ENVIRONMENTAL PROTECTION

Division of Fish and Wildlife

Endangered and Nongame Species

Proposed Amendments: N.J.A.C. 7:25-4.1, 4.13, 4.17

Authorized By: Bob Martin, Commissioner, Department of Environmental

Protection

Authority: N.J.S.A. 23:2A-1 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar

requirement.

DEP Docket Number: 15-10-12

Proposal Number:

Submit written comments (within 60 days after publication of this proposal) to:

Gary J. Brower, Esq.

Attn: DEP Docket Number: 15-10-12

Office of Legal Affairs

New Jersey Department of Environmental Protection

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The Department of Environmental Protection (Department) requests that commenters submit comments on disk or CDs as well as on paper. Submittals on disk or CD must not be access-restricted (locked or read-only) in order to facilitate use by the Department of the electronically submitted comments. Submission of a disk or CD is not a requirement. The Department prefers Microsoft Word 6.0 or above. MacIntosh formats should not be used. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The agency proposal follows:

Summary

As the Department has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

In accordance with the Endangered and Nongame Species Conservation Act (ENSCA), N.J.S.A. 23:2A-1 et seq., the Commissioner of the Department of Environmental Protection (Department) may promulgate and periodically review a list of those indigenous species and subspecies of wildlife determined to be endangered and may, by regulation, amend the list making such additions or deletions as are deemed appropriate. Additionally, N.J.S.A. 23:2A-6 provides that the Department may adopt regulations with respect to the taking, possession, transportation, and sale of endangered species or regulated nongame species including "the list of nongame species regulated pursuant to this act." The Department has promulgated, as part of its Division of Fish and Wildlife Rules, N.J.A.C. 7:25, the Endangered, Nongame and Exotic Wildlife rules at N.J.A.C. 7:25-4, including the list of endangered species at N.J.A.C. 7:25-4.13 and the list which defines the status of indigenous wildlife species at N.J.A.C. 7:25-4.17.

As described in more detail below, the Department is proposing several amendments to the Endangered, Nongame and Exotic Wildlife rules. The Department is proposing to amend the set of status categories that are assigned to the list of nongame wildlife species at N.J.A.C. 7:25-4.17 to reflect the species' conservation status (the species' need for conservation action). As a result of the proposed amendment of the status categories, the Department is proposing to delete the definitions of several of the terms currently used to describe species status at N.J.A.C. 7:25-4.1 and replace them with new terms and definitions. N.J.A.C. 7:25-4.17 is proposed for amendment to assign the new status categories to the species listed there. The Department is also proposing to change the title of N.J.A.C. 7:25-4.17 to more correctly and succinctly describe the contents of this section. Finally, the Department is proposing several changes to the list of endangered wildlife at N.J.A.C. 7:25-4.13 and to the list and status of nongame wildlife at N.J.A.C. 7:25-4.17 to reclassify several species based upon the Department's analysis of the

latest available information on the status of these species in the State. Changes are also proposed to the scientific (Latin) and common names of several species to reflect nomenclature changes adopted by various professional taxonomic organizations.

The following is a section-by section description of the proposed amendments.

The Department is proposing to amend N.J.A.C. 7:25-4.1 to delete the definition of several terms which are proposed to be replaced by new terms. Definitions are proposed for these new terms. The Department is additionally correcting a cross-reference to the list of endangered species in the definition of "endangered"

The Department is proposing to delete definitions of the terms "declining," "extirpated," "increasing," "introduced," "peripheral," "special case," and "stable." As discussed above, these terms are currently used to indicate the status of indigenous nongame wildlife at N.J.A.C. 7:25-4.17. With the proposed new terminology to describe species status, these terms will no longer be utilized in the rules.

The Department is proposing to add to N.J.A.C. 7.25-4.1 definitions of the following proposed new status categories:

Secure–stable (S) is defined to include species that appear to be secure in the State and not in any immediately foreseeable danger of becoming "endangered" (a species whose prospects for survival in the State are in immediate danger), "threatened" (a species that may become endangered if conditions surrounding it begin or continue to deteriorate) or "special concern" (see summary of the proposed definition for this new status classification below). The term "secure-stable" applies to species for which there is currently no urgent need for directed conservation action. This term replaces the term "stable", but in some cases may also be used to describe the status of species that are currently defined as "declining" so long as there is no immediate conservation concern, despite an apparent declining population trend. Species currently classified as "declining" for which there is an immediate conservation concern will be classified as "special concern" or "threatened", depending upon the level of concern.

The status of "special concern" (SC) is defined to include species that warrant special attention because of inherent vulnerability to environmental deterioration or habitat modification that would result in it becoming threatened if there is deterioration of conditions surrounding the

species. A species is classified as "special concern" when species rarity in the State, declining population trends or increased threats to the species or its habitat make it likely that the species status in the State will worsen in the absence of conservation measures. A species can also be classified as "special concern" if it has highly specialized food and/or habitat requirements, has an inherently low reproductive rate, is found in isolated populations within the State, or has other characteristics that make it particularly vulnerable to environmental or habitat changes. While special concern status warrants the institution of conservation measures, the level of concern for a species classified as "special concern" has not reached a level that would justify "threatened" status. While declining population trends can be one factor leading to classification of a species as special concern, this term is also applied to species that are inherently vulnerable to environmental changes for the foregoing reasons and for which there is little understanding of their current population status in the State. Species classified as special concern receive additional or continued monitoring by the Department, special attention in the management of lands administered by the Department and consideration in the Department's land acquisition programs (for example, the importance of particular areas to the conservation of wildlife is a factor considered by the Department in its funding of land acquisition for the State and in administering grant and loan programs to local governments and non-profit organizations pursuant to the Green Acres Program, N.J.A.C. 7:36).

The Department is proposing a definition of "undetermined-unknown" (U) to replace the current definition of the term "undetermined", which is proposed for deletion. This status classification will continue to include species that cannot be assigned a status of endangered, threatened, special concern, or secure because not enough information exists on which to base a judgment. The Department is expanding the term and its definition to clarify that this status includes all species that cannot otherwise be classified under one of the other status classifications due to a lack of information.

The terms and their definitions proposed to be deleted are primarily reflective of population status (in other words, the species' abundance and trend). The Department is proposing the above new terms and definitions to better reflect the conservation status of species for which population status is just one component. The Department believes that the proposed

terms are more informative with regard to the purpose and intent of ENSCA to "manage all forms of wildlife to insure their continued participation in the ecosystem" (N.J.S.A. 23:2A-2a) in that the new terms provide an appropriate prioritization of species with respect to their need for conservation action and recognize that there are some species that can not yet be so prioritized until further information is developed.

The Department is also proposing to add to N.J.A.C. 7.25-4.1 definitions of the following terms used in reference to bird statuses. "Breeding population" is the species' population (or assemblage of individuals) present in the State during the nesting season. The nesting season dates vary by species but generally occur in early spring to late summer. "Non-breeding population" is the species' population (or assemblage of individuals) present in the State outside of the nesting season.

The Endangered, Nongame and Exotic Wildlife rules include the list of endangered species at N.J.A.C. 7:25-4.13. This list was last amended in April 2003 (see 34 N.J.R. 2405(a), 35 N.J.R. 1669(a)). The Department is proposing to amend the list of endangered species to add five species and reclassify eight species to differentiate the level of conservation concern applicable to the species during the breeding season from that applicable during the non-breeding season, as explained further below. The Department is additionally amending the statutory reference at the beginning of N.J.A.C. 7:25-4.13(a) to utilize the more commonly referenced statutory citation to the New Jersey Statutes Annotated (N.J.S.A.).

The Department has employed a methodology known as the Delphi Technique to develop recommended changes to the list of endangered species at N.J.A.C. 7:25-4.13 and the list and status of nongame species at N.J.A.C. 7:25-4.17 since 1999. Including the amendments made in 1999, the Department has adopted three amendments to the lists at N.J.A.C. 7:25-4.13 and N.J.A.C. 7:25-4.17. Changes to the nongame list at N.J.A.C. 7:25-4.17 have been limited to those species that have been assigned a status of "threatened" or species that were removed from the list of nongame species to be placed on the list of endangered species at N.J.A.C. 7:25-4.13. No comprehensive change to the entire list at N.J.A.C. 7:25-4.17 has been proposed or adopted since 1991. The current proposal would replace the list at N.J.A.C. 7:25-4.17 to reflect current

taxonomic nomenclature and alphabetize the list of species (within species groups of mammals, birds, reptiles, etc.) to make the list easier to use and reference.

The proposed amendments to these lists reflect the results of the Department's most recent application of the Delphi Technique to the following taxonomic groups: freshwater mussels, butterflies (Lepidoptera), dragonflies and damselflies (Odonata), and birds, between 2000 and 2005. The Delphi Technique includes review and analysis of information relating to populations, distribution, habitat needs and other biological and ecological data. The Delphi Technique is a statistically verifiable investigation process for establishing consensus of a group of experts; in this case, a group of wildlife experts. These experts, including individuals both from within and from outside the Department, review the status of nongame wildlife species and share expert opinions and data through an iterative process administered by the Department (Clark et al. 2006, An Objective Means of Species Status Assessment: Adapting the Delphi Technique, Wildlife Society Bulletin 34(2):419-425). The reviewers consider data on species population and trends, productivity, survival and mortality factors, habitat requirements, and threats to populations and habitats. In the course of the iterative process, reviewers reach consensus on the appropriate status of each species using the classifications of endangered, threatened, special concern, stable-secure, unknown or not applicable (which includes species that have been extirpated from the State).

Most species (for example, mammals, reptiles, amphibians, invertebrates) are categorized with one status for their population in New Jersey. For bird species, however, status is assigned separately for breeding and non-breeding populations in the State. The breeding population is the population during the nesting season of spring and summer (actual dates of the nesting seasons vary slightly among species). The non-breeding population is the population in the State during the rest of the year outside the breeding season.

After the expert review and classification, status determinations reached through the Delphi Technique are reviewed by the Department's Endangered and Nongame Species Program and the Endangered and Nongame Species Advisory Committee, a committee of experts established pursuant to ENSCA (see N.J.S.A. 23:2A-7e) and its implementing regulations at N.J.A.C. 7:25-4.18) to advise and assist the Commissioner in carrying out the intent of ENSCA.

The proposed amendments at N.J.A.C. 7:25-4.13 add four species to the list of endangered species based upon this analysis: black rail (breeding population), golden-winged warbler (breeding population), red knot (non-breeding population), and gray petaltail (a dragonfly). In addition to the four species proposed for change to endangered status on the basis of the Delphi Technique, one species is proposed for endangered status based upon its Federal classification. Pursuant to ENSCA at N.J.S.A. 23:2A-3, species that appear on any Federal endangered species list that also occur in New Jersey are, by definition, considered "endangered species" in New Jersey. The Department is therefore proposing to include the Indiana bat in the list of New Jersey endangered species because it is listed as endangered pursuant to the Federal Endangered Species Act.

In addition to proposing to add five species to the endangered species list at N.J.A.C. 7:25-4.13, the Department is proposing to modify the endangered status of eight species of birds for either the breeding or non-breeding populations, as described below.

The bald eagle is currently classified as endangered for both breeding and non-breeding populations. The classification of the bald eagle will continue to be endangered for the breeding population, which includes all bald eagles present in the State during the breeding season. However, the non-breeding population, which includes all bald eagles present in the State outside of the breeding season, is proposed to be reclassified as threatened, as reflected in the proposed amended table at N.J.A.C. 7:25-4.17, discussed below.

Six bird species currently listed as endangered for both breeding and non-breeding populations are proposed to continue to be classified as endangered for their breeding populations but are proposed to be listed as special concern for their non-breeding populations (see N.J.A.C. 7:25-4.17). These species are the pied-billed grebe, northern harrier, northern goshawk, peregrine falcon, short-eared owl, and vesper sparrow.

For the loggerhead shrike, another bird species currently listed as endangered for both breeding and non-breeding populations, the non-breeding population will continue to be classified as endangered at N.J.A.C. 7:25-4.17, but the breeding population is proposed to be classified as extirpated, as this species no longer breeds in New Jersey.

Corrections are made to the scientific names of four species: bog turtle, least tern, sperm whale and right whale. The scientific names for these species have been modified by the respective species taxonomic organizations. Two other species' scientific names were corrected for typographic errors (bald eagle and Henslow's sparrow).

The Endangered, Nongame and Exotic Wildlife rules include a table at N.J.A.C. 7:25-4.17 that specifies the status of indigenous nongame wildlife species in the State. The Department proposes to amend the title of this section from "Defining status of indigenous wildlife species of New Jersey" to "List Providing Conservation status of New Jersey's indigenous nongame wildlife species" to more clearly reflect that the section provides the official list of nongame species for the State and provides their conservation status. The list of species contained in the table includes both those that reside year round and those that spend part of their life cycle in the State.

Similarly, the Department is proposing to replace the paragraph that introduces the table listing the species and their status with a paragraph that more completely describes the list's contents and organization.

For vertebrate classes of mammals, birds, reptiles and amphibians, the list includes all indigenous nongame species native to the eastern United States that regularly occur in the State as long as a hunting or trapping season for the species has not been established pursuant to N.J.S.A. 23:4 or N.J.A.C. 7:25-5. By definition, a species for which a hunting or trapping season has been established is a game species and thus is not included on the nongame species list. The list also does not include vertebrate mammals, birds, reptiles or amphibians identified as endangered as these species are separately listed at N.J.A.C. 7:25-4.13.

The proposed new introductory paragraph to the nongame list at N.J.A.C. 7:25-4.17 also makes clear that the list only includes those invertebrate species that have been determined to be properly classified as either "threatened" or "special concern." The list does not include all invertebrate species that occur in the State because an all-inclusive list would include many thousands of species and inclusion on the nongame wildlife list at N.J.A.C. 7:25-4.17 would apply the protections provided by N.J.SA. 23:2A-1 et seq. to several common invertebrate species regarded as overabundant and/or as pest species. Specifically, the prohibitions on the

regulation of the taking, possession, transportation, and sale at N.J.S.A. 23:2A-6 apply to "...the list of wildlife determined to be endangered by the commissioner pursuant to this act..." (in other words, the list at N.J.A.C. 7:25-4.13) and "... the list of nongame species regulated pursuant to this act..." (that is, the list at N.J.A.C. 7:25-4.17). Consequently, the Department limits the listing of invertebrate wildlife species at N.J.A.C. 7:25-4.17 to those for which the Department has sufficient information, based upon status review using the Delphi Technique, to consider such species as threatened or special concern (in other words, those species for which the Department has some level of concern regarding the continued ability of the species to sustain itself successfully the State).

Similarly, the proposed introductory language to the nongame list specifies that no marine or freshwater fish species are included on the list. Harvest of all marine fish species is subject to N.J.S.A. 23:2B-1 et seq. and the implementing regulations at N.J.A.C. 7:25-18. Harvest of all fresh water fish is regulated in accordance with N.J.S.A. 13:1B-29, 30 and 31, and N.J.S.A. 23:1-1 et seq. and implementing regulations at N.J.A.C. 7:25-6. Consequently, the Department does not currently consider any species of marine or freshwater fish as "nongame" and thus none are included in the list of "nongame" wildlife at N.J.A.C. 7:25-4.17. Fish species are included at the list of endangered species at N.J.A.C. 7:25-4.13 because the definition of "endangered" provided by N.J.S.A. 23:2A-3c, unlike the definition of "nongame," does not preclude the inclusion of species for which a legal hunting or trapping season has been established.

Currently, the list at N.J.A.C. 7:25-4.17 is arranged in what is known as taxonomic or phylogenetic order – a sequence followed in listing of taxa that roughly reflects the evolutionary relationships among the taxa. While such ordering may make the list easier to use or reference for biologists, it is more difficult for the lay person to use. Consequently, in addition to amendments reflecting numerous changes to species' scientific names since the last major revision of this list, the Department is proposing to reorder the list to follow an alphabetical order of species' common names within each taxonomic class (bivalve mollusks, insects, fish, amphibians, reptiles, birds, mammals). Due to this major change in the listing order, rather than reflecting where each species currently appears in the list with a proposed deletion and

additionally reflecting where the same species is proposed to appear in the revised list, the Department is proposing to repeal the existing list and replace it with a new list. Except as explained below, the status classifications of the species contained on the list are not changed.

Overall, the Department is proposing to add 43 species and remove ten species from the list of nongame species indigenous to the State. The Department is additionally proposing to assign status categories to each species based upon the results of the Delphi Technique and the subsequent review of these results and recommendations by the Department's Endangered and Nongame Species Program and the Endangered and Nongame Species Advisory Committee. The additions to the indigenous nongame species list, discussed below, are primarily invertebrate species that were not previously included on the list of indigenous wildlife, but which now warrant inclusion because of their proposed status classification. These include mussels and butterflies that are proposed for special concern status, and other invertebrates (dragonflies and damselflies) proposed for threatened or special concern status.

Invertebrates are the first species group contained on the proposed revised list of indigenous nongame species. The Department is proposing to add one species of freshwater mussel (the creeper) with special concern status due to concerns for low population size and little evidence of successful reproduction. In addition to the creeper, the Department is proposing to add 31 species of dragonflies and damselflies to the list, six with threatened status and 25 with special concern status, due to concern for their low populations and limited occurrence in the State. Finally, the Department is proposing to add eight butterfly species to the list, with a special concern status due to concern for their low populations and limited occurrence in the State. The following table lists the invertebrate species that are being added to the list at N.J.A.C. 7:25-4.17:

Common Name	Scientific Name	Species Status
Bivalves:		
Creeper	Strophitus undulatus	SC
Insects:		
Allegheny River Cruiser	Macromia alleghaniensis	SC
Arrowhead Spiketail	Cordulegaster obliqua	SC

Brush-tipped Emerald Somatochlora walshii SC Cobra Clubtail Gomphus (Gomphurus) vastus SC Coppery Emerald Somatochlora georgiana SC Crimson-ringed Whiteface Leucorrhinia glacialis SC Dotted Skipper Hesperia attalus slossonae SC Extra-striped Snaketail Ophiogomphus anomalus SC Forcipate Emerald Somatochlora forcipata SC Georgia [Lakehurst] Satyr Neonympha areolatus septentrionalis SC Golden-winged Skimmer Libellula auripennis SC Green-faced Clubtail Gomphus (Hylogomphus) viridifrons SC Harpoon Clubtail Gomphus descriptus T Harris Checkerspot Chlosyne harrisii SC Hessel's Hairstreak Callophrys hesseli SC Hoary Elfin Callophrys polios SC Hudsonian Whiteface Leucorrhinia hudsonica SC Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Supertina's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Banner Clubtail	Gomphus apomyius	T
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Georgia [Lakehurst] Satyr Neonympha areolatus septentrionalis SC Golden-winged Skimmer Libellula auripennis SC Green-faced Clubtail Gomphus (Hylogomphus) viridifrons SC Harpoon Clubtail Gomphus descriptus T Harris Checkerspot Chlosyne harrisii SC Hessel's Hairstreak Callophrys hesseli SC Hoary Elfin Callophrys polios SC Hudsonian Whiteface Leucorrhinia hudsonica SC Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Extra-striped Snaketail	Ophiogomphus anomalus	SC
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Harris Checkerspot Chlosyne harrisii SC Hessel's Hairstreak Callophrys hesseli SC Hoary Elfin Callophrys polios SC Hudsonian Whiteface Leucorrhinia hudsonica SC Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Green-faced Clubtail	Gomphus (Hylogomphus) viridifrons	SC
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Hessel's Hairstreak Callophrys hesseli SC Hoary Elfin Callophrys polios SC Hudsonian Whiteface Leucorrhinia hudsonica SC Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Harris Checkerspot		SC
Hudsonian Whiteface Leucorrhinia hudsonica SC Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Hessel's Hairstreak		SC
Kennedy's Emerald Somatochlora kennedyi T Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Hoary Elfin	Callophrys polios	SC
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Leonard's Skipper Hesperia leonardus SC Maine Snaketail Ophiogomphus mainensis SC Midland Clubtail Gomphus (Gomphurus) fraternus SC New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Kennedy's Emerald	Somatochlora kennedyi	Т
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New England Bluet Enallagma laterale SC Northern Metalmark Calephelis borealis SC Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Maine Snaketail	Ophiogomphus mainensis	SC
Northern Metalmark Pine Barrens Bluet Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Midland Clubtail	Gomphus (Gomphurus) fraternus	SC
Pine Barrens Bluet Enallagma recurvatum SC Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	New England Bluet	Enallagma laterale	SC
Rapids Clubtail Gomphus (Gomphus) quadricolor SC Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Northern Metalmark	Calephelis borealis	SC
Robust Baskettail Epitheca spinosa T Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula	Pine Barrens Bluet	Enallagma recurvatum	SC
Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Rapids Clubtail	Gomphus (Gomphus) quadricolor	SC
Sable Clubtail Gomphus (Gomphurus) rogersi SC Scarlet Bluet Enallagma pictum SC Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Robust Baskettail	Epitheca spinosa	Т
Septima's Clubtail Gomphus septima SC Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Sable Clubtail	^ ^	SC
Ski-tailed Emerald Somatochlora elongata SC Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Scarlet Bluet	Enallagma pictum	SC
Spatterdock Darner Rhionaeschna mutata SC Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Septima's Clubtail	Gomphus septima	SC
Subarctic Darner Aeshna subarctica SC Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Ski-tailed Emerald	Somatochlora elongata	SC
Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Spatterdock Darner	Rhionaeschna mutata	SC
Superb Jewelwing Calopteryx amata T Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC	Subarctic Darner	Aeshna subarctica	SC
Tiger Spiketail Cordulegaster erronea SC Two-spotted Skipper Euphyes bimacula SC		Calopteryx amata	Т
Two-spotted Skipper Euphyes bimacula SC	<u> </u>	1 3	SC
A AA A V		-	SC
		Somatochlora williamsoni	SC
Zebra Clubtail Stylurus scudderi SC	Zebra Clubtail	Stylurus scudderi	SC

Status Codes: T=Threatened, SC=Special Concern

For amphibians, the second species group in the proposed list of indigenous nongame species, the northern leopard frog, recently found in the State, is proposed to be added with undetermined-unknown status, as biologists do not know its full range of occurrence in the State at this time. One species (silvery salamander) is proposed to be removed due to a taxonomic determination that it is a subspecies of Jefferson salamander and the list does not currently differentiate subspecies. Five species (carpenter frog, fowler's toad, Jefferson salamander, marbled salamander and northern spring salamander) are proposed for special concern status due to declining trends in population and wetland habitats. Three species (eastern spadefoot, four-toed salamander and New Jersey chorus frog) are being proposed for undetermined-unknown status, and two species (northern cricket frog and spotted salamander) are proposed to change from declining or unknown to stable-secure.

Reptiles are the third species group contained on the proposed list of indigenous nongame species. For reptiles, the Department is proposing no additions to or removals from the list, but is proposing changes to the status of four species (spotted turtle, eastern box turtle, eastern king snake and northern copperhead) from stable or undetermined to special concern due to habitat threats and population trends. In addition, the Department is proposing to change the status of eastern mud turtle from undetermined to stable.

For birds, the fourth species group on the proposed list of indigenous nongame species, the proposed changes are extensive. The Department is proposing changing the status of three species from increasing, decreasing or stable to threatened: American kestrel (breeding and non-breeding), cattle egret (breeding) and horned lark (breeding). For all three of these species, recent data indicate trends with sharp or continuing declines in population in the State. The status for three species, northern goshawk (non-breeding), Cooper's hawk (breeding), and vesper sparrow (non-breeding), are proposed to be upgraded from threatened to special concern due to improvements in their population and distribution in the State for the specified (seasonal) populations. The status for one species, the bald eagle (non-breeding population only), is proposed to be upgraded from endangered to threatened due to improvements in the non-breeding population and its removal in 2007 from the Federal list of endangered species. The breeding population will continue to be classified as endangered at N.J.A.C. 7:25-4.13. The

Department is proposing adding the common raven to the list with a status of secure-stable, due to its recent nesting in New Jersey. The common raven did not previously appear in the nongame list. Fifty-seven changes in status from stable, declining or undetermined to special concern are proposed. These changes affect 50 species of birds, with some species having the status of both breeding and non-breeding populations changed. For many of these species, changes are a result of the improved state of knowledge of birds in the State, as well as the addition of the special concern category that enables a more accurate conservation status characterization. All were categorized as special due to concerns about their population trends and the viability of their habitats in the State. Eighteen of those species being reclassified as special concern are forest passerines (warblers, thrushes, vireos), three are forest hawks, eight are shorebirds, eight are salt and fresh water marsh herons, six are grassland species, and the remainder use a variety of habitats in New Jersey.

The Department is proposing removing a total of nine bird species from the list of indigenous nongame species at N.J.A.C. 7:25 4.17. Two species, black-necked stilt and black tern, are proposed for removal from the list due to the recent determination that they do not, and likely never did, occur with sufficient regularity to be considered indigenous to the State as breeding or non-breeding populations. In addition, seven species of birds are proposed for removal from the list in order to make the State classification of these species consistent with their classification as game birds by the U.S. Fish and Wildlife Service (U.S. Fish and Wildlife Service. 1988. Final supplemental environmental impact statement: issuance of annual regulations permitting the sport hunting of migratory birds [SEIS 88]; available from U.S. Fish and Wildlife Service, Division of Migratory Bird Management, 4401 N. Fairfax Drive, MBSP 4107, Arlington, VA, 22203 and excerpted at

http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/gmebrd.html). These species are fish crow, Eurasian wigeon, fulvous whistling-duck, king eider, harlequin duck, king rail, and mourning dove. As a result of this change, these birds will be regulated as migratory birds under New Jersey law and regulations (see N.J.A.C. 7:25-5.13). This change does not create a hunting season, but changes the species classification from "nongame" to "migratory birds" for which the New Jersey Fish and Game Council can propose to establish hunting seasons in accordance

with N.J.S.A. 13:1B-30. While there is no State or Federal mandate for such consistency, the Federal regulations for migratory birds are cited in N.J.A.C. 7:25-5.13, the State regulations governing seasons and bag limits. The seven species proposed for removal from the nongame list will be under the jurisdiction of the Division of Fish and Wildlife as game species with closed seasons, meaning they will not be subject to hunting. One species on the USFWS SEIS 88 list that will be continued on the nongame list is the tundra swan, which, as a species of "swan," is excluded from the list of game birds by N.J.S.A. 23:4-49.

Mammals, the fifth (last) species group on the proposed list of indigenous nongame species, is the only taxonomic class of vertebrate species with members currently listed at N.J.A.C. 7:25-4.17 for which a Delphi panel review of species status has not yet been completed. Currently, there are 55 species of mammals listed. Of these, the majority (34) are currently listed as "undetermined," fifteen are listed as stable, five as peripheral, and one as increasing. None are currently listed as "threatened." The Department is proposing to change the status of all mammals to "undetermined-unknown," which effectively will change the status of 21 species since the current status of "undetermined" and the proposed status of "undetermined-unknown" are essentially equivalent. The Department is proposing this change as an interim measure until a Delphi status review of mammals is completed and amendments to the list at N.J.A.C. 7.25-4.17 reflecting the outcome of this review are proposed. As no comprehensive review of nongame mammal status has been performed within at least the past 20 years, the Department believes that the "undetermined-unknown" status is appropriate until such time as a review of status has been completed. As all nongame species are afforded the protections of N.J.S.A. 23:2A-1 et seq. and only the status of "threatened" or "special concern" provide any additional regulatory protection in the context of the Department's land use regulations, there is no regulatory impact from this amendment. The Department is also proposing to add two species of marine mammal, the clymene dolphin and melon-headed whale, with undetermined-unknown status, based on information developed by the Department from marine mammal experts that they occur in New Jersey waters with sufficient regularity to be considered indigenous species. More information is needed to assess their status in the State.

Below is a summary of changes to the list:

	No Change	Remove	Add as T	Add as SC	Add as	Add as U		D to E		S/D/P/I/ U to SC	E to SC	E to T	T to S	T to SC	D/U/I to S	T/D/S/I/P to U	Total
BIVALVES	5	0	0	1		0				0					0	0	6
INSECTS	3	0	6	33		0				0					0	0	42
AMPHIBIANS	16	1	0	0		1				6					3	3	30
REPTILES	25	0	0	0		0				4					2	0	31
MAMMALS	33	0	0	0		2				0					0	21	56
BIRDS	130	9															139
Birds-Breeding			0	6	11	1	1	1	3	32	0	0	0	1	25	1	82
Birds-Non-																	
breeding			0	1	1	0	1	0	1	25	2	1	3	2	2	8	45
TOTAL		20	6	41	12	4	2	1	4	67	2	1	3	3	32	33	431

 $Status\ Codes:\ E=Endangered,\ T=Threatened,\ SC=Special\ Concern,\ S=Secure-stable,\ U=\ Undetermined-unknown,\ D=Declining,\ S=Secure-stable,\ U=Special\ Concern,\ S=Secure-stable,\ U=Special\ Concern,\ S=Secure-stable,\ U=Special\ Concern,\ S=Secure-stable,\ U=Special\ Concern,\ U=Special\ U=$

I=Increasing, P=Peripheral

Social Impact

The proposed amendments will have a beneficial social impact. Periodic re-evaluation and revision of the State's lists of endangered and other indigenous nongame wildlife, based upon the best available scientific data, improves the reliability of these lists and thus furthers the efforts of the Department in conservation of the State's indigenous wildlife populations by helping the Department direct resources at the species that have the greatest conservation need. This in turn benefits New Jersey citizens by targeting conservation actions and land use regulations to maximize benefits to wildlife species that are at risk and assure that the level of regulation of land use reflects only the level appropriate based upon the status of the species utilizing that land. Accuracy in the lists of endangered and nongame wildlife provides a focus for conservation efforts by State, county, municipal and citizen organizations such as land acquisition and management, planning and zoning.

Minor social impact may result from the addition of certain invertebrate species in the list of nongame indigenous wildlife. Specifically, people who collect butterflies, moths, dragonflies or damselflies may be curtailed from collecting species added to the list at N.J.A.C. 7:25-4.17. The provisions of N.J.A.C. 7:25-4.2 limiting collection and possession and requirements for acquiring permits apply to all species appearing on the list of indigenous

nongame wildlife at N.J.A.C. 7:25-4.17. The Department has sufficient information that the invertebrate species being included under these proposed amendments with threatened or special concern status warrant the additional protections provided under N.J.S.A. 23:2A-6 (the prohibition on possession and taking without authorization) and N.J.A.C. 7:25-4.2.

Economic Impact

Restrictions on possession, sale and take of nongame wildlife apply equally to all species considered nongame species under ENSCA, regardless of species status. Consequently, where the proposed amendments change the status of nongame wildlife already listed at N.J.A.C. 7:25-4.17, they will have no effect with respect to regulations on the possession and collection of nongame species (that is, N.J.A.C. 7:25-4.2, 4.6, 4.7 and 4.14). Some regulations within this subchapter (see N.J.A.C. 7:25-4.6, 4.10 and 4.14) include additional requirements and restrictions for permits related to holding and collecting species listed as endangered. Consequently, there will be nominal additional regulatory burden imposed on persons who desire to collect or hold the five species being added to the list of endangered species at N.J.A.C. 7:25-4.13. None of the invertebrate species that this proposal adds to the list of nongame wildlife at N.J.A.C. 7:25-4.17 were previously considered "nongame," consequently no permits were previously required for possession or collection of these species. The Department anticipates that the number of individuals engaged in activities for which collection and holding of these newly listed nongame or endangered species is a requirement, however, is very small. Currently there are fewer than 200 permit holders for activities involving collection, holding, exhibiting or selling of regulated native nongame wildlife. Moreover, those engaged in typical zoological, scientific, educational and other activities will be able to obtain such permits and the main economic impact will be the time required to complete permit applications and required reporting in addition to the nominal permit fees (\$10.00 - \$150.00). Such permit applications as would be required are not complex or highly technical and are typically completed in a few minutes to an hour by the applicant without the need to retain paid professional assistance.

Reporting requirements associated with such permits are straightforward and simple and are typically completed by the permittees without the assistance of paid professionals. Satisfaction of reporting requirements does not require the use of any specialized equipment.

The predominant economic impact resulting from changes to the lists of endangered and threatened wildlife arises from the need to protect the habitat of these fauna. Threatened and endangered species habitats in New Jersey are protected by several land use regulations that limit development and disturbance of areas identified as such habitat. Specifically, restrictions are imposed on the development of endangered and threatened wildlife species habitats under the following Department regulations: Coastal Permit Program Rules (N.J.A.C. 7:7), Coastal Zone Management rules (N.J.A.C. 7:7E), Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A), Flood Hazard Area Control Act Rules (N.J.A.C. 7:13), Water Quality Management Planning rules (N.J.A.C. 7:15) and Highlands Water Protection and Planning Act Rules (N.J.A.C. 7:38). Restrictions on development of endangered and threatened wildlife species habitats are also imposed under the Pinelands Comprehensive Management Plan (N.J.A.C. 7:50).

The proposed amendments would both remove and add species to the endangered species list at N.J.A.C. 7:25-4.13 and make changes to the nongame list at N.J.A.C. 7:25-4.17. Changes to the classification of species as threatened or endangered will impact the habitat areas subject to protection under the above referenced regulations. Specifically, the above land use regulations may require that a particular development proposal in such areas be reduced or altered to minimize impacts to habitats for endangered or threatened wildlife species, or in some cases, a particular development proposal may be barred. Therefore, the primary persons affected by these proposed amendments are those with an interest in land development in areas identified as habitat for the species listed as threatened or endangered, as well as those with an interest in land development in areas where habitat is present for species proposed to be removed from threatened or endangered status.

Current mapping of endangered and nongame species habitats used by the Department in administering the above land use rules includes threatened and endangered species occurrences in the Department's database as of May 2008. The proposed amendments would result in approximately 43,400 acres currently presumed to comprise endangered or threatened species

habitat no longer being presumed to comprise threatened or endangered species habitat. The addition of several species to the endangered species list and/or additions to species assigned threatened status results in approximately 12,400 acres not currently presumed to comprise endangered or threatened species habitat being added to the area of presumptive endangered or threatened species habitat therefore potentially requiring greater protection under the above land use rules. The overall result of the amendments to the lists proposed herein is a net decrease of approximately 31,000 acres of land presumed to comprise habitat for endangered or threatened species.

In addition to protections for endangered and threatened wildlife species habitats, the Highlands Water Protection and Planning Act Rules (N.J.A.C. 7:38) additionally provide identical protections for habitats of wildlife considered "rare species." The definition of "rare species" at N.J.A.C. 7:38-1.4 includes species "... of special concern as determined by a panel of experts..." and also includes species "...that are ranked S1 (critically imperiled in New Jersey because of extreme rarity), S2 (imperiled in New Jersey because of rarity), S3 (rare in New Jersey), G1(critically imperiled globally), G2 (imperiled globally because of rarity) or G3 (globally very rare and local throughout its range or found locally in a restricted range) in the Natural Heritage Database...". All of the species proposed to be added to the list of endangered species at N.J.A.C. 7:25-4.13 or proposed to be assigned a status of threatened or special concern at N.J.A.C. 7:25-4.17 in this proposal currently meet the definition of "rare species" at N.J.A.C. 7:38-1.4. Further, all of the species proposed to be removed from the list of endangered species, or nongame species that would no longer be assigned a status of "threatened," would continue to meet that definition of "rare species." Consequently, these proposed amendments would have no effect on the habitat protections provided within the area protected by the Highlands Water Protection and Planning Act Rules.

Outside of the area within which the Highlands Water Protection and Planning Act Rules apply, the proposed changes to the list of endangered species at N.J.A.C. 7:25-4.13 and the list of nongame species at N.J.A.C. 7:25-4.17 are expected to result in an overall increase in land available for development or available for higher density development, as a result of the recovery of several species' populations.

Within the Coastal Zone Management Rules, Coastal Permit Program rules, and the Pinelands Comprehensive Management Plan, the addition of species to the list of endangered species and list of nongame species with a status of threatened could potentially increase restrictions on land use for particular landowners. As noted above, some species populations have recovered and those species are proposed to be downgraded from "threatened" status. Areas that were identified as potential habitat for those species only will no longer be considered potential habitat for a threatened species, therefore not subject to restriction under the threatened species habitat provisions of the Coastal Zone Management Rules, Coastal Permit Program rules, or the Pinelands Comprehensive Management Plan. Where the area is considered potential habitat for more than one species classified as threatened, the downgrade of only one of those species from threatened status will not impact the restrictions applicable to that area as the area must continue to be protected as potential habitat for species that continue to be classified as threatened. The net effect of these changes is an increase in land available for development with fewer restrictions, providing the potential for economic growth associated with that development.

In the context of the Freshwater Wetlands Protection Act Rules, the Department expects that additional acreage presumed to comprise habitat as a result of the changes in species classification will have very little impact on the total area subject to restrictions on activities due to the presence of endangered and threatened species habitat under these rules. The presence of endangered or threatened species may lead to an increase in the size of the wetlands transition area (see N.J.A.C. 7:7A-2.4 through 2.6) if the species present is one that has some degree of dependency on, or association with, wetlands habitats. However, the species that accounts for most of the additional 12,400 acres that would be added to areas presumed to comprise endangered or threatened species habitat under this proposal, the American Kestrel, is not a wetland-dependent species. Therefore, it is a species for which the Department will rarely (if ever) classify wetlands as "exceptional resource value" in accordance with N.J.A.C. 7:7A-2.4, and is also, therefore, not a species likely to affect the Department's issuance of individual permits or general permit authorizations. Many of the damselflies or dragonflies that would be

added to the list of threatened species are associated with wetlands habitats. However, there are very few wetland areas of the State currently mapped as presumed habitat for theses species.

With respect to the Flood Hazard Control Act rules, the size of the regulated "riparian area" is based in part on the presence of habitat for endangered or threatened species "critically dependent upon the watercourse for survival" (see N.J.A.C. 7:13-4.1(c) 2. iii.). None of the species proposed for listing as threatened are currently considered by the Department to be species critically dependent upon the watercourse for survival. Although it is likely that some of the dragonflies or damselflies may be added to the list of such species, there are very few areas of the state currently mapped as presumptive habitat for theses species. The Flood Hazard Area Control Act Rules also provide that the Department will not issue an individual permit for any regulated activity that would adversely affect any endangered or threatened species or their habitat (see N.J.A.C. 7:13-10.6). Again, the species to which the vast majority of the areas added to those presumed to comprise endangered or threatened species habitat are attributable, the American Kestrel, is primarily an upland species. Consequently, the Department expects this proposal will have very limited impact on the administration of Flood Hazard Control Act rule provisions that restrict activities in endangered or threatened species habitats within the areas regulated pursuant to those rules (i.e., floodways, flood fringes, and riparian zones; see N.J.A.C. 7:13-2.3).

A reliable estimate of the number of acres that would be subject to the endangered and threatened species habitat provisions under the Freshwater Wetlands Protection Act Rules or the Flood Hazard Area Control Act Rules is not possible. The applicability of the endangered and threatened species habitat provisions these rules are subject to verification of actual field conditions in the context of individual applications to the Department under these regulations.

Within the Water Quality Management Planning (WQMP) rules endangered and threatened species habitats are among the environmental features designated as "environmentally sensitive" (see N.J.A.C. 7:15-1.5). The WQMP rules provide that areas defined as environmentally sensitive include areas mapped as endangered or threatened wildlife species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened or Other

Priority Species. With limited exceptions, the rules provide that such areas are not available to be included in sewer service areas when the mapped area is greater than 25 acres (see N.J.A.C. 7:15-5.24). Consequently, amendments to the lists of endangered or threatened species could have an effect on the designation of future sewer service areas or on approval of applications to amend WQMPs. Because this proposal includes both the addition and removal of species from the lists of threatened and endangered species, environmentally sensitive areas as defined in the WQMP rules will decrease in some areas and expand in others. However as noted earlier, the net impact is expected to be a significant decrease in the extent of potential threatened species habitat, and therefore a likely decrease in the extent of environmentally sensitive areas under the WQMP rules.

It is not anticipated that any economic impact on funding sources or the general public will result from this proposal beyond the intrinsic worth of the species being protected. As the Department already regulates threatened and endangered species, this proposal should have no effect on the implementing agency.

In summary, the improved status of several species has led to their proposed removal from endangered or threatened species status, while it has been determined that other species require increased protection as threatened or endangered species. The net result of the proposed listing and delisting is an overall reduction in lands protected as endangered and threatened species habitat. Although the proposed changes to the lists of threatened and endangered species have nominal direct economic impact, the indirect effect is a potential for increased economic growth due to the net decrease in area determined to be potential threatened species habitat and thus restricted under other regulations.

Environmental Impact

Amendment of the endangered species and indigenous nongame wildlife lists to reflect currently available data will contribute to positive environmental impacts by promoting the conservation of those species and their habitats most in need of protection. The Department's

wildlife status lists are used by a variety of agencies whose actions directly and indirectly affect these species. The listings are utilized by programs within the Department's Land Use Management program, which implements the land use regulations identified in the Economic Impact assessment; the Pinelands Commission, which implements the Pinelands Protection Act (N.J.S.A. 13:18A-1 et seq.); and the Highlands Council, which, along with the Department, implements the Highlands Water Protection and Planning Act (N.J.S.A. 13:20-1 et seq.). In addition, municipal authorities that use these lists to guide local land use planning, and private, non-profit organizations that use these lists for a broad range of conservation purposes are aided by updated and current lists reflecting the best understanding of the conservation status of wildlife species. Thus, the proposed amendments serve to preserve the State's ecosystems and the biological diversity that is essential to a healthy and stable human environment. In addition, the inclusion of special concern status for various species of butterflies, moths, dragonflies and damselflies will help promote the conservation of species not previously recognized for their rarity, by highlighting the need for investigations to improve understanding of species' conservation needs and population assessments.

The requirement for authorization to collect and hold these species in accordance with the existing provisions of this subchapter for all species that are being added to the list of nongame wildlife at N.J.A.C. 7:25-4.17 will also contribute to conservation of these species and consequently provide environmental benefit.

Federal Standards Statement

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies which adopt, readopt or amend State regulations that exceed Federal standards or requirements to include in the rulemaking document a Federal standards analysis.

These amendments do not exceed Federal standards or requirements insofar as this rule implements specific aspects of ENSCA and as that statute directs specific conservation attention to species indigenous to New Jersey. This proposal amends a State rule that lists species determined to be endangered at N.J.A.C. 7:25-4.13 and amends at N.J.A.C. 7:25-4.1 the

selection of status categories used to indicate nongame wildlife species' conservation status, and assigns at N.J.A.C. 7:25-4.17 such status categories to nongame wildlife species not listed as endangered. The set of status categories currently includes the status of "threatened." The Federal endangered and threatened wildlife lists (see 50 C.F.R. §§ 17.11(h), 223.102(a) and 224.101(a)) established pursuant to the Endangered Species Act of 1973 (ESA, 16 U.S.C. § 1532) reflect the status of species as they occur throughout the United States. The Federal lists, which cover both endangered and threatened wildlife, and the New Jersey lists are compiled using different data and criteria to determine the status of species in two different geographical areas.

The definition of endangered at N.J.S.A. 23:2A-3 provides that the "term shall also be deemed to include any species or subspecies of wildlife appearing on any Federal endangered species list." One of the additions to the list of endangered species at N.J.A.C. 7:25-4.13 is being proposed in accordance with this requirement. That this provision in the statutory definition of "endangered" includes the word "also" indicates that the legislature intended that species beyond those listed under federal law be included in the state list of endangered species. The status of "threatened," one of the status categories assigned to species at N.J.A.C. 7:25-4.17, is similar in definition to the federal definition of threatened within the ESA.

Additional status categories assigned at N.J.A.C. 7:25- 4.17 have no federal equivalent; however, these statutes do not provide any additional protection under the statute or this regulation, as all nongame species, regardless of status assigned at N.J.A.C. 7:25-4.17 are equally protected from "take" under ENSCA. Consequently, there is no conflict with any Federal law and no need for further analysis.

Jobs Impact

As indicated in the Economic Impact statement, as a result of the proposed amendments to the species classified as endangered or threatened a net area of approximately 31,000 acres of land will no longer be presumed habitat for endangered or threatened species. Consequently, more land will be available for development or for higher density development. This change

could allow for an increase in economic activity and potential growth of jobs, housing, and communities in those areas. Accordingly, the Department expects that the proposed amendments will result in minor, but generally positive, job impacts.

In addition to determining the acreage of land that would be impacted by the proposal as a result of species status changes affecting whether the land is or would be considered endangered or threatened species habitat, the Department also examined the location of endangered and threatened wildlife habitat with respect to the State Development and Redevelopment Plan Map (available at: http://nj.gov/dca/divisions/osg/resources/maps.html) The Department determined that, of the approximately 12,400 acres that would be added to the areas presumed to comprise endangered or threatened wildlife habitats, only about ten percent (approximately 1,300 acres) would be within "areas for growth" (i.e., Planning Area 1 and Planning Area 2 and Designated Centers), while about 90 percent (approximately 11,100 acres) would be within areas designated for limited growth or conservation (i.e., Planning Area 3, Planning Area 4, Planning Area 5). Among the approximately 43,400 acres that are currently presumed to comprise endangered or threatened species habitat that would no longer be presumed to comprise threatened or endangered species habitat, about 40 percent (approximately 17,000 acres) would be within "areas for growth" (i.e., Planning Area 1 and Planning Area 2 and Designated Centers) while about 60 percent would be within areas designated for limited growth or conservation (i.e., Planning Area 3, Planning Area 4, Planning Area 5).

The overall reduction in lands potentially considered endangered and threatened species habitat upon adoption of the proposed listing changes results in more land that is available for development or for higher density development. The impact on actual development as a result of adoption of the proposed changes depends, in part, on whether the affected land is located in an area designated for growth or is in an area that is planned for limited growth due to factors other than the presence of endangered or threatened species habitat. Of the areas that would become endangered and threatened habitat as the result of a species being reclassified as endangered or threatened under this rulemaking, only a very small portion is in areas designated for growth. Conversely, a significant portion (though not the majority) of the areas that would no longer be classified as endangered or threatened species habitat as a result of these amendments is

located in areas designated for growth. This increases the likelihood that there will be an increase in construction related economic activity and associated jobs as a result of the reduction of regulatory restrictions in at least some of these areas.

Agricultural Industry Statement

Pursuant to N.J.S.A.52:14B-4, the Department has evaluated this rulemaking to determine the nature and extent of the proposed amendments' impact on the agricultural industry.

Impacts to the agricultural industry through adoption of proposed amendments to the list of endangered species at N.J.A.C. 7:25-4.13 and the list and status of nongame species at N.J.A.C. 7:25-4.17 would occur through the land use regulations identified in the Economic Impact statement.

None of the proposed amendments to the list of endangered species at N.J.A.C. 7:25-4.13 are expected to impact the agriculture industry, since, with the exception of the Indiana Bat, the species involved are generally not associated with agricultural areas. Although the proposed rule amendment would add the Indiana Bat to the list of endangered species, this is essentially a formal recognition of the fact that this species has been considered an endangered species by definition since its Federal listing in 1967. As N.J.S.A. 23:2A-3c defines an endangered species "...to include any species or subspecies of wildlife appearing on any Federal endangered species list." Further, the land use regulations most likely to regulate agricultural activities (i.e., those listed above in the Economic Impact statement), include species appearing on the Federal list of endangered species among the species for which habitat protections are provided. Consequently, any possible impact to agricultural industry of listing the Indiana Bat as "endangered" occurred at the time the species was Federally listed or at the time that the above rules began to explicitly include protections for species listed as endangered under the ESA would not result from adoption of these proposed amendments.

The Department expects that impacts to agricultural industry as a result of the amendments to the list and status of nongame species will be minimal. Although, the species

that account for the vast majority of the areas that would added to the areas presumed to provide threatened species habitat as result of these proposed amendments (i.e., the American kestrel and horned lark) are associated with agricultural habitats, the land use regulations that include restrictions on the modification of habitat for threatened species only minimally regulate agricultural activities.

Except for such agricultural activities that might occur or be proposed within coastal wetlands or that involve the filling or draining of such wetlands, agricultural activities are not regulated by the Coastal Permit Program rules (N.J.A.C. 7:7) or the Costal Zone Management rules (N.J.A.C. 7:7E).

Ongoing agriculture is generally exempt under the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7A (see N.J.A.C. 7:7A-2.8). Within the Flood Hazard Area Protection Act Rules, ongoing agriculture is permitted under permits-by rule (see N.J.A.C. 7:13-7.1(f)). In both of these regulations, only agricultural activities that include clearing, within regulated areas, of lands not currently farmed would require general permit authorization or individual permits or other Department decision, authorization or approval.

To the extent that agricultural activities are regulated, the presence of endangered or threatened species habitat has variable effect on the regulatory requirements for those agricultural activities. In the case of freshwater wetlands regulations, the presence of endangered or threatened species may lead to an increase in the size of the wetlands transition area (see N.J.A.C. 7:7a-2.4-2.6) if the species present is one that has some degree of dependency on, or association with, wetlands habitats. Notably, the species that accounts for most of the additional 12,400 acres that would be added to areas considered threatened species habitat under this proposal, the American Kestrel, is not a wetland-associated species and therefore is not a species for which the Department will classify wetlands as "exceptional resource value" in accordance with N.J.A.C. 7:7A-2.4 and is also, therefore, not a species likely to affect issuance of individual permits or general permit authorizations. Many of the damselflies or dragonflies that would be added to the list of threatened species are associated with wetlands habitats, however, there are currently very few areas of the State currently mapped as presumed habitat for theses species.

Similarly, the Flood Hazard Area Control Act Rules define the size of the riparian area based on the presence of habitat for endangered or threatened species "critically dependent upon the watercourse for survival" (see N.J.A.C. 7:13-4.1(c) 2. iii.). None of the species proposed for listing as threatened are currently considered by the Department to be species critically dependent upon the watercourse for survival. Although it is likely that some of the dragonflies or damselflies may be added to the list of such species, as mentioned above, there are very few areas of the state currently mapped as presumed habitat for theses species. The Flood Hazard Area Control Act Rules also provide that the Department will not issue an individual permit for any regulated activity that would adversely affect threatened species or their habitat (see N.J.A.C. 7:13-10.6). Most typical agricultural activities, however, are permitted under permitsby-rule (N.J.A.C. 7:13-7.2 (f)) and do not require issuance of an individual permit or general permit authorization. For those limited agricultural activities that require general permit authorization (see N.J.A.C. 7:13-8.4) or issuance of an individual permit, it is possible that the additions to the list of species assigned a status of threatened could reduce the ability to obtain Department approval in areas where the species occur. The species that accounts for most of the additional 12,400 acres that would be added to areas considered threatened species habitat under this proposal, however, are generally associated with upland habitats and not likely to be a significant factor in a permit decision in the riparian areas regulated by these rules.

While the Water Quality Management Planning rules (N.J.A.C. 7:15) do include regulation of agricultural activities, the provisions of these rules that protect endangered and threatened species of wildlife habitat are those affecting the delineation of Sewer Service Areas within Water Quality Management Plans (see N.J.A.C. 7:15-5.24). These provisions do not directly affect the agricultural industry insofar as most farming activities are conducted outside of areas served by sanitary sewers. Consequently, the Department anticipates no impacts to agricultural industry as a result of the amendments to the list of nongame wildlife and the consequent protection of additional habitat areas for threatened species of wildlife under the Water Quality Management Planning rules.

The Pinelands Comprehensive Management Plan (CMP) (N.J.A.C. 7:50) regulates agricultural activities and includes specific standards for conducting such activities (see N.J.A.C.

7:50-6.51 to 6.55). In addition, agricultural activities are covered by the definition of "development" and the CMP provides that "... it shall be unlawful for any person to carry out any development in the Pinelands Area which does not conform to the minimum standards of this Plan" (N.J.A.C. 7:50-1.4). In the context of Pinelands Commission development review (see N.J.A.C. 7:50-4), however, most agricultural activities, including construction of buildings used exclusively for agricultural purposes, are exempt from requiring review and therefore do not require application to, or approval by, the Pinelands Commission.

Finally, as noted above in the Economic Impact statement the overall effect of this proposal would be to reduce by approximately 31,000 acres the area of the State presumed to provide endangered or threatened species habitat. Accordingly, while the additions to the list of nongame species considered threatened may impact the requirement for or ability to obtain particular land use permits or other approvals for particular individuals engaged in agricultural activities, based on the Department's mapping of endangered and threatened species habitat, the impacts of such additions are more than offset by the removal of species, in particular the Cooper's Hawk, from threatened status.

Regulatory Flexibility Statement

In accordance with the Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has determined that the proposed amendments would create nominal new compliance requirements for small businesses as defined under the Act. Small consulting businesses that conduct natural resource inventories and surveys already are subject to a requirement to obtain a Scientific Collecting Permit and/or a Scientific Holding Permit from the Division of Fish and Wildlife in accordance with N.J.A.C. 7:25-4.2 for any nongame wildlife they may trap or hold in the course of their surveys. Should any of the invertebrate species proposed for addition to the nongame list, be targeted for surveys that require collection or holding such activities would require a permit from the Division of Fish and Wildlife; however, if the surveys for invertebrates are part of a survey project for which an applicant currently holds a valid permit for their activities related to other wildlife, the permittee would seek an

amendment to the current permit to add the newly listed species at no cost. The permittee would be required to include the collection and/or holding activities in the required annual reporting for the species added and so would need to perform additional record-keeping with regard to any species added.

Smart Growth

Executive Order No. 4 (2002) requires State agencies that adopt, amend or repeal any rule adopted pursuant to N.J.S.A. 52:14B-4(a) of the Administrative Procedure Act, to describe the impact of the proposed rule on the achievement of smart growth and implementation of the New Jersey State Development and Redevelopment Plan (State Plan). The Department has evaluated this rulemaking to determine the nature and extent of the proposed amendments' impact on smart growth and the implementation of the State Plan.

The proposed amendments are relevant to existing land use policies in that State land use regulations make reference to the lists of endangered and nongame wildlife, and certain land use restrictions are triggered by the presence of endangered, threatened or special concern wildlife or their habitat.

To a large degree, smart growth policies and the State Plan attempt to channel development into areas with existing infrastructure and away from larger, undeveloped parcels and regions usually associated with habitats for rare wildlife. Accurate lists of endangered and threatened wildlife coupled with the imposition of restrictions on development through State land use regulations that protect endangered and threatened wildlife habitat, therefore, tend to support the achievement of smart growth. As to the implementation of the State Plan, the proposed amendments are intended to promote conservation of the State's natural resources, which is one of the overall goals of the State Plan.

Housing Affordability Impact

In accordance with N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the proposed amendments for purposes of determining their impact, if any, on the affordability of housing. The Department has determined that the proposed rules will impose an insignificant impact because it is unlikely that the rules will evoke a change in the average costs associated with housing. The proposed amendments do extend the scope of regulation to include additional endangered and threatened species, but also remove other species from those categories. The proposal also would add 43 species, mostly rare invertebrates, to the nongame list at N.J.A.C. 7:25-4.17 with special concern status. Species with special concern status are provided regulatory protection only under the Highlands Water Protection and Planning Act Rules, N.J.A.C. 7:38. However, the list changes proposed would not expand the number of properties subject to the protections because, as discussed above in the Economic Impact statement, the definitions used in the Highlands rules for "rare species" already encompass the species proposed to be classified as "special concern."

As discussed in the Economic Impact statement above, the net effect of the proposed changes to the endangered species list and the list of indigenous nongame wildlife would potentially result in the easing of restrictions on development on a net area of over 31,000 acres and therefore potentially result in reduced regulatory costs of housing construction in these areas. Therefore any minor impacts to housing affordability are expected to be positive.

Smart Growth Development Impact

In accordance with N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the proposed amendments at N.J.A.C. 7:25-4.1, 4.13 and 4.17 to determine their impact, if any, on smart growth development.

As described in the Economic Impact Analysis, the proposed regulations do not, by themselves, have any direct regulatory impact on housing construction and development.

Rather, the Department's several land use regulations applicable to certain building and development activities include limits on such activities in habitat for endangered and threatened

species. There are many factors that impact the application of the Department's land use regulations, such as the type and size of proposed development and the presence of other sensitive resources (for example, wetlands). Further, in the context of the various land use regulations, the Department's mapping of endangered and threatened species habitat is not determinative but is used as guidance – habitat warranting protection under the Department's land use regulations is not always present in the areas mapped. Habitat suitability is determined on a case by case basis. Consequently, it is not possible to make precise predictions of the impact of the proposed rules on the availability of affordable housing or on new construction within Planning Area 1, Planning Area 2 and Designated Centers under the State Development and Redevelopment Plan. By examining the Department's mapping of endangered and threatened species habitat areas in the context of State Development and Redevelopment Plan, however, it is possible to predict whether the proposed changes will tend to increase or decrease the likelihood of such development.

To assess the potential impacts on smart growth development, the Department overlaid its most current mapping of habitat areas for endangered and threatened species (known as the Landscape Project maps) with the State Development and Redevelopment Plan Map (developed in accordance with N.J.A.C. 5:85-10) to examine the location of habitat areas affected by the proposed changes to the list of endangered species and the amendments to the status of nongame species in comparison with the areas designated for growth areas (that is, Planning Area 1 and Planning Area 2 and Designated Centers) and areas designated for limited growth or conservation (Planning Area 3, Planning Area 4, Planning Area 5).

As discussed in the Economic Impact statement, the Department's GIS analysis suggests that approximately 12,400 acres would be added to areas presumed to be endangered or threatened species habitat as a result of species being added to either the endangered species list or the list of indigenous nongame wildlife as threatened species. Conversely, the result of removing species from the endangered species list and removal from threatened status will result in approximately 43,400 fewer acres presumed to be endangered or threatened species habitats in the context of actual land use permit applications. The net effect of the proposed changes is

therefore approximately 31,000 fewer acres presumed to be endangered or threatened species habitat.

Of the approximately 12,400 acre increase in areas that would be mapped as habitat for endangered or threatened species, the vast majority (approximately 11,100 acres or approximately 90 percent of the total acreage) is located within areas designated for limited growth or conservation, while only approximately 1,300 acres (or approximately 10 percent of the total acreage) are located in areas designated for growth. Of the approximately 43,400 acre decrease in areas that would be mapped as habitat for endangered or threatened species, approximately 17,000 acres are located in areas designated for growth, while approximately 26,300 acres are located within areas designated for limited growth or conservation.

Accordingly, based on current mapping, the net outcome would be that there would be approximately 15,800 fewer acres potentially considered endangered or threatened species habitat within areas designated for growth and approximately 15,200 fewer acres potentially considered endangered or threatened species habitat within areas designated for limited growth or conservation.

Based on the above analysis, the Department has determined that the proposed rules will likely result in easing of regulatory restrictions on development in several areas within the State, including in Planning Areas 1 and 2 and designated centers under the State Development and Redevelopment Plan. Accordingly, any impact from the proposed amendments is anticipated to increase opportunities to provide affordable housing and new housing in Planning Areas 1 and 2 and designated centers. However, it is anticipated that any impact of the amendments on the availability of affordable housing or in new housing construction in Planning Area 1 or 2, or within designated centers, under the State Development and Redevelopment Plan will be limited.

CHAPTER 25

DIVISION OF FISH AND WILDLIFE RULES

SUBCHAPTER 4. ENDANGERED, NONGAME AND EXOTIC WILDLIFE

7:25-4.1 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings unless the context clearly indicates otherwise.

"Breeding population" means, for birds, the species' population, or assemblage of individuals of a species, present in the State during the nesting season (actual dates of the nesting season vary among species).

["Declining" (D) means a species which has exhibited a continued decline in population numbers over the years.]

. . .

"Endangered" (E) means a species whose prospects for survival within the State are in immediate danger due to one or many factors: A loss of or change in habitat, overexploitation, predation, competition, disease. An endangered species requires immediate assistance or extinction will probably follow. See N.J.A.C. 7:25A-[4.12(b)] **4.13(b)** for listing.

. . .

["Extirpated" (Ex) means a species that formerly occurred in New Jersey, but is not known to exist within the State.]

["Increasing" (INC) means a species whose population has exhibited a significant increase beyond the normal range of its cycle, over a long term period.]

["Introduced" (I) means a species not native to New Jersey, that could not have established itself here without the assistance of man.]

"Non-breeding population" means, for birds, the species' population, or assemblage of individuals of a species, present in the State during the parts of the year outside of the nesting season (actual dates of the nesting season vary among species).

["Peripheral" (P) means a species whose occurrence in New Jersey is at the extreme edge of its present natural range.]

. . .

"Secure-stable" (S) means a species that appears to be secure in the State and not in any immediately foreseeable danger of becoming "endangered," "threatened," or "special concern."

["Special case" means a species not known to nest regularly in New Jersey (marine reptiles) but that does occur off our shores, some occurring with regularity close to our shore or in our bays (marine reptiles and mammals).]

"Special Concern" (SC) means a species that warrants special attention by the Department because of inherent vulnerability to environmental deterioration or habitat modification that would result in its becoming threatened if conditions surrounding the species begin or continue to deteriorate. Factors that can lead to classification as special concern include, but are not limited to, species rarity in the State, highly specialized food and/or habitat requirements, low reproductive rate, isolated populations of the species within the State and/or other characteristics that make the species particularly susceptible to environmental or habitat changes. This category includes a species that meets the foregoing criteria and for which there is little understanding of its current population status in the State.

["Stable" (S) means a species whose population is not undergoing any long term increase/decrease within its natural cycle.]

["Undetermined" (U) means a species about which there is not enough information available to determine the status.]

"Undetermined-Unknown" (U) means a species that cannot be assigned a status of endangered, threatened, special concern or secure-stable because not enough information exists on which to base such a determination

7:25-4.13 List of endangered species.

- (a) [Section] **N.J.S.A.** 23:2A-4 [of the revised statutes] provides that the Department shall conduct investigations concerning wildlife in order to develop information relating to the populations, distributions, habitat needs, limiting factors and other biological and ecological factors. On the basis of such investigations of wildlife and other available scientific and commercial data, the Department may by regulation promulgate a list of those species and subspecies of wildlife indigenous to the State which are determined to be endangered, giving their common and scientific names by species and subspecies.
 - (b) In accordance therewith, the following species are determined to be endangered:
 - 1. 4. (No change.)
 - 5. Bog Turtle, Glyptemys [Clemmys] muhlenbergi
 - 6. 7. (No change.)
 - 8. Bald Eagle, Haliaeetus **leucocephalus** [leucoephalus] (**Breeding population**)
 - 9. Peregrine Falcon, Falco peregrinus (**Breeding population**)
 - 10. Northern Goshawk, Accipiter gentiles (**Breeding population**)
 - 11. Northern Harrier, Circus cyaneus (**Breeding population**)
 - 12.(No change.)
 - 13. Short-eared Owl, Asio flammeus (**Breeding population**)
 - 14. Pied-billed Grebe, Podilymbus podiceps (**Breeding population**)
 - 15. 16.(No change.)

- 17. Loggerhead Shrike, Lanius Iudovicianus (Non-breeding population)
- 18. Henslow's Sparrow, Ammodramus [Ammodrammus] henslowii
- 19. Vesper Sparrow, Pooecetes gramineus (**Breeding population**)
- 20. 21. (No change.)
- 22. Least Tern, Sterna antillarum [abifrons]
- 23. 27. (No change.)
- 28. Sperm Whale, Physeter macrocephalus [catodon]
- 29. 32. (No change.)
- 33. Right Whale, Balaena [Eubalaena] glacialis
- 34. 44. (No change.)
- 44. Queen Snake, [(]Regina septemvittata[)]
- 45. 46. (No change.)
- 47. Black Rail, Laterallus jamaicensis (Breeding population)
- 48. Golden-winged Warbler, Vermivora chrysoptera (Breeding population)
- 49. Red Knot, Calidris canutus (Non-breeding population)
- 50. Indiana Bat, Myotis sodalis
- 51. Gray Petaltail (dragonfly), Tachopteryx thoreyi

7:25-4.17 [Defining status of indigenous wildlife species of New Jersey

The following table defines the status of indigenous nongame wildlife species of New Jersey:

Species	Scientific Name	Species Status!
REPTILES		
Common Musk Turtle	Kinosternon odoratum	S
Eastern Mud Turtle Spotted Turtle	Kinosternon s. subrubrum Clemmys guttata	U
Wood Turtle	Clemmys insculpta	Ť
Eastern Box Turtle	Terrapene c. carolina	s
Map Turtle	Graptemys geographica	ŭ
Red-bellied Turtle	Pseudemys rubriventris	Ü
Eastern Painted Turtle	Chrysemys p. picta	S
Midland Painted Turtle	Chrysemys picta marginata	ŭ
Atlantic Green Turtle	Chelonia mydas	T S
Northern Fence Lizard Five-lined Skink	Sceloporus undulatus hyacinthinus Euroces fasciatus	S U
Ground Skink	Scincella lateralis	ŭ
Northern Water Snake	Nerodia s. sipedon	
Northern Brown Snake	Storeria d. dekayi	S S S
Northern Red-bellied Snake	Storeria o. occipitomaculata	S
Eastern Garter Snake	Thamnophis s, sirtalis	
Eastern Ribbon Snake	Thamnophis s. sauritus	S
Eastern Smooth Earth Snake	Virginia v. valeriae	D D
Eastern Hognose Snake Northern Ringneck Snake	Heterodon Platyrhinos Diudophis punctatus edwardsi	S
Southern Ringneck Snake	Diadophis p. punctatus	S
Eastern Worm Snake	Carphophis a. amoenus	ŭ
Northern Black Racer	Coluber c. constrictor	Ü
Rough Green Snake	Ophcodrys aestivus	S
Eastern Smooth Green Snake	Opheodrys v. vernalis	U
Black Rat Snake	Elaphe o. obsoleta	U
Northern Pine Snake	Pituophis m. melanoleucus Lampropeltis g. getulus	T U
Eastern King Snake Eastern Milk Snake	Lampropeltis t, triangulum	s
Northern Scarlet Snake	Cemophora coccinea copei	ŭ
Northern Copperhead	Agkistrodon contortrix mokasen	ΰ
AMPHIBIANS		
Pine Barrens Tree Frog	Hyla andersonii	т
Marbled Salamander	Ambystoma opacum	D
Jefferson Salamander	Ambystoma jeffersonianum	D
Silvery Salamander Spotted Salamander	Ambystoma platineum Ambystoma maculatum	D D
Red-spotted Newt	Notophthalmus v. viridescens	s
Northern Dusky Salamander	Desmognathus f. fuscus	š
Mountain Dusky Salamander	Desmognathus ochrophaeus	Ü
Red-backed Salamander	Plethodon c. cincreus	s
Slimy Salamander	Plethodon g. glutinosus	s
Four-toed Salamander	Hemidactylium scutatum	D
Northern Spring Salamander	Gyrinophilus p. porphyriticus Pseudotriton r. ruber	D D
Northern Red Salamander Eastern Mud Salamander	Pseudotriton m. montanus	Ť
Northern Two-lined	r secontition in: montaines	
Salamander	Eurycea b. bislineata	s
Long-tailed Salamander	Eurycea I. longicauda	т
Eastern Spadefoot Toad	Scaphiopus h. holbrookii	D
American Toad	Bufo americanus	S
Fowler's Toad	Bufo woodhouseii fowleri	S
Northern Cricket Frog	Acris c. crepitans	S S
Northern Spring Peeper Barking Treefrog	Hyla c. crucifer Hyla gratiosa	Ŭ
Northern Gray Treefrog	Hyta versicolor	š
New Jersey Chorus Frog	Pseudacris triscriata kalmi	S
Upland Chorus Frog	Pseudacris triscriata feriarum	U
Carpenter Frog	Rana varigatipes	Ü
Wood Frog	Rana sylvatica	S
Southern Leopard Frog Pickerel Frog	Rana spenocephala Rana palustris	S S
_	come business	3
MAMMALS Masked Shrew	Sorex cincreus	s
Tuckahoe Masked Shrew	Sorex cinereus nigriculus	Ü
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Species	Scientific Name		Species Status!		Scientific	Breeding	Non- Breed!
Water Shrew	Sorex palustris		U	Species	Name	Status1	Status
Smokey Shrew	Sorex fumeus		U	Red-necked Grebe	Podiceps grisegena		D
Long-tailed Shrew	Sorex dispar		U	Cory's Shearwater	Calonectris diomedea		S
Short-tailed Shrew	Blarma brevicauda		s	Greater Shearwater	Puffinus gravis		INC
Least Shrew	Crytotis parva		U	Sooty Shearwater	Puffinus griscus		s
Hairy-tailed Mole	Parascalops breweri		U	Wilson's Storm-petrel	Oceanites oceanicus		s
Eastern Mole	Scalopus aquaticus		S U	Leach's Storm-petrel	Occanodroma leucorhoa		S
Star-nosed Mole Little Brown Bat	Condylura cristata		s	Northern Gannet Brown Pelican	Sula bassanus Pelecanus occidentalis		S
Keen Myotis	Myotis Lucifugus Myotis keenii		Ü	Great Cormorant	Phalacrocorax carbo		S
Small-footed Myotis	Myotis subulatus		ŭ	Double-crested Cormo-	Filalaci Ocorax Carbo		3
Silver-haired Bat	Lasionycteris noctivagans		ŭ	rant	Phalacrocorax auritus		INC
Eastern Pipistrel	Pipistrellus subflavus		Ü	American Bittern	Botaurus lentiginosos	E	S
Big Brown Bat	Eptesicus fuscus		S	Least Bittern	Ixobrychus exilis	D	S
Red Bat	Lasiurus borealis		S	Great Blue Heron	Ardea herodias	S	S
Northern Yellow Bat	Lasiurus intermedius		P	Great Egret	Casmerodius albus	S	S
Hoary Bat	Lasiurus cincreus		U	Snowy Egret	Egretta thula	S	S
New England Cottontail	Sylvilagus transitionalis		U	Little Blue Heron	Egretta caerulea	S	S
Eastern Chipmunk	Tamias striatus		S	Tricolored Heron	Egretta tricolor	INC	S
Red Squirrel Southern Flying Squirrel	Tamtasciurus hudsonicus Glaucomys volans		S U	Cattle Egret Green-backed Heron	Bubulcus ibis Butorides striatus	INC S	INC S
Northern Flying Squirrel	Glaucomys sabrinus		ΰ	Black-crowned Night	Butorides striatus	3	3
Marsh Rice Rat	Oryzomys palustris		s	Heron Night	Nyeticorax nyeticorax	т	S
White-footed Mouse	Peromyseus leucopus		Š	Yellow-crowned Night	rijencoras njencoras		
Red-backed Mouse	Clethrionomys gapperi		s	Heron	Nyctanassa violaceus	T	Т
Meadow Vole	Microtis pennsylvanicus		S	Glossy Ibis	Plegadis falcinellus	D	s
Pine Vole	Pitymys pinctorum		S	Fulvous Whistling Duck	Dendrocygna bicolor		P
Southern Bog Lemming	Synaptomys cooperi		U	Tundra Swan	Cygnus columbianus		INC
Woodland Jumping Mouse	Napacozapus isignis		U	Eurasian Wigeon	Anas penelope		S
Meadow Jumping Mouse	Zapus hudsonius		U	King Eider	Somateria spectabilis		S
Porcupine	Erethizon dorsatum		INC	Harlequin Duck	Histrionicus Instrionicus	1510	s
Harbor Scal	Phoca vitulina		S P	Black Vulture	Coragyps atratus Cathartes aura	INC	S
Harp Scal Gray Scal	Pagophilus groenlandica Halichoerus grypus		P	Turkey Vulture Osprey	Pandion haliactus	S T	T
Hooded Scal	Cystophora cristata		P	American Swallowtail	Pandon hanactus		
Goose-beaked Whale	Ziphius cavirostris		Ù	Kite	Elanoides forficodus		INC
Dense Beaked Whale	Mesoplodon densirostris		ŭ	Mississippi Kite	Ictinia mississippiensis		INC
Gervais Beaked Whale	Mesoplodon curopacus		Ŭ	Northern Harrier	Circus cyaneus	E	U
True's Beaked Whale	Mesoplodon mirus		Ú	Sharp-shinned Hawk	Accipiter striatus	υ	U
Pygmy Sperm Whale	Kogia breviceps		U	Cooper's Hawk	Accipiter cooperii	т	T
Dwarf Sperm Whale	Kogia simus		U	Red-shouldered Hawk	Butco lineatus	Е	T
Beluga Whale	Delphinapterus leucas		P	Broad-winged Hawk	Butco platypierus	S	S
Bridled Spotted Dolphin	Stenella frontalis		U	Red-tailed Hawk	Buteo jamaicensis	INC	INC
Spotted Dolphin	Stenella plagiodon		U	Rough-legged Hawk	Butco lagopus		S
Striped Dolphin Saddle-backed Dolphin	Stenella coeruleoalba Delphinus delphis		ŭ	Golden Eagle American Kestrel	Aquila chrysactos Falco sparvenus	INC	s s
Bottle-nosed Dolphin	Tursiops truncatus		s	Merlin	Falco columbarius	INC	S
Atlantic Killer Whale	Orcinus orca		ŭ	Yellow Rail	Coturnicops noveboracensis		ŭ
Risso's Dolphin	Grampus griscus		Ü	Black Rail	Laterallus jamaicensis	т	Ť
Long-finned Pilot Whale	Globicephala malaena		U	King Rail	Railus cicgans	Ü	Ü
Short-finned Pilot Whale	Globicephala macrothyncus	;	U	Black-bellied Plover	Pluvialis squatarola		S
Harbor Porpoise	Phocoena phocoena		U	Lesser Golden Plover	Pluvialis dominica		s
Minke Whale	Balacnoptera acutorostrata		Ú	Semipalmated Plover	Charadrius semipalmatus	-	s s
				Killdeer	Charadrius vociferus	S	S
INVERTEBRATES				American Oystercatcher	Hacmatopus palliatus	INC	S
Checkered White	Dontio mestodias		т	Black-necked Stilt	Himantopus mexicanus		INC
(butterfly) Frosted Elfin	Pontia protodice			American Avocet Greater Yellowlegs	Recurvirostra americana Tringa melanoleuca		S
(butterfly)	Callophrys irus		т	Lesser Yellowlegs	Tringa flavipes		S
Silver-bordered Fritillary	Canopinya nua		•	Solitary Sandpiper	Tringa solitaria		s
(butterfly)	Bolaria selene myrına		т	Willet	Catoptrophorus semipalmatus	INC	s
Eastern Lampmussel			-	Spotted Sandpiper	Actitis macularia	S	s
(mussel)	Lampsilis radiata		т	Whimbrel	Numenius phaeopus	_	S
Tidewater Mucket	•			Hudsonian Godwit	Limosa haemastica		D
(mussel)	Leptodea ochracea		T	Marbled Godwit	Limosa fedoa.		D
Yellow Lampmussel				Ruddy Turnstone	Arenana interpres		S
(mussel)	Lampsilis cariosa		T	Red Knot	Calidris canutus		T
Triangle Floater				Sanderling	Calidris alba		D
(mussel) Eastern Pondmussel	Alasmidonta undulata		T	Semipalmated Sandpiper	Calidris pusillus		S
(mussel)	Ligumia nasuta		т	Western Sandpiper Least Sandpiper	Calidris mauri Calidris minutilla		S
(musser)	Eigurma nasuta			White-rumped Sandpiper	Calidris fuscicollis		S
				Baird's Sandpiper	Calidris baircii		Ď
			Non-	Pectoral Sandpiper	Calidris melanotos		S
	Scientific	Breeding	Breed!	Purple Sandpiper	Calidris maritima		INC
Species	Name	Status	Status	Dunlin	Calidris alpina		INC
BIRDS				Curlew Sandpiper	Calidris ferruginea		S
Red-throated Loon	Gavia stellata		S	Stilt Sandpiper	Calidris himantopus		INC
Common Loon	Gavia immer	_	S	Buff-breasted Sandpiper	Tryngites subruficollis		S
Pied-billed Grebe	Podilymbus podiceps	Е	S	Ruff	Philomachus pugnax		INC
Horned Grebe	Podiceps auritus		S	Short-billed Dowitcher	Limnodromus griscus		S

			Non-				Non-
Ci	Scientific	Breeding	Breed		Scientific	Breeding	Breed1
Species	Name	Status !	Status	Species	Name	Status	Status
Long-billed Dowitcher	Limnodromus scolopaceus		S	White-breasted Nuthatch	Sitta carolinensis	S	S
Wilson's Phalarope	Phalaropus tricolor		INC	Brown Creeper	Certhia americana	S	S
Red-necked Phalarope	Phalaropus lobatus		S	Carolina Wren	Thryothorus Iudovicianus	S	S
Red Phalarope	Phalaropus fulicarias		S	House Wren	Troglodytes aedon	S	S
Pomarine Jaeger	Stercorarius pomarinus		S	Winter Wren	Troglodytes troglodytes		S
Parasitic Jaeger	Stereorarius parasiticus		S	Marsh Wren	Cistothorus palustris	D	S
Long-tailed Jaeger	Stereorarius longicaudus	_	S	Golden-crowned Kinglet	Regulus satrapa	S	S
Laughing Gull	Larus atricilla	S	S	Ruby-crowned Kinglet	Regulus calendula		S
Little Gull	Larus minutus		S	Blue-gray Gnatcatcher	Polioptila caerulea	INC	s s s
Common Black-headed			_	Eastern Bluebird	Sialia sialis	S	S
Gull	Larus ridibundus		S	Vecry	Catharus fuscescens	S	S
Bonaparte's Gull	Larus philadelphia		S	Gray-checked Thrush	Catharus minimus		S
Ring-billed Gull	Larus delawarensis	_	INC	Swainson's Thrush	Catharus ustulatus		S
Herring Gull	Larus argentatus	S	S	Hermit Thrush	Catharus guttatus	S	S
Iceland Gull	Larus glaucoides		S	Wood Thrush	Hylocichla mustelina	S	S
Lesser Black-backed Gull	Larus fuscus		INC	American Robin	Turdus migratorius	S	S
Glaucous Gull	Larus hyperboreus	****	S	Cathird	Dumetella carolinensis	S	s s
Great Black-backed Gull	Larus marinus	INC	S	Northern Mockingbird	Mimus polyglottos	INC	S
Black-legged Kittiwake	Rissa tridactyla		S	Brown Thrasher	Toxostoma rufum	D	S
Gull-billed Tern	Sterna nilotica		S	Water Pipit	Anthus spinoletta	_	S
Caspian Tern	Sterna caspia		S	Cedar Waxwing	Bombycilla cedrorum	S	s
Royal Tern	Sterna maximus	_	S	Northern Shrike	Lanius exubitor	_	Š
Common Tern	Sterna hirundo	D	S	White-eyed Vireo	Virco griscus	D	S
Forster's Tern	Sterna forsteri	INC	S S	Solitary Virco	Virco solitarius	s	s
Black Tern	Childonias niger		S	Yellow-throated Vireo	Virco flavifrons	s	Š
Dovekie	Alle alle		D	Warbling Virco	Virco gilvus	š	s
Thick-billed Murre	Uria iomvia		D	Philadelphia Virco	Virco philadelphicus		s
Razorbill	Alca torda		D	Red-eved Vireo	Virco olivaccus	INC	INC
Mourning Dove	Zenaida maeroura	INC	S S	Blue-winged Warbler	Vermivora pinus	INC	S
Black-billed Cuckoo	Coccyzus crythropthalmus	S	S	Golden-winged Warbler	Vermivora chrysoptera	D	s
Yellow-billed Cuckoo	Coccyzus americanus	S	S	Tennessee Warbler	Vermivora peregrina	ь	s
Common Barn Owl	Tyto alba	S	S	Orange-crowned Warbler	Vermivora celata		S
Eastern Screech Owl	Otus asio	S	S	Nashville Warbler	Vermivora reficapilla	s	
Great Horned Owl	Bubo virginianus	INC	S	Northern Parula	Parula americana	P	S
Snowy Owl	Nyctea scandiaca		S	Yellow Warbler	Dendroica petechia	s	s s s
Barred Owl	Strix varia	T	T	Chestnut-sided Warbler	Dendroica pensylvanica	S	3
Long-cared Owl	Asio otus	T	T	Magnolia Warbler	Dendroica magnolia	S	
Short-cared Owl	Asio flammeus	E	U	Cape May Warbler		3	S S
Northern Saw-whet Owl	Acgolius acadicus	S	S	Black-throated Blue	Dendroica tigrina		3
Common Nighthawk	Chordeiles minor	S	S	Warbler	Dendroica caerulescens	e	
Chuck-will's-widow	Caprimulgus carolinensis	INC	s	Yellow-rumped Warbler		s	S
Whipporwill	Caprimulgus vociferus	D	S	Black-throated Green	Dendroica coronata		S
Chimney Swift	Chaetura pelagica	S	S	Warbler Oreen	Dandenias viesas		
Ruby-throated Hum-					Dendroica virens	S	S
mingbird	Archilochus colubris	D	S	Blackburnian Warbler	Dendroica fusca	S	S
Belted Kingfisher	Ceryle aleyon	S	S	Yellow-throated Warbler Pine Warbler	Dendroica dominica	s	S
Red-headed Woodpecker	Melanerpes erythrocephalus	Т	T		Dendroica pinus	S	S
Red-bellied Woodpecker	Melanerpes carolinus	INC	S	Prairie Warbler	Dendroica discolor	S	S
Yellow-bellied Sapsucker	Sphyrapicus varius		S	Palm Warbler	Dendroica palmarum		S
Downy Woodpecker	Picoides pubescens	S	S	Bay-breasted Warbler	Dendroica castanea		S
Hairy Woodpecker	Picoides villosus	S	S	Blackpoll Warbler	Dendroica striata		S
Northern Common Flick-				Cerulean Warbler	Dendroica cerulea	S	S
cr	Colaptes auratus	S	S	Black and White Warbler	Miniotilta varia	S	S
Pileated Woodpecker	Dryocopus pileatus	S	S	American Redtart	Sctophaga ruticilla	S	S
Olive-sided Flycatcher	Contopus borealis		S	Prothonotary Warbler	Protonotana citrca	INC	S
Eastern Wood Pewce	Contopus virens	S	S	Worm-cating Warbler	Helmitheros vermivorus	S	S
Yellow-bellied Flycatcher	Empidonax flaviventris		S	Ovenbird	Sciurus aurocapillus	S	S
Acadian Flycatcher	Empidonax virescens	INC	S	Northern Waterthrush	Seiurus noveboracensis	S	S
Alder Flycatcher	Empidonax alnorum	S	S	Louisiana Waterthrush	Sciurus motacilla	S	S
Willow Flycatcher	Empidonax traillii	INC	S	Kentucky Warbler	Oporornis formosus	S	S
Least Flycatcher	Empidonax minimus	S	s	Connecticut Warbler	Oporornis agilis		S
Eastern Phoebe	Sayornis phoebe	s	S	Mourning Warbler	Oporornis philadelphia		S
Great Crested Flycatcher	Myiarchus crinitus	S	S	Common Yellowthroat	Geothlypis trichas	S	S
Western Kingbird	Tyrannus verticalis		S	Hooded Warbler	Wilsonia citrina	D	S
Eastern Kingbird	Tyrannus tyrannus	D	D	Wilson's Warbler	Wilsonia pusilla		S
Horned Lark	Eremophila alpestris	D	S	Canada Warbler	Wilsonia canadensis	s	S
Purple martin	Progne subis	D	S	Yellow-breasted Chat	Icteria virens	D	S
Tree Swallow	Tachycineta bicolor	S	S	Summer Tanager	Piranga rubra		S
Northern Rough-winged				Scarlet Tanager	Piranga olivacea	S	S
Swallow	Stelgidopteryx serripennis	S	S	Northern Cardinal	Cardinalis cardinalis	INC	INC
Bank Swallow	Riparia riparia	S	S	Rose-breasted Grosbeak	Pheucticus Iudovicianus	S	S
Cliff Swallow	Hirundo pyrrhonota	S	S	Bluc Grosbeak	Guiraca caerulea	INC	S
Barn Swallow	Hirundo rustica	S	S	Indigo Bunting	Passerina cyanea	S	S
Blue Jay	Cyanocitta cristata	INC	S	Dickeissel	Spiza americana	EX	Ũ
Fish Crow	Corvus ossifragus	INC	S	Rufous-sided Towhee	Pipilo crythrophthalmus	S	S
Black-capped Chickadee	Parus atricapillus	INC	S	American Tree Sparrow	Spizella arborea		Š
Carolina Chickadee	Parus carolinensis	S	S	Chipping Sparrow	Spizella passerina	S	S
Boreal Chickadee	Parus hudsonicus		S	Field Sparrow	Spizella pusilla	s	S
Tufted Titmouse	Parus bicolor	INC	S	Lark Sparrow	Chondestes grammacus		S S T
Red-breasted Nuthatch	Sitta canadensis	S	S	Savannah Sparrow	Passerculus sandwichensis	T	Т
				-			

Species	Scientific Name Passerculus sandwichensis	Breeding Status!	Non- Breed ¹ Status
Ipswich Sparrow	princeps		S
Grasshopper Sparrow	Ammodramus savannarum	T	s
Sharp-tailed Sparrow	Ammodramus caudacuta	S	S S S S S S
Seaside Sparrow	Ammodramus maritima	s	S
Fox Sparrow	Passerella iliaca		S
Song Sparrow	Melospiza melodia	S	S
Lincoln's Sparrow	Melospiza lincolnii		S
Swamp Sparrow	Melospiza georgiana	S	S
White-throated Sparrow	Zonotrichia albicollis	S	S
White-crowned Sparrow	Zonotrichia leucophrys		INC
Dark-cycd Junco	Junco hyemalis	S	S
Lapland Longspur	Calcarius Iapponicus		S
Snow Bunting	Plectophenax nivalis		S
Bobolink	Dolichonyx oryzzvorus	T	т
Red-winged Blackbird	Agelaius phoeniceus	S	S
Eastern Meadowlark	Sturnella magna	D	S S S
Rusty Blackbird	Euphagus carolinus		s
Boat-tailed Grackle	Quiscalus major	INC	S
Common Grackle	Quiscalus quiscula	INC	S
Brown-headed Cowbird	Molothrus ater	INC	s s
Orchard Oriole	Icterus spurius	S	S
Northern Oriole	Icterus galbula	S	S
Pine Grosbeak	Pinicola enucleator		S
Purple Finch	Carpodacus purpureus	S	S
House Finch	Carpodacus mexicanus	INC	S
Red Crossbill	Loxia curvirostra		S
White-winged Crossbill	Loxia leucoptera		S
Common Redpoll	Carduelis flammea		S
Pine Siskin	Carductis pinus		S S S S S
American Goldfinch	Carduelis tristis	S	S
Evening Grosbeak	Hesperiphona vespertina		INC

¹D signifies "Declining," E signifies "Endangered," EX signifies "Extirpated." INC signifies "Increasing," I signifies "Introduced," P signifies "Peripheral," S signifies "Stable," T signifies "Threatened" and U signifies "Undetermined." These terms are defined in N.J.A.C. 7:25–4.1.

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List providing conservation status of New Jersey's indigenous nongame wildlife species.

The following table sets forth the list and conservation status of nongame wildlife species indigenous to New Jersey in their respective taxonomic classes. For the vertebrate classes of mammals, birds, reptiles, and amphibians, the list is intended to include all indigenous nongame species, that is, all species for which a legal hunting or trapping season has not been established or that have not been classified as an endangered species and that are native to the eastern United States and regularly and predictably occur within the State or

its waters. Freshwater and marine fish are not included on this list because none are currently considered "nongame." For the invertebrate classes, the list includes only those species for which the Department has determined that their status is either "threatened" or "special concern." The list is ordered alphabetically by species' common names within each taxonomic class.

<u>Species</u>	Scientific Name	Species Status*
BIVALVES		
Creeper	Strophitus undulatus	SC
Eastern Lampmussel	Lampsilis radiata	T
Eastern Pondmussel	Ligumia nasuta	T
Tidewater Mucket	Leptodea ochracea	T
Triangle Floater	Alasmidonta undulata	T
Yellow Lampmussel	Lampsilis cariosa	T
INSECTS		
Allegheny River Cruiser	Macromia alleghaniensis	SC
Arrowhead Spiketail	Cordulegaster obliqua	SC
Banner Clubtail	Gomphus apomyius	T
Brook Snaketail	Ophiogomphus aspersus	T
Brush-tipped Emerald	Somatochlora walshii	SC
Checkered White	Pontia protodice	T
Cobra Clubtail	Gomphus (Gomphurus) vastus	SC
Coppery Emerald	Somatochlora georgiana	SC
Crimson-ringed Whiteface	Leucorrhinia glacialis	SC
Dotted Skipper	Hesperia attalus slossonae	SC
Extra-striped Snaketail	Ophiogomphus anomalus	SC
Forcipate Emerald	Somatochlora forcipata	SC
Frosted Elfin	Callophrys irus	T
Georgia (Lakehurst) Satyr	Neonympha areolatus septentrionalis	SC
Golden-winged Skimmer	Libellula auripennis	SC
Green-faced Clubtail	Gomphus (Hylogomphus) viridifrons	SC
Harpoon Clubtail	Gomphus descriptus	T
Harris Checkerspot	Chlosyne harrisii	SC
Hessel's Hairstreak	Callophrys hesseli	SC
Hoary Elfin	Callophrys polios	SC
Hudsonian Whiteface	Leucorrhinia hudsonica	SC

Kennedy's Emerald	Somatochlora kennedyi	T
Leonard's Skipper	Hesperia leonardus	SC
Maine Snaketail	Ophiogomphus mainensis	SC
Midland Clubtail	Gomphus (Gomphurus) fraternus	SC
New England Bluet	Enallagma laterale	SC
Northern Metalmark	Calephelis borealis	SC
Pine Barrens Bluet	Enallagma recurvatum	SC
Rapids Clubtail	Gomphus (Gomphus) quadricolor	SC
Robust Baskettail	Epitheca spinosa	T
Sable Clubtail	Gomphus (Gomphurus) rogersi	SC
Scarlet Bluet	Enallagma pictum	SC
Septima's Clubtail	Gomphus septima	SC
Silver-bordered Fritillary	Bolaria selene myrina	T
Ski-tailed Emerald	Somatochlora elongata	SC
Spatterdock Darner	Rhionaeschna mutata	SC
Subarctic Darner	Aeshna subarctica	SC
Superb Jewelwing	Calopteryx amata	T
Tiger Spiketail	Cordulegaster erronea	SC
Two-spotted Skipper	Euphyes bimacula	SC
Williamson's Emerald	Somatochlora williamsoni	SC
Zebra Clubtail	Stylurus scudderi	SC

AMPHIBIANS

Allegheny Dusky Salamander	Desmognathus ochrophaeus	U
Barking Treefrog	Hyla gratiosa	\mathbf{U}
Carpenter Frog	Rana virgatipes	SC
Eastern American Toad	Bufo americanus americanus	\mathbf{S}
Eastern Mud Salamander	Pseudotriton m. montanus	T
Eastern Spadefoot	Scaphiopus holbrookii	\mathbf{U}
Four-toed Salamander	Hemidactylium scutatum	\mathbf{U}
Fowler's Toad	Bufo fowleri	\mathbf{SC}
Jefferson Salamander	Ambystoma jeffersonianum	\mathbf{SC}
Longtail Salamander	Eurycea l. longicauda	T
Marbled Salamander	Ambystoma opacum	\mathbf{SC}
New Jersey Chorus Frog	Pseudacris kalmi	\mathbf{U}
Northern Cricket Frog	Acris c. crepitans	\mathbf{S}
Northern Dusky Salamander	Desmognathus fuscus	\mathbf{S}
Northern Gray Treefrog	Hyla versicolor	\mathbf{S}
Northern Leopard Frog	Rana pipiens	\mathbf{U}

Northern Red Salamander	Pseudotriton r. ruber	\mathbf{S}
Northern Spring Peeper	Pseudacris c. crucifer	\mathbf{S}
Northern Spring Salamander	Gyrinophilus p. porphyriticus	SC
Northern Two-lined Salamander	Eurycea bislineata	\mathbf{S}
Pickerel Frog	Rana palustris	\mathbf{S}
Pine Barrens Treefrog	Hyla andersonii	T
Red-backed Salamander	Plethodon cinereus	\mathbf{S}
Red-spotted Newt	Notophthalmus v. viridescens	\mathbf{S}
Slimy Salamander	Plethodon glutinosus	\mathbf{S}
Southern Leopard Frog	Rana spenocephala utricularia	\mathbf{S}
Spotted Salamander	Ambystoma maculatum	\mathbf{S}
Upland Chorus Frog	Pseudacris feriarum	\mathbf{U}
Wood Frog	Rana sylvatica	\mathbf{S}

REPTILES

KEI TIEED		
Common Map Turtle	Graptemys geographica	\mathbf{U}
Common Musk Turtle	Sternotherus odoratus	\mathbf{S}
Eastern Box Turtle	Terrapene c. carolina	SC
Eastern Earth Snake	Virginia v. valeriae	\mathbf{U}
Eastern Garter Snake	Thamnophis s. sirtalis	\mathbf{S}
Eastern Hognose Snake	Heterodon platirhinos	\mathbf{S}
Eastern King Snake	Lampropeltis g. getula	SC
Eastern Milk Snake	Lampropeltis t. triangulum	\mathbf{S}
Eastern Mud Turtle	Kinosternon s. subrubrum	\mathbf{S}
Eastern Painted Turtle	Chrysemys p. picta	\mathbf{S}
Eastern Rat Snake	Elaphe alleghaniensis	U
Eastern Redbelly Turtle	Pseudemys rubriventris	\mathbf{U}
Eastern Ribbon Snake	Thamnophis s. sauritus	\mathbf{S}
Eastern Worm Snake	Carphophis a. amoenus	\mathbf{U}
Five-lined Skink	Eumeces fasciatus	\mathbf{U}
Ground Skink	Scincella lateralis	U
Midland Painted Turtle	Chrysemys picta marginata	\mathbf{U}
Northern Black Racer	Coluber c. constrictor	\mathbf{U}
Northern Brown Snake	Storeria d. dekayi	\mathbf{S}
Northern Copperhead	Agkistrodon contortrix mokasen	SC
Northern Fence Lizard	Sceloporus undulatus hyacinthinus	\mathbf{S}
Northern Pine Snake	Pituophis m. melanoleucus	T
Northern Redbelly Snake	Storeria o. occipitomaculata	\mathbf{S}
Northern Ringneck Snake	Diadophis punctatus edwardsii	\mathbf{S}

Northern Scarlet Snake	Cemophora coccinea copei	${f U}$
Northern Water Snake	Nerodia s. sipedon	S
Rough Green Snake	Opheodrys aestivus	S
Smooth Green Snake	Liochlorophis vernalis	U
Southern Ringneck Snake	Diadophis p. punctatus	S
Spotted Turtle	Clemmys guttata	SC
Wood Turtle	Glyptemys insculpta	T

			Non-breeding
<u>Species</u>	Scientific Name	Breeding Status*	status*
<u>BIRDS</u>			
Acadian Flycatcher	Empidonax virescens	S	S
Alder Flycatcher	Empidonax alnorum	S	S
American Avocet	Recurvirostra americana		\mathbf{S}
American Bittern	Botaurus lentiginosus	E	SC
American Golden-Plover	Pluvialis dominica		S
American Goldfinch	Spinus tristis	S	S
American Kestrel	Falco sparverius	T	T
American Oystercatcher	Haematopus palliatus	SC	SC
American Pipit	Anthus rubescens		\mathbf{S}
American Redstart	Setophaga ruticilla	\mathbf{S}	\mathbf{S}
American Robin	Turdus migratorius	S	S
American Tree Sparrow	Spizella arborea		S
Baird's Sandpiper	Calidris bairdii		S
Bald Eagle	Haliaeetus leucocephalus	E	T
Baltimore Oriole	Icterus galbula	S	S
Bank Swallow	Riparia riparia	S	S
Barn Owl	Tyto alba	SC	SC
Barn Swallow	Hirundo rustica	S	S
Barred Owl	Strix varia	T	T
Bay-breasted Warbler	Dendroica castanea		S
Belted Kingfisher	Ceryle alcyon	S	S
Black and White Warbler	Mniotilta varia	S	S
Black Rail	Laterallus jamaicensis	\mathbf{E}	T
Black Vulture	Coragyps atratus	S	S
Black-bellied Plover	Pluvialis squatarola		S
Black-billed Cuckoo	Coccyzus erythropthalmus	SC	S
Blackburnian Warbler	Dendroica fusca	SC	S
Black-capped Chickadee	Poecile atricapillus	S	S

Black-crowned Night-Heron	Nycticorax nycticorax	Т	SC
Black-legged Kittiwake	Rissa tridactyla	-	S
Blackpoll Warbler	Dendroica striata		S
Black-throated Blue Warbler	Dendroica caerulescens	SC	S
Black-throated Green Warbler	Dendroica virens	SC	S
Blue Grosbeak	Passerina caerulea	S	S
Blue Jay	Cyanocitta cristata	S	S
Blue-gray Gnatcatcher	Polioptila caerulea	S	S
Blue-headed Vireo	Vireo solitarius	SC	S
Blue-winged Warbler	Vermivora pinus	S	S
Boat-tailed Grackle	Quiscalus major	S	S
Bobolink	Dolichonyx oryzivorus	T	SC
Bonaparte's Gull	Larus philadelphia		S
Boreal Chickadee	Poecile hudsonica		S
Broad-winged Hawk	Buteo platypterus	SC	S
Brown Creeper	Certhia americana	S	S
Brown Pelican	Pelecanus occidentalis		S
Brown Thrasher	Toxostoma rufum	SC	S
Brown-headed Cowbird	Molothrus ater	\mathbf{S}	\mathbf{S}
Buff-breasted Sandpiper	Tryngites subruficollis		S
Canada Warbler	Wilsonia canadensis	\mathbf{SC}	S
Cape May Warbler	Dendroica tigrina		S
Carolina Chickadee	Poecile carolinensis	\mathbf{S}	S
Carolina Wren	Thryothorus ludovicianus	\mathbf{S}	S
Caspian Tern	Sterna caspia	\mathbf{SC}	S
Cattle Egret	Bubulcus ibis	T	SC
Cedar Waxwing	Bombycilla cedrorum	S	\mathbf{S}
Cerulean Warbler	Dendroica cerulea	SC	SC
Chestnut-sided Warbler	Dendroica pensylvanica	S	\mathbf{S}
Chimney Swift	Chaetura pelagica	S	S
Chipping Sparrow	Spizella passerina	S	\mathbf{S}
Chuck-will's-widow	Caprimulgus carolinensis	S	\mathbf{S}
Cliff Swallow	Hirundo pyrrhonota	\mathbf{SC}	\mathbf{S}
Common Black-headed Gull	Larus ridibundus		\mathbf{S}
Common Grackle	Quiscalus quiscula	\mathbf{S}	\mathbf{S}
Common Loon	Gavia immer		\mathbf{S}
Common Nighthawk	Chordeiles minor	\mathbf{SC}	SC
Common Raven	Corvus corax	\mathbf{S}	\mathbf{S}
Common Redpoll	Acanthus flammea		U

Common Tern	Sterna hirundo	SC	\mathbf{S}
Common Yellowthroat	Geothlypis trichas	S	\mathbf{S}
Connecticut Warbler	Oporornis agilis		\mathbf{S}
Cooper's Hawk	Accipiter cooperii	SC	\mathbf{S}
Cory's Shearwater	Calonectris diomedea		\mathbf{S}
Curlew Sandpiper	Calidris ferruginea		\mathbf{S}
Dark-eyed Junco	Junco hyemalis	S	\mathbf{S}
Dickcissel	Spiza americana		\mathbf{S}
Double-crested Cormorant	Phalacrocorax auritus	S	\mathbf{S}
Dovekie	Alle alle		U
Downy Woodpecker	Picoides pubescens	S	\mathbf{S}
Dunlin	Calidris alpina		\mathbf{S}
Eastern Bluebird	Sialia sialis	S	\mathbf{S}
Eastern Kingbird	Tyrannus tyrannus	S	\mathbf{S}
Eastern Meadowlark	Sturnella magna	SC	SC
Eastern Phoebe	Sayornis phoebe	S	\mathbf{S}
Eastern Screech Owl	Otus asio	S	\mathbf{S}
Eastern Towhee	Pipilo erythrophthalmus	S	\mathbf{S}
Eastern Wood Pewee	Contopus virens	S	\mathbf{S}
Evening Grosbeak	Coccothraustes vespertina		\mathbf{S}
Field Sparrow	Spizella pusilla	S	\mathbf{S}
Forster's Tern	Sterna forsteri	S	\mathbf{S}
Fox Sparrow	Passerella iliaca		\mathbf{S}
Glaucous Gull	Larus hyperboreus		\mathbf{S}
Glossy Ibis	Plegadis falcinellus	SC	\mathbf{S}
Golden Eagle	Aquila chrysaetos		\mathbf{S}
Golden-crowned Kinglet	Regulus satrapa	S	\mathbf{S}
Golden-winged Warbler	Vermivora chrysoptera	E	SC
Grasshopper Sparrow	Ammodramus savannarum	T	SC
Gray Catbird	Dumetella carolinensis	S	\mathbf{S}
Gray-cheeked Thrush	Catharus minimus		SC
Great Black-backed Gull	Larus marinus	S	\mathbf{S}
Great Blue Heron	Ardea herodias	SC	\mathbf{S}
Great Cormorant	Phalacrocorax carbo		\mathbf{S}
Great Crested Flycatcher	Myiarchus crinitus	S	\mathbf{S}
Great Egret	Ardea alba	S	\mathbf{S}
Great Horned Owl	Bubo virginianus	S	S
Greater Shearwater	Puffinus gravis		S
Greater Yellowlegs	Tringa melanoleuca		S

		-	-
Green Heron	Butorides virescens	S	S
Gull-billed Tern	Sterna nilotica	SC	SC
Hairy Woodpecker	Picoides villosus	S	S
Hermit Thrush	Catharus guttatus	S	\mathbf{S}
Herring Gull	Larus argentatus	\mathbf{S}	\mathbf{S}
Hooded Warbler	Wilsonia citrina	\mathbf{SC}	\mathbf{S}
Horned Grebe	Podiceps auritus		\mathbf{S}
Horned Lark	Eremophila alpestris	T	SC
House Finch	Carpodacus mexicanus	\mathbf{S}	\mathbf{S}
House Wren	Troglodytes aedon	S	\mathbf{S}
Hudsonian Godwit	Limosa haemastica		\mathbf{S}
Iceland Gull	Larus glaucoides		\mathbf{S}
Indigo Bunting	Passerina cyanea	\mathbf{S}	\mathbf{S}
Ipswich Sparrow	Passerculus sandwichensis princeps		SC
Kentucky Warbler	Oporornis formosus	\mathbf{SC}	\mathbf{SC}
Killdeer	Charadrius vociferus	\mathbf{S}	\mathbf{S}
Lapland Longspur	Calcarius lapponicus		\mathbf{S}
Lark Sparrow	Chondestes grammacus		\mathbf{S}
Laughing Gull	Larus atricilla	\mathbf{S}	\mathbf{S}
Leach's Storm-petrel	Oceanodroma leucorhoa		\mathbf{U}
Least Bittern	Ixobrychus exilis	SC	\mathbf{SC}
Least Flycatcher	Empidonax minimus	SC	\mathbf{S}
Least Sandpiper	Calidris minutilla		\mathbf{S}
Lesser Black-backed Gull	Larus fuscus		\mathbf{S}
Lesser Yellowlegs	Tringa flavipes		\mathbf{S}
Lincoln's Sparrow	Melospiza lincolnii		\mathbf{S}
Little Blue Heron	Egretta caerulea	\mathbf{SC}	SC
Little Gull	Larus minutus		\mathbf{S}
Loggerhead Shrike	Lanius ludovicianus		${f E}$
Long-billed Dowitcher	Limnodromus scolopaceus		\mathbf{S}
Long-eared Owl	Asio otus	T	T
Long-tailed Jaeger	Stercorarius longicaudus		U
Louisiana Waterthrush	Seiurus motacilla	\mathbf{S}	\mathbf{S}
Magnolia Warbler	Dendroica magnolia	\mathbf{S}	\mathbf{S}
Marbled Godwit	Limosa fedoa		\mathbf{S}
Marsh Wren	Cistothorus palustris	\mathbf{S}	\mathbf{S}
Merlin	Falco columbarius		\mathbf{S}
Mississippi Kite	Ictinia mississippiensis		\mathbf{S}
Mourning Warbler	Oporornis philadelphia		\mathbf{S}
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Nashville Warbler	Vermivora ruficapilla	\mathbf{SC}	S
Northern Cardinal	Cardinalis cardinalis	S	S
Northern Common Flicker	Colaptes auratus	\mathbf{S}	S
Northern Gannet	Morus bassanus		S
Northern Goshawk	Accipiter gentilis	\mathbf{E}	SC
Northern Harrier	Circus cyaneus	\mathbf{E}	SC
Northern Mockingbird	Mimus polyglottos	S	S
Northern Parula	Parula americana	SC	S
Northern Rough-winged Swallow	Stelgidopteryx serripennis	\mathbf{S}	S
Northern Saw-whet Owl	Aegolius acadicus	U	S
Northern Shrike	Lanius exubitor		S
Northern Waterthrush	Seiurus noveboracensis	\mathbf{S}	\mathbf{S}
Olive-sided Flycatcher	Contopus borealis		\mathbf{S}
Orange-crowned Warbler	Vermivora celata		S
Orchard Oriole	Icterus spurius	\mathbf{S}	\mathbf{S}
Osprey	Pandion haliaetus	T	\mathbf{S}
Ovenbird	Seiurus aurocapilla	\mathbf{S}	\mathbf{S}
Palm Warbler	Dendroica palmarum		\mathbf{S}
Parasitic Jaeger	Stercorarius parasiticus		\mathbf{S}
Pectoral Sandpiper	Calidris melanotos		\mathbf{S}
Peregrine Falcon	Falco peregrinus	${f E}$	SC
Philadelphia Vireo	Vireo philadelphicus		\mathbf{S}
Pied-billed Grebe	Podilymbus podiceps	\mathbf{E}	SC
Pileated Woodpecker	Dryocopus pileatus	S	\mathbf{S}
Pine Grosbeak	Pinicola enucleator		\mathbf{S}
Pine Siskin	Spinus pinus		\mathbf{S}
Pine Warbler	Dendroica pinus	\mathbf{S}	\mathbf{S}
Pomarine Jaeger	Stercorarius pomarinus		\mathbf{S}
Prairie Warbler	Dendroica discolor	\mathbf{S}	\mathbf{S}
Prothonotary Warbler	Protonotaria citrea	\mathbf{S}	S
Purple Finch	Carpodacus purpureus	\mathbf{S}	\mathbf{S}
Purple Martin	Progne subis	\mathbf{S}	S
Purple Sandpiper	Calidris maritima		S
Razorbill	Alca torda		S
Red Crossbill	Loxia curvirostra	U	U
Red Phalarope	Phalaropus fulicarius		\mathbf{S}
Red-bellied Woodpecker	Melanerpes carolinus	\mathbf{S}	\mathbf{S}
Red-breasted Nuthatch	Sitta canadensis	\mathbf{S}	\mathbf{S}
Red-eyed Vireo	Vireo olivaceus	\mathbf{S}	S

Ded heeded Weedershoo	Malanamaaandhaaanbalaa	Tr.	Tr.
Red-headed Woodpecker	Melanerpes erythrocephalus	T	T
Red-necked Grebe	Podiceps grisegena		S
Red-necked Phalarope Red-shouldered Hawk	Phalaropus lobatus Buteo lineatus	177	S
		E	SC
Red-tailed Hawk	Buteo jamaicensis	S	S
Red-throated Loon	Gavia stellata	G.	S
Red-winged Blackbird	Agelaius phoeniceus	S	S
Ring-billed Gull	Larus delawarensis	G.	S
Rose-breasted Grosbeak	Pheucticus ludovicianus	S	S
Rough-legged Hawk	Buteo lagopus		S
Royal Tern	Sterna maxima		S
Ruby-crowned Kinglet	Regulus calendula	-	S
Ruby-throated Hummingbird	Archilochus colubris	\mathbf{S}	S
Ruddy Turnstone	Arenaria interpres		S
Ruff	Philomachus pugnax		S
Rusty Blackbird	Euphagus carolinus		S
Saltmarsh Sparrow	Ammodramus caudacutus	SC	S
Sanderling	Calidris alba		SC
Savannah Sparrow	Passerculus sandwichensis	T	\mathbf{S}
Scarlet Tanager	Piranga olivacea	\mathbf{S}	\mathbf{S}
Seaside Sparrow	Ammodramus maritima	S	S
Semipalmated Plover	Charadrius semipalmatus		S
Semipalmated Sandpiper	Calidris pusilla		SC
Sharp-shinned Hawk	Accipiter striatus	\mathbf{SC}	SC
Short-billed Dowitcher	Limnodromus griseus		\mathbf{S}
Short-eared Owl	Asio flammeus	${f E}$	SC
Snow Bunting	Plectophenax nivalis		\mathbf{S}
Snowy Egret	Egretta thula	\mathbf{SC}	S
Snowy Owl	Nyctea scandiaca		S
Solitary Sandpiper	Tringa solitaria		S
Song Sparrow	Melospiza melodia	\mathbf{S}	S
Sooty Shearwater	Puffinus griseus		S
Spotted Sandpiper	Actitis macularius	\mathbf{SC}	\mathbf{S}
Stilt Sandpiper	Calidris himantopus		\mathbf{S}
Summer Tanager	Piranga rubra	\mathbf{S}	S
Swainson's Thrush	Catharus ustulatus		S
Swallow-tailed Kite	Elanoides forficatus		U
Swamp Sparrow	Melospiza georgiana	S	S
Tennessee Warbler	Vermivora peregrina		\mathbf{S}
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Thick-billed Murre	Uria lomvia		\mathbf{U}
Tree Swallow	Tachycineta bicolor	\mathbf{S}	\mathbf{S}
Tricolored Heron	Egretta tricolor	\mathbf{SC}	SC
Tufted Titmouse	Baeolophus bicolor	S	\mathbf{S}
Tundra Swan	Cygnus columbianus		S
Turkey Vulture	Cathartes aura	\mathbf{S}	S
Veery	Catharus fuscescens	\mathbf{SC}	S
Vesper Sparrow	Pooecetes gramineus	${f E}$	SC
Warbling Vireo	Vireo gilvus	\mathbf{S}	S
Western Kingbird	Tyrannus verticalis		\mathbf{S}
Western Sandpiper	Calidris mauri		\mathbf{S}
Whimbrel	Numenius phaeopus		\mathbf{SC}
Whip-poor-will	Caprimulgus vociferus	SC	\mathbf{U}
White-breasted Nuthatch	Sitta carolinensis	\mathbf{S}	\mathbf{S}
White-crowned Sparrow	Zonotrichia leucophrys		\mathbf{S}
White-eyed Vireo	Vireo griseus	\mathbf{S}	\mathbf{S}
White-rumped Sandpiper	Calidris fuscicollis		\mathbf{S}
White-throated Sparrow	Zonotrichia albicollis	\mathbf{S}	\mathbf{S}
White-winged Crossbill	Loxia leucoptera		U
Willet	Catoptrophorus semipalmatus	S	S
Willow Flycatcher	Empidonax traillii	\mathbf{S}	\mathbf{S}
Wilson's Phalarope	Phalaropus tricolor		S
Wilson's Storm-petrel	Oceanites oceanicus		S
Wilson's Warbler	Wilsonia pusilla		S
Winter Wren	Troglodytes troglodytes	\mathbf{SC}	S
Wood Thrush	Hylocichla mustelina	SC	S
Worm-eating Warbler	Helmitheros vermivora	\mathbf{SC}	\mathbf{S}
Yellow Rail	Coturnicops noveboracensis		\mathbf{U}
Yellow Warbler	Dendroica petechia	\mathbf{S}	\mathbf{S}
Yellow-bellied Flycatcher	Empidonax flaviventris		\mathbf{S}
Yellow-bellied Sapsucker	Sphyrapicus varius	S	\mathbf{S}
Yellow-billed Cuckoo	Coccyzus americanus	S	\mathbf{S}
Yellow-breasted Chat	Icteria virens	SC	\mathbf{S}
Yellow-crowned Night-Heron	Nyctanassa violacea	T	T
Yellow-rumped Warbler	Dendroica coronata	S	\mathbf{S}
Yellow-throated Vireo	Vireo flavifrons	S	\mathbf{S}
Yellow-throated Warbler	Dendroica dominica	S	S

<u>Species Status *</u>

MAMMALS

Atlantic Spotted Dolphin	Stenella frontalis	U
Beluga Whale	Delphinapterus leucas	\mathbf{U}
Big Brown Bat	Eptesicus fuscus	U
Blainville's Whale	Mesoplodon densirostris	U
Bottlenose Dolphin	Tursiops truncatus	U
Clymene Dolphin	Stenella clymene	\mathbf{U}
Cuvier's Whale	Ziphius cavirostris	\mathbf{U}
Dwarf Sperm Whale	Kogia simus	\mathbf{U}
Eastern Chipmunk	Tamias striatus	\mathbf{U}
Eastern Mole	Scalopus aquaticus	U
Gervais Beaked Whale	Mesoplodon europaeus	U
Gray Seal	Halichoerus grypus	U
Hairy-tailed Mole	Parascalops breweri	U
Harbor Porpoise	Phocoena phocoena	U
Harbor Seal	Phoca vitulina	U
Harp Seal	Pagophilus groenlandicus	U
Hoary Bat	Lasiurus cinereus	U
Hooded Seal	Cystophora cristata	U
Keen Myotis	Myotis keenii	U
Killer Whale	Orcinus orca	U
Least Shrew	Crytotis parva	U
Little Brown Bat	Myotis lucifugus	\mathbf{U}
Long-finned Pilot Whale	Globicephala melas	U
Long-tailed Shrew	Sorex dispar	U
Marsh Rice Rat	Oryzomys palustris	\mathbf{U}
Masked Shrew	Sorex cinereus	\mathbf{U}
Meadow Jumping Mouse	Zapus hudsonius	U
Meadow Vole	Microtis pennsylvanicus	\mathbf{U}
Melon-headed Whale	Peponocephala electra	\mathbf{U}
Minke Whale	Balaenoptera acutorostrata	\mathbf{U}
New England Cottontail	Sylvilagus transitionalis	\mathbf{U}
Northern Flying Squirrel	Glaucomys sabrinus	\mathbf{U}
Northern Yellow Bat	Lasiurus intermedius	\mathbf{U}
Pine Vole	Pitymys pinetorum	\mathbf{U}
Porcupine	Erethizon dorsatum	\mathbf{U}
Pygmy Sperm Whale	Kogia breviceps	\mathbf{U}
Red Bat	Lasiurus borealis	\mathbf{U}

Red Squirrel	Tamiasciurus hudsonicus	\mathbf{U}
Red-backed Mouse	Clethrionomys gapperi	\mathbf{U}
Risso's Dolphin	Grampus griseus	\mathbf{U}
Short-beaked Common Dolphin	Delphinus delphis	U
Short-finned Pilot Whale	Globicephala macrorhyncus	U
Short-tailed Shrew	Blarina brevicauda	U
Silver-haired Bat	Lasionycteris noctivagans	U
Small-footed Myotis	Myotis subulatus	U
Smokey Shrew	Sorex fumeus	\mathbf{U}
Southern Bog Lemming	Synaptomys cooperi	U
Southern Flying Squirrel	Glaucomys volans	\mathbf{U}
Star-nosed Mole	Condylura cristata	\mathbf{U}
Striped Dolphin	Stenella coeruleoalba	\mathbf{U}
Tri-colored Bat	Perimyotis subflavus	\mathbf{U}
True's Beaked Whale	Mesoplodon mirus	\mathbf{U}
Tuckahoe Masked Shrew	Sorex cinereus nigriculus	\mathbf{U}
Water Shrew	Sorex palustris	\mathbf{U}
White-footed Mouse	Peromyscus leucopus	\mathbf{U}
Woodland Jumping Mouse	Napaeozapus isignis	U
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^{*} E means "Endangered;" S means "Secure-stable;" SC means "Special Concern;"

T means "Threatened;" and U means "Undetermined-unknown." These terms are defined in N.J.A.C. 7:25-4.1.