



## Featured Species Habitat Management Guidance for Red Crossbill

**Latin Name:** *Loxia curvirostra*

**Scope:** Upper Peninsula

**Rationale** - *why we value the species and the problem for the species:*

The red crossbill (RECR) is listed as a SGCN (Michigan DNR 2015). Declines in RECRs have been associated with declines in the amount of available pine seeds; this relationship is well documented in the literature from around the world (Adkisson 1996).

**Habitat Need** - *the cause & effect relationship between habitat and species and its primary limiting habitat need:*

The Red Crossbill is closely associated with mature red and white pine forests and is a year-round non-migratory resident in the Upper Peninsula (UP). The RECR's nearly exclusive diet of conifer seeds makes it dependent upon mature pine forests and influences its seasonal distribution and habitat selection. In Michigan, savannah-like stands of mature red pine comprise preferred habitat. These areas are used by family groups and may serve as important food sources for fledglings which suffer high mortality their first winter without a reliable food source. The loss of mature pines on the landscape would be detrimental to this species. Jack pine plains, sand ridges with mature pine, black spruce-tamarack bogs, and recent clearcuts are also used in the summer by foraging flocks.

**Habitat Objectives** - *the treatment or management to address the primary limiting habitat need:*

- 1) Increase the rotation age of ten percent of white and red pine to greater than 100 years in shelter-wood, seed tree cuts and managed stands.
- 2) Retain large mature and over mature red and white pine in shelter-wood and seed tree cuts.
- 3) Set aside core tracts of pine (greater than 100 years old) as SCA or HVCA. Pine ridges in peatlands are important summer foraging areas and retention of mature trees in this landscape are desirable.

**Priority Geographic Areas** – *the specific geographic areas where we should focus management for the species:*

The 8 Regional State Forest Management Plan Management Areas (Deer Park, Whitefish-Vermillion Point, Danaher-Kingston Plains, Kinchloe Highlands, Tahquamenon River Patterned Fens, Chain Lakes Moraine, Keweenaw Tip, and Palmer Moraine), which identify RECR as a featured species.

**Priority Landscapes** – *the landscape, setting, or cover-type where we should focus management within the areas above:*

Red, white pine, or mixed pine stands within the priority geographic areas. Particularly focus upon stands with mature or soon-to-be-mature pines.

**Population Goal** - *the goal for the species, its habitat, or a stakeholder's actions:*

Presence at 75% of a proposed set of survey sites.

**Evaluation Method** - *the monitoring method to measure progress towards the goal above:*

Breeding bird surveys (BBS), the Christmas bird count, and proposed targeted surveys at a sample of sites. Propose baseline data to be gathered at some sites. Propose annual point counts at a sample of sites should be performed as time and budget allows. Propose post treatment sites surveyed one year and several years after harvesting to determine if retention is adequate for the species.

**Incidental Species** – *other species which may benefit from management for this species:*

American marten; blackburnian warbler; gray jay; and spruce grouse.

**References** - *citation for documents referenced in this guidance:*

- Adkisson, Curtis S. 1996. Red Crossbill (*Loxia curvirostra*), The Birds of North America Online (A. Poole, Editors). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/256>
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- Michigan Department of Natural Resources (DNR). 2015. Michigan Department of Natural Resources (DNR) online list of Frequently Asked Questions on the 2009 Revision of the State Endangered Species List. < [http://www.michigan.gov/dnr/0,1607,7-153-10370\\_12141-213610--,00.html](http://www.michigan.gov/dnr/0,1607,7-153-10370_12141-213610--,00.html) >. Accessed 9 Sept. 2015.