evidence of nesting. (Table 6)

Results of the surveys were compared to the Connecticut Breeding Bird Atlas (Bevier 1994). The percent of blocks with any recorded observation of Northern goshawk in the 2005-2008 surveys were compared to the percent of blocks with any recorded observation of Northern goshawk in the Breeding Bird Atlas. This comparison demonstrated a rapidly declining (approximately 50 percent decline) of the Northern goshawk population. In 1982-1986, the Breeding Bird Atlas had occurrences in 14 percent of survey blocks. (Bevier 1994), whereas Woodland Raptor Surveys, conducted in 2005-2008, returned observations in only 7 percent of equivalent atlas blocks visited (23/162). Additionally, estimated site occupancy incorporating detection probability estimated that only 5 percent of the sites surveyed were occupied, and occupancy declined over the course of the surveys. (The complete petition is attached.)

Ownership	Percent of Survey Points
State	60%
Private	20%
County/Town	11%
Unknown	4%
Tribal	3%
Other	2%

Table 1. Survey locations by percentage of ownership

Land Use Around Survey Point	Percent of Survey Points
Light Recreation	61%
Undisturbed	17%
Heavy Recreation	7%
Partially Cut	5%
Unknown	5%
Commercial Forest	1%
Grazed	1%
Water Company	1%

Table 2. Land us of survey areas

Acres of Forest Patch with Survey Point	Percent of Survey Points
<20	35%
20-50	3%
50-100	1%
100-200	1%
300-500	3%
500-1000	3%
1000-1500	2%
>2000	6%
unknown	45%

Table 3. Forest Patch Size

Percent Total Canopy Cover	Percent of Survey Points
<5%	7%
10-30%	9%
30-50%	17%
50-80%	39%
>80%	28%

Table 4. Percent of Canopy Cover

Percent of Coniferous Forest Cover	Percent of Survey Points
0%	38%
5-20%	36%
20-50%	13%
50-75%	10%
75-95%	3%
100%	1%

Table 5. Percent of Coniferous Forest Cover

Year	Number of Independent Survey Sites*	Raw Percent Sites Occupied	Corrected Percentage Sites Occupied
2005	54	6.0%	6.7%
2006	55	3.6%	3.8%
2007	181	1.1%	n/a
2008	29	0.0%	n/a

Table 6.Results of surveys

*Sites may consist of 1-11 survey points spaced at least ½ mile

Recommended wording: As proposed.

Comment: The group that worked on reviewing the invertebrates has recommended additional changes to the list as noted:

Spelling edits:

Harpalus [eraticus] erraticus

Hybomitra [luridus] lurida

Status change:

Remove "Believed Extirpated" symbol (*) for *Coccinella novemnotata* SC*

Response: The DEEP Wildlife Division agrees with the technical changes as recommended.

Recommended wording: Revised.

Hearing Officer's Recommendations

The hearing officer has reviewed all comments received at the March 31, 2015 public hearing and all written comments received as of 4:30 p.m. by April 14, 2015. The Department received a total of three individualized written and/or verbal public comments regarding the proposed amendments. All issues of concern have been addressed in this document to my satisfaction. Based on review of the information and the aforementioned responses, the hearing officer recommends that the Commissioner of Energy and Environmental Protection proceed with the proposed amendment to the regulations governing Endangered, Threatened, and Special Concern Species.