

## Field Guide to Three Landbird Species at Risk and their Forested Wetland Breeding Habitat in Nova Scotia

Common name <i>Latin Name</i>	<b>Olive-sided Flycatcher</b> <i>Contopus cooperii</i>	<b>Canada Warbler</b> <i>Cardellina canadensis</i>	<b>Rusty Blackbird</b> <i>Euphagus carolinus</i>
Status SARA / NS	Threatened / Threatened	Threatened / Endangered	Special Concern / Endangered
Males in breeding plumage  (see website for more photos and information)			
Field marks, appearance	Olive-gray brown upperparts and vest, no wing bars; large head; short legs; sexes similar	Bright yellow underneath, black necklace, gray back; female is duller version of the male, inconspicuous	Black (male) or charcoal (female) in summer (rusty-tinged in winter); yellow eye, thin bill, rounded tail
Typical sounds (see website for examples)	Male sings a loud “Quick, three beers!” song at 3 kHz; both sexes give “pip-pip-pip” calls at 2 kHz	Male songs rapid, complex series of notes at 3-8 kHz, start with “chip”; both sexes give “chick” calls	Male songs end in squeaky whistle at 4.5-5 kHz that sounds like a rusty gate; both sexes give “check” calls
Typical behaviours	Perches on and sings from tops of mature live or dead conifers; flies out from perch to capture flying insect and returns to eat it	Usually hidden in dense shrubs; male sings from scattered taller ‘song perch’ trees; feeds on flying insects near the ground	Forages for aquatic invertebrates in shallow water, across large areas of wetland-forest mosaics; sings from tall trees in or near wetlands
Typical habitats  (see website for more habitat examples and details)			
Habitat types	Spruce-dominated treed swamps and bogs, wet coniferous forest with a relatively open canopy of mature conifers, mainly spruce	Mixedwood swamps with trees over 7 m, well-developed tall shrub layer 2-7 m, and dense low shrub or fern layer under 2 m	Mosaics of wetlands interspersed with mature trees and patches of short conifers; may include beaver ponds, vernal pools, bogs, swamps
More / less common trees	Black Spruce/ Balsam Fir, Larch, Pine, Red Maple	Red Maple / Spruce, Balsam Fir, Larch, Pine, Cedar, Birch	Spruce, Red Maple, Pine / Balsam Fir, Eastern Larch, Hemlock, Birch
Key understorey plants	Low shrub and herbaceous layers usually cover most of the ground	Canada holly, false holly, alder, wild raisin, cinnamon fern, dense stems	Patches of young or stunted conifers, relatively open ground for foraging
Mature tree requirements	Mature conifers and snags taller than 7 m for singing, foraging, surveying territory, and nesting	Scattered or clumped live trees 5-15 m tall and 4.5 m or more apart for singing and surveying territory	Scattered live and dead trees higher than 4 m for singing, looking out for predators, and transferring food
Other important features	Coniferous forest edges, semi-open canopies, across large areas	Uneven, messy ground, fallen trees, upturned roots, hummocks	Shallow water and mud for foraging; large areas of wetland-forest mosaics
Typical nest placement	In mature conifers, on horizontal branches away from trunk	On the ground or hummocks, very well concealed by vegetation	In dense patches of short conifers 1-3 m high, over or near water