ELEMENT 1

Species of Greatest Conservation Need

Maine's 2025 State Wildlife Action Plan

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Key to Acronyms

ASMFC	Atlantic States Marine Fisheries Commission
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
EBTJV	Eastern Brook Trout Joint Venture
ECOS	Environmental Conservation Online System
ESA	U.S. Endangered Species Act
E/T	Endangered and/or Threatened
ETSC	Endangered, Threatened, and Special Concern
GIS	Geographic Information System
IUCN	International Union for the Conservation of Nature
MDACF	Maine Department of Agriculture, Conservation and Forestry
MDIFW	Maine Department of Inland Fisheries and Wildlife
MDMR	Maine Department of Marine Resources
MESA	Maine Endangered Species Act
MRSA	Maine Revised Statutes Annotated

NARSP	North Atlantic Regional Shorebird Plan
NAWCP	North American Waterbird Conservation Plan
NEFWDTC	Northeast Fish and Wildlife Diversity Technical Committee
NEPARC	Northeast Partners in Amphibian and Reptile Conservation
NMFS	National Marine Fisheries Service
RSGCN	Regional Species of Greatest Conservation Need
SC	Special Concern
SGCN	Species of Greatest Conservation Need
SoC	Species of Concern
SWAP	State Wildlife Action Plan
SWG	State Wildlife Grants
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USSCP	U.S. Shorebird Conservation Plan
WNS	White-nose syndrome

Prepared by Maine Department of Inland Fisheries and Wildlife in Collaboration with Maine Departments of Agriculture, Conservation, and Forestry and Marine Resources, and Key Conservation Partners

Element 1: Species of Greatest Conservation Need

The Legislature finds that various species of fish and wildlife have been and are in danger of being rendered extinct within the state of Maine, and that these species are of esthetic, ecological, educational, historical, recreational and scientific value to the people of the State. The Legislature, therefore, declares that it is the policy of the State to conserve, by according such protection as is necessary to maintain and enhance their numbers, all species of fish or wildlife found in the State, as well as the ecosystems upon which they depend.

107th Maine Legislature, 1975: preface to Maine's Endangered Species Act (MESA)

1.0 Abstract

A critical dilemma facing conservation biologists and managers worldwide is the need to allocate limited dollars, staff, and programmatic resources toward a growing list of conservation challenges. Foundational to this prioritization process in Maine's State Wildlife Action Plan is the development of a list of Species of Greatest Conservation Need (SGCN). Biologists from Maine Department of Inland Fisheries and Wildlife (MDIFW) and other state agencies, with cooperation from conservation partners and species experts, developed a suite of objective criteria for designating SGCN that is transparent and science-based, and recognizes that species conservation concerns can be identified at global, regional, and local scales. The primary themes for SGCN prioritization include risk of extirpation, population trend, endemicity, and regional conservation concerns. Secondary themes for SGCN prioritization include climate change vulnerability, survey knowledge, and indigenous cultural significance.

Maine's 2015 list of SGCN totaled 378 species grouped into three priority levels. Consistent with this approach, Maine's 2025 list of 729 SGCN are also assigned to priority levels: Priority 1 (Highest; 197 SGCN), Priority 2 (High; 258 SGCN), and Priority 3 (Moderate; 274 SGCN), all of which are eligible for State Wildlife Grant (SWG) assistance from the U.S. Fish and Wildlife Service. The 2025 process for reviewing and identifying Maine SGCN included both species deletions and additions to the 2015 list. The net increase in SGCN is driven primarily from a) the inclusion of plants, b) scrutiny of more invertebrate taxa, and c) greater recognition of climate change vulnerability. It is our hope that identifying a relatively comprehensive, prioritized suite of SGCN will help MDIFW and conservation partners implement meaningful conservation actions for some of Maine's most vulnerable and valued wildlife resources over the coming decade.

1.1 Introduction

Agencies and conservation partners have long faced the dilemma of allocating limited funds to address the critical needs of species designated as Endangered or Threatened (E/T). The much larger number of vulnerable species at risk of being listed as E/T is even more problematic. The Conservation and Reinvestment Act in the U.S. (2001) and a similar Species at Risk Act in Canada (2002) emphasize that need and established funding for states and provinces to address an array of biodiversity risks within their borders beyond a focus on E/T species. Conservation challenges solved at these local and regional scales are less likely to escalate into national or international crises. Additional benefits of working proactively with locally or regionally vulnerable species include a greater likelihood of success and minimal reliance on regulations.

An approved State Wildlife Action Plan is a requisite for receipt of federal SWG funding. The primary conservation targets of these plans are SGCN populations and habitats. Each state has considerable flexibility for SGCN designations and resulting SWG expenditures, though there is foundational guidance offered in the Wildlife Conservation and Restoration Act that SWG funds are intended "…for the benefit of a diverse array of wildlife and associated habitats, including species that are not hunted or fished, to fulfill unmet needs of wildlife within the States." To this end, Maine's 2025 Plan employs a variety of objective criteria to identify and prioritize SGCN. Specifically, MDIFW and Plan partners emphasize the following general concepts for SGCN eligibility:

1) **Acute Vulnerability**: State, federal or international agencies formally designate the risk of species extirpation. We also acknowledge those species experiencing recent, dramatic population declines and those species likely to be listed as E/T in the near future.
2) **Regional Conservation Priority**: One or more scientific partners have identified the species as a high regional concern in the Northeast. We include regional endemics and species with disproportionate range occurrences in the Northeast.
3) **Data Deficiency**: Some rare, understudied taxa require further survey and research to accurately determine conservation risk status.
4) **Climate Change Sensitivity**: A growing body of scientific literature suggests that a suite of northeastern species will face significant risks in the near future.
5) **Cultural Significance**: Maine tribes identified some SGCN based on special values to tribal heritage in combination with emerging ecological vulnerabilities.

Some states develop Wildlife Action Plans that reflect the scope of the jurisdiction in the wildlife agency that legally administers SWG allocations to states. Maine's 2025 Plan includes other natural resource agencies. MDIFW is the lead agency for any terrestrial or freshwater wildlife species (including all birds). The Maine Department of Marine Resources (MDMR) has primary authority for all fauna (except birds) in coastal waters. The Maine Coastal Program in the state's Department of Marine Resources (MDMR) also considers conservation issues in the Gulf of Maine. The Maine Natural Areas Program in MDACF has sole responsibility for rare plants, of which many at-risk species are newly included as SGCN in the 2025 SWAP Finally, we acknowledge that participation by Maine's diverse alliance of conservation partners (private, public, and tribal) is essential to effective Plan implementation

1.2 Significant Changes From Maine's 2015 Plan

Maine's 2025 SWAP is an update of the 2015 plan, and as such the plans share a common structure and approach, with detailed assessments of Maine's at-risk species, habitats, and threats, all of which then help to inform statewide conservation actions and monitoring programs. However, the 2025 plan incorporates new conservation science and species assessment information not previously considered in Maine's 2005 and 2015 plans. Some key differences in Element 1 of the 2025 Action Plan include:

- **Purpose:** Maine's resource agencies and conservation partners made additional efforts to construct a document that better serves as a statewide conservation plan rather than one focused on MDIFW perspectives.

- **SGCN taxonomic scope:** The 2025 SGCN list includes plants and a more diverse assessment of invertebrates.
- **SGCN species reports:** Newly formatted SGCN fact sheets are available as hyperlinks from Table 1-3 of the Plan.
- **SGCN criteria:** The 2025 SGCN list includes updates to the qualifying criteria, including data from newly published status reports by regional partners (e.g., Partners in Flight, NatureServe Global- and State-ranks, Species of Regional Conservation Need in the Northeast). Whenever possible, we employ objective, published reviews of species vulnerability to identify SGCN.
- **Climate change:** The 2025 Plan incorporates climate change more prominently as a priority threat consideration to Maine's flora and fauna
- **SGCN mapping:** A new approach is proposed for mapping "Conservation Ranges" for SGCN that combines the availability of suitable habitats with observation data to estimate species occurrence in Maine.

1.3 An Overview of Maine's Fauna and SGCN

The diversity and health of Maine's natural resources is a priority for both residents and visitors. Maine's varied landscape, rural character, and traditional resource-based economy heighten public familiarity and appreciation for fish and wildlife. Regular exposure to flora and fauna in the every-day lives of many Maine citizens reinforces concern for the state's natural heritage generally, and species-at-risk in particular.

The variety of biota is also key to the allure. Maine is a mixing zone of northern species allied with boreal systems prevalent in neighboring Canada that yield to southern species typical of Appalachian habitats that predominate further south in New England and beyond. Examples of northern fauna include Canada Lynx (*Lynx canadensis)*, Arctic Charr (*Salvelinus alpinus*), Mink Frog (*Lithobates septentrionalis*), and Atlantic Puffin (*Fratercula arctica*); all approach southernmost range limits in the state. Southern fauna that are near the northern edge of their range in Maine include New England Cottontail (*Sylvilagus transitionalis*), Roseate Tern (*Sterna dougalli*), Black Racer (*Coluber constrictor*), Loggerhead Sea Turtle (*Caretta caretta*), and Monarch Butterfly (*Danaus plexippus*).

The composition of Maine's animal and plant communities shifts considerably from south-to-north, in both terrestrial and aquatic habitats. Woodlands encompass nearly 85% of Maine's land area, but forests vary from deciduous and mixed forests prevalent in southern, western and central Maine to boreal conifers in northern and eastern regions and at higher elevations. Faunal associations shift accordingly as well. Surface waters cover almost 13% of the State and also offer diverse environments. Predominantly cool / cold lakes, rivers and streams yield to warmer waters in southwestern Maine. Maine's intricate coastline totals almost 3,500 miles, and the Gulf of Maine itself transitions into cooler waters along a west-to-east gradient due to tidal mixing with the North Atlantic's Labrador Current.

Not surprisingly, our knowledge of Maine fauna has limitations. For example, many invertebrate taxa are not yet considered, let alone proportionately represented among Maine's SGCN. Nevertheless, Maine's 2025 Plan identifies 729 SGCN spanning 43 orders of vertebrates, 29 orders of invertebrates, and 35 orders of plants. A compilation by major taxa groups (Table 1-1) reveals both the sheer number and diversity of SGCN in Maine.

Two-hundred forty-six (33.74%) SGCN in Maine are state-listed E/T species (Appendices 1-1, 1-2, and 1-3). Only 21 SGCN (2.88%) are federally-listed as E/T (Appendix 1-4). Thus, the vast majority of Maine's SGCN, while characterized by distinct biological sensitivities, are not on the brink of extirpation or ecological crisis. This provides a strategic opportunity for MDIFW and a coalition of conservation partners to implement meaningful conservation interventions for some of Maine's most vulnerable wildlife populations in advance of the necessity for ESA listings and regulatory implications.

Table 1 - 1. Faunal and floral species totals for Maine, including numbers of state, federal, and SGCN species by major taxa groups.

Taxa Groups Lead state agency jurisdiction	Extant in Maine[1]	Number of Species Federal E/T	State E/T	SGCN in 2025 Plan
Invertebrates subtotal[2]	**>33,000**	**1**	**21**	**189**
freshwater / terrestrial (MDIFW)	>15,000	1	21	153
marine (MDMR)	>18,000	0	0	36
Vertebrates subtotal	**889**	**20**	**225**	**239**
Amphibians (MDIFW)	18	0	0	4
Birds (MDIFW)	475	3	25	145
Fish	292	3	3	54
freshwater (MDIFW)	40	0	2	19
marine / diadromous (MDMR)	252	3	1	35
Mammals	83	7	11	26
marine (MDMR)	24	5	5	7
terrestrial (MDIFW)	59	2	6	19
Reptiles	21	4	6	10
freshwater / terrestrial (MDIFW)	15	0	3	6
marine (MDMR)	6	4	3	4
Plants subtotal (MDACF)[3]	**2,526**	**3**	**180**	**301**
MAINE FLORA & FAUNA TOTALS	**>36,415**	**21**	**246**	**729**

1: Total extant includes confirmed visitors, temporary colonists, and resident species
2: Total extant includes only described and documented species; the actual number is much greater.
3: Total extant includes only vascular plants as described in Haines (2011).

1.3.1 Mammals (Non-marine)

General Overview

Maine's 59 species of non-marine mammals may be best characterized as a diverse mixture of boreal and temperate species. Maine encompasses three ecoregional provinces (Warm Continental Mountains, Warm Continental Division, and the Hot Continental Division) and is near the Subarctic Division in Canada. Maine's proximity to the Subarctic Division enables species that are typically found in boreal forests of Canada (e.g., Canada Lynx), to thrive in the mixed coniferous forests of northern Maine. Similarly, the Hot Continental Division's climate helps make it possible for other species (e.g., New England Cottontail) to persist at the northern extent of their range in southern Maine. While Maine's proximity to boreal and temperate regions may contribute to the diversity of mammals found in the state, this same proximity also raises a number of challenges for species that live near the edge of their range. Species on the southern edge of their range, like American

Marten (*Martes americana*) and Canada Lynx may compete for resources with species more common to the south, such as Fisher (*Martes pennanti*) and Bobcat (*Lynx rufus*). Although we cannot say for certain how mammals in Maine will be affected by climate change, it will likely be the species at the edge of their range that will experience the greatest change.

Conservation Overview

The species comprising Maine's native mammals have remained constant over the last 100 years since the extinction of the Sea Mink (*Mustela macrodon*) and Eastern Cougar (*Felis concolor couguar*), and state extirpation of Caribou (*Rangifer tarandus*) and Gray Wolf (*Canis lupus*). Today, Maine's mammals receive greater protection through regulatory measures and the conservation efforts carried out by MDIFW and a host of dedicated conservation partners.

Notwithstanding these conservation efforts, Maine mammals face a variety of challenges and threats. A total of 19 species (32%) of Maine's nonmarine mammals are listed as SGCN in this Plan. Although Moose (*Alces alces*) and Muskrat (*Ondatra zibethicus*) are numerous in Maine, they were listed as SGCN because of their cultural significance to native tribes and recent changes in the populations of these species in the Northeast and elsewhere. The factors behind these changes are still under investigation.

As an order, bats perhaps face the most unified set of conservation threats. White-nose syndrome (WNS), a deadly fungal disease, has drastically reduced populations of cave bats. Due to this disease, in 2015 Little Brown Bats (*Myotis lucifugus*) and Northern Long-eared Bats (Myotis septentrionalis) were state-listed as Endangered, and the Eastern Small-footed Bat (*Myotis leibii*) was state-listed as Threatened. Similarly, Tri-colored Bats (*Perimyotis subflavus*) were state-listed as Threatened in 2023. These bat populations are not only threatened by WNS in Maine but throughout most of their range. The impact of WNS on Maine's bat populations has heightened concerns over the effects of other mortality factors, such as wind turbines, and the vulnerability of maternity colonies to disturbance. Our lack of knowledge about the wintering habits of Maine's bats also poses a significant threat. It is difficult to undertake effective conservation actions if we do not understand many of the basic habits of bats. In addition to the four bat species that have recently been listed as E/T under MESA, Maine's four other species of bats are all considered species of Special Concern and/or SGCN.

The availability and structure of forest seral stages is a major factor determining the abundance of Maine's mammals. In southern Maine, the loss of early successional habitat through forest maturation and development has resulted in a substantial decline of suitable habitat for New England Cottontail. In York and Cumberland Counties, <3% of the landscape can be characterized as early successional forest habitat. The lack of shrublands and young forests in southern Maine threatens not only the New England Cottontail, but also several SGCN birds associated with scrub-shrub habitat.

Conversely, in northern Maine, less than 3% of the landscape remains as ecologically mature forest that is suitable for deer wintering areas. This not only impacts Maine's White-tailed Deer (*Odocoileus virginianus*) but other mammals (e.g., American Marten, *Martes americana*) and birds that are dependent on mature interior forests. Unlike the interior boreal forests of Canada and Alaska, where natural wildfires play a major role in determining the pace of forest succession, commercial logging operations and market forces are major factors influencing the composition and structure of Maine's northern forests.

1.3.2 Birds

General Overview

Birds enrich our lives and reflect the quality and health of our environment. North America provides habitat for over 900 species of birds. The Maine Bird Records Committee has positively documented 475 species, half of all North American birds, within the state of Maine, a number that has increased by 52 species since 2015. Maine's diverse mosaic of habitats supports 233 species of nesting birds, a number that has increased by 33 between the first and second Bird Atlas. Over 220 additional species visit Maine as either fall or spring migrants or winter residents.

Maine's landscape supports numerous inland bird species that reach either the northern or southern limits of their breeding ranges within the state. Similarly, many of Maine's island-nesting seabirds reach their southern breeding terminus on Maine's coastal islands. Several other species have expanded their breeding ranges into Maine over the last 40 years. New arrivals include the Sandhill Crane (*Grus canadensis*), Red-bellied Woodpecker (*Melanerpes carolinus*), Merlin (*Falco columbarius*), Great Egret (*Ardea alba*), and Fish Crow (*Corvus ossifragus*). Three species, the Peregrine Falcon (*Falco peregrinus*), Atlantic Puffin (*Fratercula arctica*), and Wild Turkey (*Meleagris gallopavo*) have been successfully reintroduced into Maine following prolonged extirpation. All are now carefully monitored and managed.

Maine is strategically located at a constriction point of the funnel in the Atlantic Flyway, a migratory path along eastern North America that tapers from a wide swath over the eastern Canadian arctic southward along the east coast. The Atlantic Ocean has a channeling effect on these migratory movements as birds fly south in late-summer and fall. Maine's extensive coastline and more than 4,000 coastal islands provide crucial stopover areas for millions of migrating birds. This flyway includes some of the continent's most productive ecosystems and is home to about a third of the U.S. human population. Conserving birds and their habitats in Maine's portion of this important flyway is a monumental task.

Conservation Overview

All of Maine's bird guilds are represented on Maine's official Endangered and Threatened (E/T) List or the List of Species of Special Concern (SC). The latter is an administrative list of species that could become E/T without attention. The challenges for future conservation and stewardship are many. At least five bird species are documented as extinct or extirpated from Maine, emphasizing the importance of preventing any more erosion of the state's avian biodiversity. Among 475 birds documented in Maine, 12 are listed as state Endangered, 13 are listed as state Threatened, 43 are listed as Special Concern, and 145 are listed as SGCN. Thus, conservation concerns exist for ~32% of the bird species known to inhabit Maine. Most attention is devoted to birds that breed, nest and raise their young in Maine. However, two waterfowl, the Barrow's Goldeneye (*Bucephala islandica*) and Harlequin Duck (*Histrionicus histrionicus*), are state-listed as Threatened because they winter in significant numbers in coastal Maine. Since a large percentage of the North Atlantic populations of these waterfowl species winter here, Maine has a high regional management responsibility for them.

Threats to bird populations are many and conservation challenges are equally diverse. Managers are tasked with protecting small numbers of ground-nesting Least Terns (*Calidris minutilla*) and Piping Plovers (*Charadrius melodus*) that struggle to co-habit southern Maine's sand beaches with tens of thousands of recreational users. Although Maine retains large tracts of intact forest and wetland habitat, many of the state's forest and wetland

species are experiencing declines. Several have been newly added to Maine's SGCN list. These declines reflect a range of cumulative pressures, including habitat fragmentation and loss from development, intensive forest management practices, invasive species, climate change, and the growing impacts of forest pests and diseases. While these species face significant threats, Maine's extensive undeveloped landscapes continue to offer important opportunities for large-scale conservation and habitat protection.

Grassland birds have faced particularly steep challenges in Maine and across North America. Grasshopper Sparrows (*Ammodramus savannarum*) occupy just a few sites in southern Maine, and Eastern Meadowlark (*Sturnella magna*) populations continue a long-term decline. Upland Sandpipers are restricted to managed grasslands, including commercial blueberry fields, with most populations in the Downeast barrens. Other grassland specialists such as the American Kestrel (*Falco sparverius*) and Short-eared Owl (*Asio flammeus*) are experiencing continental and regional declines. Many grassland birds are declining due to habitat loss, early-season mowing, incompatible grazing, and long-term fragmentation of Maine's already scarce grassland habitats. Among the most dramatically declining birds are the aerial insectivores, particularly swallows, which are undergoing rapid population losses across their ranges. Even populations of the widespread and locally abundant Tree Swallow (*Tachycineta bicolor*) have steadily declined over the last decade. The steep declines of aerial insectivores are likely driven by a combination of factors including declines of aerial insect abundance, habitat loss, exposure to environmental contaminants, phenological mismatches due to climate change, and stressors on migratory stopover and wintering grounds.

Many raptors in Maine also face conservation challenges related to disturbance, environmental contaminants, and knowledge gaps. While successfully reintroduced, Peregrine Falcons (*Falco peregrinus*) remain a small breeding population vulnerable to human activity near nest sites. Recent monitoring has revealed exposure to contaminants such as lead and PFAS in nestlings and unhatched eggs. Golden Eagles (*Aquila chrysaetos*), historically breeding in Maine, are rarely observed, and significant gaps in understanding their seasonal presence, habitat use, and threats hinder effective management. These ongoing challenges highlight the importance of strengthening monitoring efforts, expanding research, and addressing both direct threats and knowledge gaps for Maine's diverse raptor community.

Seabirds and salt marsh dependent birds face threats from pollution, over-fishing of important food items, warming sea temperatures and rising sea levels caused by climate change, and the impacts of offshore wind development. Rare seabirds and some colonial waterbird populations remain vulnerable as high percentages of their statewide nesting populations occur on a just a handful of managed sites. The maintenance and enhancement of populations of focal species will require careful monitoring of breeding populations and management that addresses threats that include: predation from gulls, habitat loss, changes in food availability in the Gulf of Maine, oil spills, incidental take during commercial fishing, offshore energy development, and human disturbance near nests. Wintering seabirds and waterfowl face these same threats, although they can be more challenging to survey and monitor due to the extreme environment, the vast areas they inhabit, and the need for specialized watercraft.

Maine's numerous wetlands and riparian areas are critical to a large percentage of Maine birds, including passerines, shorebirds, wading birds, and waterfowl. Poorly planned development that is too close to wetlands puts ecological functions at risk and leads to general habitat degradation, lower productivity, and eventual loss of

birds. While the rate at which wetlands are lost has slowed since the 1980s, wetlands are still under threat from environmental and land-use changes, and some of Maine's marsh birds (e.g., rails and bitterns) have become increasingly rare for unknown reasons. With rarity comes increased vulnerability to all stressors such as flooding associated with severe weather due to climate change; displacement of native vegetation by invasive species, human disturbance through recreation and development; and water regime changes at managed wetlands. Maintaining high quality wetlands is critical for the long-term resilience of waterbird populations. Colonial wading birds such as Great Blue Herons (*Ardea herodias*) and Black-crowned Night Herons (*Nycticorax nycticorax*) have declined along the coast for unknown reasons; however, disturbance, predation, and changes in food resources are all suspected. Continued surveys and monitoring are needed to understand complex interspecific interactions and species responses to changes in their local environment.

Shorebirds that rely on coastal habitats for feeding and roosting during migration are negatively influenced by declining food resources and human disturbance. Recent data suggest that several Atlantic Flyway shorebird species have experienced declines of between 50% and 90% within the last four decades, and the estimated rates of decline have accelerated during the last three generations for most species (Smith et al. 2023). Shorebird experts throughout the U.S. and Canada agree that the primary reason for shorebird declines is habitat loss from coastal development and human related disturbances. Thirty-eight shorebird species spend some portion of their annual life cycle in Maine including the federally listed Piping Plover and Red Knot (*Calidris canutus rufa*). Shorebirds are an important group for management consideration because large numbers of these birds concentrate in discrete areas of coastal habitat where they are highly susceptible to recreational disturbance, oil spills, habitat loss from development, and environmental contaminants. Conservation requires attention to these cumulative impacts.

Maine is subject to most of the same suite of complex threats affecting birds across North America. In both the U.S. and Canada, bird populations are declining rapidly (Rosenberg et al. 2019) and the top three identified threats also impact Maine's birds: habitat loss, cat predation, and bird-building collisions. Cat predation by free-ranging (including feral, stray, and owned) domestic cats is overwhelmingly estimated as the top source of direct anthropogenic mortality to birds (Loss et al. 2015), and collisions with buildings are the third biggest cause of avian mortality (Loss et al. 2014). Most collision victims are passerines (Rebolo-Ifran et al. 2019, Colling et al. 2022) and migratory species are especially susceptible (Sabo et al. 2016), including some SGCNs (Loss et al. 2014, Marler 2024), and game birds such as waterfowl and woodcock. In addition, light pollution has emerged as a significant and growing threat to birds. Artificial lighting can disorient migratory species, increase collision risks, and disrupt natural behaviors and ecological processes, further compounding other threats facing Maine's bird populations.

Finally, Maine's birds also face many natural challenges including starvation, predation, severe weather, and diseases. But the major threat for Maine birds remains habitat loss. Well-designed biological monitoring of Maine's avifauna is required to guide conservation strategies for priority birds. Conserving high value habitats and directing disturbance activities away from the most sensitive habitats will go a long way in ensuring a viable future for Maine birds and the people of Maine who enjoy watching them.

1.3.3 Reptiles and Amphibians

General Overview

By eastern U.S. standards, Maine is a large and climatically diverse state. Thus, while North American reptiles and amphibians (herpetofauna) are richest at southern latitudes, Maine's relatively moderate southern and coastal climate permits many species, especially snakes and turtles, to reach their northeastern range limit in the state. Only one species, the Mink Frog (*Lithobates septentrionalis*), reaches the southern edge of its range in Maine (and northern New Hampshire and Vermont). There are 33 species of nonmarine herpetofauna known from Maine, including 18 amphibians and 15 reptiles, one of which is considered extirpated (Timber Rattlesnake, *Crotalus horridus*). One other is introduced – the Mudpuppy salamander (*Necturus maculosus*). While Maine has a lower diversity of reptiles and amphibians than most eastern states, it provides some of the most extensive and intact remaining habitat for the species it hosts. Several are of regional and national conservation concern.

Conservation Overview

Reptiles and amphibians are two of the most imperiled vertebrate taxa worldwide, a pattern that is also reflected in the status of Maine's fauna where a relatively large proportion of herpetofauna (33%) are listed as state Endangered or Threatened (three species), Special Concern (four species), Extirpated (one species), and/or SGCN (three additional species). This is in part due to the biogeography described above, whereby the area of greatest diversity, southern and coastal Maine, is also the most densely human populated with associated high rates of development, habitat loss and fragmentation, road mortality, predation, pollution, and illegal collection. The effect of climate change on the status of Maine's reptiles and amphibians is uncertain, but given the group's limited dispersal capability and sensitivity to temperature and humidity gradients it is safe to expect significant changes in local distribution and abundance. An in-depth review of the biology, status and conservation of Maine's herpetofauna is available in the new (3rd edition) of Maine Amphibians and Reptiles (Hunter et. al. 2025).

Reptiles (Snakes and Turtles)

Among Maine's vertebrates, reptiles are arguably the most imperiled, with seven of the state's native 16 species (43%) listed as Endangered, Threatened, Special Concern, Extirpated, and/or SGCN. The rarity of many of the state's snakes and turtles is partially attributed to the fact that nearly all reach or approach the northern edge of their range in Maine, but population viability for several species is further stressed by anthropogenic factors including most notably habitat loss, roadkill, nest and hatchling loss to human-subsidized predators, and illegal collection. The globally rare and declining Wood Turtle (*Glyptemys insculpta*) is patchily distributed throughout the state, but the fate of Maine's other imperiled reptiles will likely be determined in just a few southern counties where the challenge is to conserve remaining high-quality occurrences in a relatively densely populated landscape.

Amphibians (Frogs, Toads and Salamanders)

Four of Maine's 18 amphibian species are listed as Special Concern and/or SGCN. As a group, Maine's amphibians are relatively secure compared to its reptiles, likely because of their greater fecundity, higher densities, lower sensitivity to adult mortality factors, and generally wider distribution across the state. Two of Maine's salamanders are listed as SGCN largely because of their close breeding association with a specialized aquatic habitat that is vulnerable to loss and degradation – headwater streams (Northern Spring Salamander; *Gyrinophilus p. porphyriticus*) and vernal pools (Blue-spotted Salamander; *Ambystoma laterale*).

1.3.4 Freshwater Fish (Non-diadromous)

General Overview

Maine's freshwaters host a variety of fishes including 40 native freshwater obligate species (live their entire lives in freshwater habitats) and 12 diadromous species that live part of their lives in freshwaters. A significant proportion of the fish fauna (diadromous or obligate freshwater) that occur in Maine's inland waters is non-native: 18 species (26%). We include two whose exact status needs to be confirmed: Banded Sunfish (*Enneacanthus obesus*) and Emerald Shiner (*Notropis atherinoides*). As with other fauna, Maine sits at a biogeographic transition zone with some native fishes occurring at the northernmost extent of their natural distribution such as Redfin Pickerel (*Esox americanus americanus*), Swamp Darter (*Etheostoma fusiforme*) and American Brook Lamprey (*Lethenteron appendix*). Others are at the southern end of their range, like Brook Stickleback (*Culaea inconstans*), Lake Whitefish (*Coregonus clupeaformis*) and Lake Trout (*Salvelinus namaycush*). In addition, Maine maintains the only remaining U.S. populations of a regional endemic freshwater fish, a landlocked subspecies of Arctic Charr (*Salvelinus alpinus oquassa*).

Conservation Overview

Freshwater and diadromous fishes of North America are among the most threatened taxonomic groups. The American Fisheries Society reports that approximately 39% of all described species are considered imperiled (Jelks et al. 2008) and a recent global analysis estimates that 26% of freshwater fishes are threatened with extinction (Sayer et al. 2025). Five Maine species are E/T listed under either state (MESA) or federal law (ESA). Moreover, 57% (29/51) of Maine's native freshwater and diadromous fishes are listed as SGCN. Most fish require clean, clear waters and all are naturally restricted to movements within aquatic habitats. Hence their survival, reproduction, movement and dispersal capabilities are compromised by natural landscape features (ex. waterfalls, watershed divides) as well as anthropogenic infrastructure (e.g., dams, road/stream crossings, developed shorelines). In addition, Maine's native freshwater fishes are adapted to relatively depauperate fish community conditions. Hence, many of Maine's native fishes compete poorly with the on-going invasions of non-native species whose presence has potentially strong effects on local distribution and abundance.

Inland Coldwater Fishes (Salmon, Trout, Charr, Smelt and Whitefishes)

By physiological limitations, Maine's native salmonid fishes are at or near their southerly range extent and all seven native species have some level of conservation concern. Anadromous Atlantic Salmon (*Salmo salar*) are federally listed as Endangered in Maine. Arctic Charr (*Salvelinus alpinus oquassa*), and Lake Whitefish (*Coregonus clupeaformis*), are designated as Special Concern and all, including Landlocked Salmon (*Salmo salar sebago*), Brook Trout (*Salvelinus fontinalis*), Lake Trout (*Salvelius namaycush*), Round Whitefish (*Prosopium cylindraceum*) and anadromous populations of Rainbow Smelt (*Osmerus mordax*) are SGCN. In addition to threats associated with water quality and impediments to dispersal and migration, coldwater fishes are likely to be significantly affected by climate change in Maine.

Rare Native Fishes (Minnows and others)

Redfin Pickerel (*Esox americanus americanus*) and Swamp Darter (*Etheostoma fusiforme)* are state-listed as Endangered and Threatened respectively. Both species occur at the northern extent of their natural range in Maine where they have highly restricted distributions and are subject to water quality degradation and habitat loss. Most other rare native fishes in Maine are listed as SGCN (11 species) because of a general lack of knowledge regarding their current abundance, population trend and distribution. Their habitat and ecological requirements

are diverse. However, identifying true threats is difficult at present without a better understanding of their current status.

1.3.5 Inland and Freshwater Invertebrates

General Overview

As is true globally, invertebrates dominate Maine's biota, both in terms of richness and biomass. Based on available data, Gawler et al. (1996) conservatively estimated that Maine hosts a total of >15,000 non-marine invertebrate species, representing nearly 98% of the state's animal species diversity. Like most other states, Maine's legal definition of "wildlife" (any species of the animal kingdom) includes invertebrates, thus challenging MDIFW and cooperators with a tremendous breadth and volume of species to protect and manage (McCollough 1997). One of the ways MDIFW triages its limited staff and program resources toward the conservation and management of invertebrates is to focus on those species and groups that are better-studied, and which have well documented declines or imperilment.

The best-studied phyla in Maine, as in most states, are the Mollusca (e.g., snails and mussels: ~200 species) and Arthropoda (e.g., insects, crustaceans, spiders: ~7,950 species). These two groups include all of the non-marine invertebrate species considered in this Plan. Within these phyla, the state of knowledge on distribution, status, and life history is strongest for just three orders: the Unionoida (freshwater mussels), Odonata (damselflies and dragonflies), and Lepidoptera (butterflies and moths), or what some have referred to as "charismatic microfauna." Accordingly, a large proportion (58%) of the priority invertebrate species identified as SGCN are represented by members of these same groups (Unionoida – 5 species; Odonata – 24 species; and Lepidoptera – 61 species). Other invertebrate taxa also considered in the SWAP because of partial, but growing, knowledge include Gastropoda (snails; 9 species), Plecoptera (stoneflies; 8 species), Trichoptera (caddisflies; 7 species), Ephemeroptera (mayflies; 18 species), Hymenoptera (bumble bees; 9 species), Coleoptera (beetles; 4 species), Diptera (flower flies; 8 species), and Decapoda (crayfish; 1 species).

Conservation Overview

Maine was one of the last states in New England to officially include invertebrates among its state-listed E/T species in 1997, but there have since been considerable efforts to improve our knowledge of the targeted groups highlighted above. As such, Maine has now assigned official conservation status to a total of 154 invertebrate species, including 21 species as E/T, 48 species as SC, and 85 additional fauna as SGCN. Still, the list of Maine invertebrates of conservation concern remains very low as a proportion of the state's estimated non-marine species richness (<~1.0%). It should be noted this is primarily because of a lack of knowledge, and not because invertebrates as a group are inherently more abundant or secure in Maine, as illustrated by the fact that over half (8 of 15 species) of all documented state wildlife extinctions and extirpations are comprised of invertebrates. Undoubtedly, many more invertebrate losses remain undocumented. The conservation knowledge gap for Maine's invertebrates is significant compared to plants and vertebrates, and thus their representation on Maine's SGCN and other conservation status lists will inevitably grow as further knowledge is obtained on the status, distribution, and trends of various at-risk taxa.

The following is a brief review of the conservation status and imperilment patterns for select groups of Maine invertebrate taxa that host most of the state's SGCN.

Snails (subclass: Pulmonata and Prosobranchia, class: Gastropoda, phylum: Mollusca)

According to Martin (1999, 2000), there are 76 species of terrestrial snails, and 45 species of freshwater snails, reported from Maine. At least five species are introduced, and the taxonomic status of several others is questionable. While a number of individual investigations of Maine's snails exist *(*Gleich and Gilbert 1976, Hotopp and Smith 1994, Martin 1999, Martin 2000) systematic surveys targeting terrestrial (Nekola 2008) and aquatic (Hotopp 2012) species of potential conservation concern have only recently been initiated. Most Maine SGCN snails fall in the Ladislavella (formerly Stagnicola; aquatic) and Vertigo (terrestrial) genera and are thought to be limited by requirements for high water quality and/or extreme habitat specialization.

Freshwater Mussels (order: Unionoida, class: Bivalvia, phylum: Bivalvia)

Freshwater mussels are one of the few invertebrate taxa that have been a focus of intensive statewide survey efforts in Maine. From 1992 to present, MDIFW biologists have surveyed over 2,000 sites on the state's rivers, streams, lakes and ponds to document the distribution and status of mussels in Maine. Ten species are native to Maine, with the greatest diversity in the Kennebec and Penobscot River drainages where all 10 species are often present in the same stretch of river (Nedeau et al. 2000). Unfortunately, the invasive zebra mussel (*Dreissena polymorpha*) was recently introduced to the St. John River via the Madawaska River in Quebec. MDIFW has a monitoring program in place and so far, it has not been discovered in any other Maine waterbody. If it is able to spread further, this species could have substantial impacts on native mussels and other aquatic biota. While freshwater mussel diversity is relatively low in Maine, their levels of imperilment are high with 5 of 10 species assigned Threatened and/or SGCN status, a trend mirrored nationally where over 3/4 of U.S. species are considered imperiled by various states in their range. The group shares several life history characteristics (long-lived, benthic, sedentary, filter feeding) that increase their exposure to a suite of anthropogenic stressors including water pollution, eutrophication, sedimentation, dams, and the degradation of riparian integrity along forested rivers and streams.

Mayflies (order: Ephemeroptera), Stoneflies (order: Plecoptera), and Caddisflies (order: Trichoptera) = all class: Insecta, phylum: Arthropoda

At least 162 species of mayflies are reported from Maine (Burian and Gibbs 1991, S. Burian, pers. communication). While this group is relatively well studied compared to many other insects, comprehensive surveys have never been conducted in Maine, and information on mayfly diversity and status is incomplete. Maine has two species of regionally endemic mayflies listed as state Threatened, one as Special Concern, and 13 additional species considered SGCN. Most of Maine's mayflies of conservation concern have narrow geographic distributions and occupy riverine habitats, with many of these specialized to small, cold, headwater settings.

At least 94 species of stoneflies, representing all nine North American families, are reported from Maine (Mingo 1983; S. Burian, pers. communication). Typically inhabiting cold, fast-flowing streams and rivers, stoneflies are likely more diverse than what is currently documented for the state. Two of Maine's eight SGCN stoneflies are globally rare species with only historical occurrence data, and the remaining species all have very limited modern occurrence data, emphasizing the need for further survey effort.

The species richness of caddisflies is higher in Maine than in most regions of North America, with recent collections suggesting a total that exceeds 300 species (Huryn and Harris 2000). At least an additional 50 species of the lesser-known "micro caddisflies" in the family Hydroptilidae are also reported from the state (Blickle and

Morse 1966, Huryn and Harris 2000). All of Maine's seven SGCN species are micro-caddisflies, and most are considered globally rare, with one species having only been described and documented (to date) in Maine.

Bees, Wasps, and Ants (order: Hymenoptera, class: Insecta, phylum: Arthropoda)

At least 52 families and 855 species of bees, wasps, and ants have been reported from Maine (Dearborn et al. 1983; Stubbs et al. 1995). These numbers are most certainly conservative estimates, as surveys specifically designed to assess species diversity for the Hymenoptera have never been conducted (Stubbs et al. 1995). In recent years, bees have received more attention, including the publication of a checklist that documents 278 species from six families (Dibble et al. 2017). From 2015 through 2020, MDIFW coordinated a statewide atlas project for Maine's bumble bees (*Bombus* spp) using community scientists (http://mainebumblebeeatlas.umf.maine.edu/) and has continued with targeted surveys for the state's rarest species. As a result, the conservation status of bumble bees - one of the state's most valuable pollinators of wild plants and cultivated crops - has been comprehensively assessed. Of the 17 species previously documented in Maine, 15 were found to be still extant, while two are likely extirpated. Nine species are now considered SGCN, including one recently listed as state Endangered and four as state Special Concern, primarily due to a lack of modern records or range-wide declines. Habitat loss, introduced diseases and parasites, pesticides, and intensive agricultural practices are all believed to have played a role in bumble bee declines in Maine and across North America.

Beetles (order: Coleoptera, class: Insecta, phylum: Arthropoda)

There are at least 96 families and 2,871 species of beetles reported from Maine (Majka et al. 2011). Generally recognized as the largest order of insects, the Coleoptera have not been systematically surveyed in Maine and there are likely hundreds of state species records yet to be discovered. The best studied group of beetles in Maine, and probably North America, is the tiger beetles (family Carabidae, subfamily Cicindelinae). Three of Maine's four SGCN beetles are Cicindelids, including the state Endangered Cobblestone Tiger Beetle (*Cicindela marginipennis*) known from only one riverine population in the western foothills, and the state Threatened Margined Tiger Beetle (*Ellipsoptera marginata*) which is limited to southern beaches and saltmarshes. The federally endangered American Burying Beetle (*Nicrophorus americanus*) is known historically from southwestern and central Maine but is now believed to be state extirpated.

Butterflies and Moths (order: Lepidoptera, class: Insecta, phylum: Arthropoda)

Colorful, conspicuous, and ecologically important, butterflies are among the few insect groups that have benefited from considerable attention by early Maine naturalists (collections exist from as far back as 1870) and recent citizen scientist efforts through the Maine Butterfly Survey (http://mbs.umf.maine.edu/). There are 124 documented species of butterflies and skippers representing five families in Maine (deMaynadier et.al. 2023). Of special note is the relatively high proportion of Maine butterflies that are listed as Endangered or Threatened (8 species), Special Concern (13 species) and/or SGCN (36 species): a result consistent with global trends elsewhere for the group (Stein et al. 2000, Thomas et al. 2004). Primary threats to Maine's butterflies include habitat loss and degradation to development, succession, and aerial pesticides. Most of Maine's rarest butterflies are associated with the following habitat types: swamps, peatlands, dry barrens and grasslands, and riparian areas. An in-depth review of the biology, status and conservation of Maine's butterflies can be found in the recently published volume entitled Butterflies of Maine and the Canadian Maritime Provinces (deMaynadier et. al. 2023).

There are at least 17 families and 1,152 species of moths (macro) reported from Maine (Brower 1974). An additional 41 families and 1,720 species of "micro-moths" are also documented to occur in the state (Brower 1983, 1984, D. Dearborn, pers. communication). Much of this information is based on historical collections and the focused efforts of a few individual researchers. Comprehensive statewide surveys and species assessments have never been done for this taxon with especially pronounced knowledge gaps for the micro-Lepidoptera. Much of what we know about the conservation status of moths in Maine comes from NatureServe, which tracks 147 species from the state, of which 10 are ranked as globally rare. Currently Maine lists two species of moth as Threatened and 23 species as Special Concern and/or SGCN, with several more likely to be extirpated (D. Schweitzer, pers. communication). Like the butterflies, several of Maine's rarest moths are associated with pitch pine-scrub oak barrens and peatlands and are especially sensitive to any threats to these habitats.

Dragonflies and Damselflies (order: Odonata, class: Insecta, phylum: Arthropoda)

Like butterflies, dragonflies and damselflies are a popular and conspicuous insect group that have attracted significant attention from scientists and the public. Much of what is currently known about Maine's Odonates is the result of an assessment of historical records, MDIFW targeted surveys, and the Maine Dragonfly and Damselfly Survey (http://mdds.umf.maine.edu/). These efforts have led to a list of 163 species of dragonflies and damselflies known from Maine and considerable knowledge on distribution, habitat relationships, and conservation status of most species (Brunelle et.al., in press). Two of Maine's Odonata are listed as state Threatened and 24 species as Special Concern and/or SGCN. A recent assessment of high priority Odonata for conservation action in the Northeast identified 21 species in Maine because of high regional responsibility (narrow geographic ranges centered in the Northeast) and/or moderate to high imperilment due to habitat vulnerabilities and potential population declines (White et al. 2014). Many of Maine's most vulnerable Odonata are associated with northern peatlands, lakes, and moderate to large, forested rivers. An in-depth review of the biology, status and conservation of Maine's Odonata is soon to be published in a volume entitled Damselflies and Dragonflies of Maine and the Canadian Maritime Provinces (Brunelle et. al., in press).

Flower Flies (order: Diptera, class: Insecta, phylum: Arthropoda)

After bees, flies are the second most important group of insect pollinators and among them, the Flower Flies (family Syrphidae) do most of the work (Doyle et al. 2020). Also called "hover flies" for their characteristic flight pattern of hovering as they approach a flower to feed, these colorful and conspicuous insects are often excellent mimics of bees and wasps, which provides them some protection from predators. A recent assessment by Klymko et al (2023) found that most northeastern Syrphidae appear to be at low risk of extinction, but at least 11 species are at risk of rangewide extinction, and many others are of unknown status. Currently, 215 species are reported from Maine (Maine Syrphidae S-rank Calculator by J. Klymko, unpublished NatureServe file), but comprehensive surveys have never been conducted and there is ample opportunity for more to be discovered. In 2025, MDIFW initiated the Maine Flower Fly Survey (MFFS) - a multi-year, statewide community science project aimed at documenting the diversity, distribution, habitat use, and status of Maine's Flower Fly fauna. Eight species are currently classified as SGCN, including three listed as state Special Concern, but a clearer picture of the conservation status of this important group of pollinators should be possible once MFFS is completed.

1.3.6 Marine Fauna (except birds)

General Overview

There are approximately 1,800 known marine animal species in the Gulf of Maine, but it is estimated that far more are still undiscovered, especially in the invertebrate and chordate groups (Census of Marine Life 2015). Maine state waters (<3 nautical miles offshore) host a wide array of species including invertebrates, diadromous fishes, groundfish, marine mammals, sea birds, pelagic finfishes, and more. The diversity of habitat within coastal and marine waters, the geographic location between the Artic and Temperate zones, as well as complex coastal circulation patterns all provide Maine with unique and delicately balanced species assemblages.

Maine is the southern extent for some marine fauna. Polar Lebbeid Shrimp (*Lebbeus polaris*), Sea Strawberry (*Gersemia rubiformis*), and Atlantic Great Piddock (*Zirfaea crispata*) are SGCN from 3 different invertebrate classes that are restricted to waters from Maine northward. Conversely, others are at the northernmost range limits in Maine. The Horseshoe Crab (*Limulus polyphemus*) and Leatherback Sea Turtle (*Dermochelys coriacea*) are SGCN with distributions that range southward from the Gulf of Maine.

Some marine fauna have undergone severe population reductions in recent years. Maine waters host some of the last remaining, sizeable populations in the U.S. Notable SGCN examples include Atlantic Salmon and Rainbow Smelt. Several marine SGCN have large oceanic ranges or are highly migratory as adults: Atlantic Bluefin Tuna (*Thunnus thynnus*), Atlantic Salmon, all whales, and all sea turtles. Most marine species have highly dispersive juvenile stages. Taken together, these attributes contribute to a unique balance of species assemblages, with each species relying on the suite of others for prey, prey buffering, habitat (e.g., mollusk reefs), and nutrients transfer.

Conservation Overview

Aside from the Sea Mink (Section 1.2.1), only one marine species is known to be extinct in the Gulf of Maine: the Eelgrass Limpet (*Lottia alveus*). The Eelgrass Limpet, a marine gastropod, was estimated to have become extinct in the 1930s due to massive die-offs of eelgrass, which served as its primary habitat (Carlton et al. 1991).

A small number of marine species are protected via federal listing as E/T: three diadromous fish, six whales and four sea turtles. Eleven of these are also state-listed under MESA. The National Marine Fisheries Service (NMFS) designates some fauna as Species of Concern (SoC): three diadromous fishes, three groundfish and two elasmobranchs. However, numerous other species warrant conservation attention. State-listing of marine fauna under MESA is limited by statute to those federally listed as E/T.

While many marine species are subject to commercial and recreational fisheries, or being caught indirectly as bycatch, some of these species warrant conservation measures beyond fisheries management plans. The 2025 Maine Wildlife Action Plan lists 72 SGCN: ten diadromous fish, six groundfish, one flatfish, six pelagic fish, one ammodyte (American Sand Lance, *Ammodytes americanus*), six sharks, four skates, four sea turtles, six whales, one porpoise, and 27 invertebrates.

The following is a brief review of the conservation status and imperilment patterns for select groups of marine taxa that host significant numbers of the state's SGCN.

Marine Invertebrates

Although a large proportion of the known marine animal species in the Gulf of Maine are invertebrates (~80%), less than half of the marine SGCN are invertebrates (34 species, 48% of SGCN). This is primarily due to a lack of knowledge about the status, distribution, or abundance of these species. Marine invertebrates face many of the same research challenges as terrestrial and freshwater invertebrates, including their small size, and small niches/habitats. Additionally, financial and logistical challenges specific to working in the marine environment compound these issues. Since 24% of the marine SGCN are commercially or recreationally harvested, some may have existing monitoring programs in place. However, there is a need for increased knowledge about population trends and reasons for decline for many of the invertebrate SGCN.

Marine invertebrates vary in life history and are thus subject to a variety of stresses. Most juvenile invertebrates are found in the water column as zooplankton, and some species are sessile during at least part of their life cycle. Sessile organisms can be slow to recolonize an area after an event that reduces their abundance. Many invertebrates can be sensitive to changes in water quality including non-point source pollution and thermal changes. Calcareous invertebrates may be susceptible to changes in water pH resulting from increased dissolved carbon dioxide in the water. SGCN vulnerable to ocean acidification include Softshell Clam (*Mya arenaria*) and Gaper Clam (*Mya truncata*). With recent and sometimes rapid changes in coastal development, increases in sea surface temperature, and decreases in ocean pH, understanding if and how these species are adapting and how their ranges and habitats are affected is imperative for developing successful conservation strategies.

Finfish: Diadromous, Groundfish, and Ocean Migratory Fish

There are over 50 commonly found finfish species in Maine waters, most of which have experienced population declines in the past 10-50 years. A total of 16 finfish species have been identified as SGCN for Maine, and 11 of those species have experienced recent, significant declines in abundance. Overfishing has been attributed to the decline of many of these species, including Atlantic Cod (*Gadus morhua*) and Haddock (*Melanogrammus aeglefinus*).

Some SGCN declines may be due to environmental changes and habitat alterations: e.g., Atlantic Wolfish (*Anarhichas lupus*) and Spotted Wolffish (*Anarhichas minor*). Fish populations can be slow to rebound after marked declines, even after fishing pressure has been reduced. This may be due to populations having been reduced below a critical threshold, combined with changes in habitat including increasing water temperature, changes in bottom structure following trawling and infrastructure development, and changes in predator-prey abundances. Key to the conservation of these species are efforts to identify spawning locations, migration patterns, habitat use, impacts of changing water chemistry and temperature, as well as how changing species assemblages will affect predator-prey relationships.

Diadromous fishes face a unique set of threats as they migrate between marine and freshwater. Dams and other obstructions in rivers and streams, alterations in water flow, and water runoff contamination and high nutrient inputs have all led to the reduction of species' populations. While some of these species respond well to existing management strategies, like improving fish passage and seed-stocking (e.g., Alewives, *Alosa pseudoharengus*), others continue to maintain only small populations despite conservation efforts (e.g., Atlantic Salmon). Continuing to improve fish passage and water quality is necessary to recover these species. Additionally, research has further demonstrated the importance of interspecific relationships. For example, the timing of spawning and

migration patterns provides prey-buffering for species of reduced numbers – e.g., harbor seals prey on schools of river herring, which reduce predation pressure from seals on Atlantic Salmon smolts.

Whales and Sea Turtles

There are at least 22 species of marine mammals and turtles that are known to frequent the waters of the northern Gulf of Maine. Many are SGCN, including six species of large whales federally-listed as Endangered since 1970: North Atlantic Right (*Eubalaena glacialis*), Humpback (*Megaptera novaeangliae*), Finback (*Balaenoptera physalus*), Sei (*Balaenoptera borealis*), Sperm (*Physeter macrocephalus*), and Blue (*Balaenaoptera musculus*). There are four species of federally-listed sea turtles: Kemp's Ridley (*Lepidochelys kempii*), Leatherback (*Dermochelys coriacea*), Green (*Chelonia mydas*), and the Northwest Atlantic Ocean distinct population segment of Loggerhead Turtles. All range widely in international waters with some presence in state jurisdiction in the Gulf of Maine.

The North Atlantic Right Whale, with a population now estimated over 400 is considered one of the most endangered of the large whales. For decades, since the end of commercial whaling, the Right Whale has shown slow recovery. The lack of Right Whale recovery has been linked to collisions with ships, entanglement in specific fishing gear, habitat degradation, and disturbance from vessels. Additionally, the Maine gillnet and lobster fisheries are documented as causing serious injury and mortality to this SGCN, as well as to other bycatch. Consequently MDMR, in collaboration with Maine's commercial fishing industries, developed a Comprehensive Marine "Wildlife Conservation Strategy for Large Whales and Sea Turtles" to reduce the risk posed by these fisheries to North Atlantic Right Whales and other protected resources. MDMR has a strategic role to balance commercial lobster and gillnet fisheries within State waters and impacts to large whales and sea turtles. The State of Maine is fully committed to the protection of Atlantic large whales and sea turtles, while at the same time protecting the economic and operational realities of the State's fisheries.

1.3.7 Plants

General Overview

Plants enrich our lives, reflect environmental quality, and provide food, cover, nesting materials, and other resources for Maine's animals. Haines (2011) records 2,526 tracheophyte taxa (plants with structurally advanced vascular tissue, excluding mosses and relatives) in Maine, 1,630 of which are native to the state. Maine has a diverse array of habitats and supports species at their northern range limit, such as Sassafras (*Sassafras albidum*), Spicebush (*Lindera benzoin)*, and Chestnut Oak (*Quercus montana*) and their southern range limit, principally found on Maine's highest peaks and northern rivershores, such as Northern painted-cup (*Castilleja septentrionalis*), Furbish's lousewort (*Pedicularis furbishiae*), and northern willow (*Salix arctophila*).

Conservation Overview

The Maine Natural Areas Program (MNAP) maintains a tracking list of native vascular plant species in Maine whose populations within the state are vulnerable to loss, including species determined to be Endangered, Threatened, and of Special Concern. Species on the list are typically known from a very small number of sites within the state, and many require unique habitat.

The Official List of Endangered and Threatened Plants (a subset of the tracking list) is under the jurisdiction of the Commissioner of the Department of Agriculture, Conservation and Forestry. Both lists are informational tools

which are available for use by public agencies, private institutions, or individuals. They may be used to assist scientific research, environmental assessment, permit review, land management, and educational purposes.

The current tracking list includes 352 taxa, 111 of which are Endangered, 72 are Threatened, 103 are of Special Concern, and 66 are presumed extirpated from the state. Three-hundred and one of these species are included in the State Wildlife Action Plan as SGCN, and include all 286 taxa listed as Endangered, Threatened, and Special Concern, one newly described species (*Cuscuta acadiana*), and nine that are listed as presumed extirpated but either have been newly rediscovered (yet have not formally undergone a rank change review) or have a reasonable likelihood of rediscovery. In addition, there are seven plant species added for cultural significance and/or expected large declines that are not tracked as rare by MNAP. These include Maine's three native ash species (genus *Fraxinus*), two species of sweetgrass (genus *Anthoxanthum*), American Elm (*Ulmus americana*), and the marine species Eelgrass (*Zostera marina*).

The majority of SGCN taxa are restricted to specialized habitats that occupy an extremely small fraction of the state's land area, with 39% restricted to wetlands and shores, and another 32% primarily restricted to alpine areas, cliffs, and rock outcrops. More than half (61%) of the species listed as Endangered have only one location where they are known to occur in the state. Collectively, mapped plant locations in MNAP's database occupy 73,586 acres, representing 0.4% of Maine's terrestrial acreage.

Threats to plant populations are diverse and differ geographically in nature and severity. Rare plant species in southern Maine are primarily threatened by development, habitat fragmentation and habitat conversion, and invasive species. Rare taxa in northern Maine face climate change impacts that may push them beyond their tolerance thresholds, impacts from forestry, and for subalpine and alpine species, recreational trail use.

1.4 Distribution of Maine's SGCN and Associated Habitats

Best practices for State Wildlife Action Plan updates (AFWA 2012) recommend compiling information on the distribution of each SGCN and its associated habitats to help prioritize areas within the state for conservation actions.

A species' "range" is the geographic extent of its potential occurrence. This extent is determined by broad landscape characteristics like climate, hydrography, and topography. A range often is approximated by the distribution of suitable habitat for the species.

A species' "distribution" is its actual occurrence within its range. It is determined primarily by the abundance of the species relative to local carrying capacity. For example, if a species is relatively rare, suitable areas may be unoccupied simply by a lack of individuals to fill them. It also may be determined by local variations in habitat suitability that are too fine to measure at the range scale. A species' distribution can be approximated by observations of the species. This approach assumes that all areas within the range have been thoroughly surveyed and that the potential for observing the species does not vary within its range.

Many SGCNs lacked suitable observation data to rigorously document their true distributions within their ranges. We therefore developed a hybrid approach, termed "Conservation Ranges," that combines the availability of suitable habitats (as best as we could determine) with any available observation data for the species to estimate

where the species likely occurs in Maine. To avoid potential issues with the number and accuracy of individual observations, we generalized the analysis to presence versus absence within each geographic sampling unit.

The sampling unit used for mapping ranges/distributions should be appropriate to the scale and resolution of the input data and the needs it is intended to meet. We chose Maine's municipal township boundaries (for non-aquatic SGCN) and United States Geological Survey (USGS) HUC12 sub-watersheds (for aquatic SGCN) as the sampling units for this effort. Both are familiar to the Maine conservation community and the public and can be generalized to broader scales (e.g., counties, watersheds, or ecoregions).

1.4.1 Methodology for Mapping Element 1 – SGCN Distribution

Our primary source of observation data was MDIFW's "Endangered, Threatened, and Special Concern" (ETSC) database, which includes observations on some, but not all of Maine's SGCNs. We supplemented MDIFW's ETSC data with SGCN observations from the following:

- Maine Damselfly and Dragonfly Atlas; (http://www.maine.gov/ifw/wildlife/species/invertebrates/damselfly_dragonfly.html)
- Maine Butterfly Survey; (http://www.maine.gov/ifw/wildlife/species/invertebrates/butterfly_survey.html)
- Maine Mussel Survey; (http://www.maine.gov/ifw/wildlife/species/invertebrates/freshwater_mussels.html)
- Maine Amphibian and Reptile Atlas Project; (http://www.maine.gov/ifw/wildlife/species/reptiles/atlasing_project.html)
- North American Breeding Bird Survey; (https://www.pwrc.usgs.gov/bbs/)
- Essential Wildlife Habitats mapped under Maine's Endangered Species Act
- MDIFW radio-telemetry locations and track surveys for Canada Lynx
- Shorebird Areas mapped under Maine's Natural Resources Protection Act
- MDIFW vernal pool locations with Blue-spotted Salamander observations
- MDIFW fish data sets
- eBird
- Maine Bumble Bee Atlas; (http://mainebumblebeeatlas.umf.maine.edu/)
- Maine Mayfly Database (http://www.maine.gov/ifw/wildlife/species/invertebrates/rare_mayflies.html)

These data sets varied greatly in data format. Some data sets were geospatial (i.e., GIS files), whereas others stored only attributes but included geographic coordinates that we used to generate geospatial representations. Most were point data, but some linked observations to unmapped sites along survey transects and others mapped observations as polygons. Thus, our first step in generating SGCN Conservation Ranges was to standardize and assimilate these data sets. We then used all of these observations to determine in which Maine townships and sub-watersheds each SGCN occurred. We did not attempt to count observations of an SGCN within a township or sub-watershed or to estimate densities because sampling effort varied geographically and among data sets. Some observations also may have been duplicated across data sets. Although an observation from any of the data sets could indicate presence of the SGCN in a particular township or sub-watershed, we presented the data sets as separate GIS layers so users could compare the data sources or view them collectively for an SGCN.

1.4.2 Methodology for Mapping Element 2- Habitats

We used a modified version of the Northeast Ecological Systems, 2014 Update (Ferree and Anderson 2013, http://northatlanticlcc.org/data/regional-spatial-data/terrestrial/tnc-terrestrial-habitat/ne-terrestrial-habitat-map) mapped by the North Atlantic Landscape Conservation Cooperative (NALCC), the Northeast Association of Fish and Wildlife Agencies, and The Nature Conservancy to map habitats for each SGCN. We updated their map for habitat classes for which we had and/or required more accurate/higher resolution spatial data including:

- Maine Aquatic Habitat Classification (2025) as described in Element 2
- Tidal flats classified by substrate type by the National Wetlands Inventory
- Tidal marshes as mapped/classified by the Maine Natural Areas Program
- Lake and river shores classified by the National Wetlands Inventory
- Intertidal and subtidal habitats as mapped/classified by the Maine Department of Marine Resources

Using the resulting habitats, species specialists from MDIFW, with input from conservation partners, associated each SGCN with each ecological system and habitat macrogroup the species was believed to use. We then identified the townships and sub-watersheds where these associated habitats occurred for each SGCN. Part of our goal was to identify unoccupied habitats or areas of undocumented SGCN presence. Some habitats, however, extended beyond the range of an SGCN and therefore presented an unrealistic estimate of its potential distribution. As part of our 2005 SWAP conservation actions, Maine divided the state into ecoregions and surveyed them for a variety of species including many SGCN. This work was the source for many of the SGCN observations in MDIFW's ETSC database. The species specialists associated each SGCN with each ecoregion where it was believed to occur and we then used those ecoregional associations to constrain the habitat mapping to more realistic extents.

The Maine GAP Analysis project (Krohn et al. 1998) used a similar process (i.e., combining observation data with habitat maps) to estimate distributions for vertebrate species in Maine. We included the GAP data in our species conservation range maps, calling it "potential habitat." Despite having fewer observations to work with and a much simpler habitat data set, the GAP distributions are quite similar to our updated distributions for many SGCNs.

1.4.3 Species Conservation Range Maps

In the 2015 Wildlife Action Plan, we created a series of "Conservation Range Maps" to show the estimated distribution of each SGCN in Maine. These maps used available observation data and habitat suitability models to determine presence or absence of an SGCN within each Maine Township (for terrestrial species) or within each Maine sub-watershed (for aquatic species). These maps were published as PDF files that could be downloaded from a website. Since then, we have worked with our conservation partners to identify improvements that would make these maps more useful for conservation planning. First, the observation and habitat data that is available varies significantly among species. The previous one-size-fits-all mapping approach was not suitable for SGCN with limited observation data and/or habitat suitability models. We are working on a more nuanced mapping approach to address these data differences. Second, the static PDF maps were inconvenient to download. They also were for individual species only – users could not aggregate them to assess multiple species simultaneously. We are working on a web-based, interactive map that will address both issues. These map updates are ongoing. They will

not be completed in time for this SWAP update. Rather, they are a high priority conservation action item to be accomplished in the 2025-2035 plan implementation period.

All SGCN species conservation range maps will be served to conservation partners and the public as digital files and/or via a web mapping service. Figure 1 - 1 illustrates some static images of a few SGCN example maps illustrating some of the variation in distribution patterns such as edge-of-range, rare but scattered, concentrated (e.g., coastal, mountainous), and ubiquitous.

1.4.4 SGCN Distribution Synthesis

Summarizing SGCN patterns statewide was a primary goal of mapping species conservation ranges to determine where conservation actions might be best applied to benefit the most species. One summary method is by taxonomic class, for example, all birds. This approach benefits conservation partners interested in working with certain groups of SGCN. Other groups might be interested in SGCN associated with particular habitats (e.g., emergent marshes), especially when a specific conservation action is tied to a habitat type (e.g., improved riparian buffer conservation). As with the species conservation ranges, we based our SGCN summaries on USGS subwatersheds for aquatic SGCN classes and habitats and on Maine townships for non-aquatic SGCN classes and habitats. Our goal is to present these summaries in an interactive map format where users can select which SGCN classes, habitats, and landscape units to use. For purposes of this static document, we have included a few possible examples (Figure 1 - 2).

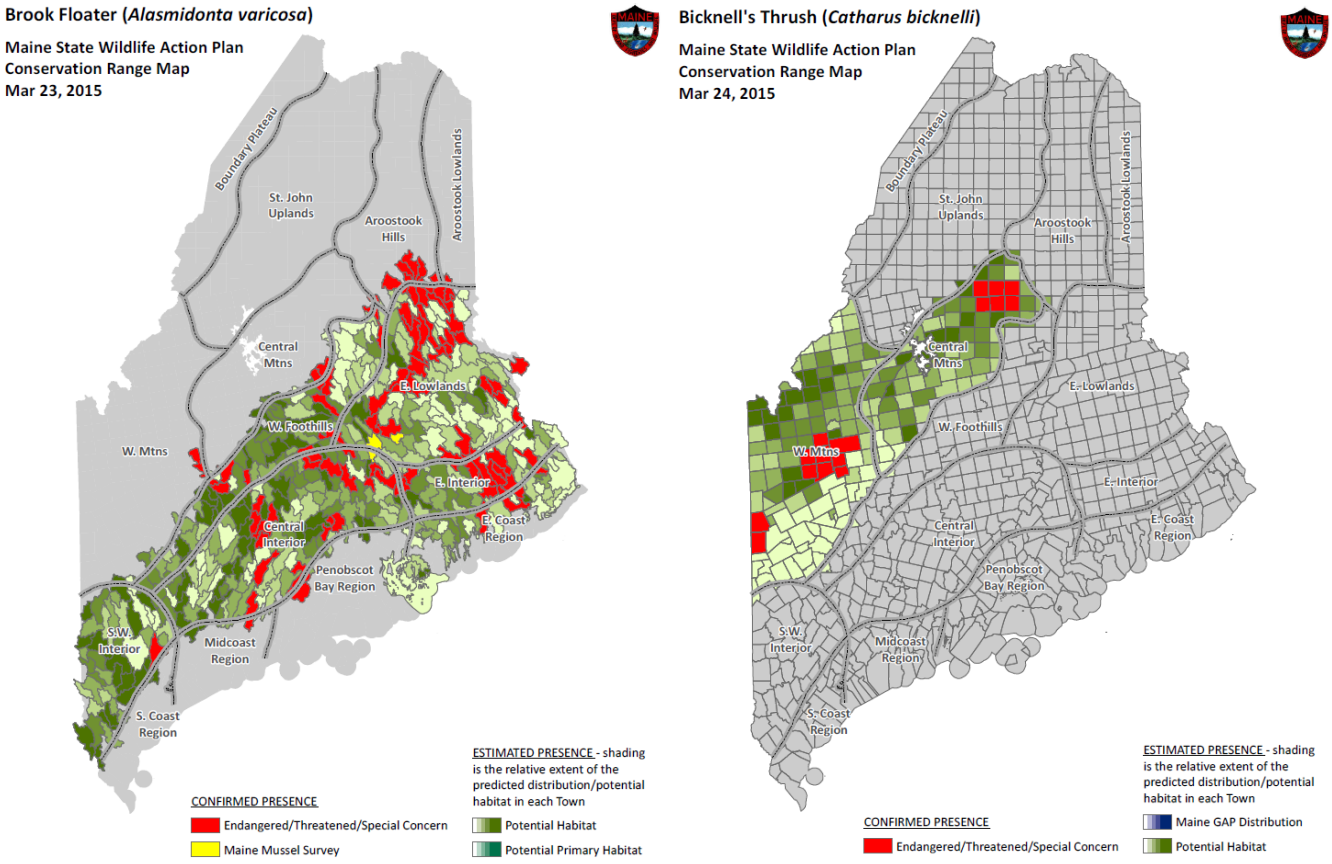

Figure 1 - 1 Examples of conservation range maps by USGS sub-watersheds for aquatic SGCNs and by Maine townships for terrestrial SGCNs. Red/yellow shaded areas indicate an SGCN's presence based on observation data; green/blue indicates presence of potential habitats associated with the SGCN.

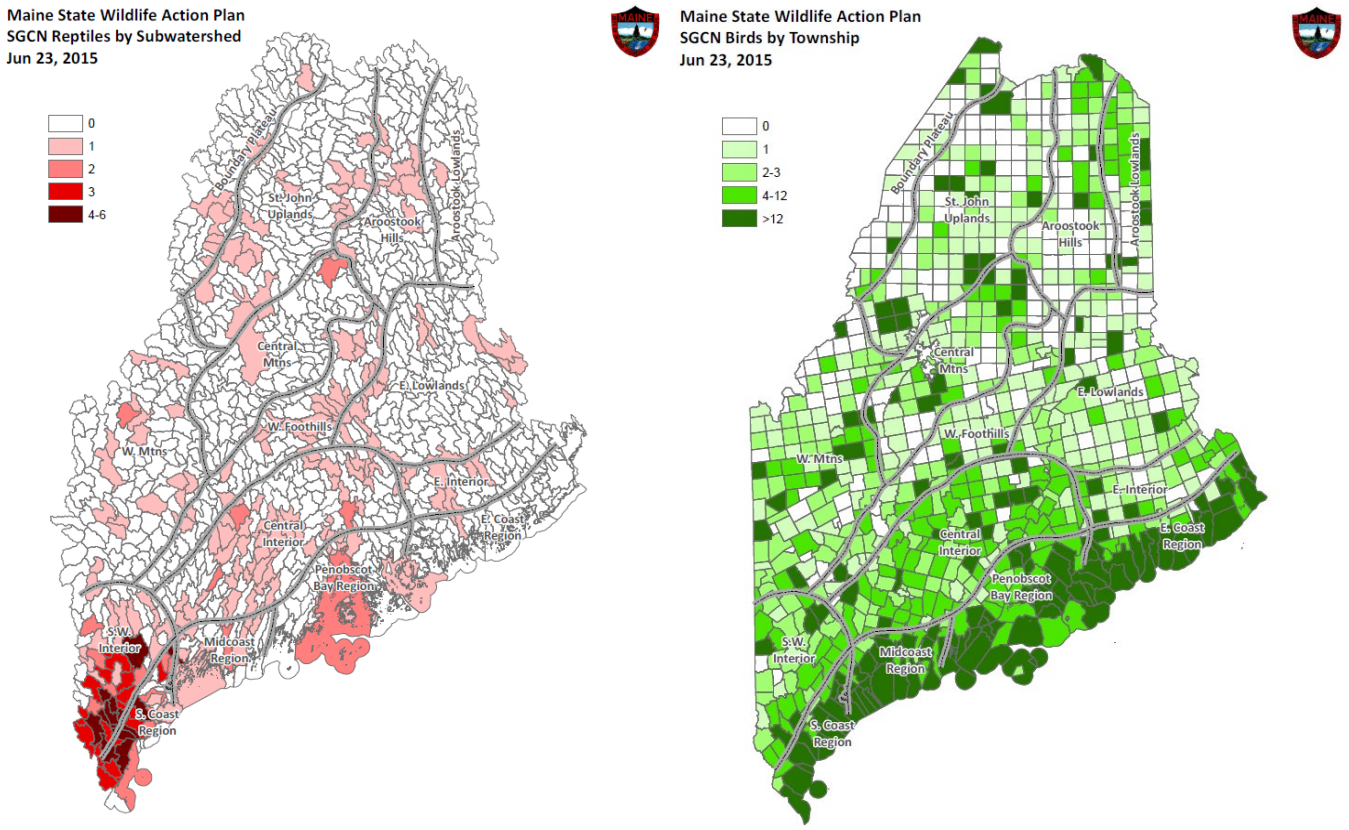

Figure 1 - 2 Examples of SGCN summaries by taxa class and habitat associations for USGS sub-watersheds and Maine townships.

1.5 Designation Criteria for Maine's SGCN in 2025

MDIFW biologists, with review and cooperation from conservation partners and species experts, offer the following criteria (and subcriteria) for designating Maine's eligible Species of Greatest Conservation Need (SGCN). The criteria and process for selecting SGCN are intended to be comprehensive, transparent, and based on best available science for prioritizing species of conservation concern at local, regional, and global scales. As proposed, fish and wildlife species (and subspecies) designated as priority 1 or 2 or 3 qualify as SGCN and are thus eligible for State Wildlife Grant funding. The primary themes for SGCN prioritization include risk of extirpation, population trend, endemicity, and regional conservation responsibility. Secondary themes for SGCN prioritization include climate change vulnerability, survey knowledge, and cultural significance to Maine tribes (Table 1-2). Finally, only Maine extant species were considered for designation as SGCN in 2025

1.5.1 Priority 1 (Highest Priority) SGCN

Generally, Priority 1 species include those that meet <u>two or more</u> of the following criteria:

1) **Risk of Extirpation** – Have current state or federal E/T status, or global endangerment status (International Union for the Conservation of Nature [IUCN])

2) **Recent Significant Declines** – A species currently (within 15 years) undergoing biologically significant population decline or significant range contraction, statewide or regionally.
3) **Regional Endemic** – A species whose global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).
4) **High Regional Conservation Priority** -- Identified as a high regional or global species of conservation concern by one of the following species assessment authorities (see Table 1-2 for Priority 1 subcriteria):
    a. Northeast Regional Synthesis [RSGCN] (all vertebrates, invertebrates with regional species status assessments) – Terwilliger & NEFWDTC 2023
    b. NatureServe (all taxa) – NatureServe 2024
    c. Partners in Flight Landbird Conservation Plan: 2016 Revision for Canada and Continental United States - Partners in Flight Science Committee 2016
    d. Partners in Flight (all birds) - Avian Conservation Assessment Database, version 2021.
    e. North American Waterbird Conservation Plan [NAWCP] (all waterbirds [2002] and marsh birds [2006]) – Kushlan et al. 2002 and 2006
    f. The U.S. Shorebird Conservation Partnership – Past Accomplishment - U. S. Shorebird Conservation Partnership Council 2022
    g. Birds of Conservation Concern (all birds) – USFWS 2021
    h. Northeast Partners in Amphibian and Reptile Conservation [NEPARC] (herpetofauna) – NEPARC 2010
    i. American Fisheries Society (freshwater & diadromous fish) – Jelks et al. 2008
    j. Atlantic States Marine Fisheries Commission Stock Assessments [ASMFC] - ASMFSC 2012

Note: Priority 1 designation is not intended for species that have expanded their range into Maine within the past 50 years

1.5.2 Priority 2 (High Priority) SGCN

Generally, Priority 2 species include:

- All other current State (Endangered, Threatened), Federal (Endangered, Threatened, or Candidate) or Global (IUCN Critically Endangered or Threatened) risk of extirpation species, OR
- Species that meet at least two of the following criteria:

1) **Global Vulnerability** – A species designated as Vulnerable by the International Union for the Conservation of Nature (IUCN).
2) **State Special Concern** – Listed as a current species of Special Concern in Maine.
3) **Recent Significant Declines** – A species currently (within 30 years) undergoing biologically significant population decline or significant range retraction, statewide or regionally.
4) **Regional Endemic** – A species whose global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).

5) **High Climate Change Vulnerability** – A species identified as highly vulnerable by Whitman et al. 2013 or Galbraith et al. 2014 (or other published source).
6) **Historical** -- Species currently listed as state (SH) or global (GH) Historical (by MDIFW or NatureServe) that have a reasonable probability of population rediscovery with further survey.
7) **Culturally Significant** -- Species identified as both biologically vulnerable and culturally significant by Maine's tribes.
8) **High Regional Conservation Priority** -- Identified as a high regional or global species of conservation concern by one of the following authorities (see Table 1-2 for Priority 2 subcriteria):
    a. Northeast Regional Synthesis [RSGCN] (all vertebrates, invertebrates with regional species status assessments) – Terwilliger & NEFWDTC 2023
    b. NatureServe (all taxa) – NatureServe 2024
    c. Partners in Flight Landbird Conservation Plan: 2016 Revision for Canada and Continental United States - Partners in Flight Science Committee 2016
    d. Partners in Flight (all birds) - Avian Conservation Assessment Database, version 2021
    e. North American Waterbird Conservation Plan [NAWCP] (all waterbirds [2002] and marsh birds [2006]) – Kushlan et al. 2002 and 2006
    f. The U.S. Shorebird Conservation Partnership – Past Accomplishments - U. S. Shorebird Conservation Partnership Council 2022
    g. Birds of Conservation Concern 2021 (all birds) – USFWS 2021
    h. Northeast Partners in Amphibian and Reptile Conservation [NEPARC] (herpetofauna) – NEPARC 2010
    i. American Fisheries Society (freshwater & diadromous fish) – Jelks et al. 2008
    j. Atlantic States Marine Fisheries Commission Stock Assessments [ASMFC] - ASMFSC 2012
    k. Eastern Brook Trout Joint Venture [EBTJV] - EBTJV 2011
    l. Northeast Odonate Assessment (damselflies & dragonflies) – White et al. 2014
    m. Committee on the Status of Endangered Wildlife in Canada [COSEWIC] (all taxa) – COSEWIC 2025

Note: Priority 2 designation is not intended for species that have expanded their range into Maine within the past 25 years.

1.5.3 Priority 3 (Moderate Priority) SGCN

Generally, Priority 3 species include those that meet at least one of the following criteria:

1) **Global Vulnerability** – A species designated as Vulnerable by the International Union for the Conservation of Nature (IUCN).
2) **State Special Concern** – Listed as a current or proposed species of Special Concern in Maine.
3) **Recent Significant Declines** – A species currently (within 30 years) undergoing biologically significant population decline or significant range retraction, statewide or regionally.
4) **Regional Endemic** – A species whose global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).

5) **High Climate Change Vulnerability** – A species identified as highly vulnerable by Whitman et al. 2013 or Galbraith et al. 2014 (or other published source).
6) **Understudied Rare Taxa** -- Recently documented or poorly surveyed species for which risk of extirpation is potentially high (e.g. few known occurrences), but insufficient data exist to conclusively assess distribution and status.
7) **Historical** -- Species currently listed as state (SH) or global (GH) Historical (by MDIFW or NatureServe) that have a reasonable probability of population rediscovery with further survey.
8) **Culturally Significant** -- Species identified as culturally significant by Maine's tribes.
9) **High Regional Conservation Priority** -- Identified as a high regional or global species of conservation concern by one of the following authorities (see Table 1-2 for Priority 2 subcriteria):
    a. Northeast Regional Synthesis [RSGCN] (all vertebrates, invertebrates with regional species status assessments) – Terwilliger & NEFWDTC 2023
    b. NatureServe (all taxa) – NatureServe 2024
    c. Partners In Flight Landbird Conservation Plan: 2016 Revision for Canada and Continental United States - Partners in Flight Science Committee 2016
    d. Partners in Flight - (all birds) - Avian Conservation Assessment Database, version 2021
    e. North American Waterbird Conservation Plan [NAWCP] (all waterbirds [2002] and marsh birds [2006]) – Kushlan et al. 2002 and 2006
    f. The U.S. Shorebird Conservation Partnership – Past Accomplishments - U. S. Shorebird Conservation Partnership Council. 2022
    g. Birds of Conservation Concern 2021 (all birds) – USFWS 2021
    h. Northeast Partners in Amphibian and Reptile Conservation [NEPARC] (herpetofauna) – NEPARC 2010
    i. American Fisheries Society (freshwater & diadromous fish) – Jelks et al. 2008
    j. Atlantic States Marine Fisheries Commission Stock Assessments [ASMFC] - ASMFSC 2012
    k. Eastern Brook Trout Joint Venture [EBTJV] - EBTJV 2011
    l. Northeast Odonate Assessment (damselflies & dragonflies) – White et al. 2014
    m. Committee on the Status of Endangered Wildlife in Canada [COSEWIC] (all taxa) – COSEWIC 2025

Note: Priority 3 designation is not intended for species that have expanded their range into Maine within the past 10 years.

Table 1 - 2 Criteria and concepts used to designate Species of Greatest Conservation Need (SGCN) in Maine's 2025 Wildlife Action Plan. The criteria and concepts embedded are intended to support the SGCN designation criteria and priority rank assignments presented in sections 1.5.1, 1.5.2, and 1.5.3.

Vulnerability Factor	Authority (Source)	Metric[1]	Potential Priority	Primary Taxa
Extirpation	IUCN	"CR" or "EN"	1-2	all
Extirpation	IUCN	"VU"	1-3	all

Vulnerability Factor	Authority (Source)	Metric[1]	Potential Priority	Primary Taxa
Extirpation	US ESA (USFWS, NOAA)	"E" or "T" or "C"	1-2	all
Extirpation	State ESA (MDIFW, MNAP, MDMR)	"E" or "T"	1-2	all
Potential Extirpation	MDIFW, MNAP	"Special Concern"	2-3	all
Recent Decline	MDIFW (multiple)	Steep declines < 15 yrs.	1	all
Recent Decline	MDIFW (multiple)	Steep declines < 30 yrs.	2-3	all
Regional Endemics	MDIFW (multiple)	>90% of geographic range in the Northeast	1-3	all
Specialist Group Assessment	RSGCN (Terwilliger & NEFWDTC 2023)	"high responsibility" AND "very high concern"	1	all
Specialist Group Assessment	RSGCN (Terwilliger & NEFWDTC 2023)	"high responsibility" AND "high concern"	2-3	all
Specialist Group Assessment	NatureServe (2024)	"G1" (global rank) or "S1" (subnational rank)	1	all
Specialist Group Assessment	NatureServe (2024)	"G2" (global rank) or "S2" (subnational rank)	2	all
Specialist Group Assessment	NatureServe (2024)	"G3" (global rank) or "S3" (subnational rank)	3	all
Specialist Group Assessment	COSEWIC (2025)	"E" or "T" in Atlantic Canada	2-3	all
Specialist Group Assessment	Partners in Flight (2016)	Listed in BCR 14 or 30	1-3	landbirds
Specialist Group Assessment	Partners in Flight (2021)	Regional Concern, Regional Stewardship, Regional Importance, or Continental Importance in Region for BCR 14 or 30	1-3	all birds
Specialist Group Assessment	NAWCP (Kushlan et al. 2002, 2006)	"high concern"	1-3	waterbirds
Specialist Group Assessment	USSCP (USSCP 2022)	"highly imperiled" OR species of "high concern"	1-3	shorebirds
Specialist Group Assessment	Birds of Conservation Concern (USFWS 2021)	Listed in BCR 14 or 30	1-3	all birds

Vulnerability Factor	Authority (Source)	Metric[1]	Potential Priority	Primary Taxa
Specialist Group Assessment	NEPARC (2010)	"high responsibility"	1-3	reptiles & amphibians
Specialist Group Assessment	American Fisheries Society (Jelks et al. 2008)	Imperiled	1-3	fish
Specialist Group Assessment	ASMFC (2012)	"decreasing, unstable/decreasing, or local subpopulation"	1-3	marine fish
Specialist Group Assessment	EBTJV (2011)	"imperiled"	2-3	brook trout
Specialist Group Assessment	Northeast RCN Odonate Assessment (White et al. 2014)	"high vul" OR ["mod vul" + "primary-significant" responsibility]	2-3	damselflies & dragonflies
Climate Change	Manomet (Whitman et al. 2013)	"high vulnerability" + > "low confidence"	2-3	all
Climate Change	(Galbraith et al. 2014)	"high concern, highly imperiled, or critical"	2-3	shorebirds
Climate Change	Multiple	miscellaneous	2-3	all
Rare & Poorly Surveyed	MDIFW	specialized habitat + <5 EOs and "G4-G5" OR < 10 EOs and "G3"	3	all
Historical	MDIFW & NatureServe (2024)	SH/GH and high rediscovery potential	2-3	all
Culturally Significant	Maine Tribes	culturally significant + biologically vulnerable	2-3	all

[1]Metric Notes: CR = Critically Endangered, EN = Endangered, VU = Vulnerable, E = Endangered, T = Threatened, C = Candidate, P = Proposed, G1-G5 & GH = NatureServe Global rarity ranks (range ranks rounded as follows: G1G2=G1, G1G3=G2), S1-S5 & SH = NatureServe Subnational rarity ranks (range ranks rounded as follows: S1S2=S1, S1S3=S2), BCR = Bird Conservation Region, EO = Element Occurrences

1.6 Maine's 2025 SGCN

Vulnerability concepts and criteria (Table 1-2) adopted in this Plan identified 729 SGCN in Maine. This number is significantly greater than the 378 SGCN recognized in the 2015 Plan. The net expansion of the SGCN list between 2015 and 2025 is mostly a reflection of i) the addition of plants, ii) consideration of a greater diversity of inland invertebrates, and troubling, well-documented declines in additional bird species.

The 2025 compilation of Maine's SGCN (Table 1-3) includes 729 species. Each cell for a species is linked to an SGCN Report that summarizes qualification criteria (Element 1), habitat associations (Element 2), threats to the species or its habitats (Element 3), potential conservation actions (Element 4), and updated conservation range maps (in progress). Click on the cell with the scientific name / common name to view reports of these details for each Maine SGCN, including data (e.g., range) that can be updated during the life of the Plan.

Priority tiers of SGCN in this Plan ultimately are based on the degree of vulnerability for each species. Tier 1 SGCN receive utmost concern throughout the various Plan elements. However, higher SGCN priority levels do not necessarily infer they are absolute priority conservation targets. Instead, habitat-based conservation actions, or those that address a guild of several SGCN, may be more significant than a strategy that benefits a single Tier 1 SGCN. Feasibility, outcomes, and cost of conservation actions also influence Plan priorities. Among the 729 SGCN recognized in this Plan, the total number of SGCN by priority level separate as follows:

- Tier 1 SGCN (Highest Priority) – 197 (27%)
- Tier 2 SGCN (High Priority) – 258 (35%)
- Tier 3 SGCN (Moderate Priority) – 274 (38%)

Table 1 - 3 Maine's Species of Greatest Conservation Need (SGCN) sorted by Order (light green) and Class (gray) as identified by Maine's SGCN Designation Criteria in the 2025 Maine Wildlife Action Plan. The priority rank for both the current Action Plan (2025) and previous Action Plan (2015) are noted. Additionally, species designated as Endangered, Threatened, or Special Concern at the State or Federal level are included for reference.

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Actinopterygii (ray-finned fishes; N = 42)				
Acipenseriformes (sturgeons and paddlefishes; N = 2)				
Acipenser brevirostrum Shortnose sturgeon	Priority 1	Priority 1	Endangered	Endangered
Acipenser oxyrinchus Atlantic Sturgeon	Priority 1	Priority 1		Threatened
Anguilliformes (true eels; N = 1)				
Anguilla rostrata American Eel	Priority 2	Priority 2		
Clupeiformes (herrings; N = 5)				
Alosa aestivalis Blueback Herring	Priority 1	Priority 1		
Alosa pseudoharengus Alewife	Priority 2	Priority 1		
Alosa sapidissima American Shad	Priority 1	Priority 1		
Brevoortia tyrannus Atlantic Menhaden	NA	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Clupea harengus Atlantic Herring	NA	Priority 3		
Cypriniformes (carps, minnows, loaches and allies; N = 8)				
Catostomus catostomus Longnose Sucker	Priority 3	Priority 3		
Catostomus commersoni White Sucker	NA	Priority 3		
Erimyzon oblongus Creek Chubsucker	Priority 3	Priority 2	Special Concern	
Hybognathus regius Eastern Silvery Minnow	Priority 3	Priority 3		
Margariscus margarita Pearl Dace	Priority 3	Priority 3		
Notropis bifrenatus Bridle Shiner	Priority 2	Priority 2	Special Concern	
Notropis heterolepis Blacknose Shiner	Priority 3	Priority 3		
Rhinichthys cataractae Longnose Dace	Priority 3	Priority 3	Special Concern	
Esociformes (pikes and mudminnows; N = 1)				
Esox americanus americanus Redfin Pickerel	Priority 2	Priority 2	Endangered	
Gadiformes (cods, haddocks, grenadiers; N = 5)				
Gadus morhua Atlantic Cod	Priority 1	Priority 2		
Melanogrammus aeglefinus Haddock	Priority 1	Priority 3		
Microgadus tomcod Atlantic Tomcod	NA	Priority 3		
Brosme brosme Cusk	Priority 2	Priority 2		
Urophycis tenuis White Hake	NA	Priority 3		
Gasterosteiformes (sticklebacks; N = 1)				
Culaea inconstans Brook Stickleback	Priority 3	Priority 3		
Osmeriformes (smelts and allies; N = 1)				

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Osmerus mordax Rainbow Smelt	Priority 1	Priority 1		
Perciformes (perch-like fishes; N = 10)				
Ammodytes americanus American Sand Lance	Priority 3	Priority 3		
Anarhichas lupus Atlantic Wolffish	Priority 2	Priority 2		
Anarhichas minor Spotted Wolffish	Priority 3	Priority 2		
Tautoga onitis Tautog	NA	Priority 3		
Morone americana White Perch	NA	Priority 3		
Morone saxatilis Striped Bass	Priority 2	Priority 2		
Etheostoma fusiforme Swamp Darter	Priority 2	Priority 1	Threatened	
Pomatomus saltatrix Bluefish	NA	Priority 3		
Scomber scombrus Atlantic Mackerel	NA	Priority 3		
Thunnus thynnus Atlantic Bluefin Tuna	Priority 2	Priority 3		
Pleuronectiformes (flatfish; N = 1)				
Pseudopleuronectes americanus Winter Flounder	Priority 2	Priority 2		
Salmoniformes (salmon, trout, and whitefish; N = 7)				
Coregonus clupeaformis Lake Whitefish	Priority 2	Priority 1	Special Concern	
Prosopium cylindraceum Round Whitefish	Priority 2	Priority 1		
Salmo salar Atlantic Salmon	Priority 1	Priority 1		Endangered
Salmo salar sebago Landlocked Atlantic Salmon	NA	Priority 2		
Salvelinus alpinus oquassa Arctic Charr	Priority 1	Priority 1		
Salvelinus fontinalis Brook Trout	Priority 3	Priority 2		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Salvelinus namaycush Lake Trout	Priority 3	Priority 3		
Amphibia (amphibians; N = 4)				
Anura (frogs and toads; N = 2)				
Lithobates pipiens Northern Leopard Frog	Priority 2	Priority 2	Special Concern	
Lithobates septentrionalis Mink Frog	Priority 3	Priority 3		
Caudata (salamanders; N = 2)				
Ambystoma laterale Blue-spotted Salamander	Priority 2	Priority 3		
Gyrinophilus porphyriticus porphyriticus Northern Spring Salamander	Priority 2	Priority 2	Special Concern	
Asteroidea (sea stars; N = 5)				
Forcipulatida (sea stars; N = 3)				
Asterias forbesi Forbes's Starfish	Priority 2	Priority 2		
Asterias rubens Common Sea Star	Priority 2	Priority 2		
Stephanasterias albula White Sea Star	Priority 2	Priority 2		
Valvatida (sunstars; N = 2)				
Crossaster papposus Common Sun Star	Priority 2	Priority 2		
Solaster endeca Purple Sunstar	Priority 2	Priority 2		
Aves (birds; N = 145)				
Accipitriformes (hawks, kites, eagles, and allies; N = 3)				
Accipiter atricapillus American Goshawk	NA	Priority 3		
Aquila chrysaetos Golden Eagle	Priority 2	Priority 1	Endangered	
Circus cyaneus Northern Harrier	Priority 3	Priority 3	Special Concern	
Anseriformes (waterfowl; N = 8)				
Anas rubripes American Black Duck	NA	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Aythya marila Greater Scaup	Priority 2	Priority 2	Special Concern	
Bucephala islandica Barrow's Goldeneye	Priority 1	Priority 1	Threatened	
Histrionicus histrionicus Harlequin Duck	Priority 1	Priority 1	Threatened	
Melanitta americana Black Scoter	NA	Priority 3		
Melanitta deglandi White-winged Scoter		Priority 3		
Melanitta perspicillata Surf Scoter	NA	Priority 3		
Somateria mollissima Common Eider	Priority 3	Priority 1		
Apodiformes (swifts and hummingbirds; N = 1)				
Chaetura pelagica Chimney Swift	Priority 2	Priority 2	Special Concern	
Caprimulgiformes (nightjars; N = 2)				
Antrostomus vociferus Eastern Whip-poor-will	Priority 2	Priority 2	Special Concern	
Chordeiles minor Common Nighthawk	Priority 3	Priority 2	Special Concern	
Charadriiformes (plovers, sandpipers, and allies; N = 33)				
Alca torda Razorbill	Priority 2	Priority 2	Threatened	
Cepphus grylle Black Guillemot	NA	Priority 3		
Fratercula arctica Atlantic Puffin	Priority 2	Priority 2	Threatened	
Uria aalge Common Murre	Priority 3	Priority 3	Special Concern	
Charadrius melodus Piping Plover	Priority 1	Priority 1	Endangered	Threatened
Pluvialis squatarola Black-bellied Plover	Priority 3	Priority 3		
Haematopus palliatus American Oystercatcher	Priority 3	Priority 3	Special Concern	
Chlidonias niger Black Tern	Priority 2	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Chroicocephalus philadelphia Bonaparte's Gull	Priority 3	Priority 3	Special Concern	
Larus marinus Great Black-backed Gull	NA	Priority 3		
Leucophaeus atricilla Laughing Gull	Priority 3	Priority 3	Special Concern	
Sterna dougallii Roseate Tern	Priority 1	Priority 1	Endangered	Endangered
Sterna hirundo Common Tern	Priority 2	Priority 3		
Sterna paradisaea Arctic Tern	Priority 1	Priority 1	Threatened	
Sternula antillarum Least Tern	Priority 1	Priority 1	Endangered	
Arenaria interpres Ruddy Turnstone	Priority 2	Priority 2		
Bartramia longicauda Upland Sandpiper	Priority 1	Priority 1	Threatened	
Calidris alba Sanderling	Priority 2	Priority 2		
Calidris alpina Dunlin	Priority 3	Priority 3		
Calidris canutus rufa Red Knot	Priority 1	Priority 1	Special concern	Threatened
Calidris maritima Purple Sandpiper	Priority 1	Priority 1		
Calidris minutilla Least Sandpiper	Priority 3	Priority 3		
Calidris pusilla Semipalmated Sandpiper	Priority 2	Priority 2	Special Concern	
Gallinago delicata Wilson's Snipe		Priority 3		
Limnodromus griseus Short-billed Dowitcher	Priority 3	Priority 2		
Numenius phaeopus Whimbrel	Priority 2	Priority 2	Special Concern	
Phalaropus fulicarius Red Phalarope	Priority 3	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Phalaropus lobatus Red-necked Phalarope	Priority 2	Priority 2	Special Concern	
Scolopax minor American Woodcock	Priority 3	Priority 2		
Tringa flavipes Lesser Yellowlegs	Priority 1	Priority 1		
Tringa melanoleuca Greater Yellowlegs	Priority 3	Priority 3		
Tringa semipalmata Willet	Priority 3	Priority 2		
Tringa solitaria Solitary Sandpiper	Priority 2	Priority 3		
Coraciiformes (kingfishers and allies; N = 1)				
Megaceryle alcyon Belted Kingfisher	Priority 3	Priority 3		
Cuculiformes (cuckoos; N = 2)				
Coccyzus americanus Yellow-billed Cuckoo	Priority 2	Priority 3		
Coccyzus erythropthalmus Black-billed Cuckoo	Priority 3	Priority 3		
Falconiformes (caracaras and falcons; N = 2)				
Falco peregrinus Peregrine Falcon	Priority 1	Priority 1	Endangered	
Falco sparverius American Kestrel	Priority 3	Priority 2	Special Concern	
Galliformes (grouse, quail, and allies; N = 2)				
Bonasa umbellus Ruffed Grouse	NA	Priority 3		
Canachites canadensis Spruce Grouse	Priority 3	Priority 3		
Gaviiformes (loons; N = 2)				
Gavia immer Common Loon	Priority 3	Priority 3		
Gavia stellata Red-throated Loon	Priority 3	Priority 3		
Gruiformes (cranes and rails; N = 3)				
Fulica americana American Coot	Priority 3	Priority 3	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Gallinula galeata Common Gallinule	Priority 2	Priority 2	Threatened	
Porzana carolina Sora	Priority 3	Priority 3		
Passeriformes (perching birds; N = 63)				
Eremophila alpestris Horned Lark	Priority 3	Priority 2	Special Concern	
Pheucticus ludovicianus Rose-breasted Grosbeak	Priority 3	Priority 3		
Piranga olivacea Scarlet Tanager	Priority 3	Priority 3		
Perisoreus canadensis Canada Jay	Priority 3	Priority 3		
Coccothraustes vespertinus Evening Grosbeak	Priority 2	Priority 1	Special Concern	
Haemorhous purpureus Purple Finch	Priority 3	Priority 3		
Loxia curvirostra Red Crossbill	Priority 3	Priority 3		
Loxia leucoptera White-winged Crossbill	Priority 3	Priority 3		
Pinicola enucleator Pine Grosbeak	Priority 3	Priority 2		
Spinus pinus Pine Siskin	NA	Priority 3		
Hirundo rustica Barn Swallow	Priority 2	Priority 2	Special Concern	
Petrochelidon pyrrhonota Cliff Swallow	Priority 3	Priority 1	Threatened	
Progne subis Purple Martin	Priority 2	Priority 1	Special Concern	
Riparia riparia Bank Swallow	Priority 1	Priority 1	Threatened	
Stelgidopteryx serripennis Northern Rough-winged Swallow	Priority 3	Priority 3	Special Concern	
Tachycineta bicolor Tree Swallow	Priority 2	Priority 2	Special Concern	
Dolichonyx oryzivorus Bobolink	Priority 3	Priority 2	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Euphagus carolinus Rusty Blackbird	Priority 1	Priority 2	Special Concern	
Icterus galbula Baltimore Oriole	Priority 3	Priority 2		
Icterus spurius Orchard Oriole		Priority 3		
Molothrus ater Brown-headed Cowbird		Priority 3		
Quiscalus quiscula Common Grackle	NA	Priority 3		
Sturnella magna Eastern Meadowlark	Priority 2	Priority 1	Special Concern	
Mimus polyglottos Northern Mockingbird		Priority 3		
Toxostoma rufum Brown Thrasher	Priority 2	Priority 2	Special Concern	
Anthus rubescens American Pipit	Priority 2	Priority 2	Endangered	
Poecile hudsonicus Boreal Chickadee	Priority 2	Priority 2		
Cardellina canadensis Canada Warbler	Priority 2	Priority 2	Special Concern	
Cardellina pusilla Wilson's Warbler	NA	Priority 2		
Geothlypis philadelphia Mourning Warbler	Priority 3	Priority 2		
Leiothlypis peregrina Tennessee Warbler	Priority 2	Priority 1	Special Concern	
Leiothlypis ruficapilla Nashville Warbler	NA	Priority 3		
Mniotilta varia Black-and-white Warbler	Priority 2	Priority 3		
Parkesia motacilla Louisiana Waterthrush	Priority 3	Priority 3		
Setophaga caerulescens Black-throated Blue Warbler	Priority 3	Priority 3		
Setophaga castanea Bay-breasted Warbler	Priority 3	Priority 2	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Setophaga fusca Blackburnian Warbler		Priority 3		
Setophaga pensylvanica Chestnut-sided Warbler	Priority 2	Priority 3		
Setophaga ruticilla American Redstart		Priority 3		
Setophaga striata Blackpoll Warbler	Priority 3	Priority 1	Threatened	
Setophaga tigrina Cape May Warbler	Priority 3	Priority 2	Special Concern	
Vermivora cyanoptera Blue-winged Warbler	Priority 2	Priority 3		
Ammodramus savannarum Grasshopper Sparrow	Priority 1	Priority 1	Endangered	
Ammospiza caudacuta Saltmarsh Sparrow	Priority 1	Priority 1	Endangered	
Ammospiza nelsoni Nelson's Sparrow	Priority 2	Priority 2	Special Concern	
Melospiza lincolnii Lincoln's Sparrow	Priority 3	Priority 2		
Passerella iliaca Fox Sparrow	Priority 3	Priority 2	Special Concern	
Pipilo erythrophthalmus Eastern Towhee	Priority 2	Priority 3	Special Concern	
Pooecetes gramineus Vesper Sparrow	NA	Priority 2	Special Concern	
Spizella pallida Clay-colored Sparrow		Priority 3		
Spizella pusilla Field Sparrow	Priority 3	Priority 2	Special Concern	
Corthylio calendula Ruby-crowned Kinglet	Priority 2	Priority 2		
Cistothorus stellaris Sedge Wren	Priority 1	Priority 1	Endangered	
Catharus bicknelli Bicknell's Thrush	Priority 1	Priority 1	Threatened	
Catharus fuscescens Veery	Priority 2	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Catharus ustulatus Swainson's Thrush	Priority 3	Priority 3		
Hylocichla mustelina Wood Thrush	Priority 1	Priority 1		
Contopus cooperi Olive-sided Flycatcher	Priority 2	Priority 2	Special Concern	
Contopus virens Eastern Wood-Pewee	Priority 2	Priority 2	Special Concern	
Empidonax flaviventris Yellow-bellied Flycatcher	Priority 3	Priority 2		
Empidonax minimus Least Flycatcher	Priority 3	Priority 3		
Empidonax traillii Willow Flycatcher	NA	Priority 3		
Tyrannus tyrannus Eastern Kingbird	Priority 2	Priority 3	Special Concern	
Pelecaniformes (pelecans, herons, ibises, and allies; N = 7)				
Ardea herodias Great Blue Heron	Priority 2	Priority 2	Special Concern	
Botaurus lentiginosus American Bittern	Priority 3	Priority 3		
Butorides virescens Green Heron	NA	Priority 3		
Egretta caerulea Little Blue Heron	Priority 3	Priority 3		
Egretta thula Snowy Egret	Priority 3	Priority 3		
Ixobrychus exilis Least Bittern	Priority 1	Priority 1	Endangered	
Nycticorax nycticorax Black-crowned Night-heron	Priority 2	Priority 2	Endangered	
Piciformes (woodpeckers: N = 2)				
Picoides arcticus Black-backed Woodpecker	Priority 3	Priority 2		
Picoides dorsalis American Three-toed Woodpecker	Priority 3	Priority 1	Special Concern	
Podicipediformes (grebes; N = 2)				
Podiceps auritus Horned Grebe	Priority 3	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Podilymbus podiceps Pied-billed Grebe	Priority 3	Priority 3		
Procellariiformes (tubenoses; N = 5)				
Hydrobates leucorhoa Leach's Storm-petrel	Priority 3	Priority 2	Special Concern	
Ardenna gravis Great Shearwater	Priority 3	Priority 3		
Ardenna grisea Sooty Shearwater	NA	Priority 3		
Fulmarus glacialis Northern Fulmar	NA	Priority 3		
Puffinus puffinus Manx Shearwater	NA	Priority 3		
Strigiformes (owls; N = 4)				
Asio flammeus Short-eared Owl	Priority 2	Priority 1	Threatened	
Asio otus Long-eared Owl	Priority 3	Priority 3		
Megascops asio Eastern Screech-Owl	Priority 3	Priority 3		
Tyto furcata American Barn Owl		Priority 3		
Suliformes (frigatebirds, boobies, cormorants, darters, and allies; N = 3)				
Nannopterum auritum Double-crested Cormorant		Priority 3		
Phalacrocorax carbo Great Cormorant	Priority 1	Priority 1	Threatened	
Morus bassanus Northern Gannet	NA	Priority 3		
Bivalvia (marine and freshwater molluscs; N = 13)				
Myida (saltwater clams; N = 3)				
Mya arenaria Softshell Clam	Priority 3	Priority 3		
Mya truncata Gaper Clam	Priority 3	Priority 2		
Zirfaea crispata Atlantic Great Piddock	Priority 2	Priority 2		
Mytiloida (mussels; N = 1)				

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Mytilus edulis Blue Mussel	Priority 3	Priority 3		
Ostreoida (oysters, scallops, and allies; N = 1)				
Crassostrea virginica Eastern oyster	Priority 3	Priority 2		
Pectinida (saltwater clams; N = 2)				
Chlamys islandica Icelandic Scallop	Priority 3	Priority 3		
Placopecten magellanicus Atlantic Sea Scallop	Priority 3	Priority 2		
Unionoida (freshwater mussels; N = 5)				
Margaritifera margaritifera Eastern Pearlshell	Priority 3	Priority 3		
Alasmidonta undulata Triangle Floater	Priority 3	Priority 3		
Alasmidonta varicosa Brook Floater	Priority 1	Priority 1	Threatened	
Atlanticoncha ochracea Tidewater Mucket	Priority 1	Priority 1	Threatened	
Lampsilis cariosa Yellow Lampmussel	Priority 1	Priority 1	Threatened	
Venerida (veneroids; N = 1)				
Mercenaria mercenaria Quahog, hard clam	Priority 3	Priority 3		
Cephalaspidomorphi (lampreys; N = 2)				
Petromyzontiformes (lampreys; N = 2)				
Lethenteron appendix American Brook Lamprey	Priority 3	Priority 3		
Petromyzon marinus Sea Lamprey	NA	Priority 3		
Chondrichthyes (sharks, rays, and skates; N = 10)				
Lamniformes (mackerel sharks; N = 6)				
Alopias vulpinus Common Thresher Shark	Priority 3	Priority 3		
Cetorhinus maximus Basking Shark	NA	Priority 2		
Carcharodon carcharias White Shark	NA	Priority 2		

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Isurus oxyrinchus Shortfin Mako	Priority 2	Priority 2		
Lamna nasus Porbeagle	Priority 2	Priority 2		
Carcharias taurus Sand Tiger Shark	NA	Priority 3		
Rajiformes (skates; N = 4)				
Amblyraja radiata Thorny Skate	Priority 2	Priority 2		
Dipturus laevis Barndoor Skate	Priority 2	Priority 3		
Leucoraja ocellata Winter Skate	Priority 2	Priority 1		
Malacoraja senta Smooth Skate	Priority 2	Priority 2		
Echinoidea (sea urchins; N = 1)				
Camarodonta (sea urchins; N = 1)				
Strongylocentrotus droebachiensis Green Sea Urchin	Priority 2	Priority 2		
Eudicots (Eudicots; N = 162)				
Apiales (Carrot; N = 3)				
Cryptotaenia canadensis Honewort	NA	Priority 3		
Lilaeopsis chinensis Lilaeopsis	NA	Priority 2	Special Concern	
Panax quinquefolius American Ginseng	NA	Priority 1	Endangered	
Aquifoliales (Holly; N = 2)				
Ilex glabra Ink-berry	NA	Priority 1	Endangered	
Ilex laevigata Smooth Winterberry Holly	NA	Priority 3	Special Concern	
Asterales (Aster; N = 26)				
Arnica lanceolata Hairy Arnica	NA	Priority 1	Threatened	
Artemisia campestris ssp. canadensis Northern Wormwood		Priority 1		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Artemisia campestris ssp. caudata Beach Wormwood	NA	Priority 3	Special Concern	
Bidens eatonii Eaton's Bur-marigold	NA	Priority 2	Special Concern	
Bidens hyperborea Estuary Bur-marigold	NA	Priority 3	Special Concern	
Erigeron hyssopifolius Hyssop-leaved Fleabane	NA	Priority 2	Special Concern	
Eupatorium pubescens Hairy Boneset	NA	Priority 2	Endangered	
Eupatorium sessilifolium Upland Boneset	NA	Priority 2	Endangered	
Euthamia caroliniana Narrow-leaved Goldenrod	NA	Priority 2	Threatened	
Eutrochium fistulosum Hollow Joe-pye Weed	NA	Priority 3	Special Concern	
Hieracium robinsonii Robinson's Hawkweed	NA	Priority 1	Endangered	
Hieracium venosum var. nudicaule Rattlesnake Hawkweed	NA	Priority 1	Endangered	
Iva frutescens ssp. oraria Marsh-elder	NA	Priority 2	Endangered	
Krigia virginica Dwarf Dandelion	NA	Priority 2	Endangered	
Liatris novae-angliae Northern Blazing Star	NA	Priority 1	Threatened	
Nabalus boottii Boott's Rattlesnake Root	NA	Priority 1	Endangered	
Nabalus racemosus Glaucous Rattlesnake-root	NA	Priority 3	Special Concern	
Omalotheca supina Alpine Cudweed	NA	Priority 1	Endangered	
Pluchea odorata var. succulenta Camphorweed	NA	Priority 3		
Sericocarpus asteroides White-topped Aster	NA	Priority 2	Endangered	
Solidago leiocarpa Cutler's Goldenrod	NA	Priority 1	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Solidago speciosa Showy Goldenrod	NA	Priority 1	Threatened	
Symphyotrichum anticostense Anticosti Aster	NA	Priority 1	Endangered	
Symphyotrichum patens var. patens Late Purple Aster		Priority 3		
Symphyotrichum subulatum Small Salt-marsh Aster	NA	Priority 2	Endangered	
Tanacetum bipinnatum ssp. huronense Huron Tansy	NA	Priority 2	Special Concern	
Boraginales (Borage; N = 2)				
Cynoglossum virginianum var. boreale Northern Wild Comfrey	NA	Priority 1	Endangered	
Hackelia deflexa var. americana Northern Stickseed	NA	Priority 1	Endangered	
Brassicales (Mustard; N = 9)				
Boechera laevigata Smooth Rockcress	NA	Priority 1	Endangered	
Boechera missouriensis Missouri Rockcress	NA	Priority 1	Threatened	
Cardamine bulbosa Bulbous Bitter-cress	NA	Priority 3	Special Concern	
Cardamine concatenata Cut-leaved Toothwort	NA	Priority 2	Endangered	
Cardamine longii Long's Bitter-cress	NA	Priority 1	Threatened	
Cardamine maxima Large Toothwort	NA	Priority 3	Special Concern	
Draba arabisans Rock Whitlow-grass	NA	Priority 1	Threatened	
Draba cana Lance-leaved Draba	NA	Priority 1	Endangered	
Draba glabella Smooth draba	NA	Priority 1	Endangered	
Caryophyllales (Carnation; N = 13)				
Chenopodium foggii Fogg's Goosefoot	NA	Priority 1	Endangered	
Salicornia bigelovii Dwarf Glasswort	NA	Priority 2	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Suaeda calceoliformis American Sea-blite	NA	Priority 2	Threatened	
Minuartia glabra Smooth Sandwort	NA	Priority 3	Special Concern	
Minuartia groenlandica Mountain Sandwort	NA	Priority 3	Special Concern	
Minuartia michauxii Michaux's Sandwort	NA	Priority 2	Endangered	
Minuartia rubella Arctic Sandwort	NA	Priority 1	Endangered	
Paronychia argyrocoma Silverling	NA	Priority 1	Threatened	
Drosera anglica English Sundew	NA	Priority 1	Endangered	
Drosera linearis Slender-leaved Sundew	NA	Priority 1	Endangered	
Montia fontana Blinks	NA	Priority 2	Special Concern	
Bistorta vivipara Alpine Bistort	NA	Priority 1	Endangered	
Polygonum douglsii Douglas' Knotweed	NA	Priority 2	Special Concern	
Cornales (Dogwood; N = 1)				
Benthamidia florida Flowering Dogwood	NA	Priority 1	Endangered	
Dioscoreales (Yam; N = 1)				
Aletris farinosa Unicorn Root	NA	Priority 2	Endangered	
Dipsacales (Teasel; N = 4)				
Lonicera dioica Mountain Honeysuckle	NA	Priority 2	Endangered	
Lonicera oblongifolia Swamp Honeysuckle	NA	Priority 3	Special Concern	
Triosteum aurantiacum Wild Coffee	NA	Priority 2	Endangered	
Valeriana uliginosa Marsh Valerian	NA	Priority 2	Special Concern	
Ericales (Blueberry; N = 19)				

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Impatiens pallida Pale Jewel-weed	NA	Priority 2	Special Concern	
Clethra alnifolia Sweet Pepper-bush	NA	Priority 3	Special Concern	
Diapensia lapponica Lapland Diapensia	NA	Priority 2	Special Concern	
Arctous alpina Alpine Bearberry	NA	Priority 1	Threatened	
Chimaphila maculata Spotted Wintergreen	NA	Priority 2	Threatened	
Harrimanella hypnoides Moss Bell-heather	NA	Priority 1	Threatened	
Kalmia latifolia Mountain-laurel	NA	Priority 2	Special Concern	
Kalmia procumbens Alpine Azalea	NA	Priority 1	Threatened	
Phyllodoce caerulea Mountain Heath	NA	Priority 1	Threatened	
Pyrola minor Lesser Wintergreen	NA	Priority 2	Special Concern	
Rhododendron lapponicum Lapland Rosebay	NA	Priority 1	Threatened	
Rhododendron maximum Great Rhododendron	NA	Priority 1	Threatened	
Rhododendron viscosum Clammy Azalea	NA	Priority 1	Endangered	
Vaccinium boreale Alpine Blueberry	NA	Priority 2	Special Concern	
Polemonium vanbruntiae Jacobs Ladder	NA	Priority 1	Endangered	
Hottonia inflata Featherfoil	NA	Priority 1	Threatened	
Primula laurentiana Bird's-eye Primrose	NA	Priority 2	Special Concern	
Primula mistassinica Mistassini Primrose	NA	Priority 3	Special Concern	
Samolus valerandi ssp. parviflorus Water Pimpernel	NA	Priority 3	Special Concern	
Fabales (Pea; N = 7)				

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Astragalus alpinus var. brunetianus Alpine Milk-vetch	NA	Priority 2	Special Concern	
Astragalus robbinsii var. minor Robbins' Milk-vetch	NA	Priority 1	Endangered	
Baptisia tinctoria Wild Indigo	NA	Priority 3		
Hedysarum alpinum var. americanum Alpine Sweet-broom	NA	Priority 3	Special Concern	
Lespedeza hirta ssp. hirta Hairy Bush-clover	NA	Priority 2	Endangered	
Oxytropis campestris var. johannensis St John Oxytrope	NA	Priority 1	Threatened	
Polygala senega Seneca Snakeroot	NA	Priority 1	Endangered	
Fagales (Beech; N = 8)				
Betula glandulosa Tundra Dwarf Birch	NA	Priority 1	Endangered	
Betula minor Dwarf White Birch	NA	Priority 1	Endangered	
Betula pumila Swamp Birch	NA	Priority 2	Special Concern	
Castanea dentata American Chestnut	NA	Priority 2	Special concern	
Quercus bicolor Swamp White Oak	NA	Priority 2	Threatened	
Quercus coccinea Scarlet Oak	NA	Priority 2	Endangered	
Quercus montana Chestnut Oak	NA	Priority 2	Threatened	
Carya cordiformis Bitternut Hickory	NA	Priority 2	Endangered	
Gentianales (Gentian; N = 7)				
Bartonia paniculata ssp. iodandra Screwstem	NA	Priority 1	Threatened	
Gentiana rubricaulis Red-stemmed Gentian	NA	Priority 1	Threatened	
Gentianella amarella ssp. acuta Northern Gentian	NA	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Lomatogonium rotatum Marsh Felwort	NA	Priority 1	Threatened	
Galium kamtschaticum Boreal Bedstraw	NA	Priority 2	Special Concern	
Galium labradoricum Bog Bedstraw	NA	Priority 2	Special Concern	
Houstonia longifolia var. longifolia Long-leaved Bluet	NA	Priority 2	Special Concern	
Lamiales (Mint; N = 16)				
Pinguicula vulgaris Common Butterwort	NA	Priority 1	Endangered	
Lindernia dubia var. anagallidea Slender False Pimpernel	NA	Priority 3	Special Concern	
Fraxinus americana White Ash	NA	Priority 3		
Fraxinus nigra Black Ash	NA	Priority 3		
Fraxinus pennsylvanica Green Ash	NA	Priority 3		
Agalinis maritima Saltmarsh Agalinis	NA	Priority 3	Special Concern	
Agalinis neoscotica Nova Scotia Agalinis	NA	Priority 1	Threatened	
Agalinis purpurea Purple Agalinis	NA	Priority 2	Endangered	
Aureolaria pedicularia Fern-leaved False Foxglove	NA	Priority 3	Special Concern	
Castilleja septentrionalis Northern Painted Cup	NA	Priority 2	Special Concern	
Euphrasia oakesii Oakes' Eyebright	NA	Priority 1	Endangered	
Pedicularis furbishiae Furbish's Lousewort	NA	Priority 1		Threatened
Callitriche terrestris Terrestrial Water-starwort	NA	Priority 3	Special Concern	
Veronica wormskjoldii Alpine Speedwell	NA	Priority 1	Endangered	
Limosella australis Mudwort	NA	Priority 3	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Verbena urticifolia White Vervain	NA	Priority 3	Special Concern	
Laurales (Laurel; N = 2)				
Lindera benzoin Spicebush	NA	Priority 3	Special Concern	
Sassafras albidum Sassafras	NA	Priority 3	Special Concern	
Malphigiales (Cassava; N = 10)				
Hypericum ascyron Great St John's-wort	NA	Priority 1	Endangered	
Salix arctophila Arctic Willow	NA	Priority 1	Endangered	
Salix candida Hoary Willow	NA	Priority 2	Endangered	
Salix exigua ssp. interior Sandbar Willow	NA	Priority 2	Endangered	
Salix herbacea Dwarf Willow	NA	Priority 1	Threatened	
Salix myricoides Blue-leaf Willow	NA	Priority 2	Threatened	
Salix occidentalis Dwarf Prairie Willow	NA	Priority 3	Special Concern	
Salix planifolia Tea-leaved Willow	NA	Priority 1	Threatened	
Salix uva-ursi Bearberry Willow	NA	Priority 1	Threatened	
Viola novae-angliae New England Violet	NA	Priority 2	Special Concern	
Myrtales (Myrtle; N = 2)				
Epilobium anagallidifolium Alpine Willow-herb	NA	Priority 1	Endangered	
Epilobium hornemannii Hornemann's Willow-herb	NA	Priority 1	Threatened	
Nymphaeales (Water-lily; N = 2)				
Nuphar advena Yellow Pond-lily	NA	Priority 2	Special Concern	
Nymphaea leibergii Pygmy Water-lily	NA	Priority 1	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Piperales (Birthwort: N = 1)				
Asarum canadense Wild Ginger	NA	Priority 2	Threatened	
Ranunculales (Buttercup; N = 10)				
Adlumia fungosa Allegheny Vine	NA	Priority 1	Endangered	
Dicentra canadensis Squirrel-corn	NA	Priority 2	Endangered	
Anemone acutiloba Sharp-lobed hepatica		Priority 2		
Anemone multifida Cut-leaved Anemone	NA	Priority 1	Threatened	
Clematis occidentalis ssp. occidentalis Purple Clematis	NA	Priority 3	Special Concern	
Coptidium lapponicum Lapland Buttercup	NA	Priority 1	Threatened	
Ranunculus fascicularis Early Crowfoot	NA	Priority 1	Threatened	
Ranunculus gmelinii var. purshii Lesser Yellow Water Crowfoot	NA	Priority 2	Special Concern	
Thalictrum thalictroides Rue-anemone	NA	Priority 2	Endangered	
Thalictrum venulosum var. confine Boundary Meadow-rue	NA	Priority 1	Endangered	
Rosales (Rose; N = 8)				
Shepherdia canadensis Canada Buffaloberry	NA	Priority 2	Endangered	
Ceanothus americanus New Jersey Tea	NA	Priority 2	Threatened	
Amelanchier gaspensis Gaspé Shadbush	NA	Priority 2	Special Concern	
Amelanchier nantucketensis Nantucket Shadbush	NA	Priority 2	Threatened	
Geum fragarioides Barren-strawberry	NA	Priority 1	Endangered	
Prunus maritima Beach Plum	NA	Priority 1	Endangered	
Sanguisorba canadensis Canada Burnet	NA	Priority 2	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Ulmus americana American Elm	NA	Priority 2		
Santalales (Sandalwood; N = 1)				
Geocaulon lividum Northern Comandra	NA	Priority 3	Special Concern	
Saxifragales (Saxifrage; N =)				
Crassula aquatica Pygmyweed	NA	Priority 2	Special Concern	
Proserpinaca pectinata Comb-leaved Mermaid-weed	NA	Priority 2	Endangered	
Micranthes foliolosa Star Saxifrage	NA	Priority 1	Endangered	
Saxifraga cespitosa Tufted Saxifrage	NA	Priority 2	Endangered	
Saxifraga paniculata ssp. neogaea Livelong Saxifrage	NA	Priority 1	Endangered	
Solanales (Nightshade; N = 2)				
Calystegia spithamaea Upright Bindweed	NA	Priority 1	Threatened	
Cuscuta acadiana Acadian dodder		Priority 3		
Vitales (Grape; N = 1)				
Vitis aestivalis var. bicolor Summer Grape	NA	Priority 2	Threatened	
Gastropoda (aquatic and terrestrial snails; N = 16)				
Basommatophora (air-breathing freshwater snails; N = 2)				
Ladislavella mighelsi Bigmouth Pondsnail	Priority 1	Priority 1		
Ladislavella oronoensis Obese Pondsnail	Priority 3	Priority 3		
Littorinimorpha (primarily sea snails; N = 3)				
Arrhoges occidentalis American Pelican Foot	Priority 2	Priority 2		
Floridobia winkleyi New England Siltsnail	Priority 3	Priority 3		
Limneria undata Wavy Lamellaria	Priority 3	Priority 3		
Neograstropoda (mostly sea snails; N = 4)				

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Colus pygmaeus pygmy whelk	Priority 2	Priority 2		
Boreotrophon clathratus Clathrate Trophon	Priority 2	Priority 2		
Boreotrophon truncatus Murex	Priority 2	Priority 2		
Ptychatractus ligatus Spindle Shell	Priority 2	Priority 2		
Stylommatophora (air-breathing snails land snails; N = 6)				
Appalachina sayana Spike-lip Crater	Priority 3	Priority 3		
Neohelix dentifera Big-tooth Whitelip	Priority 3	Priority 3		
Vertigo malleata Malleated Vertigo	Priority 3	Priority 3	Special Concern	
Vertigo morsei Six-whorl Vertigo	Priority 1	Priority 1	Endangered	
Vertigo perryi Olive Vertigo	NA	Priority 3		
Paravitrea lamellidens Lamellate Supercoil	NA	Priority 3		
Thecosomata (sea butterflies; N = 1)				
Limacina helicina Limancina Snail	Priority 3	Priority 3		
Holothuroidea (sea cucumbers; N = 4)				
Dendrochirotida (sea cucumbers; N = 4)				
Cucumaria frondosa Orange-footed Sea Cucumber	Priority 2	Priority 2		
Thyonidium drummondii Sea Cucumber	Priority 2	Priority 2		
Psolus fabricii Psolus	Priority 2	Priority 2		
Psolus phantapus Psolus	Priority 2	Priority 2		
Insecta (insects; N = 139)				
Coleoptera (beetles; N = 4)				
Cicindela ancocisconensis Appalachian Tiger Beetle	Priority 2	Priority 2	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Cicindela marginipennis Cobblestone Tiger Beetle	Priority 1	Priority 1	Endangered	
Ellipsoptera marginata Margined Tiger Beetle	Priority 2	Priority 1	Threatened	
Nebria nivalis gaspesiana Gaspé Gazelle Beetle	Priority 3	Priority 3		
Diptera (Flies; N = 8)				
Chrysogaster inflatifrons Long-haired Wrinklehead	NA	Priority 2		
Eristalis brousii Hourglass Drone Fly	NA	Priority 3	Special Concern	
Leucozona xylotoides Eastern Hoary	NA	Priority 3		
Parasyrphus tarsatus Holarctic Bristleside	NA	Priority 2	Special Concern	
Platycheirus modestus Yellow Sedgesitter	NA	Priority 3		
Sericomyia slossonae Slosson's Pond Fly	NA	Priority 2	Special Concern	
Volucella evecta Eastern Swiftwing		Priority 3		
Volucella facialis Yellow-faced Swiftwing		Priority 3		
Ephemeroptera (mayflies; N = 18)				
Ameletus browni Brown's Comb Minnow Mayfly	Priority 3	Priority 2	Special Concern	
Baetisca berneri A Small Minnow Mayfly	Priority 3	Priority 3		
Baetisca carolina Carolina Armored Mayfly	Priority 3	Priority 3		
Baetisca lacustris Great Lakes Armored Mayfly	Priority 3	Priority 3		
Baetisca rubescens Provancher's Armored Mayfly	Priority 3	Priority 2		
Hexagenia rigida Straight Hex Burrowing Mayfly	Priority 3	Priority 3		
Epeorus frisoni Roaring Brook Mayfly	Priority 1	Priority 1	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Nixe horrida Rough Flat-headed Mayfly	Priority 3	Priority 3		
Nixe rusticalis Rusty Flat-headed Mayfly	NA	Priority 3		
Rhithrogena brunneotincta Brown Flat-headed Mayfly	NA	Priority 3		
Rhithrogena jejuna Eaton (s.s.) A Flat-headed Mayfly	Priority 3	Priority 3		
Metretopus borealis Boreal Cleft-footed Minnow Mayfly	Priority 3	Priority 3		
Parameletus midas Midas Primitive Minnow Mayfly	Priority 3	Priority 3		
Siphlonisca aerodromia Tomah Mayfly	Priority 1	Priority 1	Threatened	
Siphlonurus barbaroides Wild Primitive Minnow Mayfly	Priority 3	Priority 3		
Siphlonurus barbarus Barbarous Primitive Minnow Mayfly	Priority 2	Priority 3		
Siphlonurus demarayi Demaray's Primitive Minnow Mayfly	Priority 2	Priority 2		
Siphlonurus securifer Hatchet Primitive Minnow Mayfly	NA	Priority 3		
Hymenoptera (ants, bees, wasps and sawflies; N = 9)				
Bombus affinis Rusty-patched Bumble Bee	Priority 1	Priority 1	Special concern	Endangered
Bombus ashtoni Ashton's Cuckoo Bumble Bee	Priority 2	Priority 1	Endangered	
Bombus citrinus Lemon Cuckoo Bumble Bee	Priority 3	Priority 2	Special Concern	
Bombus fervidus Yellow Bumble Bee	Priority 3	Priority 2	Special Concern	
Bombus flavidus appalachiensis Appalachian Cuckoo Bumble Bee	Priority 3	Priority 3		
Bombus insularis Indiscriminate Cuckoo Bumble Bee	Priority 2	Priority 2	Special Concern	
Bombus pensylvanicus American Bumble Bee	Priority 2	Priority 3		
Bombus rufocinctus Red-belted Bumble Bee	NA	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Bombus terricola Yellowbanded Bumble Bee	Priority 3	Priority 3		
Lepidoptera (butterflies, skippers, and moths; N = 61)				
Catocala similis Similar Underwing	Priority 3	Priority 2	Special Concern	
Zale obliqua Oblique Zale	Priority 3	Priority 2	Special Concern	
Lycia rachelae Twilight Moth	Priority 2	Priority 2	Threatened	
Macaria exonerata Barrens Itame	Priority 2	Priority 2		
Metarranthis apiciaria Barrens Metarranthis Moth	Priority 2	Priority 2		
Nepytia pellucidaria A Geometrid Moth	Priority 3	Priority 3		
Atrytonopsis hianna hianna Dusted Skipper	Priority 3	Priority 2	Special Concern	
Erynnis brizo brizo Sleepy Duskywing	Priority 2	Priority 2	Threatened	
Euphyes bimacula bimacula Two-spotted Skipper	NA	Priority 3		
Euphyes conspicua orono Black Dash	NA	Priority 3		
Hesperia colorado laurentina Common Branded Skipper	NA	Priority 3		
Hesperia leonardus leonardus Leonard's Skipper	Priority 3	Priority 3	Special Concern	
Hesperia metea metea Cobweb Skipper	Priority 3	Priority 3	Special Concern	
Poanes massasoit massasoit Mulberry Wing	NA	Priority 3		
Thorybes bathyllus Southern Cloudywing	Priority 3	Priority 3		
Callophrys eryphon eryphon Western Pine Elfin	NA	Priority 3		
Callophrys gryneus gryneus Juniper Hairstreak	Priority 2	Priority 1	Endangered	
Callophrys hesseli hesseli Hessel's Hairstreak	Priority 1	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Callophrys lanoraieensis Bog Elfin	Priority 3	Priority 3		
Callophrys polios polios Hoary Elfin	NA	Priority 2	Special Concern	
Cupido amyntula maritima Western Tailed-Blue	Priority 3	Priority 3		
Erora laeta Early Hairstreak	Priority 2	Priority 3	Special Concern	
Plebejus idas empetri Crowberry Blue	Priority 2	Priority 2		
Plebejus idas scudderii Northern Blue	Priority 2	Priority 2	Special Concern	
Satyrium acadica acadica Acadian Hairstreak	NA	Priority 3		
Satyrium edwardsii edwardsii Edwards' Hairstreak	Priority 2	Priority 2	Endangered	
Satyrium titus winteri Coral Hairstreak	Priority 3	Priority 3	Special Concern	
Strymon melinus humuli Gray Hairstreak	NA	Priority 3		
Tharsalea dorcas claytoni Clayton's Copper	Priority 2	Priority 2	Threatened	
Chaetaglaea cerata Waxed Sallow Moth	Priority 2	Priority 3		
Chaetaglaea rhonda Barrens Chaetaglaea	Priority 3	Priority 3		
Cucullia speyeri Speyer's Cucullia Moth	Priority 3	Priority 3		
Lithophane lepida lepida Pine Pinion	Priority 2	Priority 2		
Photedes inops Spartina Borer Moth	Priority 3	Priority 3		
Psectraglaea carnosa Pink Sallow	Priority 2	Priority 3		
Pyrrhia aurantiago Aureolaria Seed Borer	NA	Priority 3		
Sympistis perscripta Scribbled Sallow Moth	Priority 3	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Xylena thoracica Acadian Swordgrass Moth	Priority 3	Priority 3		
Xylotype capax Broad Sallow	Priority 3	Priority 2	Special Concern	
Xystopeplus rufago Red-winged Sallow	Priority 3	Priority 2	Special Concern	
Zale lunifera Bold-based Zale Moth	Priority 3	Priority 2	Special Concern	
Zanclognatha martha Pine Barrens Zanclognatha	Priority 1	Priority 2	Threatened	
Boloria bellona bellona Meadow Fritillary	NA	Priority 3		
Boloria chariclea grandis Arctic Fritillary	Priority 2	Priority 1	Threatened	
Boloria eunomia dawsoni Bog Fritillary	NA	Priority 3		
Boloria frigga saga Frigga Fritillary	Priority 1	Priority 1	Endangered	
Chlosyne nycteis nycteis Silvery Checkerspot	NA	Priority 3	Special Concern	
Danaus plexippus plexippus Monarch	Priority 3	Priority 3		
Lethe appalachia appalachia Appalachian Brown	Priority 3	Priority 3		
Nymphalis l-album j-album Compton Tortoiseshell	NA	Priority 3		
Oeneis polixenes katahdin Katahdin Arctic	Priority 1	Priority 1	Endangered	
Polygonia gracilis gracilis Hoary Comma	NA	Priority 3		
Polygonia satyrus neomarsyas Satyr Comma	Priority 3	Priority 2	Special Concern	
Papilio brevicauda gaspeensis Short-tailed Swallowtail	Priority 3	Priority 2	Special Concern	
Pterourus troilus troilus Spicebush Swallowtail	Priority 3	Priority 2	Special Concern	
Citheronia sepulcralis Pine Devil	Priority 2	Priority 3		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Hemileuca lucina New England Buckmoth	Priority 3	Priority 3		
Hemileuca maia maia Eastern Buckmoth	Priority 2	Priority 2	Special Concern	
Hemaris gracilis Graceful Clearwing	Priority 3	Priority 3		
Lapara coniferarum Southern Pine Sphinx	Priority 3	Priority 3		
Paonias astylus Huckleberry Sphinx	Priority 3	Priority 3		
Odonata (dragonflies and damselflies; N = 24)				
Aeshna juncea Sedge Darner	Priority 2	Priority 1	Special Concern	
Anax longipes Comet Darner	Priority 3	Priority 2		
Epiaeschna heros Swamp Darner	Priority 3	Priority 3	Special Concern	
Rhionaeschna mutata Spatterdock Darner	Priority 3	Priority 2	Special Concern	
Argia translata Dusky Dancer	Priority 3	Priority 2	Special Concern	
Enallagma carunculatum Tule Bluet	Priority 3	Priority 3	Special Concern	
Enallagma durum Big Bluet	Priority 3	Priority 1	Special Concern	
Enallagma laterale New England Bluet	Priority 2	Priority 3		
Enallagma pictum Scarlet Bluet	Priority 2	Priority 3		
Ischnura hastata Citrine Forktail	Priority 3	Priority 3		
Ischnura ramburii Rambur's Forktail	Priority 3	Priority 2		
Zoraena obliqua Arrowhead Spiketail	Priority 3	Priority 3	Special Concern	
Somatochlora albicincta Ringed Emerald	Priority 3	Priority 2	Special Concern	
Somatochlora brevicincta Quebec Emerald	Priority 2	Priority 3	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Somatochlora linearis Mocha Emerald		Priority 1		
Williamsonia lintneri Ringed Boghaunter	Priority 1	Priority 1	Threatened	
Gomphurus vastus Cobra Clubtail	Priority 3	Priority 2	Special Concern	
Lanthus vernalis Southern Pygmy Clubtail	Priority 2	Priority 3		
Ophiogomphus colubrinus Boreal Snaketail	Priority 1	Priority 1	Threatened	
Ophiogomphus howei Pygmy Snaketail	Priority 2	Priority 3	Special Concern	
Progomphus obscurus Common Sanddragon	Priority 3	Priority 2	Special Concern	
Stylurus spiniceps Arrow Clubtail	Priority 3	Priority 2	Special Concern	
Leucorrhinia patricia Canada Whiteface	Priority 2	Priority 3	Special Concern	
Libellula needhami Needhams Skimmer	Priority 3	Priority 2		
Plecoptera (stoneflies; N = 8)				
Allocapnia illinoensis Illinois Snowfly	NA	Priority 3		
Alloperla idei Vernal Sallfly	NA	Priority 3		
Alloperla voinae Lawrence Sallfly	Priority 3	Priority 3		
Alloperla vostoki Scotia Sallfly	NA	Priority 3		
Utaperla gaspesiana Gaspé Sallfly	NA	Priority 3		
Ostrocerca prolongata Bent Forestfly	NA	Priority 3		
Neoperla mainensis Maine Stone	Priority 3	Priority 3		
Pteronarcys comstocki Spiny Salmonfly	Priority 3	Priority 3		
Trichoptera (caddisflies; N = 7)				

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Hydroptila blicklei A Caddisfly	Priority 3	Priority 3		
Hydroptila dentata A Purse Casemaker Caddisfly	NA	Priority 3		
Hydroptila parachelops A Caddisfly	Priority 3	Priority 3		
Hydroptila tomah A Caddisfly	Priority 3	Priority 3		
Hydroptila xoncla Retracted Microcaddisfly	NA	Priority 3		
Ochrotrichia denningi A Caddisfly	Priority 3	Priority 3		
Oxyethira rossi A Caddisfly	NA	Priority 3		
Lycopodiopsida (Clubmoss; N = 10)				
Isoetales (Quillwort; N = 3)				
Isoetes acadiensis Acadian Quillwort	NA	Priority 3	Special Concern	
Isoetes prototypus Prototype Quillwort	NA	Priority 2	Threatened	
Isoetes riparia var. canadensis Shore Quillwort	NA	Priority 2	Endangered	
Lycopodiaceae (Clubmoss; N = 5)				
Diphasiastrum sitchense Alaskan Clubmoss	NA	Priority 1	Threatened	
Huperzia appressa Mountain Firmoss	NA	Priority 2	Special Concern	
Huperzia selago Alpine Clubmoss	NA	Priority 2	Threatened	
Lycopodiella alopecuroides Foxtail Bog-clubmoss	NA	Priority 1	Endangered	
Lycopodiella appressa Southern Bog-clubmoss	NA	Priority 2	Endangered	
Selaginellales (Spikemoss; N = 2)				
Selaginella apoda Creeping Spike-moss	NA	Priority 2	Endangered	
Selaginella selaginoides Low Spike-moss	NA	Priority 1	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Magnoliopsida (Monocots; N = 13)				
Alismatales (Water-plantain; N = 13)				
Sagittaria filiformis Narrow-leaved Arrowhead	NA	Priority 3	Special Concern	
Sagittaria montevidensis ssp. spongiosa Spongy-leaved Arrowhead	NA	Priority 3	Special Concern	
Sagittaria rigida Stiff Arrowhead	NA	Priority 3	Special Concern	
Wolffia brasiliensis Pointed Watermeal	NA	Priority 3	Special Concern	
Wolffia columbiana Columbian Watermeal	NA	Priority 3	Special Concern	
Triglochin gaspense Gaspé Arrow-grass	NA	Priority 2	Special Concern	
Potamogeton friesii Fries' Pondweed	NA	Priority 2	Endangered	
Potamogeton pulcher Spotted Pondweed	NA	Priority 2	Threatened	
Potamogeton strictifolius Straight-leaved Pondweed	NA	Priority 2	Threatened	
Potamogeton vaseyi Vasey's Pondweed	NA	Priority 2	Special Concern	
Stuckenia filiformis Northern Slender Pondweed	NA	Priority 2	Special Concern	
Zannichellia palustris Horned Pondweed	NA	Priority 3	Special Concern	
Zostera marina Common Eelgrass		Priority 3		
Malacostraca (crustaceans; N = 5)				
Decapoda (decapods; N = 5)				
Faxonius limosus Spinycheek Crayfish	Priority 3	Priority 3		
Cancer irroratus Atlantic Rock Crab	NA	Priority 3		
Pandalus borealis Northern Shrimp	Priority 1	Priority 1		
Lebbeus groenlandicus Spiny Lebbeid Shrimp	Priority 2	Priority 2		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Lebbeus polaris Polar Lebbeid Shrimp	Priority 2	Priority 2		
Mammalia (mammals; N = 26)				
Artiodactyla (even-toed ungulates; N = 1)				
Alces alces americanus Moose	Priority 3	Priority 2		
Carnivora (carnivores; N = 3)				
Canis lupus Gray Wolf		Priority 2		Threatened/ Endangered
Lynx canadensis Canada Lynx	Priority 2	Priority 2	Special concern	Threatened
Martes americana American Marten	NA	Priority 3		
Cetacea (whales; N = 7)				
Eubalaena glacialis North Atlantic Right Whale	Priority 1	Priority 1	Endangered	Endangered
Balaenoptera musculus Blue Whale	Priority 2	Priority 1		Endangered
Balaenoptera borealis Sei Whale	Priority 2	Priority 1	Endangered	Endangered
Balaenoptera physalus Finback Whale	Priority 2	Priority 1	Endangered	Endangered
Megaptera novaeangliae Humpback Whale	Priority 1	Priority 1	Endangered	
Phocoena phocoena Harbor Porpoise	Priority 2	Priority 3		
Physeter macrocephalus Sperm Whale	Priority 2	Priority 1	Endangered	Endangered
Chiroptera (bats; N = 7)				
Lasionycteris noctivagans Silver-haired Bat	Priority 2	Priority 3	Special Concern	
Lasiurus borealis Eastern Red Bat	Priority 3	Priority 3	Special Concern	
Lasiurus cinereus Hoary Bat	Priority 3	Priority 3	Special Concern	
Myotis leibii Eastern Small-footed Myotis	Priority 1	Priority 1	Threatened	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Myotis lucifugus Little Brown Bat	Priority 1	Priority 2	Endangered	
Myotis septentrionalis Northern Long-eared Myotis	Priority 1	Priority 1	Endangered	Endangered
Perimyotis subflavus Tri-colored Bat	Priority 2	Priority 1	Threatened	
Eulipotyphla (hedgehogs, moles, shrew-like moles, and true shrews; N = 1)				
Sorex dispar Long-tailed Shrew		Priority 3		
Lagomorpha (rabbits, hares, and pikas; N = 2)				
Lepus americanus Snowshoe Hare	NA	Priority 3		
Sylvilagus transitionalis New England Cottontail	Priority 1	Priority 1	Endangered	
Rodentia (rodents; N = 5)				
Microtus chrotorrhinus Rock (yellow-nosed) Vole	NA	Priority 3		
Microtus pennsylvanicus shattucki Penobscot Meadow Vole	Priority 2	Priority 2	Special Concern	
Microtus pinetorum Woodland Vole		Priority 3		
Ondatra zibethicus Muskrat	Priority 3	Priority 3		
Synaptomys borealis sphagnicola Northern Bog Lemming	Priority 1	Priority 2	Threatened	
Maxillopoda (crustaceans; N = 1)				
Calanoida (calanoid copepods; N = 1)				
Calanus finmarchicus A Copepod	Priority 3	Priority 3		
Merostomata (horseshoe crabs and sea scorpions; N = 1)				
Xiphosura (horseshoe crabs; N = 1)				
Limulus polyphemus Horseshoe Crab	Priority 1	Priority 1		
Monocots (Monocots; N = 99)				
Asparagales (Asparagus; N = 16)				
Allium canadense Wild Garlic	NA	Priority 3	Special Concern	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Allium tricoccum Wild Leek	NA	Priority 3	Special Concern	
Iris prismatica Slender Blue Flag	NA	Priority 2	Threatened	
Amerorchis rotundifolia Small Round-leaved Orchis	NA	Priority 1	Threatened	
Corallorhiza odontorhiza Autumn Coral-root	NA	Priority 2	Endangered	
Cypripedium arietinum Ram's-head Lady's-slipper	NA	Priority 1	Endangered	
Cypripedium reginae Showy Lady's-slipper	NA	Priority 2	Special Concern	
Galearis spectabilis Showy Orchid	NA	Priority 1	Endangered	
Goodyera oblongifolia Giant Rattlesnake-plantain	NA	Priority 1	Endangered	
Isotria medeoloides Small Whorled Pogonia	NA	Priority 1		Threatened
Malaxis monophyllos ssp. brachypoda White Adder's-mouth	NA	Priority 1	Endangered	
Neottia auriculata Auricled Twayblade	NA	Priority 1	Threatened	
Platanthera flava var. herbiola Pale Green Orchis	NA	Priority 2	Special Concern	
Platanthera leucophaea Prairie White-fringed Orchid	NA	Priority 1		Threatened
Spiranthes lucida Shining Ladies'-tresses	NA	Priority 2	Threatened	
Triphora trianthophora Nodding Pogonia	NA	Priority 2	Threatened	
Commelinales (Spiderwort; N = 1)				
Heteranthera dubia Water Stargrass	NA	Priority 3	Special Concern	
Poales (Grass; N = 82)				
Bolboschoenus novae-angliae Marsh Bulrush	NA	Priority 1	Endangered	
Bolboschoenus robustus Saltmarsh Bulrush	NA	Priority 2	Threatened	

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Carex adusta Swarthy Sedge	NA	Priority 2	Endangered	
Carex atherodes Awned Sedge	NA	Priority 1	Threatened	
Carex atratiformis Black Sedge	NA	Priority 2	Special Concern	
Carex baileyi Bailey's sedge	NA	Priority 3		
Carex bicknellii Bicknell's Sedge	NA	Priority 1	Endangered	
Carex bigelowii Bigelow's Sedge	NA	Priority 2	Special Concern	
Carex bullata Button Sedge	NA	Priority 3	Special Concern	
Carex capillaris Capillary Sedge	NA	Priority 2	Special Concern	
Carex eburnea Ebony Sedge	NA	Priority 1	Endangered	
Carex garberi Garber's Sedge	NA	Priority 2	Special Concern	
Carex granularis Meadow Sedge	NA	Priority 2	Endangered	
Carex gynocrates Northern Bog Sedge	NA	Priority 2	Special Concern	
Carex hirtifolia Pubescent Sedge	NA	Priority 3	Special Concern	
Carex laxiculmis Spreading Sedge	NA	Priority 2	Endangered	
Carex livida Livid Sedge	NA	Priority 2	Special Concern	
Carex media Intermediate Sedge	NA	Priority 1	Endangered	
Carex muehlenbergii Muhlenberg Sedge	NA	Priority 2	Endangered	
Carex oronensis Orono Sedge	NA	Priority 1	Threatened	
Carex polymorpha Variable Sedge	NA	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Carex prairea Prairie Sedge	NA	Priority 2	Threatened	
Carex rostrata Beaked Sedge	NA	Priority 2	Special Concern	
Carex saxatilis Russett Sedge	NA	Priority 1	Endangered	
Carex scirpoidea Bulrush Sedge	NA	Priority 2	Special Concern	
Carex siccata Dry Land Sedge	NA	Priority 3	Special Concern	
Carex sparganioides Bur-reed Sedge	NA	Priority 2	Endangered	
Carex sterilis Dioecious Sedge	NA	Priority 3	Special Concern	
Carex tenuiflora Sparse-flowered Sedge	NA	Priority 2	Special Concern	
Carex typhina Cat-tail Sedge	NA	Priority 2	Endangered	
Carex vacillans Salt Marsh Sedge	NA	Priority 1	Endangered	
Carex vestita Clothed Sedge	NA	Priority 2	Endangered	
Carex waponahkikensis Dawn-land Sedge	NA	Priority 1	Special Concern	
Cyperus erythrorhizos Red-root Flatsedge	NA	Priority 2	Endangered	
Cyperus houghtonii Houghton's Flatsedge	NA	Priority 2	Endangered	
Cyperus squarrosus Awned Flatsedge	NA	Priority 3	Special Concern	
Eleocharis aestuum Tidal Spikerush	NA	Priority 2	Special Concern	
Eleocharis nitida Slender Spikerush	NA	Priority 2	Special Concern	
Eleocharis quniqueflora ssp. fernaldii Few-flowered Spikerush	NA	Priority 3	Special Concern	
Eleocharis rostellata Beaked Spikerush	NA	Priority 1	Threatened	

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Eleocharis tuberculosa Long-tubercled Spike-rush	NA	Priority 2	Endangered	
Fimbristylis autumnalis Fall Fimbry	NA	Priority 3	Special Concern	
Lipocarpha micrantha Dwarf Bulrush	NA	Priority 2	Threatened	
Rhynchospora capillacea Horned Beak-rush	NA	Priority 1	Threatened	
Rhynchospora macrostachya Tall Beak-rush	NA	Priority 2	Endangered	
Scirpus georgianus Georgia Bulrush	NA	Priority 3	Special Concern	
Scirpus longii Long's Bulrush	NA	Priority 2	Threatened	
Scirpus pendulus Pendulous Bulrush	NA	Priority 3	Special Concern	
Trichophorum clintonii Clinton's Bulrush	NA	Priority 3	Special Concern	
Eriocaulon parkeri Parker's Pipewort	NA	Priority 2	Special Concern	
Juncus alpinoarticulatus ssp. americanus Alpine Rush	NA	Priority 3	Special Concern	
Juncus secundus Secund Rush	NA	Priority 2	Threatened	
Juncus stygius ssp. americanus Moor Rush	NA	Priority 2	Special Concern	
Juncus subtilis Slender Rush	NA	Priority 1	Endangered	
Juncus vaseyi Vasey Rush	NA	Priority 1	Endangered	
Luzula confusa Northern Wood-rush	NA	Priority 1	Endangered	
Luzula spicata Spiked Wood-rush	NA	Priority 1	Threatened	
Agrostis mertensii Boreal Bentgrass	NA	Priority 2	Threatened	
Anthoxanthum hirtum Northern sweet-grass	NA	Priority 2		

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Anthoxanthum monticola Alpine Sweet-grass	NA	Priority 1	Threatened	
Anthoxanthum nitens Vanilla sweet-grass	NA	Priority 2		
Bromus kalmii Wild Chess	NA	Priority 2	Endangered	
Bromus pubescens Hairy Wood Brome-grass	NA	Priority 3	Special Concern	
Calamagrostis cinnoides Small Reed Grass	NA	Priority 3	Special Concern	
Calamagrostis pickeringii Pickering's Reed Bent-grass	NA	Priority 1	Endangered	
Calamagrostis stricta ssp. inexpansa New England Northern Reed Grass	NA	Priority 1	Endangered	
Calamagrostis stricta ssp. stricta Neglected Reed-grass	NA	Priority 1	Threatened	
Elymus hystrix Bottlebrush Grass	NA	Priority 3	Special Concern	
Elymus macgregorii MacGregor's Rye	NA	Priority 2	Special Concern	
Eragrostis hypnoides Teel lovegrass	NA	Priority 3		
Festuca prolifera Arctic Red Fescue	NA	Priority 1	Endangered	
Glyceria acutiflora Sharp-scaled Manna-grass	NA	Priority 2	Endangered	
Muhlenbergia richardsonis Soft-leaf Muhly	NA	Priority 3	Special Concern	
Muhlenbergia sobolifera Cliff Muhly	NA	Priority 1	Endangered	
Phleum alpinum Mountain Timothy	NA	Priority 2	Threatened	
Piptatherum canadense Canada Mountain-ricegrass	NA	Priority 2	Special Concern	
Poa glauca White Bluegrass	NA	Priority 1	Threatened	
Poa laxa ssp. fernaldiana Wavy Bluegrass	NA	Priority 1	Endangered	

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Sorghastrum nutans Indian Grass	NA	Priority 2	Endangered	
Sporobolus compositus var. drummondii Longleaf Dropseed	NA	Priority 1	Endangered	
Vahlodea atropurpurea Mountain Hairgrass	NA	Priority 1	Endangered	
Xyris smalliana Yellow-eyed Grass	NA	Priority 2	Endangered	
Octocorallia (corals, sea pens, sea fans, sea anemones; N = 2)				
Alcyonacea (soft corals; N = 2)				
Alcyonium siderium Dead Man's Fingers	Priority 3	Priority 3		
Gersemia rubiformis Sea Strawberry	Priority 2	Priority 2		
Ophiuroidea (brittle stars; N = 1)				
Phrynophiurida (basket stars; N = 1)				
Gorgonocephalus arcticus Northern Basket Starfish	Priority 2	Priority 2		
Pinopsida (Pine; N = 1)				
Cupressales (Cypress; N = 1)				
Chamaecyparis thyoides Atlantic White Cedar	NA	Priority 2	Special Concern	
Polypodiopsida (Fern; N = 16)				
Ophioglossales (Adder's-tongue' N = 4)				
Botrychium lunaria Moonwort	NA	Priority 1	Endangered	
Botrychium oneidense Blunt-lobed Grapefern	NA	Priority 2	Threatened	
Botrychium pallidum Pale Moonwort	NA	Priority 2	Endangered	
Ophioglossum pusillum Adder's Tongue Fern	NA	Priority 2	Endangered	
Polypodiales (Polypod; N = 12)				
Asplenium platyneuron Ebony Spleenwort	NA	Priority 3	Special Concern	
Asplenium viride Green Spleenwort	NA	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Dryopteris filix-mas ssp. brittonii Male Fern	NA	Priority 1	Endangered	
Dryopteris fragrans Fragrant Wood Fern	NA	Priority 3	Special Concern	
Dryopteris goldiana Goldie's Wood Fern	NA	Priority 3	Special Concern	
Adiantum aleuticum Aleutian Maidenhair Fern	NA	Priority 1	Endangered	
Adiantum viridimontanum Maidenhair Fern	NA	Priority 1	Endangered	
Cryptogramma stelleri Slender Cliffbrake	NA	Priority 1	Threatened	
Phegopteris hexagonoptera Broad Beech Fern	NA	Priority 2	Special Concern	
Woodsia alpina Northern Woodsia	NA	Priority 1	Threatened	
Woodsia glabella Smooth Woodsia	NA	Priority 1	Threatened	
Woodsia obtusa Blunt-lobed Woodsia	NA	Priority 1	Threatened	
Reptilia (reptiles; N = 10)				
Squamata (lizards and snakes; N = 2)				
Coluber constrictor constrictor Northern Black Racer	Priority 1	Priority 1	Endangered	
Thamnophis saurita Eastern Ribbonsnake	Priority 2	Priority 2	Special Concern	
Testudines (turtles and tortoises; N = 8)				
Caretta caretta Loggerhead Seaturtle	Priority 2	Priority 1	Threatened	Threatened
Chelonia mydas Green Seaturtle	Priority 2	Priority 1		Threatened
Dermochelys coriacea Leatherback Seaturtle	Priority 1	Priority 1	Endangered	Endangered
Lepidochelys kempii Kemp's Ridley Seaturtle	Priority 2	Priority 1	Endangered	Endangered
Clemmys guttata Spotted Turtle	Priority 1	Priority 1	Threatened	
Emydoidea blandingii Blanding's Turtle	Priority 1	Priority 1	Endangered	

Scientific Name Common Name	2015 Priority Rank	2025 Priority Rank	State Status	Federal Status
Glyptemys insculpta Wood Turtle	Priority 1	Priority 1	Special concern	
Terrapene carolina Eastern Box Turtle	Priority 2	Priority 3		
Rhynchonellata (brachiopods; N = 1)				
Terebratulida (articulate brachiopods; N = 1)				
Terebratulina septentrionalis Lamp Shell	Priority 2	Priority 2		

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1.8 Appendices

Appendix 1 - 1 Maine's list of state-designated Endangered and Threatened plants administered by Natural Areas Program - Maine Department of Agriculture, Conservation and Forestry.

Taxa group (class) *Scientific name*	Common name	State status (updated, 2025)
Class Eudicots (Eudicots)		
Panax quinquefolius	American Ginseng	Endangered
Ilex glabra	Ink-berry	Endangered
Arnica lanceolata	Hairy Arnica	Threatened
Eupatorium pubescens	Hairy Boneset	Endangered
Eupatorium sessilifolium	Upland Boneset	Endangered
Euthamia caroliniana	Narrow-leaved Goldenrod	Threatened
Hieracium robinsonii	Robinson's Hawkweed	Endangered
Hieracium venosum var. nudicaule	Rattlesnake Hawkweed	Endangered
Iva frutescens ssp. oraria	Marsh-elder	Endangered
Krigia virginica	Dwarf Dandelion	Endangered
Liatris novae-angliae	Northern Blazing Star	Threatened
Nabalus boottii	Boott's Rattlesnake Root	Endangered
Omalotheca supina	Alpine Cudweed	Endangered
Sericocarpus asteroides	White-topped Aster	Endangered
Solidago leiocarpa	Cutler's Goldenrod	Threatened
Solidago speciosa	Showy Goldenrod	Threatened
Symphyotrichum anticostense	Anticosti Aster	Endangered
Symphyotrichum subulatum	Small Salt-marsh Aster	Endangered
Cynoglossum virginianum var. boreale	Northern Wild Comfrey	Endangered
Hackelia deflexa var. americana	Northern Stickseed	Endangered
Boechera laevigata	Smooth Rockcress	Endangered
Boechera missouriensis	Missouri Rockcress	Threatened
Cardamine concatenata	Cut-leaved Toothwort	Endangered
Cardamine longii	Long's Bitter-cress	Threatened
Draba arabisans	Rock Whitlow-grass	Threatened
Draba cana	Lance-leaved Draba	Endangered
Draba glabella	Smooth draba	Endangered
Chenopodium foggii	Fogg's Goosefoot	Endangered
Salicornia bigelovii	Dwarf Glasswort	Threatened
Suaeda calceoliformis	American Sea-blite	Threatened
Minuartia michauxii	Michaux's Sandwort	Endangered
Minuartia rubella	Arctic Sandwort	Endangered
Paronychia argyrocoma	Silverling	Threatened
Drosera anglica	English Sundew	Endangered
Drosera linearis	Slender-leaved Sundew	Endangered
Bistorta vivipara	Alpine Bistort	Endangered
Benthamidia florida	Flowering Dogwood	Endangered
Aletris farinosa	Unicorn Root	Endangered
Lonicera dioica	Mountain Honeysuckle	Endangered

Taxa group (class) *Scientific name*	Common name	State status (updated, 2025)
Triosteum aurantiacum	Wild Coffee	Endangered
Arctous alpina	Alpine Bearberry	Threatened
Chimaphila maculata	Spotted Wintergreen	Threatened
Harrimanella hypnoides	Moss Bell-heather	Threatened
Kalmia procumbens	Alpine Azalea	Threatened
Phyllodoce caerulea	Mountain Heath	Threatened
Rhododendron lapponicum	Lapland Rosebay	Threatened
Rhododendron maximum	Great Rhododendron	Threatened
Rhododendron viscosum	Clammy Azalea	Endangered
Polemonium vanbruntiae	Jacobs Ladder	Endangered
Hottonia inflata	Featherfoil	Threatened
Astragalus robbinsii var. minor	Robbins' Milk-vetch	Endangered
Lespedeza hirta ssp. hirta	Hairy Bush-clover	Endangered
Oxytropis campestris var. johannensis	St John Oxytrope	Threatened
Polygala senega	Seneca Snakeroot	Endangered
Betula glandulosa	Tundra Dwarf Birch	Endangered
Betula minor	Dwarf White Birch	Endangered
Quercus bicolor	Swamp White Oak	Threatened
Quercus coccinea	Scarlet Oak	Endangered
Quercus montana	Chestnut Oak	Threatened
Carya cordiformis	Bitternut Hickory	Endangered
Bartonia paniculata ssp. iodandra	Screwstem	Threatened
Gentiana rubricaulis	Red-stemmed Gentian	Threatened
Gentianella amarella ssp. acuta	Northern Gentian	Endangered
Lomatogonium rotatum	Marsh Felwort	Threatened
Pinguicula vulgaris	Common Butterwort	Endangered
Agalinis neoscotica	Nova Scotia Agalinis	Threatened
Agalinis purpurea	Purple Agalinis	Endangered
Euphrasia oakesii	Oakes' Eyebright	Endangered
Veronica wormskjoldii	Alpine Speedwell	Endangered
Hypericum ascyron	Great St John's-wort	Endangered
Salix arctophila	Arctic Willow	Endangered
Salix candida	Hoary Willow	Endangered
Salix exigua ssp. interior	Sandbar Willow	Endangered
Salix herbacea	Dwarf Willow	Threatened
Salix myricoides	Blue-leaf Willow	Threatened
Salix planifolia	Tea-leaved Willow	Threatened
Salix uva-ursi	Bearberry Willow	Threatened
Epilobium anagallidifolium	Alpine Willow-herb	Endangered
Epilobium hornemannii	Hornemann's Willow-herb	Threatened
Nymphaea leibergii	Pygmy Water-lily	Threatened
Asarum canadense	Wild Ginger	Threatened
Adlumia fungosa	Allegheny Vine	Endangered
Dicentra canadensis	Squirrel-corn	Endangered

Taxa group (class) *Scientific name*	Common name	State status (updated, 2025)
Anemone multifida	Cut-leaved Anemone	Threatened
Coptidium lapponicum	Lapland Buttercup	Threatened
Ranunculus fascicularis	Early Crowfoot	Threatened
Thalictrum thalictroides	Rue-anemone	Endangered
Thalictrum venulosum var. confine	Boundary Meadow-rue	Endangered
Shepherdia canadensis	Canada Buffaloberry	Endangered
Ceanothus americanus	New Jersey Tea	Threatened
Amelanchier nantucketensis	Nantucket Shadbush	Threatened
Geum fragarioides	Barren-strawberry	Endangered
Prunus maritima	Beach Plum	Endangered
Sanguisorba canadensis	Canada Burnet	Threatened
Proserpinaca pectinata	Comb-leaved Mermaid-weed	Endangered
Micranthes foliolosa	Star Saxifrage	Endangered
Saxifraga cespitosa	Tufted Saxifrage	Endangered
Saxifraga paniculata ssp. neogaea	Livelong Saxifrage	Endangered
Calystegia spithamaea	Upright Bindweed	Threatened
Vitis aestivalis var. bicolor	Summer Grape	Threatened
Class Lycopodiopsida (Clubmoss)		
Isoetes prototypus	Prototype Quillwort	Threatened
Isoetes riparia var. canadensis	Shore Quillwort	Endangered
Diphasiastrum sitchense	Alaskan Clubmoss	Threatened
Huperzia selago	Alpine Clubmoss	Threatened
Lycopodiella alopecuroides	Foxtail Bog-clubmoss	Endangered
Lycopodiella appressa	Southern Bog-clubmoss	Endangered
Selaginella apoda	Creeping Spike-moss	Endangered
Selaginella selaginoides	Low Spike-moss	Threatened
Class Magnoliopsida (Monocots)		
Potamogeton friesii	Fries' Pondweed	Endangered
Potamogeton pulcher	Spotted Pondweed	Threatened
Potamogeton strictifolius	Straight-leaved Pondweed	Threatened
Class Monocots (Monocots)		
Iris prismatica	Slender Blue Flag	Threatened
Amerorchis rotundifolia	Small Round-leaved Orchis	Threatened
Corallorhiza odontorhiza	Autumn Coral-root	Endangered
Cypripedium arietinum	Ram's-head Lady's-slipper	Endangered
Galearis spectabilis	Showy Orchid	Endangered
Goodyera oblongifolia	Giant Rattlesnake-plantain	Endangered
Malaxis monophyllos ssp. brachypoda	White Adder's-mouth	Endangered
Neottia auriculata	Auricled Twayblade	Threatened
Spiranthes lucida	Shining Ladies'-tresses	Threatened
Triphora trianthophora	Nodding Pogonia	Threatened
Bolboschoenus novae-angliae	Marsh Bulrush	Endangered
Bolboschoenus robustus	Saltmarsh Bulrush	Threatened
Carex adusta	Swarthy Sedge	Endangered

Taxa group (class) *Scientific name*	Common name	State status (updated, 2025)
Carex atherodes	Awned Sedge	Threatened
Carex bicknellii	Bicknell's Sedge	Endangered
Carex eburnea	Ebony Sedge	Endangered
Carex granularis	Meadow Sedge	Endangered
Carex laxiculmis	Spreading Sedge	Endangered
Carex media	Intermediate Sedge	Endangered
Carex muehlenbergii	Muhlenberg Sedge	Endangered
Carex oronensis	Orono Sedge	Threatened
Carex polymorpha	Variable Sedge	Endangered
Carex prairea	Prairie Sedge	Threatened
Carex saxatilis	Russett Sedge	Endangered
Carex sparganioides	Bur-reed Sedge	Endangered
Carex typhina	Cat-tail Sedge	Endangered
Carex vacillans	Salt Marsh Sedge	Endangered
Carex vestita	Clothed Sedge	Endangered
Cyperus erythrorhizos	Red-root Flatsedge	Endangered
Cyperus houghtonii	Houghton's Flatsedge	Endangered
Eleocharis rostellata	Beaked Spikerush	Threatened
Eleocharis tuberculosa	Long-tubercled Spike-rush	Endangered
Lipocarpha micrantha	Dwarf Bulrush	Threatened
Rhynchospora capillacea	Horned Beak-rush	Threatened
Rhynchospora macrostachya	Tall Beak-rush	Endangered
Scirpus longii	Long's Bulrush	Threatened
Juncus secundus	Secund Rush	Threatened
Juncus subtilis	Slender Rush	Endangered
Juncus vaseyi	Vasey Rush	Endangered
Luzula confusa	Northern Wood-rush	Endangered
Luzula spicata	Spiked Wood-rush	Threatened
Agrostis mertensii	Boreal Bentgrass	Threatened
Anthoxanthum monticola	Alpine Sweet-grass	Threatened
Bromus kalmii	Wild Chess	Endangered
Calamagrostis pickeringii	Pickering's Reed Bent-grass	Endangered
Calamagrostis stricta ssp. inexpansa	New England Northern Reed Grass	Endangered
Calamagrostis stricta ssp. stricta	Neglected Reed-grass	Threatened
Festuca prolifera	Arctic Red Fescue	Endangered
Glyceria acutiflora	Sharp-scaled Manna-grass	Endangered
Muhlenbergia sobolifera	Cliff Muhly	Endangered
Phleum alpinum	Mountain Timothy	Threatened
Poa glauca	White Bluegrass	Threatened
Poa laxa ssp. fernaldiana	Wavy Bluegrass	Endangered
Sorghastrum nutans	Indian Grass	Endangered
Sporobolus compositus var. drummondii	Longleaf Dropseed	Endangered
Vahlodea atropurpurea	Mountain Hairgrass	Endangered
Xyris smalliana	Yellow-eyed Grass	Endangered

Taxa group (class) *Scientific name*	Common name	State status (updated, 2025)
Class Polypodiopsida (Ferns)		
Botrychium lunaria	Moonwort	Endangered
Botrychium oneidense	Blunt-lobed Grapefern	Threatened
Botrychium pallidum	Pale Moonwort	Endangered
Ophioglossum pusillum	Adder's Tongue Fern	Endangered
Asplenium viride	Green Spleenwort	Endangered
Dryopteris filix-mas ssp. brittonii	Male Fern	Endangered
Adiantum aleuticum	Aleutian Maidenhair Fern	Endangered
Adiantum viridimontanum	Maidenhair Fern	Endangered
Cryptogramma stelleri	Slender Cliffbrake	Threatened
Woodsia alpina	Northern Woodsia	Threatened
Woodsia glabella	Smooth Woodsia	Threatened
Woodsia obtusa	Blunt-lobed Woodsia	Threatened

Appendix 1 - 2 Maine's list of state-designated Endangered and Threatened inland fish and wildlife administered by the Maine Department of Inland Fisheries and Wildlife (in statute; see Title 12 MRSA, §12803, http://legislature.maine.gov/legis/statutes/12/title12sec12803.html).

Taxa group (class) *Scientific name*	Common name	State status (year listed)
Class Actinopterygii (Fish)		
Esox americanus americanus	Redfin Pickerel	Endangered (2007)
Etheostoma fusiforme	Swamp Darter	Threatened (1997)
Class Aves (Birds)		
Alca torda	Razorbill	Threatened (1997)
Ammodramus caudacutus	Saltmarsh Sparrow	Endangered (2023)
Ammodramus savannarum	Grasshopper Sparrow	Endangered (1987)
Anthus rubescens	American Pipit	Endangered (1997)
Aquila chrysaetos	Golden Eagle	Endangered (1987)
Asio flammeus	Short-eared Owl	Threatened (1987)
Bartramia longicauda	Upland Sandpiper	Threatened (1997)
Bucephala islandica	Barrow's Goldeneye	Threatened (2007)
Catharus bicknelli	Bicknell's Thrush	Threatened (2023)
Charadrius melodus	Piping Plover	Endangered (1987)
Chlidonias niger	Black Tern	Endangered (1997)
Cistothorus stellaris	Sedge Wren	Endangered (1987)
Falco peregrinus	Peregrine Falcon	Endangered (1975)
Fratercula arctica	Atlantic Puffin	Threatened (1997)
Gallinula galeata	Common Gallinule	Threatened (2007)
Haliaeetus leucocephalus	Bald Eagle	Recovered (2009) / Threatened (1996) / Endangered (1978)
Histrionicus histrionicus	Harlequin Duck	Threatened (1997)
Ixobrychus exilis	Least Bittern	Endangered (2007)
Nycticorax nycticorax	Black-crowned Night Heron	Endangered (2015) Threatened (2007)
Petrochelidon pyrrhonota	Cliff Swallow	Threatened (2023)
Phalacrocorax carbo	Great Cormorant	Threatened (2007)
Riparia riparia	Bank Swallow	Threatened (2023)
Setophaga striata	Blackpoll Warbler	Threatened (2023)
Sternula antillarum	Least Tern	Endangered (1984)
Sterna paradisaea	Arctic Tern	Threatened (1997)
Sterna dougallii	Roseate Tern	Endangered (1997) / Threatened (1987)
Class Bivalvia (Molluscs)		
Alasmidonta varicosa	Brook Floater	Threatened (2007)
Atlanticoncha ochracea	Tidewater Mucket	Threatened (1997)
Lampsilis cariosa	Yellow Lampmussel	Threatened (1997)
Class Gastropoda (Snails)		
Vertigo morseii	Six-whorled Vertigo	Endangered (2015)
Class Insecta (Insects)		

Taxa group (class) *Scientific name*	Common name	State status (year listed)
Boloria chariclea grandis	Purple Lesser Fritillary	Threatened (2007)
Boloria frigga saga	Frigga Fritillary	Endangered (2015)
Bombus ashtoni	Ashton's Cuckoo Bumble Bee	Endangered (2023)
Callophrys gryneus	Juniper Hairstreak	Endangered (2007)
Callophrys hesseli	Hessel's Hairstreak	Endangered (1997)
Cicindela marginipennis	Cobblestone Tiger Beetle	Endangered (2015)
Ellipsoptera marginata	Margined Tiger Beetle	Threatened (2023)
Epeorus frisoni	Roaring Brook Mayfly	Threatened (2015) / Endangered (2007)
Erynnis brizo	Sleepy Duskywing	Threatened (2007)
Lycia rachelae	Twilight Moth	Threatened (2007)
Oeneis polixenes katahdin	Katahdin Arctic	Endangered (1997)
Ophiogomphus colubrinus	Boreal Snaketail	Threatened (2007)
Satyrium edwardsii	Edwards' Hairstreak	Endangered (1997)
Siphlonisca aerodromia	Tomah Mayfly	Threatened (1997)
Tharsalea dorcas claytoni	Clayton's Copper	Threatened (2015) / Endangered (1997)
Williamsonia lintneri	Ringed Boghaunter	Threatened (2007)
Zanclognatha martha	Pine Barrens Zanclognatha	Threatened (1997)
Class Mammalia (Mammals)		
Myotis leibii	Eastern Small-footed Bat	Threatened (2015)
Myotis lucifugus	Little Brown Bat	Endangered (2015)
Myotis septentrionalis	Northern Long-eared Bat	Endangered (2015)
Perimyotis subflavus	Tri-colored Bat	Threatened (2023)
Sylvilagus transitionalis	New England Cottontail	Threatened (2007)
Synaptomys borealis	Northern Bog Lemming	Endangered (1987)
Class Reptilia (Reptiles)		
Clemmys guttata	Spotted Turtle	Threatened (1987)
Coluber constrictor	Black Racer	Endangered (1987)
Emydoidea blandingii	Blanding's Turtle	Endangered (1997) / Threatened (1987)

Appendix 1 - 3 Maine's list of state-designated Endangered and Threatened marine fish and wildlife administered by the Maine Department of Marine Resources (in statute; see Title 12 MRSA, §6975, http://legislature.maine.gov/legis/statutes/12/title12sec6975.html).

Taxa group (class) Scientific name	Common name	State status (year listed)
Class Actinopterygii (Fish)		
Acipenser brevirostrum	Short-nosed Sturgeon	Endangered (1975)
Class Mammalia (Mammals)		
Balaenoptera borealis	Sei Whale	Endangered (1975)
Balaenoptera physalus	Finback Whale	Endangered (1975)
Eubalaena glacialis	North Atlantic Right Whale	Endangered (1975)
Megaptera novaeangliae	Humpback Whale	Endangered (1975)
Physeter macrocephalus	Sperm Whale	Endangered (1975)
Class Reptilia (Reptiles)		
Caretta caretta	Loggerhead Sea Turtle	Threatened (1978)
Dermochelys coriacea	Leatherback Sea Turtle	Endangered (1975)
Lepidochelys kempii	Kemp's Ridley Sea Turtle	Endangered (1975)

Appendix 1 - 4 Maine's list of federally-designated Endangered and Threatened species administered by the U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries; see http://ecos.fws.gov/ecp/.

Taxa group (class) Scientific name	**Common name**	**State status (year listed)**
FAUNA		
Class Actinopterygii (Fish)		
Acipenser brevirostrum	Short-nosed Sturgeon	Endangered (1967)
Acipenser oxyrinchus	Atlantic Sturgeon (Gulf of Maine distinct population segment)	Threatened (2012)
Salmo salar	Atlantic Salmon (Gulf of Maine distinct population segment)	Endangered (2000)
Class Aves (Birds)		
Calidris canutus rufa	Rufa Red Knot	Threatened (2015)
Charadrius melodus	Piping Plover	Threatened (1985)
Falco peregrinus anatum	American Peregrine Falcon	Recovered (1999) / Endangered (1970)
Falco peregrinus tundrius	Arctic Peregrine Falcon	Recovered (1994) / Threatened (1984) / Endangered (1970)
Haliaeetus leucocephalus	Bald Eagle	Recovered (2007) / Threatened (1995) / Endangered (1978)
Sterna dougallii dougallii	Roseate Tern	Endangered (1987)
Class Insecta (Insects)		
Bombus affinis	Rusty Patched Bumble Bee	Endangered (2017)
Class Mammalia (Mammals)		
Balaenoptera borealis	Sei Whale	Endangered (1970)
Balaenoptera musculus	Blue Whale	Endangered (1970)
Balaenoptera physalus	Finback Whale	Endangered (1970)
Canis lupus	Gray Wolf	Endangered (1967)
Eubalaena glacialis	North Atlantic Right Whale	Endangered (1970)
Lynx canadensis	Canada Lynx	Threatened (2000)
Megaptera novaeangliae	Humpback Whale (North Atlantic distinct population segment)	Delisted (2016) / Endangered (1970)
Myotis septentrionalis	Northern Long-eared Bat	Threatened (2015)
Physeter macrocephalus	Sperm Whale	Endangered (1970)
Class Reptilia (Reptiles)		
Caretta caretta	Loggerhead Sea Turtle	Threatened (1978)
Chelonia mydas	Green Sea Turtle	Threatened (1978)
Dermochelys coriacea	Leatherback Sea Turtle	Endangered (1970)
Eretmochelys imbricata	Hawksbill Sea Turtle	Endangered (1970)
Lepidochelys kempii	Kemp's Ridley Sea Turtle	Endangered (1970)
FLORA		
Class Dicotyledonae (Dicots)		

Taxa group (class) Scientific name	Common name	State status (year listed)
Isotria medeoloides	Small Whorled Pogonia	Threatened (1994) / Endangered (1982)
Pedicularis furbishiae	Furbish's Lousewort	Threatened (2023) / Endangered (1978)
Class Monocotyledonae (Monocots)		
Platanthera leucophaea	Eastern Prairie Fringed Orchid	Threatened (1989)