

1.0 Annex 5--The Tragedy of Hemlock Management

The tragedy of hemlock management in Algonquin Park is that the species is extremely valuable to wildlife, yet the planned harvest exceeds the amount needed to supply local mills with this species. The argument is often made that the wood supplied from Algonquin Park is necessary to supply local mills and employ local people. However, this very valuable wildlife tree is being cut to supply pulp and saw logs to the open market, hardly designed to benefit local people and local sawmills. Exploiting the Algonquin Park Ecosystem for the benefit of making pulp from valuable wildlife habitat seems truly shortsighted and unfortunate.

Table 19 in the FMP, titled Forecast (10-year) and Planned (5-year) Wood Utilization by Mill reveals a truly tragic and devastating harvest of hemlock. During the ten years this plan will be in place, the intent is to harvest over 580,000 m³ of hemlock. Of this amount only about 150,000 m³ is needed to supply all the demand for hemlock to the mills surrounding the Park. In addition to meeting the demand for local mills, the Plan calls for more than 150,000 m³ to be sold for pulp on the open market, and more than 260,000 m³ for saw logs to be sold on the open market.

Martin (1960) surveyed bird communities in the Park over two field seasons in the early 1950's. He was able to determine that distinct bird communities were present in forest types he classified as bog, boreal forest, deciduous forest, and hemlock forest. The hemlock bird community had the highest density of territorial males and the greatest number of "principal" species. Most striking was the density of some species found in the hemlock community compared to those found in other communities. He recorded 102 blackburnian warbler males per 100 acres in the hemlock forest, compared with a maximum of 15 in other forest types; also recorded most frequently in hemlock forests were black-throated green warbler (28 in hemlock, compared to a maximum of 6 in other communities), slate-coloured junco (13 in hemlock, max. 4 elsewhere), red-breasted nuthatch (10 hemlock, max. 4 elsewhere). In addition, two species (blue-headed vireo and parula warbler) were found only in the hemlock community. The ongoing decline of hemlock in the Park may be accompanied by declines in these bird species with affinities for it.

There is overwhelming evidence of continental declines in migratory songbird populations (Terborgh 1989, Böhning-Gaese et al. 1993, Sauer et al. 2008), with habitat loss on overwintering grounds in Central and South America, fragmentation of breeding areas in southern Canada and the continental United States, and migration mortality, identified as key causal agents. At the same time, there is also considerable evidence attesting to the role of forest management in Canada contributing to this habitat loss (Schmiegelow and Mönkkönen 2002, Wedeles and Donnelly 2004).

For this Plan, the harvest of hemlock should be limited to the amount of wood needed to meet the demand at local mills and the other hemlock in the Park should be allowed to grow and mature into wildlife habitat and support the biodiversity of the Park.

This is Annex 5 prepared by Algonquin Eco Watch as part of a request for Individual Environmental Assessment for the Algonquin Forest Management Plan 2010

Böhning-Gaese, K, M. Taper, and J.H. Brown. 1993. Are declines in North American insectivorous songbirds due to causes on the breeding range? *Conservation Biology* 7: 76-86.

Martin, N.D. 1960. An analysis of bird populations in relation to forest succession in Algonquin Provincial Park, Ontario. *Ecology*. 41: 126-140.

Sauer, J. R., J. E. Hines, and J. Fallon. 2008. The North American Breeding Bird Survey, Results and Analysis 1966 - 2007. Version 5.15.2008. USGS Patuxent Wildlife Research Center, Laurel, MD.

Schmiegelow, F.K.A. 2002 and M. Mönkkönen. 2002. Habitat loss and fragmentation dynamics: Avian perspectives from the boreal forest. *Ecological Applications*. 12: 375-379.

Theberge, John A. 1990. Should Hemlock Cutting Cease in Algonquin Provincial Park? For Discussion MNR, AFA February 22, 1990.

Terborgh, J. 1989. *Where Have All the Birds Gone.* ? Princeton University Press. Princeton, N.J.

Wedeles, C.H.R. and M. Donnelly. 2004. Bird-Forestry Relationships in Canada: Literature Review and Synthesis of Management Recommendations. National Council for Air and Stream Improvement Inc. Technical Bulletin No 892. Research Triangle Park, North Carolina.