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Report to the Minnesota State Legislature

Emergency Deer Feeding Work Group



January 15, 1998

EXECUTIVE SUMMARY

This report was prepared by a six-member work group comprised of individuals from the Minnesota Deer Hunters Association and the Department of Natural Resources at the direction of the state legislature. It provides recommendations on use of dedicated state deer feeding funds for emergency deer feeding in northern Minnesota during the winters of 1997-98 and 1998-99, and includes recommendations on additional winter deer management and research needs and educational opportunities related to deer management and feeding issues.

The recommendations shift many of the responsibilities for implementing future emergency feeding programs from the DNR to local non-profit organizations with an interest in deer feeding. The DNR's Winter Severity Index would be used to identify areas where severe winter conditions exist. Legally established non-profit organizations would then declare their interest in sponsoring a feeding program in these areas. These sponsoring organizations would be responsible for defining the areas where they will carry out a feeding program, establish feeding program start and end dates, develop a feed distribution strategy, and distribute feed to deer in the field. The DNR would provide technical assistance to the sponsoring organization, monitor deer condition and winter severity, and order feed and distribute it to sponsoring organizations. Both the DNR and the organizations would be responsible for monitoring and evaluating the program.

The report also details some additional management needs in both forest and farmland areas that would benefit deer and reduce the need for future feeding programs. These needs focus on identification, protection, and management of deer wintering complexes; improving the availability and use of deer habitat and population data by DNR deer managers; and increasing the ability of wildlife managers to influence winter habitat management across all ownerships.

To improve understanding of winter deer issues and deer feeding, the report recommends additional public meetings and review of the report's findings as well as broader public discussions of the DNR's deer management program. Research is also recommended to answer questions related to existing private deer feeding efforts, public support for emergency deer feeding, and the effect of feeding on deer populations across large landscapes. Additional research is also suggested to improve understanding of the effect of winter severity on deer condition, evaluate the benefits of other deer habitat management practices, and deer population dynamics and use of wintering areas.

Public meetings will be scheduled throughout the state in the next year to discuss this report and further discuss the role of emergency deer feeding in Minnesota's deer management program.



INTRODUCTION

This report is intended to comply with the following 1997 legislation:

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Chapter 216, Sec. 144. [DEER WINTER SURVIVAL WORK GROUP] The section of wildlife of the department of natural resources, representatives of the Minnesota Deer Hunters Association, and representatives of other groups or individuals interested in deer hunting and deer management in this state shall meet as a work group to develop recommendations on deer feeding and other deer management options to provide for management of deer and deer winter survival in this state.

The work group shall develop a plan for deer management in winter that provides recommendations on deer management and feeding needs. The work group shall examine and make reports on the following:

(1) when and where deer feeding may be appropriate;

(2) appropriate funding mechanisms, criteria, and delivery systems when feeding is determined to be appropriate;

(3)other winter-related deer management needs and practices, such as food plots, wintering area identification and protection, deer yard improvement, browse regeneration, openings, and other deer foraging areas; and

(4) needs for improving understanding of deer wintering requirements and management practices.

The work group shall recommend any statutory changes or funding necessary to accomplish those needs.

The work group shall operate on a consensus basis and shall report its recommendations back to the house and senate environment and natural resources committees, the house environment and natural resources finance committee, and the senate environment and agriculture budget division by January 15, 1998.

The work group that prepared this report consisted of the following individuals:

Joe Wood, Minnesota Deer Hunter's Association Executive Director Dave Schad, DNR Forest Wildlife Program Leader Dana Klos, Minnesota Deer Hunter's Association-Thief River Falls Jim Breyen, DNR Regional Wildlife Supervisor-Bemidji Randy Willie, Minnesota Deer Hunter's Association-Carlton Jeff Lightfoot, DNR Regional Wildlife Supervisor-Grand Rapids

In addition, Jon Witt from Minnesota Bowhunters, Incorporated was involved in reviewing and commenting on work group activities even though no one from his organization was able to directly participate in the work group process. The group met three times (September 30, November 5, and December 29) to prepare the report. Meetings were facilitated by Brian Stenquist from the DNR's Ecological Services Section.

The work group did <u>not</u> address the issue of whether state-funded emergency feeding is effective or necessary in the state. This issue has been endlessly debated over the past several years, and it was clear that the work group would not be able to reach consensus on the issue. Instead, the group recognized that the 1996 legislature, in establishing a dedicated emergency feeding account (Appendix 1), established a policy to use state funds for emergency deer feeding. This account is expected to generate approximately \$250,000 annually, and are the only state funds currently earmarked for emergency feeding. The group focused on

accessible vs. deer that are inaccessible; b) whether feed should be distributed to deer that are being fed by private efforts vs. deer that are not being fed at the time state feed becomes available; c) whether feed should be targeted to specific wintering areas or groups of deer vs. distributing feed to individuals who decide where the feed will be placed; and d) the availability of private funds and food resources that can "match" state funded feed.

- B. Type of feed: Because state funds are intended to be used for an emergency program that starts relatively late in winter and targets nutritionally-stressed deer, only the approved DNR formula or an equivalent feed that meets the DNR standards for digestibility and nutrition will be purchased with state funds. The feed should preferably be in pellet form, but a ground mix could be considered if pellets are not available.
- <u>C. Monitoring and evaluation:</u> Standard forms will be provided to each sponsoring organization to record information on who obtains feed and where it is distributed. Sponsoring organizations are required to collect this information and provide completed forms to the DNR area wildlife manager. The DNR manager and the organization will monitor feed distribution and compliance with distribution guidelines.
- <u>D. Role of DNR:</u> Although the sponsoring organization will assume responsibility for distribution of feed from depot sites, the DNR will continue to be involved in emergency feeding as follows:
 - 1) The DNR Wildlife Section Chief is responsible for declaring where severe winter conditions exist.
 - 2) DNR research biologists will coordinate the WSI and project where the index will exceed 100 by mid-February.
 - 3) DNR area wildlife managers will provide advice to assist sponsoring organizations in determining feed program start and end dates and feed distribution strategies.
 - 4) DNR area wildlife managers will necropsy and examine dead deer, observe deer movements and behavior, and assess other indicators of deer condition in areas where severe winter conditions exist.
 - 5) DNR research biologists will estimate post-hunt deer numbers in proposed feeding zones and calculate the proportional share of feed available in each zone.
 - 6) DNR regional wildlife supervisors will develop feed contract specifications, purchase feed and coordinate delivery to depot sites, allocate feed between sponsoring organizations, and re-allocate any unused funds to other organizations.
 - 7) The DNR will provide education and technical advice on feeding techniques, locations, and strategies.
 - 8) DNR area wildlife managers will work with sponsoring organizations to identify access needs across public lands and restrictions in developing this access.

9) DNR area wildlife managers will work with sponsoring organizations to establish monitoring programs to determine the adequacy of feeding efforts and compliance with program guidelines.

<u>E. Role of sponsoring organizations:</u> Each sponsoring organization will be responsible for the following aspects of state-funded feeding in their feeding zone:

- 1) The organization will declare their interest (in writing to the DNR area wildlife manager) in conducting a feeding program in sub-DMUs where a severe winter condition has been announced.
- 2) The organization will define the boundaries of their feeding zone and determine the maximum amount of feed that they can distribute.
- 3) The organization will establish feeding program start and end dates, develop a feed distribution strategy, and establish feed depots and delivery schedules and report this information to the DNR area wildlife manager.
- 4) The organization will collect data on who obtains feed and where it is distributed, and provide this information to DNR area wildlife managers.
- 5) The organization will be responsible for developing any access needed to reach remote feeding sites.
- 6) The organization will work with the DNR area wildlife manager to establish monitoring programs to determine the adequacy of feeding efforts and compliance with program guidelines.
- F. Additional funding needs: In those years where severe winter conditions are widespread and insufficient funds are available for all sponsoring organizations to provide feed to the extent they desire, private groups and individuals have the responsibility to seek additional funds through the legislative process or from donations from individuals or organizations. The work group agreed that it should not be the responsibility of the DNR to initiate these efforts. The group also recommends that if there are additional funds provided for emergency feeding (both for short-term and long-term purposes), these funds should be taken out of the general fund rather than the Game and Fish Fund because of the overall importance of deer to the state's citizens.
- G. Other recommendations: 1) A standard handout should be developed by the DNR providing detailed advice on deer feeding practices. 2) If feeding programs are implemented, they should be recognized as a top priority throughout the department, and activities that require the presence of wildlife staff (such as timber planning) should be delayed when severe winter conditions exist. 3) Dedicated emergency feeding funds should only be used for feed purchase, and not be used for monitoring and other DNR activities associated with emergency feeding. However, there is a need to provide additional funds to the DNR for additional monitoring that is necessary during severe winters.

3) OTHER WINTER-RELATED DEER MANAGEMENT NEEDS.

There is broad agreement that there are a number of management activities that could reduce the future need for emergency feeding programs and produce a stronger, more resilient deer herd. These activities differ in farmland or transition areas vs. forest areas. The work group recommends that additional funding be identified and dedicated to accelerate deer management programs in the state. The following is a brief description of some of the priority management activities related to winter deer management that require additional resources.

Forest areas:

- * As the amount of older forest declines due to accelerated logging activity the identification, protection, establishment, and enhancement of deer winter complexes should be accelerated.
- * The establishment of additional quality natural feeding sites (browse plots, wildlife openings, mast development) in close proximity to known deer wintering areas should be considered to reduce the need for emergency feeding programs in the future.
- * The mixture of private and public ownership in the forested part of the state makes a comprehensive deer management program difficult. Funding is needed that will 1) improve knowledge of deer winter habitat conditions throughout the forest, especially through development of improved geographic information system (GIS) capabilities and databases necessary for deer management; 2) provide funding for DNR wildlife staff to work with other non-DNR resource managers to facilitate deer management practices across multiple ownerships.

Farmland and transition areas.

- * Protection and management of traditional deer wintering areas is a critical need in farmland and transition areas. This would include 1) inventory of wintering areas and incorporation into a GIS; 2) acquisition or easement programs to protect areas threatened with development; and 3) funding to provide food plots at these sites to provide winter food resources for deer.
- * Because most deer habitat is found on private lands in farmland and transition areas, additional funding for staff to provide technical assistance to private landowners interested in deer habitat and harvest management, and funds for cost sharing management practices that benefit deer is needed.
- * There is a need to intensify management of habitats on public lands through prescribed burning, establishment of green forage areas, and regeneration of winter browse and cover.

4) NEEDS FOR IMPROVING UNDERSTANDING.

Much of the conflict related to emergency deer feeding and other deer management issues is related to differences of opinion and understanding of deer biology and management among hunters, wildlife managers, and the general public. There are also questions that require research to provide new information for DNR wildlife managers and the general public related to winter deer management and deer feeding. The following is a list of education initiatives and research that the work group feels should be considered.

A. Emergency Deer Feeding Discussions. Regional discussions should be held with people concerned about the deer feeding issue to discuss the recommendations included in this report, and

issues related to the long term role of state-funded emergency deer feeding in Minnesota's deer management program, including funding issues. The DNR should also distribute this report and solicit written comments from the public.

- B. Deer Management Public Involvement. The DNR should provide forums (such as roundtables or other public meetings) for deer management and hunting interests to discuss the current status of Minnesota's deer management program, and to develop recommendations for future directions. These efforts should focus on important issues facing deer management and hunting in the future, strategies to address these issues, and deer program funding and needs. The DNR should also initiate public forums for discussing deer population goals in various parts of the state.
- <u>C. Research--Deer Feeding.</u> The evaluation of the 1996 emergency deer feeding program noted several research needs related to deer feeding. These research efforts would require significant funding, and the work group recommends that this work only be done if additional funding is secured for these purposes. They include:
 - 1) an assessment of private deer feeding efforts to determine the impact that private feeding has on demand for state-funded feeding programs; the effect of feeding on deer movements, behavior, and health; and the extent of private feeding and motivations for individuals to feed deer;
 - 2) a survey to assess public support (by both hunters and non-hunters) for publicly funded emergency feeding programs; and
 - 3) a study of the population impact that an emergency feeding program has on deer populations and deer condition in different landscapes to provide better understanding of the effectiveness of emergency feeding.
- <u>D. Research--Winter Deer Biology and Management.</u> DNR wildlife managers have identified a number of priority deer research and inventory needs related to winter deer management that would provide new information to give both managers and the public a better understanding of winter deer biology and management. These research efforts would require significant funding, and the work group recommends that this work only be done if additional funding is secured for these purposes. They include:
 - 1) research to better understand the relationship between the WSI and deer condition, and to improve assessment of winter severity and deer condition sequentially during winter;
 - 2) research on population dynamics of deer populations in various parts of the state, which would provide important information on the effect that winter weather, both mild and severe, has on deer mortality and fawn production;
 - 3) an evaluation of the value of food plots, forest openings, and other management practices to deer; and
 - 4) research on deer use and movements related to deer wintering complexes to provide valuable information during timber harvest planning and habitat management activities.

<u>E. Educational Forums and Materials.</u> The work group recommends additional efforts by DNR biologists and managers to provide information to the public on deer biology, management, and feeding issues. These efforts should include regional forums or workshops, development of brochures and handouts, mailings to hunters, and other public information strategies.

Appendix 1. Portion of 1996 legislation that established the dedicated emergency deer feeding account. The underlined language is the new statute language that established the new account.

Section 1. Minnesota Statutes 1994, Section 97A.075, subdivision 1, is amended to read: Subdivision 1. [DEER AND BEAR LICENSES.] (a) For purposes of this subdivision, "deer license" means a license issued under section 97A.475, subdivisions 2, clauses (4) and (5), and 3, clauses (2) and (3).

- (b) At least \$2 from each deer license shall be used for deer habitat improvement or deer management programs.
- (c) At least \$1 from each resident deer license and each resident bear license shall be used for deer and bear management programs, including a computerized licensing system. Fifty cents from each resident deer license is appropriated for emergency deer feeding. Money appropriated for emergency deer feeding is available until expended. When the unencumbered balance in the appropriation for emergency deer feeding at the end of a fiscal year exceeds \$750,000, \$750,000 is canceled to the unappropriated balance of the game and fish fund and the amount appropriated for emergency deer feeding is reduced to 25 cents from each resident deer license.

Figure 1. Deer Management Units (DMUs) and Sub-DMUs.

