

PROBLEMS AND STRATEGIES FOR SNOWSHOE HARE MANAGEMENT IN MAINE

Prepared by: Walter Jakubas
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Introduction

The following paragraphs describe the possible problems that may occur when the goals and objectives for managing snowshoe hare are implemented. These problems were identified during the review of the feasibility and desirability of the goals and objectives set by the public working group.

Problem 1: We do not know which partial cutting practices create habitats favorable for snowshoe hare, nor do we know the amount of time those habitats will remain favorable to snowshoe hare. Without this information, it will be impossible to predict what effect partial cutting practices will have on the carrying capacity of the habitat for snowshoe hare. In addition, this information is needed to make recommendations as to which cutting practices are best suited for maintaining and creating early successional habitat for snowshoe hare and other species.

Strategy 1.1: Additional funding for research on the ecological impacts of partial cutting practices should be pursued. In particular, the characteristics of partial cuts favorable to snowshoe hare need to be identified. This research should be conducted in cooperation with the University of Maine and forest landowners. Although the impact of these forest practices on snowshoe hare would be one of the most important goals of this research, the impacts on other wildlife species should also be pursued.

Problem 2: We do not know what effects intensive stand management activities, such as pre-commercial thinning, have on the carrying capacity of the habitat for snowshoe hare, nor do we know the length of time habitats that have undergone various forms of intensive stand management will remain favorable for snowshoe hare.

Strategy 2.1: Additional funding for research on the ecological impacts of intensive stand management activities should be pursued. This research should be conducted in cooperation with the University of Maine and forest landowners. Although the impact of these forest practices on snowshoe hare would be one of the most important goals of this research, the impacts on other wildlife species should also be pursued.

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Problem 3: Forests are already being cut faster than they are being replaced in the Industrial Forest Region of Maine; therefore, the long-term sustainability of the cutting rates called for in Habitat Objective 1 may not be possible.

Strategy 3.1: The Department needs to initiate a landscape planning effort for Northern Maine as soon as possible. Through this planning effort, the Department should identify how to best address the habitat needs for wildlife in this region. Once the landscape approach is agreed upon for addressing the habitat management goals of specific species, the Department should work with landowners to determine the harvest prescriptions that best meet this approach. If it is not possible to sustain the forest cutting rates suggested in this assessment, the landscape planning effort should identify the best alternatives to maintaining habitat for early successional species, such as snowshoe hare.

Problem 4: Increased cutting of forests is called for in most of the objectives in order to sustain or increase the carrying capacity for snowshoe hare. This could adversely affect deer wintering areas and other animals that depend on mature forests. Furthermore, increased cutting may increase forest fragmentation, which is detrimental to a number of species of wildlife (e.g., marten, birds dependent on forest interiors).

Strategy 4.1: The issue of balancing the needs of species requiring early successional habitat versus mature forests needs to be thoroughly examined as part of the Department's landscape planning efforts in northern and southern Maine. Through these planning efforts, the appropriate compromises should be reached regarding the mix of forest types desired on the landscape and the amount of forest fragmentation that is desirable.

Problem 5: For Habitat Objective #2, which calls for increasing the amount of snowshoe hare habitat on state owned lands by 100%, the Department does not know the amount of upland habitat that is currently suitable for hare on state owned lands. There also may be conflicts between increasing the amount of hare habitat and other Departmental objectives for habitat management.

Strategy 5.1: The Department's new Lands Management Biologist, as part of his normal duties, will categorize the various habitats on Department lands, and develop management plans for these lands. The goals and objectives for snowshoe hare will be sent to him so that he can plan land management activities that strive to accomplish the goals set by the Public Working Group for snowshoe hare, and balance those goals with other Departmental objectives for land management.

Problem 6: The amount of land open to public hunting continues to decrease because of residential development and posting of land.

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Strategy 6.1: The Department's Information and Education Division can help address this problem by producing informational material and programs that encourage people not to post their lands, and that address the benefits of hunting to landowners.

Strategy 6.2: The Department could provide incentives to landowners that do not post their land closed to hunting, and work with landowners to alleviate their concerns about having hunters on their lands.

Strategy 6.3: The hunting public should continuously be reminded to foster good relationships with the landowners on whose lands they hunt. Themes of asking permission to hunt on land, and hunting ethics could be emphasized.

Strategy 6.4: The Department, by working with local communities in the Beginning with Habitat Program, can encourage large blocks of huntable land to be set aside as wildlife and recreation areas.

Problem 7: To achieve Habitat Objective #3, approximately 23 mi² of additional forestland will need to be harvested each year, for the next 15 years. The task of timber harvesting will fall primarily on small woodlot owners. It may be difficult to convince small woodlot owners that they need to harvest their forests at this rate and allow hunting on these lands.

Strategy 7.1: An aggressive program will need to be started by the Department to promote early successional habitat creation by woodlot owners. The multi-species benefits of creating this habitat will need to be clearly explained to woodlot owners, and incentives may have to be provided to create this habitat. The Department or Maine Forest Service should highlight any economic benefits that higher harvest rates would bring to woodlot owners. The Department should try to work with the Maine Forest Service, Small Woodlot Owners Association, and sporting groups to facilitate this habitat management effort.

Strategy 7.2: The Department should encourage clearcutting as a means to achieve the forest harvest rates set forth in this goal.

Strategy 7.3: A public relations campaign is needed to let the general public know why increased forest cutting is desirable in southern and central Maine. Public support may encourage woodlot owners to participate in this habitat management program.

Problem 8: To achieve Objective #3, the amount of hare habitat in the Forest Agriculture and Residential Region will need to be estimated.

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Strategy 8.1: MDIFW's Habitat Group, in cooperation with large landowners and the Maine Forest Service, may address this problem by determining the amount of land in early successional stages that has sufficient stem density to support hare populations. This may be done either through remote census techniques or through the forest re-inventory that is done every 5 years. Alternatively, the figures presented in this assessment could be used as a conservative estimate of the amount of forest that will need to be harvested to meet this objective.

Problem 9: Too few landowners realize that they could improve habitat conditions for snowshoe hare and create hunting opportunities by setting back succession on their land.

Strategy 9.1: A public relations campaign is needed to let the general public know why increased forest cutting and early successional habitat are desirable in southern and central Maine. In addition, the Department needs to continue to promote hunting.

Problem 10: Snowshoe hare are being underutilized as a game species in some areas of the state.

Strategy 10.1: The Department needs to promote snowshoe hare hunting, and provide information to the general public on which areas of the state provide the best hunting opportunities.

Strategy 10.2: The Department could address this problem by working with registered Maine Guides to promote hare hunting as one of the activities available to their cliental.

Problem 11: Hunters and the public need to be able to distinguish New England cottontail from snowshoe hare.

Strategy 11.1: The Department could address this problem by redistributing pamphlets that describe how to distinguish a snowshoe hare from a New England cottontail. In addition, Department personnel can continue to work with the media to make the public more aware of the plight of New England cottontail and their habitat requirements.

Problem 12: Snowshoe hare are being underutilized as ecological monitors, consequently it is difficult to predict changes in predator population levels, prey selection (e.g., coyotes preying on hare vs. deer), hunting opportunities, and trapping opportunities for a variety of species.

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Strategy 12.1: Surveys specifically designed to determine the density of snowshoe hare in different regions of the state need to be established. A preliminary study is needed to determine the best method for determining hare densities over broad geographic areas (e.g., pellet counts vs. snowtrack counts). If this information is not readily available in the literature, funding could be sought for a Master's degree research project or for an Honors project, at the University of Maine.

Strategy 12.2: Snowshoe hare densities should be determined annually. This information should be incorporated into management systems for snowshoe hare, coyote, bobcat, lynx, and fisher.

Strategy 12.3: Snowshoe hare densities should be determined annually. Information on how changes in hare densities might affect the regional harvest rates of snowshoe hare, coyote, bobcat, lynx, fisher, or deer should be disseminated to the public.