



Canada Warbler

(Cardellina canadensis)

STATUS

SARA

THREATENED

Alberta

AT RISK

British Columbia

BLUE

Saskatchewan

NO STATUS

PRIMARY HABITAT

Old/riparian Deciduous

TERRITORY SIZE

0.2–1 ha

NEST TYPE

Ground

NEST REUSE

Rare

STAND LEVEL

Voluntary, wide riparian buffers in deciduous forest >80 years old and/or dispersed retention $\geq 30\%$.

LANDSCAPE LEVEL

Large (>100 ha) reserves of old deciduous and mixed forests, especially wet/riparian.

This nationally threatened species occupies wet, deciduous-leading forests, where complex understory vegetation and deep leaf litter hide their ground nests.

BREEDING WINDOW



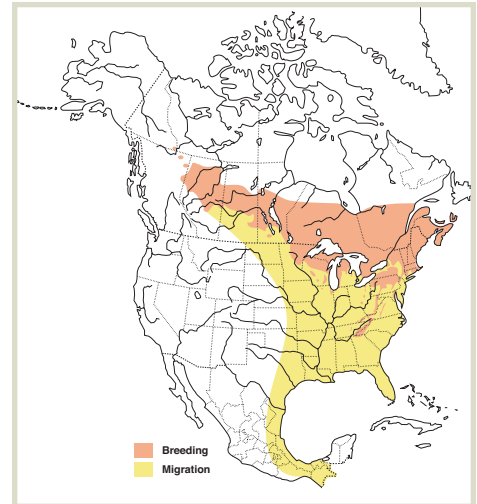
HABITAT ECOLOGY

- Canada Warbler's primary habitat is cool, moist, typically deciduous-leading forest with a dense shrub understory, complex ground cover, and steep slopes and/or open water.¹
- Forests older than rotation age (e.g., >125 years) are consistently identified as the most valuable habitat for this species, as well as high shrub cover within stands.^{2,3}
 - In Alberta, they are strongly associated with deciduous-dominated forest >80 years old and areas near small, incised streams.⁴

RESPONSE TO FOREST MANAGEMENT

- Canada Warblers have shown some use of young (11–30 years) clearcuts⁵ and postharvest stands containing large residual trees and brushy block edges.⁶ However, recent research using province-wide data in Alberta suggests that young forest, regardless of origin, is not suitable habitat for this species.⁴
 - It has been suggested that Canada Warblers are far more likely to use harvest units where there are high densities of Canada Warblers in nearby unharvested forests, and regenerating forest itself may be suboptimal habitat.^{5,7}
- Canada Warblers were essentially absent from stands with low retention (2–6%) immediately after harvest in deciduous forests of Alberta.⁸
- Canada Warbler abundances have shown a relationship with spruce budworm abundances, suggesting a possible connection to spruce budworm declines in some provinces. Field testing to establish a causal link is strongly recommended.⁹

RANGE MAP



STAND-LEVEL RECOMMENDATIONS

- Unharvested areas (e.g., Wildlife Habitat Areas in BC) may be appropriate where several pairs are present. These areas should ≥ 500 m in diameter. Should pairs be located near a stream, these patches should ideally be placed linearly along the slope above the stream.¹⁰
- Wide riparian buffers are recommended for at least a portion of a harvested area, including voluntary buffers of ephemeral and intermittent streams. Buffers exceeding the minimum buffer widths required by regulations are recommended within deciduous forests >80 years old with a well-developed shrub layer.⁴ This variability in buffer widths should also bring harvests more in line with NRV patterns.
- If possible, high retention levels (e.g., 30–50%) paired with shrub and understory protection are recommended in high-quality occupied habitats where harvesting cannot be avoided.^{3,11,12}
- Stand tending that suppresses shrub growth will negatively affect habitat quality.³ Similarly, selection harvesting within dense old stands with suppressed shrub growth may be beneficial by promoting shrub growth.¹