

Committee on Inland Fisheries and Wildlife

% Legislative Information Office

100 State House Station

Augusta, ME 04333

February 6, 2023

RE: LD 57, An Act to Amend Maine's Endangered and Threatened Species List

Senator LaFountain, Representative Landry, and distinguished members of the Committee on Inland Fisheries and Wildlife;

I am Dr. Jeff Wells. I am a long-time member of the Natural Resources Council of Maine, a Fellow of the Cornell Lab of Ornithology and Vice President of Boreal Conservation for National Audubon. I am testifying in support of LD 57 on behalf of the Natural Resources Council of Maine, which requested that I represent them at today's public hearing.

I was born and raised in Maine and I currently live in Gardiner, Maine. I received my Masters and Ph.D. from Cornell University studying ecology and conservation. I have written and lectured extensively on conservation and ecology and have written a number of books and hundreds of articles, papers and reports on the subject. Most recently I was a co-author of the book, *Birds of Maine*, for which I was the lead author on the chapter on the status and conservation of Maine birds.

I thank you for the opportunity to submit this testimony in support of LD 57, An Act to Amend Maine's Endangered and Threatened Species List. The recognition of species that are at risk of loss from the state without concerted conservation action is one important function of a state-sanctioned endangered and threatened species list. When coupled with explicit legislation, as is the case here in Maine with the Maine Endangered Species Act, enacted into law in 1975, this list of endangered and threatened species becomes even more critical for ensuring that the species most at risk are provided with interventions that increase their long-term likelihood of maintaining viable populations in our state.

The eight species that have been recommended by Maine's Department of Inland Fisheries and Wildlife to be added to the list (Bank Swallow, Cliff Swallow, Bicknell's Thrush, Blackpoll Warbler, Saltmarsh Sparrow, Tricolored Bat, Ashton's Cuckoo Bumble Bee, and Marginated Tiger Beetle) are all species that have experienced significant population declines both within the state and across their North American ranges. Because of these declines and the vulnerability of these species, most of them have had the unfortunate distinction of being added to various lists of species vulnerable to continued decline and extinction.

Birds are the taxon for which we have the best long-term population trend estimates. One of the species that is proposed to be added to the list, the Bank Swallow, has had the largest documented decline of all the birds of Maine with an 11% per year decline since 1966; that puts the current numbers of Bank Swallows in Maine at less than 1% of their abundance in 1966. Unfortunately, the Cliff Swallow and Blackpoll Warbler, two others proposed to be added to the Maine list are, with the Bank Swallow, among the top ten most declining breeding birds of our state. I will provide a table from our recently published *Birds of Maine* book that summarizes this information.

Population trends of Bicknell's Thrush and Saltmarsh Sparrow are not as easily monitored because they occur in highly specialized and hard to access habitats but available data also suggest significant declines. More importantly, both species are at high risk from climate change. The Saltmarsh Sparrow, as its name suggests, is found solely in the narrow band of salt marsh habitat along our coast, nesting just inches above the normal high tide mark. As sea levels rise and storm surges become more frequent as a result of climate change, their nests are increasingly at risk as is their salt marsh habitat itself. Bicknell's Thrush populations occur at the opposite elevational extreme, being found only above about 2,700 feet on mountain tops in spruce-fir forests. As climate change causes more intense heat and drought, these high elevation mountain forests are predicted to become smaller and eventually disappear.

Because of the declines and threats that have been well documented for the species proposed to be added to Maine's list, they have already been added to various lists of species of global and national conservation concern. Saltmarsh Sparrow is listed as Endangered on the well-known global IUCN Redlist and as a Red category (highest concern) species by Partners in Flight, a highly respected bird conservation coalition. Bicknell's Thrush is listed as Vulnerable on the IUCN Redlist and also as a Red category species by Partners in Flight. I will provide here the relevant pages from the appendix in Birds of Maine that summarizes this information.

Neighboring states have already listed many of these species. For example, the Cliff Swallow has been listed as Threatened in New Hampshire, the Tricolored Bat is listed as Endangered in Massachusetts, New Hampshire, and Vermont. The Ashton Cuckoo Bumble Bee has been listed as Endangered in Vermont. In addition, the Bicknell's Thrush and Bank Swallow are on our neighbor Canada's list of Threatened wildlife while the Tricolored Bat is officially listed as Endangered in Canada.

I'm sure that the members of this Committee are well aware of and concerned about the continuing documentation of the loss of biodiversity and ecological degradation around the world and right here in Maine. The rapidly changing climate and environmental conditions of our world necessitate that governments be as responsive as possible in fulfilling their duties, including for protecting and maintaining the native species of plants and animals. The current timeline of reviewing and renewing Maine's list of Endangered and Threatened species every eight years will not keep up with the changes that are already underway in our wildlife and plant populations. It will be very important to begin reviewing and updating the list every two to four years if there is any chance of identifying the species at greatest risk quickly enough to be able to recover their populations.

For these reasons, I urge the Committee to support LD 57, An Act to Amend Maine's Endangered and Threatened Species List.

Thank you for the opportunity to testify on this bill.

Sincerely,

Jeffrey Wells, Ph.D.

Gardiner, Maine

Breeding Bird Survey Annual Trend Estimates (continued)

Species Name	1966-2017 Trend (%)	Current % of 1966 population	2008-2017 Trend (%)	Current % of 2008 population	Migrant vs Resident?*	Comment**
Wilson's Warbler	-2.4	28	-2.6		Neotropical	Boreal forest
Common Grackle	-2.5	27	-2.2		Mixed	Wetland
Red-winged Blackbird	-2.6	26	-4.3	64	Year-round	Wetland
Great Blue Heron	-2.6	25	-2.6		Mixed	Wetland
Baltimore Oriole	-2.7	24	-5.3		Neotropical	
Spotted Sandpiper	-2.7	24	-2.6		Neotropical	Wetland
Bobolink	-3.0	21	-3.0	74	Neotropical	Grassland
Cape May Warbler	-3.1	19	-2.9		Neotropical	Boreal forest
Eastern Wood-Pewee	-3.2	18	-3.1	73	Neotropical	Aerial insectivore
Olive-sided Flycatcher	-3.2	18	-3.5		Neotropical	Aerial insectivore
Veery	-3.3	17	-3.3	71	Neotropical	
Vesper Sparrow	-3.4	17	-3.4		Short-distance	Grassland
Nashville Warbler	-3.4	17	-7.5	46	Neotropical	
Green Heron	-3.5	16	-3.4		Neotropical	Wetland
Brown Thrasher	-3.6	15	-2.9		Short-distance	
Yellow Warbler	-3.6	15	-4.9	60	Neotropical	
White-throated Sparrow	-3.6	15	-5.4	57	Short-distance	Shrub/scrub
Least Flycatcher	-3.6	15	-2.2		Neotropical	Aerial insectivore
Canada Warbler	-3.7	14	-3.8	68	Neotropical	
Tennessee Warbler	-3.7	14	-8.1		Neotropical	Boreal forest
House Sparrow	-3.7	14	-4.9		Year-round	Urban
American Redstart	-3.8	14	-3.4	71	Neotropical	
European Starling	-3.9	12	-4.6	63	Year-round	Urban
Ruby-crowned Kinglet	-4.0	12	-7.3	47	Short-distance	Boreal forest
Eastern Kingbird	-4.2	11	-5.2	58	Neotropical	Aerial insectivore
Tree Swallow	-4.5	9.1	-4.4	64	Neotropical	Aerial insectivore
Black-billed Cuckoo	-4.6	8.7	-1.3		Neotropical	
American Kestrel	-4.8	7.7	-5.3		Short-distance	
Chimney Swift	-4.9	7.4	-2.5		Neotropical	Aerial insectivore
Herring Gull	-5.1	6.6	-5.3	58	Year-round	Coastal marine
Purple Martin	-5.1	6.5	-4.7		Neotropical	Aerial insectivore
Eastern Whip-poor-will	-5.3	5.9	-5.3		Neotropical	Aerial insectivore
Brown-headed Cowbird	-5.4	5.5	-5.4	58	Short-distance	
Killdeer	-5.5	5.3	-6.1	53	Neotropical	Grassland/shrub
Wood Thrush	-5.6	5.0	-3.1		Neotropical	
Eastern Towhee	-5.8	4.5	-5.1		Short-distance	Shrub/scrub
Field Sparrow	-5.9	4.3	-6.1	53	Short-distance	Shrub/scrub
Horned Lark	-6.0	4.1	-5.8		Year-round	Grassland
Barn Swallow	-6.0	3.9	-5.4	57	Neotropical	Aerial insectivore
Blackpoll Warbler	-6.3	3.4	-5.4		Neotropical	Boreal forest
Evening Grosbeak	-6.7	2.7	-14.3		Year-round	Boreal forest
Cliff Swallow	-7.2	2.0	-7.2	47	Neotropical	Aerial insectivore
Eastern Meadowlark	-7.5	1.7	-6.8	50	Short-distance	Grassland
Great Black-backed Gull	-8.2	1.2	-8.1	43	Year-round	Coastal marine
Bank Swallow	-11	0.21	-11.4	30	Neotropical	Aerial insectivore
Increasing Significantly	27		6			
Decreasing Significantly	62		26			

Appendix II

State, Federal, and International Conservation Designations of Maine Birds

Maine species with official conservation designations are shown; accidental, hypothetical, extinct, or introduced species are not included. If a designation is limited to a subspecies, only those that occur in Maine are listed.

Conservation entities and status designations

Maine Department of Inland Fish and Wildlife (MDIFW): E: Endangered; T: Threatened; SC: Special Concern.

Maine Species of Greatest Conservation Need (SGCN): Priority 1, 2, 3.

Endangered Species Act (ESA): E: Endangered; T: Threatened.

U.S. Shorebird Conservation Plan (USSCP): Greatest; Highest; Moderate Concern; ESA listed.

Waterbird Conservation for the Americas: Waterbird Conservation Plan, High Concern; Moderate Concern.

Partners in Flight (PIF) Watch List: Red; R-Yellow: restricted range; D-Yellow: declining.

International Union for Conservation of Nature and Natural Resources (IUCN): Near Threatened; VU: Vulnerable; EN: Endangered; CR: Critical. See definitions page 599.

SPECIES	STATE		NATIONAL			INTERNATIONAL	
	MDIFW	SGCN	ESA	USSCP	Waterbird Conservation Plan	PIF	IUCN
Greater Scaup	SC	2					
Common Eider		3					NT
Harlequin Duck	T	1					
Black Scoter							NT
Long-tailed Duck		3					VU
Barrow's Goldeneye	T	1					
Spruce Grouse		3					
Pied-billed Grebe		3			High Concern		
Horned Grebe		3			High Concern		VU
Red-necked Grebe					Moderate Concern		
Yellow-billed Cuckoo	SC						
Black-billed Cuckoo		3				Yellow-D	
Common Nighthawk		3					
Eastern Whip-poor-will	SC	2				Yellow-D	NT
Chimney Swift	SC	2					VU

MDIFW (SC: Special Concern, T: Threatened, E: Endangered). SGCN (Priority 1, 2, 3). ESA (E: Endangered; T: Threatened). USSCP (Greatest, Highest, Moderate Concern, ESA listed). Waterbird Conservation Plan (High Concern, Moderate Concern). PIF (Red-recover; Yellow-R: restricted range; Yellow-D: declining population). IUCN (CR: Critical; EN: Endangered; VU: Vulnerable; NT: Near threatened.)

Appendix II

State, Federal, and International Conservation Designations of Maine Birds (continued)

SPECIES	STATE		ESA	NATIONAL		INTERNATIONAL	
	MDIFW	SGCN		USSCP	Waterbird Conservation Plan	PIF	IUCN
Bicknell's Thrush	SC	1				Red	VU
Swainson's Thrush		3					
Wood Thrush	SC	1				Yellow-D	NT
Brown Thrasher	SC	2					
American Pipit (breeding pop.)	E	2					
Evening Grosbeak	SC	2				Yellow-D	VU
Pine Grosbeak		3					
Purple Finch		3					
Red Crossbill		3					
White-winged Crossbill		3					
Grasshopper Sparrow	E	1					
Field Sparrow		3					
Fox Sparrow	SC	3					
White-throated Sparrow	SC	3					
Seaside Sparrow						Red	
Nelson's [Sharp-tailed] Sparrow	SC	2				Red	
Saltmarsh [Sharp-tailed] Sparrow	SC	1				Red	EN
Henslow's Sparrow						Yellow-R	NT
Lincoln's Sparrow		3					
Eastern Towhee	SC	2					
Bobolink		3				Yellow-D	
Eastern Meadowlark	SC	2					NT
Orchard Oriole	SC	3					

MDIFW (SC: Special Concern, T: Threatened, E: Endangered). SGCN (Priority 1, 2, 3). ESA (E: Endangered; T: Threatened). USSCP (Greatest, Highest, Moderate Concern, ESA listed). Waterbird Conservation Plan (High Concern, Moderate Concern). PIF (Red-recover; Yellow-R: restricted range; Yellow-D: declining population). IUCN (CR: Critical; EN: Endangered; VU: Vulnerable; NT: Near threatened.)

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State, Federal, and International Conservation Designations of Maine Birds (continued)

SPECIES	STATE		NATIONAL			INTERNATIONAL	
	MDIFW	SGCN	ESA	USSCP	Waterbird Conservation Plan	PIF	IUCN
Baltimore Oriole		3					
Rusty Blackbird	SC	1					VU
Common Grackle							NT
Louisiana Waterthrush		3					
Blue-winged Warbler	SC	2					
Black-and-white Warbler	SC	2					
Tennessee Warbler	SC	2					
Mourning Warbler		3					
American Redstart	SC	2					
Cape May Warbler		3				Yellow-D	
Northern Parula		3					
Bay-breasted Warbler		3					
Blackburnian Warbler		3					
Yellow Warbler	SC	3					
Chestnut-sided Warbler	SC	2					
Blackpoll Warbler		3					NT
Prairie Warbler	SC	2				Yellow-D	
Black-throated Green Warbler		3					
Canada Warbler	SC	2				Yellow-D	
Scarlet Tanager		3					
Rose-breasted Grosbeak		3					

MDIFW (SC: Special Concern, T: Threatened, E: Endangered). SGCN (Priority 1, 2, 3). ESA (E: Endangered; T: Threatened). USSCP (Greatest, Highest, Moderate Concern, ESA listed). Waterbird Conservation Plan (High Concern, Moderate Concern). PIF (Red-recover; Yellow-R: restricted range; Yellow-D: declining population). IUCN (CR: Critical; EN: Endangered; VU: Vulnerable; NT: Near threatened.)

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State, Federal, and International Conservation Designations of Maine Birds (continued)

Conservation status definitions

MDIFW (2019) and Endangered Species Act (ESA) (USFWS 2019)

“Endangered”: determined to be in danger of extinction throughout all or a significant portion of its range;

“Threatened”: determined likely to become endangered within the foreseeable future throughout all or a significant portion of its range;

“Special Concern”: any species that does not meet criteria for E or T but is particularly vulnerable or could easily become E, T, or extirpated due to restricted distribution, low or declining numbers, or other factors.

Species of Greatest Conservation Need (SGCN) (MDIFW 2016)

Priority 1, 2, and 3 species are designated by ranks, combining criteria that include current state, federal, or global species status; risk of extirpation; recent significant declines; regional endemic status; high regional conservation priority; global vulnerability; state special concern status; high climate change vulnerability; historical populations with a reasonable chance of rediscovery; understudied rare taxa; or culturally significant species. **Priority 1** species are at greatest risk.

U.S. Shorebird Conservation Plan (USSCPP 2016)

“Greatest,” “Highest,” “Moderate Concern” designations are based on a calculation of population trends, breeding, and nonbreeding distributions and threats; **“ESA listed”** indicates birds protected under the ESA.

North American Waterbird Conservation Plan (Kushlan et al. 2002)

“High Concern” species are known or thought to be in decline and have known or potential threats;

“Moderate Concern” indicates either declining with moderate threats or distributions, stable with known or potential threats and moderate to restricted distributions, or relatively small populations with relatively restricted distributions.

Partners in Flight (PIF) (2016)

Red Watch List: species with extremely high vulnerability due to small population and range, high threats, and range-wide declines.

“R” Yellow Watch List: species not declining but vulnerable due to small range or population and moderate threats;

“D” Yellow Watch List: species with population declines and moderate to high threats.

International Union for the Conservation of Nature (IUCN)

Definitions based on population size and geographic range criteria.

“Critical” indicates extremely high risk of extinction based on criteria;

“Endangered” when evidence indicates a very high risk of extinction;

“Vulnerable” when a species meets any criteria indicating high risk of extinction;

“Near Threatened” for any species that does not qualify for other categories but is close or is likely to qualify as Threatened in the near future.