Canada Warbler

Cardellina canadensis

Federal Listing	N/A
State Listing	N/A
Global Rank	G5
State Rank	S5
Regional Status	Very High

Photo by Jason Lambert

Justification (Reason for Concern in NH)

The Canada Warbler is one of several still-common forest birds that are experiencing significant population declines across much of their ranges, and as a result is considered a Regional SGCN in the Northeastern United States (USFWS Region 5). It is also on the Partners in Flight Watch List and the focus of a working group dedicated to range-wide and full life cycle conservation of the species. Populations in New Hampshire have declined at 5.34%/year since 1966, and 5.42%/year since 2003. Long term trends are similar in BCR 14 (-4.09%/year) and BCR 30 (--6.50%/year). There have also been declines of 20-30% based on repeated Breeding Bird Atlases in the northeast (McGowan and Corwin 2008, Renfrew 2013, MassAudubon 2014).

Distribution

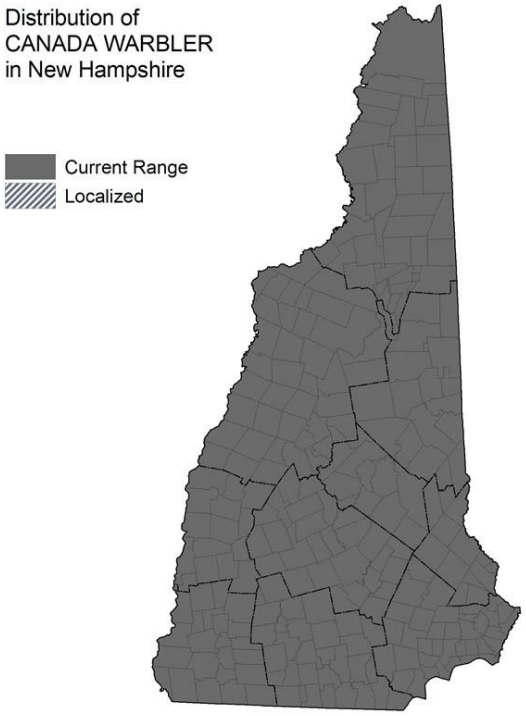
The Canada Warbler breeds from northern Alberta south and east to Wisconsin, Pennsylvania, and Nova Scotia, and south in the Appalachians to Georgia (Reitsma et al. 2010). It winters in South America in and east of the Andes from Columbia and Venezuela to Peru, but is rare to uncommon in the western Amazon lowlands. In New Hampshire is occurs statewide but is less common and highly local in the southern third of the state (Foss 1994).

Habitat

The Canada Warbler uses a wide range of forest types with well-developed shrub layers, and often wet or even swampy (Reitsma et al. 2010). Examples include red maple/hemlock swamps, regenerating clear cuts, bogs, and dense riparian thickets.

NH Wildlife Action Plan Habitats

- Hemlock Hardwood Pine Forest
- Northern Hardwood-Conifer Forest
- Lowland Spruce-Fir Forest
- Northern Swamps
- Temperate Swamps



Distribution Map

Current Species and Habitat Condition in New Hampshire

Significant rangewide population declines and some range retraction (see Justification).

Population Management Status

Management is not currently in place for this species.

Regulatory Protection (for explanations, see Appendix I)

- Migratory Bird Treaty Act (1918)

Quality of Habitat

Unknown

Habitat Protection Status

Highly variable

Habitat Management Status

Habitat management has not been implemented for this species

Threats to this Species or Habitat in NH

Threat rankings were calculated by groups of taxonomic or habitat experts using a multistep process (details in Chapter 4). Each threat was ranked for these factors: Spatial Extent, Severity, Immediacy, Certainty, and Reversibility (ability to address the threat). These combined scores produced one overall threat score. Only threats that received a "medium" or "high" score have accompanying text in this profile. Threats that have a low spatial extent, are unlikely to occur in the next ten years, or there is uncertainty in the data will be ranked lower due to these factors.

Habitat conversion due to development (Threat Rank: Medium)

Ongoing residential and commercial development results in permanent loss of habitats for wildlife. Many forest birds are area sensitive (e.g., Zuckerberg and Porter 2010) and less likely to occupy habitat patches in landscapes with less forest cover. See the forest habitat profiles for more information.

Habitat conversion and fragmentation from tower and turbine development (Threat Rank: Medium)

Towers and turbines and their supporting infrastructure result in both the direct loss of habitat and fragmentation of adjacent non-cleared forest. Both these impacts can affect forest birds as discussed elsewhere. See the forest habitat profiles for more information.

Habitat conversion and degradation from timber harvest (Threat Rank: Medium)

To the extent that timber harvest can remove mature forest from the landscape, its short-term effects can be similar to those of residential or commercial development for forest birds. At the same time, if regenerating forest contains a different species composition its suitability for specific forest birds could either increase or decrease.

Habitat degradation from insect pests (introduced species) (Threat Rank: Medium)

To the extent that insect pests can alter forest species composition, they may have trickle down effects on the bird that use these habitats, although detailed studies of these effects have yet to be carried out. See the forest habitat profiles for more information.

Disturbance (parasitism) and mortality from subsidized or introduced predators (Threat Rank: Medium)

In fragmented forest systems, brood parasitism by the Brown-headed Cowbird (*Molothrus ater*) has been implicated in declining forest bird populations (Brittingham and Temple 1983). Although the extent of such parasitism in New Hampshire is unknown, the state's extensive forest cover likely reduces the overall risk (c.f., Hoover and Brittingham 1993). Ground-nesting birds like the Canada Warbler and their nests are also subject to predation by human commensals such as free-ranging cats, raccoons, and corvids.

List of Lower Ranking Threats:

Habitat impacts and disturbance from acid deposition that can reduce prey

Disturbance from mercury toxicity

Disturbance from noise associated with recreational activity

Habitat impacts from road fragmentation

Habitat conversion and degradation from agriculture on winter grounds

Habitat degradation from habitat shifting and changes in species composition

Habitat conversion due to development on winter grounds

Actions to benefit this Species or Habitat in NH

No actions identified, but see appropriate forest habitat profile(s) for actions that would likely benefit this species.

References, Data Sources and Authors

Data Sources
Trend data from Breeding Bird Survey (Sauer et al. 2014, above). NH distribution data from NHBR/NH eBird

Data Quality
Because this species is easily detected and identifiable, data on distribution and habitat use are generally well known.

2015 Authors:
Pamela Hunt, NHA

2005 Authors:

Literature

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Massachusetts Audubon Society. 2014. Massachusetts Breeding Bird Atlas. Online results at: http://www.massaudubon.org/our-conservation-work/wildlife-research-conservation/statewide-bird-monitoring/breeding-bird-atlases/bba2/

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Rappole, J.H., and M.V. McDonald. 1994. Cause and Effect in Population Declines of Migratory Birds. Auk 111: 652-660

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Sauer, J.R., J.E. Hines, J.E. Fallon, K.L. Pardieck, D.J. Ziolkowski, Jr., and W.A. Link. 2014. The North American Breeding Bird Survey, Results and Analysis 1966 - 2013. Version 01.30.2015 USGS Patuxent Wildlife Research Center, Laurel, MD.

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