



Featured Species Habitat Management Guidance for Gray Jay

Latin Name: *Perisoreus canadensis*

Scope: Upper Peninsula

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

Gray jay's or "whiskey jacks" are a highly valued species in the Upper Peninsula (UP) of Michigan. "No welcome to the north woods surpasses the eloquence of a Gray Jay softly gliding into view as it emerges to inspect a visiting birder" (Hickman, 2011). The gray jay is listed as a SGCN (Michigan DNR 2015) and is at the southern edge of its range in the UP where it is considered an uncommon to common local resident of conifer dominated habitats, particularly those containing spruce.

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

Although gray jays are non-migratory residents, exploratory-modeling results in Ontario suggest that winter habitat needs (especially old black spruce) may be critical to persistence of local populations. Widespread salvage cutting of spruce has reduced habitat in some areas of New England (Ficken 1996). Habitat loss and global warming likely constitute the greatest potential threats to this species in Michigan. An increase in loss of conifer dominated habitats containing spruce would certainly decrease Michigan's Gray Jay population, and climate change has already been shown to be moving ranges of many organisms, including forest dwelling birds, northward (Hickman 2011). Gray jays use spruce for both nesting and caching their food and have to maintain a home range large enough that sufficient caches necessary for winter survival can be maintained at a density low enough to avoid unacceptable, density-dependent losses to conspecific and other cache predators (Strickland and Ouellet 2011).

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

Maintain the boreal forest type (Spruce/Fir) in the UP landscape spatially and temporally in a variety of age classes and ensure that older age classes of boreal forest are maintained. Important considerations in timber harvests are retention patches of spruce/fir and scattered individual trees for food caching within sale boundaries. Maintain spruce and fir buffer at bog edges.

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

The 7 Regional State Forest Management Plan Management Areas (Bullock Ranch, Cusino Complex, Tahquamenon River Basin Wetlands, Waishkey Bay, Chain Lakes Moraine, Covington/Ned Lake, and Peshekee Highlands) and 4 WLD Project Areas (Bullock Ranch SWMA, Cusino SWRA, Dollarville Flooding SWMA, Net River Flooding SWMA) which list the gray jay as a featured species.

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

Spruce/fir lowlands and bog edges within the priority geographic areas.

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

Presence at 75% of the proposed survey sites.

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

Propose use of breeding bird surveys, Christmas bird counts, and targeted point and/or meander surveys. Propose gathering baseline data at some sites. Propose annual point counts at a sample of sites as time and budget allows. Propose surveys one year and several years after harvesting to determine if patch retention is adequate for the species.

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

American marten; blackburnian warbler; moose; northern goshawk; red crossbill; snowshoe hare; and spruce grouse.

References - citation for documents referenced in this guidance:

- Brewer, Richard, Gail A. McPeck, Raymond J. Adams, Jr. "The atlas of breeding birds of Michigan." 1991, Michigan State University Press.
- Eagle, A.C., E.M. Hay-Chmielewski, K.T. Cleveland, A.L. Derosier, M.E. Herbert, and R.A. Rustem, editors. 2005. Michigan's Wildlife Action Plan. Michigan Department of Natural Resources. Lansing, Michigan. 1592 pp. <http://www.michigan.gov/dnrwildlifeactionplan>
- Hickman, S. 2011. Gray Jay (*Perisoreus Canadensis*). In A.T. Chartier, J.J. Baldy, and J.M. Brenneman, editors. The Second Michigan Breeding Bird Atlas. Kalamazoo Nature Center. Kalamazoo, Michigan, USA. Accessed online at: <www.mibirdatlas.org/Portals/12/MBA2010/GRAJaccount.pdf >.
- 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 >. Accessed 9 Sept. 2015.
- Strickland, Dan and Henri Ouellet. 2011. Gray Jay (*Perisoreus canadensis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/040>