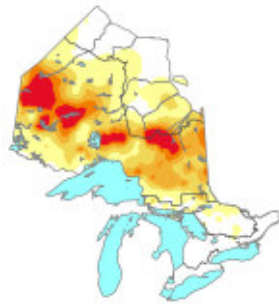


Bay-breasted Warbler Factsheet

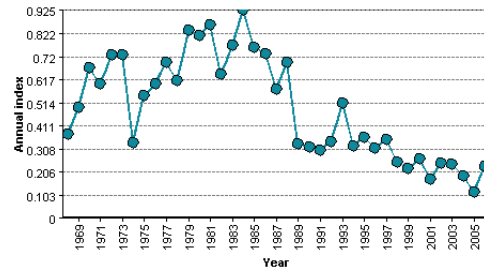
Boreal Bird Toolkit



Bay-breasted Warbler



Relative Abundance



Breeding Bird Survey Index Trend 1968-2006 (Canada)

Description and biology: The Bay-breasted Warbler is a medium-sized (12-15cm), distinctly-coloured warbler that has a black face, chestnut crown, throat, and sides, and a buff-coloured patch on the side of its neck. Its back is grey with black streaks and the dark wings have two distinct white wing bars. The Bay-breasted Warbler is a Spruce Budworm specialist and its population fluctuates with budworm outbreaks and cycles.

Habitat requirements: The Bay-breasted Warbler prefers fairly dense spruce-fir forests of the boreal forest for breeding. It will inhabit both mature and second-growth forests, but has a preference for mature forest ecosystems. The presence of Spruce Budworm is an important habitat component.

Natural history: It has been estimated that during outbreak years of spruce budworm a single Bay-breasted Warbler may eat more than 13,000 budworms per hectare over a 41-day period. Local populations have been observed to increase ten-fold.

Conservation status: Of the North American and world population, approximately 82% breed in Canada's boreal forest. Breeding Bird Surveys reveal that the Bay-breasted Warbler declined by a significant 3.4% per year across Canada between 1968 and 2006, and during the same time period declined by a non-significant 0.9% in Ontario. Migration monitoring data from Long Point and Thunder Cape indicate significant declines in the last ten years. Results from the second Ontario Breeding Bird Atlas (2001-2005) show the species increased by a significant 22% over twenty years in the Northern Shield region and decreased by 17% in the adjacent Southern Shield. Regional increases are likely indicative of budworm outbreaks. Partners in Flight designate the Bay-breasted Warbler as a watch list species of continental concern that would benefit from both continental and regional stewardship.

Environmental threats: Measures taken to control outbreaks of spruce budworm in Canada's boreal forest could be contributing to local or regional declines in this species' numbers. Planting of tree species more resistant to Spruce Budworm may lower the quality of habitat for the Bay-breasted Warbler.

Conservation opportunities: The species' affinity for mature spruce and fir forests for breeding has led to it being described as sensitive to some forestry operations. Shorter rotation (i.e. cutting) cycles and programs which reduce insect infestations have been noted as significant factors affecting the Bay-breasted Warbler population. While the species will nest in second growth habitat, efforts to protect both mature breeding habitat and wintering ground habitat would benefit the species. Significant opportunities exist in Ontario to protect suitable nesting habitat.

Boreal Bird Toolkit:

Toolkit and factsheet: © Wildlife Conservation Society Canada and G.G. Beck Ecological Consulting 2008

Breeding Bird Survey: courtesy Canadian Wildlife Service, volunteers & coordinators; www.cws-scf.ec.gc.ca/mgbc/trends

Abundance map and point count data: courtesy *Atlas of the Breeding Birds of Ontario, 2001-2005*; www.birdsontario.org

Photo: © Jeff Nadler. See toolkit for literature cited.