



MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

June 11, 2015

TO: Wildlife Division and Forest Resources Division Staff

FROM: Dr. Russ Mason, Chief, Wildlife Division (WLD)
Bill O'Neill, Chief, Forest Resources Division (FRD)

SUBJECT: Woodland Raptor Guidelines (final)

Draft Management Guidelines for Red-shouldered hawk (RSH) were first developed for the northern Lower Peninsula ecoregion by a Woodland Raptor Working Group in 1999. Those guidelines were never formally adopted by the Department of Natural Resources (DNR). Additional survey information on RSH populations helped inform the decision to reassess and update the guidelines again in 2012; at the same time a decision was also made to include the Northern goshawk in these guidelines. These materials were referenced in the Regional State Forest Management Plans and staff was directed to use these as interim management guidelines until which time new and final guidelines were developed and issued.

The Field Coordinators from FRD and WLD (Dennis Nezich and Penney Melchoir) were charged with conducting a review of these interim guidelines and soliciting input from field staff and Michigan Natural Features Inventory (MNFI) experts at the end of 2013. These findings were provided at the September 8, 2014 joint management team meeting. Differences in buffer distance were the majority of the comments and both divisions had their own recommendations. The Coordinators then discussed the guidelines with David Cuthrell (MNFI) and reviewed his comprehensive table of raptor species and the conservation and protection of nesting habitat requirements. The guidelines have now incorporated the necessary changes and have set a path for the development of baseline data and a new data layer in the MiFi system as part of this effort.

FRD and WLD staff shall use the attached final management guidelines for identified raptors on all state forest lands. These guidelines supersede guidelines contained in the draft 1999 and 2012 "Management Guidelines for Red-shouldered Hawks on State-owned Lands in Michigan and "Interim Guidelines for Red-shouldered Hawks and Northern Goshawk on State-owned Lands in Michigan."

If you have any questions or need additional information please contact either Field Coordinator.

Attachment

cc: Douglas Reeves, WLD
Debbie Begalle, FRD
David Cuthrell, MNFI

Management Guidance for Woodland Raptors (specifically Red-Shouldered Hawks and Northern Goshawk) on State Forest Lands

June 11, 2015

Background

Draft management guidelines for Red-shouldered hawk (RSH) were developed for the northern Lower Peninsula ecoregion by a Woodland Raptor Working Group in 1999. Those draft guidelines were never formally adopted by the Department. Survey information on RSH populations helped inform a decision to re-assess and update the draft guidelines and additional information also helped inform the decision to include the Northern goshawk (NG) in these guidelines and identified them as interim guidance in 2012. These interim management guidelines served to inform actions on state land as part of the State Forest Management Plan. The Field Coordinators from Wildlife Division (WLD) and Forest Resources Division (FRD) were tasked with finalizing guidance materials for woodland raptors (including RSH and NG) in 2014.

Objectives

These guidelines will focus on the following main objectives for woodland raptors:

1. Protect woodland raptors
2. Establish raptor guidelines that recognize and compliment timber cover type management objectives to the extent possible.
3. Continue to evaluate methods and determine if management changes are necessary (adaptive management strategies).
4. Develop a special data layer within the MiFi system for tracking woodland raptor nests (specifically Red-shouldered hawks and Northern goshawks).

Management Guidelines

These new guidelines, approved by the joint management team of Wildlife and Forest Resources Divisions shall be used by the two divisions' field staff for woodland raptors, including Red-shouldered hawks and Northern goshawks on all state forest lands. These guidelines supersede guidelines contained in the draft 1999 "*Management Guidelines for Red-shouldered Hawks on State-owned Lands in Michigan*" and the 2012 "*Interim Guidance for Red-shouldered Hawks and Northern goshawk on State Forest Lands.*" The current guidelines were developed from multiple sources but primarily from recommendations in Szuba and Bell (1991), Naylor (2009), and Naylor et al. (2004).

Nest Site Guidelines

1. If an active red-shouldered hawk or goshawk nest is found, the following guidelines will be put into place until such time as the nest is determined to be inactive.
 - a. Active RSH and NG nests will be buffered with a 5-chain radius (8 acre) protection area, centered on the nest tree, in which there will be no cutting or new roads constructed. Avoid human disturbance, including loading and skidding, in this protection area.
 - b. An additional zone of 5 chains (total of 10 chains centered on the active nest trees) will be established in which there is no management activity during the following activity times: Southern Lower Peninsula from February 15 to July 1; Northern Lower Peninsula from March 15 to July 15; Upper Peninsula from April 1 to July 30.

- c. Limit biomass harvesting and chipping operations; within this 10 chain zone, retain the maximum one-third of residues per the Woody Biomass Harvesting Guidance (Michigan DNR 2010).
 - d. Deviation from these guidelines is contingent on compartment review agreement and/or approval from WLD Field Operations Managers and FRD District Managers (or their supervisors if agreement cannot be reached).
2. Red-shouldered and goshawk nests determined to be inactive by joint decision involving local WLD and FRD staff will be protected with a 1-chain no-harvest buffer. If the nest is found to be in disrepair or un-occupied for multiple years, it can be classified as an unsuitable nest in which case no buffer is required.
3. Record observations of active and inactive nests as an opportunistic field survey in the enterprise GIS. This will involve developing and jointly (FRD and WLD staff) populating a separate layer in MiFi specific to raptor nests. This layer will be used for determining baseline information for use in long-term nest monitoring. It will also be used to identify trends, research opportunities, and eventual feedback/evaluation for management guidelines and development of a Habitat Suitability Index for RSH and NG.

Management Area Guidelines

1. In cover types where uneven-aged management techniques are used:
 - a. When possible, and considering forest health conditions, encourage large contiguous blocks (usually >300 acres) of relatively mature, northern hardwood and mixed hardwood-conifer forest cover types, with moderate (about 70%) canopy closure and nearby or interspersed wetland habitats (blocks can be comprised of multiple stands in different Years of Entry).
 - b. Apply Within-Stand Retention Guidance (Michigan DNR 2012), to identify and retain mature trees for future nests, existing stick nests, snags, and coarse woody debris. Where possible, retain a minimum of one large diameter deciduous (other than beech) tree per 5 acres, and with a preference for multi-crotched trees high in the canopy.
2. In cover types where even-aged management techniques are used:
 - a. Apply Within-Stand Retention Guidance (Michigan 2012), retaining patches of several large diameter deciduous trees (especially multi-crotched trees high in the canopy).
3. Maintain adequate prey base by managing for appropriate levels of coarse woody debris:
 - a. Follow Within-Stand Retention Guidance (Michigan 2012) for stand diversity.

Citations

Michigan Department of Natural Resources. 2012. Within-Stand Retention Guidance. IC4119. Michigan Department of Natural Resources, Lansing, MI. 39 pp.

Michigan Department of Natural Resources, 2010. Michigan Woody Biomass Harvesting Guidance. IC 4069. Michigan Department of Natural Resources, Lansing, MI. 18 pp.

Naylor, B.J., J.A. Baker and K.J. Szuba, 2005. Effects of forest management practices on Red-shouldered Hawks in Ontario. *The Forestry Chronicle* 80: 54-60.

Naylor, B. J. 2009. Forest management and stick-nesting birds: New direction for mitigation in Ontario. *The Forestry Chronicle* 85: 235-244.

Szuba, K. J., and P. Bell. 1991. Hawk guide for Ministry of Natural Resources field personnel. OMNR, Wildlife Policy Branch, Toronto.