MICHIGAN DEPARTMENT OF NATURAL RESOURCES – www.michigan.gov/dnr
Wildlife Division

Featured Species Habitat Management Guidance for

Snowshoe Hare

Latin Name: *Lepus americanus* **Scope:** Statewide

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

The snowshoe hare is a valued game species. In 2010 there were at least 15,000 hunters who spent 102,000 days afield seeking hare (Frawley 2012). It is a primary prey species for several small and medium sized carnivores (Griffin and Mills 2007). The number of hare hunters has declined sharply in recent years from a high of 140,000 in 1975 to less than 20,000 today (Frawley 2007). At least part of the loss of hunter interest can be attributed to declines in hare numbers. Today there is a low relative abundance of hare throughout southern extent of its range including Michigan (Eagle 2005; Hodges et al. 2009). Declines are likely the result of declining habitat quality although climate change may also be partly involved. Declines in the amount of young forests and a decrease in mesic conifer are thought to have negatively impacted hare.

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

Hare populations do best in areas with dense, young forest and shrub communities; alder and coniferous swamps are preferred (Bittner and Rongstad 1982). Dense understory cover is the primary limiting factor; escape/thermal cover is more significant than food availability (Carreker 1985). Hare are most abundant in sapling and pole stages. Their use is lower in stands taller than 40 feet and under canopy closures greater than 60% (Carreker 1985). In mature forests, hare are associated with beaver ponds and aspen harvests, feeding upon available cuttings and finding cover in the resulting revegetation.

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

1) Maintain young aspen stands that have a conifer understory or young aspen stands that are adjacent to lowland/swamp conifer and mesic conifers.
2) Maintain lowland shrub communities such as alder or willow.
3) Promote mesic conifers.
4) Maintain young dense jack pine stands.
5) Retain slash, and create brush piles within timber sales associated with hare habitat.
6) Work to maintain or increase abundance of beavers and natural cycling of beaver pond communities.

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

The entire UP and NLP; and the 30 Regional State Forest Management Plan Management Areas (1 WUP, 14 EUP, and 15 NLP) and 5 WLD project areas that identify snowshoe hare as a featured species.

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

Aspen or jack pine management areas associated with wetland and riparian complexes with shrub, lowland conifer, or mesic conifer components.

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

Increase abundance of snowshoe hare.

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

Annually monitor snowshoe hare harvest through hunter surveys. Hunting effort can provide an estimate of relative abundance.

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

American woodcock; beaver; golden-winged warbler; ruffed grouse; white-tailed deer; and wild turkey.

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

Bittner, S.L. and O.J. Rongstad. 1982. Snowshoe hare and allies. Pages 146-166 in J.A. Chapman and G.A. Feldhamer, editors. Wild Mammals of North America. John Hopkins University. Press, Baltimore, MD.

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Hodges K.E., L.S. Mills, and K.M. Murphy. 2009. Distribution and abundance of snowshoe hares in Yellowstone National Park. J. Mammalogy 90:870-878.

Griffin, P.C., and L.S. Mills. 2007. Precommercial thinning reduces snowshoe hare abundance in the short term. J. Wildlife Manage. 71:559-564.