



Birds



Blackpoll Warbler

Setophaga striata

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Birds (*Aves*)

Order: Perching Birds (*Passeriformes*)

Family: Warblers (*Parulidae*)

General comments:

The Blackpoll Warbler is a medium-sized warbler of boreal forests. Males in alternate plumage have black-and-white streaking, a black cap, bold white wingbars, and orange-yellow legs. Females and immatures are more variable in appearance, typically olive-gray with fine streaking and a pale eyebrow, the contrast of which against the olive-gray crown mimics the male's dark crown. Occasionally, the females have a yellow wash across the breast and flanks. In Maine, this species breeds primarily in high-elevation and coastal spruce-fir forests, favoring cool, moist habitats. Although still locally common in its preferred breeding areas, the Blackpoll is experiencing steep long-term declines, likely driven by climate-induced habitat shifts, extreme weather during migration, and collisions with lit structures during its long trans-oceanic flight.

Species Conservation Range Maps:

Town Map: [Setophaga striata_Towns.pdf](#)

Subwatershed Map: [Setophaga striata_HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:	Maine Status: Threatened	Federal Status: None	IUCN Red List Status: None
High Regional Conservation Priority:	Partners In Flight: Regional Concern: No, Regional Stewardship: , Regional Importance: No, Continental Importance: Yes		

Habitat Associations:

Formation: Alpine

Macrogroup: Eastern North American Alpine Tundra

Habitat System: Acadian-Appalachian Subalpine Woodland and Heath-Krummholz

Formation: Northeastern Upland Forest

Macrogroup: Acadian-Northern Appalachian Forest

Habitat System: Acadian Low Elevation Spruce-Fir-Hardwood Forest

Habitat System: Acadian Sub-boreal Spruce Flat

★ **Primary Habitat**

Habitat System: Acadian-Appalachian Montane Spruce-Fir Forest

In inland areas, they are associated with montane spruce-fir forests and regenerating subalpine stands, while on the coast, island breeders occupy cool, conifer-dominated forests structurally and climatically similar to these inland sites.

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Formation: Northeastern Upland Forest

Habitat System: Acadian-Northern Appalachian Forest Macrogroup- Unknown Habitat System

Threats

Threat Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Logging and Wood Harvesting

Severity: Moderate Severity Actionability: Moderately Actionable

Notes: Although Blackpolls may recolonize regenerating forests, extensive clearcutting, particularly near breeding sites, can reduce habitat quality and lead to avoidance, especially by post-breeding juveniles. Quality of regenerating habitat also varies.

IUCN Level 1 Threat Energy Production and Mining

IUCN Level 2 Threat: Renewable Energy

Severity: Moderate Severity Actionability: Moderately Actionable

Notes: Collision mortality at wind energy facilities has been documented, particularly when lights are left on during low cloud cover. High-elevation wind energy development also risks fragmenting breeding habitat in Maine's subalpine spruce-fir forests.

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Other Threat

Severity: Moderate Severity Actionability: Moderately Actionable

Notes: Collisions with radio and tv towers, lighthouses, wind energy facilities, etc. Blackpoll Warblers are regularly among the most frequent tower/light kills, with large numbers (e.g., 300 +/-day) documented at communication towers, lighthouses, and illuminated wind energy facilities during migration, especially in inclement weather.

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IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: High Severity**Actionability:** Actionable with Difficulty

Notes: Climate change is shrinking the elevational and latitudinal extent of spruce-fir habitats in the Northeast. Blackpolls are at risk of range retraction and population sink dynamics at the lower margins of their range due to upward shifts in forest zones and interspecific competition.

IUCN Level 2 Threat: Storms and Severe Weather

Severity: Moderate Severity**Actionability:** Actionable with Difficulty

Notes: Blackpolls migrate over the Atlantic Ocean. Fall storms have been shown to be correlated with lower breeding abundance the following year. Exposure-related nestling mortality has also been observed after inland storms.

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Air-Bourne Pollutants

Severity: Moderate Severity**Actionability:** Actionable with Difficulty

Notes: Acid rain may be degrading subalpine spruce-fir forest quality, especially in the northeastern U.S., potentially reducing suitable nesting habitat.

Species Level Conservation Actions:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority threats are summarized here.

Conservation Actions Associated with the High Elevation birds Guild:

Conservation Action	Category	Biological Priority	Type
Monitor high-elevation bird populations statewide. Birds in high-elevation habitats are difficult to access and poorly sampled by standard monitoring programs. Targeted, long-term monitoring is needed to track population trends, detect range shifts, and guide conservation priorities.	Survey and Monitoring	high	new

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

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Conservation Action	Category	Biological Priority	Type
Model and track climate-driven habitat change. All members of the high-elevation guild are vulnerable to climate-driven shifts in treeline, snowpack, and vegetation structure. Modeling future habitat changes and identifying potential climate refugia are critical for long-term planning and resilience.	Research	high	new

Threat(s) Addressed By This Conservation Action

- Habitat Shifting or Alteration

Conservation Action	Category	Biological Priority	Type
Limit recreational impacts in sensitive alpine and subalpine areas. Recreational use of Maine's alpine zones is increasing. During the short breeding season, human disturbance can displace birds from critical nesting areas. Trail management, seasonal closures, signage, and visitor education can reduce these pressures and support reproductive success. As recreational infrastructure expands into higher elevations, careful planning is needed to minimize impacts on alpine and subalpine habitats. Conservation partners should coordinate with land managers and developers to avoid key breeding areas during siting or expansion of recreational infrastructure.	Habitat Management	high	new

Threat(s) Addressed By This Conservation Action

- Recreational Activities

Conservation Action	Category	Biological Priority	Type
Protect and manage existing high-elevation forest and alpine habitats. Conservation of existing alpine and subalpine habitats through land acquisition, easements, or management plans will help prevent fragmentation and degradation. These mountaintop areas support rare species that have no alternative habitat in the state.	Habitat Management	critical	new

Threat(s) Addressed By This Conservation Action

- Habitat Shifting or Alteration

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Conservation Action	Category	Biological Priority	Type
Support regional research collaborations and species working groups. High-elevation songbirds face heightened vulnerability to climate change across their ranges due to their dependence on limited alpine and subalpine habitat. Collaboration with regional monitoring programs such as Mountain Birdwatch, and participation in species-specific working groups, is essential. These efforts enhance understanding of range-wide population dynamics and ensure Maine's data contributes to coordinated conservation planning.	Survey and Monitoring	high	

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Avoid siting new wind energy infrastructure in sensitive high-elevation breeding areas. High elevation taxa may be affected by both habitat disturbance and collision risk from wind turbines in subalpine habitats. Avoidance of key nesting areas can reduce direct and indirect impacts.	Habitat Management	moderate	on-going

Threat(s) Addressed By This Conservation Action

- Renewable Energy

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's Wildlife Action Plan: Element 4.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's Wildlife Action Plan: Element 4. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, threats, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work