

DESCRIPTION OF RESIDENCE FOR KIRTLAND'S WARBLER (*DENDROICA KIRTLANDII*) IN CANADA

Section 33 of the *Species at Risk Act* (SARA) prohibits damaging or destroying the residence of a listed threatened, endangered, or extirpated species. SARA defines residence as: “a dwelling-place, such as a den, nest or other similar area or place, that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating” [s.2(1)].

As a migratory bird protected under the *Migratory Birds Convention Act*, the Kirtland's warbler is under federal jurisdiction. Any residences that are not nests are only automatically protected on federal lands, but SARA does contain a provision to prohibit the damage or destruction of non-nest residences on provincial, territorial, or private lands by way of an Order by the Governor in Council (GIC), if the Minister of Environment recommends it necessary to do so [s.34 (2), 35(2)]. Unless such an Order is made, responsibility for protecting non-nest residences remains with the provinces and territories in which the species occurs.

The following is a description of residence for the Kirtland's warbler (*Dendroica kirtlandii*), created for the purposes of increasing public awareness and aiding enforcement of the above prohibition. Kirtland's warblers are known to have one type of residence — the nest.

Species Information:

Scientific Name - *Dendroica kirtlandii*

Common Name – Kirtland's warbler

Current COSEWIC Status & Year of Designation - Endangered 2000

Range in Canada – Ontario (no map available)

Rationale for Status - This is a globally endangered species. There are no recent breeding records in Canada, but singing males are occasionally recorded in suitable breeding habitat in Ontario.

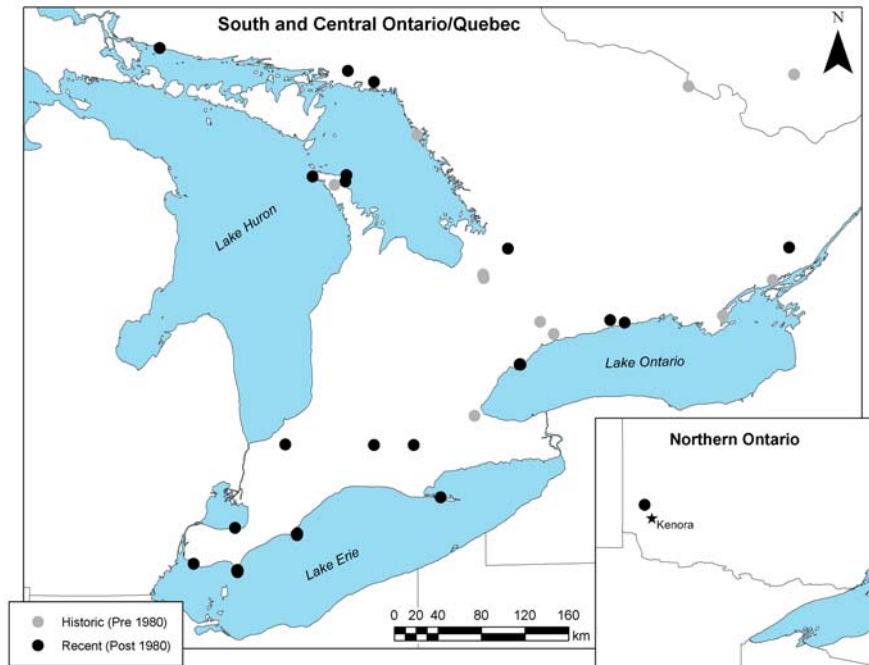


Figure 1. Distribution evidence for the Kirtland's Warbler in Canada (Multiple records at the same location are not shown)

1) The Nest

Physical Appearance and Context

In Michigan, Kirtland's warblers breed in extensive (at least 32 ha in size, preferably >80 ha) stands of young jack pine (*Pinus banksiana*)^{1,2} created by wildfire or in specially designed plantations that mimic wildfires^{1,2}. They prefer areas of dense trees interspersed with small openings, moderate canopy cover (35-65%) as well as branch cover close to the ground, and dry well-drained sandy soils². Preferred ground cover includes blueberry (*Vaccinium* spp.), bearberry (*Arctostaphylos uva-ursi*), bracken fern (*Pteridium aquilinum*), shadbushes (*Amelanchier* spp.), northern dwarf cherry (*Prunus pumila*), sweet fern (*Comptonia peregrine*), grasses (*Andropogon* spp.), sedges (*Carex* spp.), and goldenrods (*Solidago* spp.)². Canopy cover may also include small percentages of deciduous hardwood tree species². The cup-shaped nest is built on the ground, typically made out of grasses, sedges, pine needles, and small twigs, and concealed with low vegetation and branches³. The outside diameter of the nest is approximately 100mm, while the inside diameter is 58mm with a depth of 38mm³. Kirtland's warbler nests are heavily parasitized (70% of nests⁴) by the brown-headed cowbird (*Molothrus ater*), a species that lays its eggs in other birds' nests. In Ontario, suitable habitat may be largely inaccessible for surveying, due to rough terrain and a lack of roads making determination of whether the species is currently breeding in Canada difficult¹.

Function

The nest provides a container in which adult Kirtland's warblers lay and incubate eggs, and rear hatchlings. Typical clutch size is 4-5 eggs (range 3-6)⁴; eggs are pale buff, whitish, or faintly pinkish with fine brown spots gathered in cap or wreath at larger end³. The female incubates

eggs for 13-15 days and broods young hatchlings for the first 3-4 days, although young do not leave the nest for 8-10 days³. Both adults feed hatchlings³.

Damage/Destruction of Residence

Any activity that moves or otherwise disturbs the eggs or nest, changes the microclimate of the nest, or blocks access to the nest could result in damage or destruction of the residence.

Period and Frequency of Occupancy

Due to the lack of certainty of the presence of breeding Kirtland's warblers in Ontario, the timing of their return to Canadian breeding grounds is unknown. The warblers would likely return sometime in mid-May and begin nest construction shortly afterwards. Use of the nest site would last at least 5 weeks, but due to re-nesting attempts after nest failure, nest sites may be used into August. Kirtland's warblers have been known to double brood where the first brood is fledged before the end of June.³ There is no evidence that they reuse nest sites either for re-nesting attempts within the same season or between years³, so the nest site should be protected as a residence from mid May until the end of August.

Additional Information

For more information on the Kirtland's warbler, go to:

http://www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=25

For more information on SARA, go to: http://www.sararegistry.gc.ca/default_e.cfm

Recommended Citation

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References

¹ James, R. D. 1999. Update COSEWIC Status Report on the Kirtland's Warbler, *Dendroica kirtlandii*, in Canada. Committee on the Status of Endangered Wildlife in Canada.

² Austen, M. J. and H. J. Dewar. 2000. Draft National Recovery Plan for Kirtland's Warbler. Canadian Wildlife Service, Ontario Region.

³ Mayfield, Harold F. 1992. Kirtland's Warbler. In *The Birds of North America*, No. 19 (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.

4 Wildspace. Kirtland's Warbler. <http://wildspace.ec.gc.ca/life.cfm?ID=KIWA&Lang=e>