

## **DESCRIPTION OF RESIDENCE FOR RED CROSSBILL *percna* subspecies (*Loxia curvirostra percna*) 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)].

The prohibition comes into effect in different ways depending on the jurisdiction responsible for the species. As a migratory bird protected under the *Migratory Birds Convention Act*, the Red Crossbill *percna* subspecies is under federal jurisdiction. This means the residence prohibition is in effect for all nest residences on all lands on which the species occurs immediately upon its addition to the legal list of species at risk.

The following is a description of residence for the Red Crossbill *percna* subspecies (*Loxia curvirostra percna*), created for the purposes of increasing public awareness and aiding enforcement of the above prohibition. Red Crossbills are known to have one type of residence – the nest.

### **Species Information:**

**Common Name** – Red Crossbill

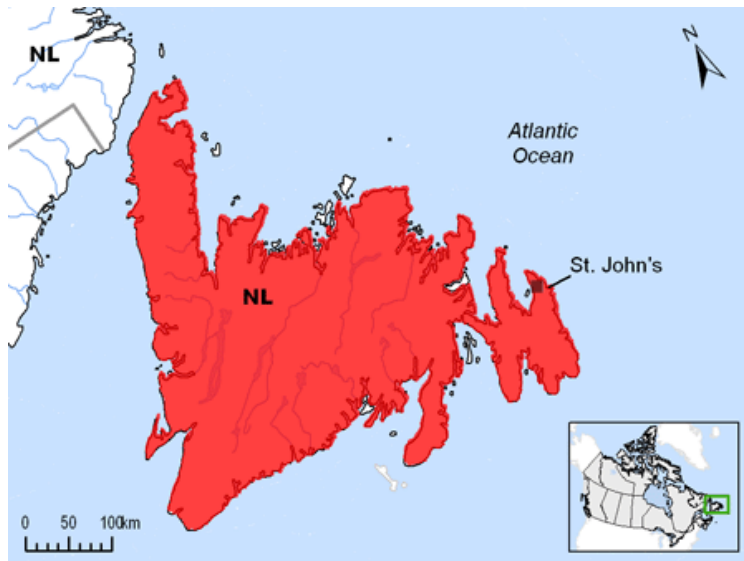
**Scientific Name** – *Loxia curvirostra* (*percna* subspecies)

**Current COSEWIC Status & Year of Designation** – Endangered (2004)

**Occurrence in Canada** – Insular Newfoundland

**Rationale for Designation** – Habitat loss, interspecific competition, and human disturbance

**Figure 1. Known distribution of the Red Crossbill (*percna subspecies*) in Canada (shown in red)<sup>1,2</sup>. Distribution is approximate and not intended for legal use.**



<sup>1</sup>Author: Canadian Wildlife Service, 2004

<sup>2</sup>Data Sources: The main source of information and data is the COSEWIC Status Report. In many cases additional data sources were used; a complete list will be available in the future.

## 1) The Nest

### Physical Appearance and Context

Any place used as a nest by Red Crossbill *percna* subspecies is considered a residence. The nest of the Red Crossbill is described as well concealed within the branches of spruce, or pine trees, ranging from 2 to 20 m off the ground<sup>1</sup>. However, nests in Newfoundland are described as being found in all coniferous trees, and are made of twigs, rootlets or strips of bark, and are lined with moss, hair or fur<sup>2</sup>. Nest dimensions measured for a nest in Colorado (non *percna* subspecies) were: 105–127 mm across, 52 mm deep; cup: 60 mm wide, 27 mm deep<sup>3</sup>. No nest dimensions are available for a *percna* nest.

Clutch size is generally 3 eggs<sup>1</sup> in North America, but 4 – 5 eggs were reported for Newfoundland nests<sup>2</sup>. Eggs are pale green in colour. Onset of incubation begins after the last egg, except in cold weather when incubation may begin on the first egg. Only the females are known to incubate the eggs<sup>1</sup>. Incubation times range from 12 – 16 days<sup>1</sup>. There is little information available from North America on the synchronization of hatch. Nests of Scottish Crossbills (*Loxia scotica*) hatched all eggs within 24 hours for 4 nests and within 48 hours for 8 nests. Colder temperatures may prompt more asynchronous hatch<sup>1</sup>.

Fledging times are varied and there is no information for the *percna* subspecies. Other Red Crossbill subspecies fledging times range from 15 – 25 days, with an extreme of 35 days<sup>1</sup>. Once fledged the young may stay near and roost at the nest tree for several days. Chicks are altricial (born featherless, blind, and helpless) at hatch, and will remain in the nest until they fledge.

## Function

The function of the nest residence is to provide protection, shelter, and the required conditions for egg-laying, incubation, and hatching, as well as the rearing of young.

## Damage and Destruction of the Residence

Federal Policy defines damage or destruction of a residence as:

*Any alteration to the topography, geology, soil conditions, vegetation, chemical composition of air/water, surface or groundwater hydrology, micro-climate, or sound environment which either temporarily or permanently impairs the function(s) of the residence of one of more individuals.*<sup>4</sup>

Any activity that destroys the function of the nest would constitute damage or destruction of the residence. This includes, but is not limited to, loss of access, direct destruction of the nest, loss of the tree that contains the nest, and alteration to surrounding canopy cover, foliage height, and foliage diversity and density.

## Period and Frequency of Occupancy

Nest initiation generally occurs between mid December and mid September<sup>1</sup> in North America, and more specifically described as January through July for Newfoundland depending upon the availability of food<sup>2</sup>.

Nests should be protected as a residence during the period they are active. Due to the variability of breeding, nest protection for this species cannot be assigned to a given time frame. Red Crossbills are very transient and eruptive and will occur in areas of high food concentration. Therefore they may not display fidelity to a nest location from year to year. Protection should include the period encompassing nest building, egg laying, incubation, hatching, brood rearing, fledging, and approximately one week of the post-fledging time period – a total time frame of approximately 60 days.

## Additional Information

For more information on the Red Crossbill *percna* subspecies, go to:

[http://www.speciesatrisk.gc.ca/search/speciesDetails\\_e.cfm?SpeciesID=814](http://www.speciesatrisk.gc.ca/search/speciesDetails_e.cfm?SpeciesID=814)

For more information on SARA, go to: [http://www.sararegistry.gc.ca/default\\_e.cfm](http://www.sararegistry.gc.ca/default_e.cfm)

## Recommended Citation

Please cite this document as:

Government of Canada. Species at Risk Act Public Registry. Residence Descriptions. Description of residence for Red Crossbill *percna* subspecies (*Loxia curvirostra percna*) in Canada. Date and link to TBD. (Access date).

## References

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- <sup>1</sup> Adkisson, C. S. 1996. Red Crossbill (*Loxia curvirostra*). In The Birds of North America, No. 256 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- <sup>2</sup> Peters, H.S. and T.D. Burleigh. 1951. The Birds of Newfoundland. Dept. of Natural Resources, Prov of Newfoundland. 431 pp.
- <sup>3</sup> Snyder, D. P. and J. F. Cassel. 1951. A late summer nest of the Red Crossbill in Colorado. Wilson Bull. 63: 177–180.
- <sup>4</sup> Government of Canada. 2004. Species at Risk Act Policy: Policy on Residence. Draft (June 18, 2004). Unpubl. Paper. 17 pp.  
[http://www.sararegistry.gc.ca/policies/showDocument\\_e.cfm?id=274](http://www.sararegistry.gc.ca/policies/showDocument_e.cfm?id=274)