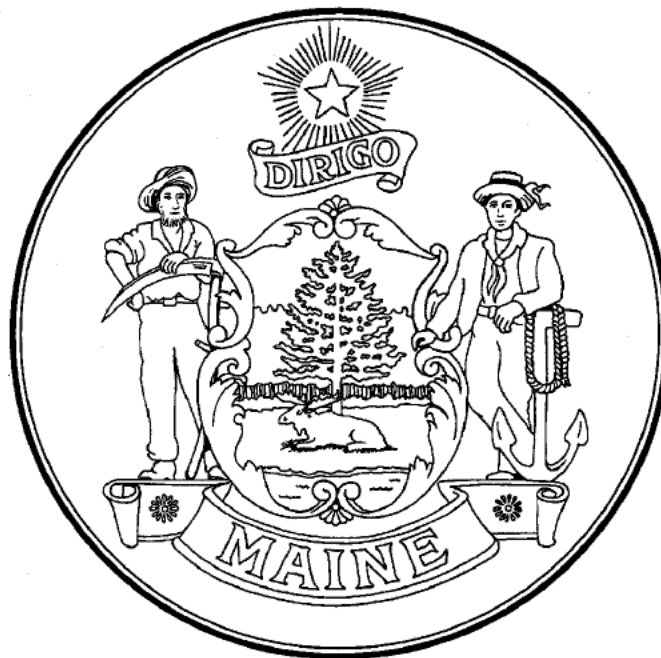


MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from electronic originals
(may include minor formatting differences from printed original)

Report to the 129th Maine Legislature Relating to LD 638 & LD 1804
January 2020



**A Report on the
Applications and Impacts of White-tailed Deer Feeding
with Recommendations for Maine**

Nathan R. Bieber

Wildlife Biologist

Maine Department of Inland Fisheries and Wildlife

Bangor, Maine

Table of Contents

Executive Summary.....	3
Introduction	5
Deer Feeding in the Northeast and in Maine	6
Impacts of Deer Feeding	12
Recommendations	14
Literature Cited	18

List of Appendices

Appendix 1. Legislative document content, LD 638 and LD 1804.....	19
Appendix 2. Rules and regulations related to artificial feeding and baiting of deer.	21
Appendix 3. Meeting agenda and notes from intradepartmental meeting on deer feeding, Sept. 9, 2019.	26
Appendix 4. Meeting agenda and notes from stakeholder meeting on deer feeding, Oct. 15, 2019.	32

Executive Summary

In Maine, deer feeding practices are governed both by Maine Department of Inland Fisheries and Wildlife (MDIFW) rules and by Maine State statutes. During the First Regular Session of the 129th Maine Legislature, legislative changes were proposed to change allowable feeding practices. In order to make more informed responses to these proposed changes, MDIFW was asked to review feeding practices and impacts and provide recommendations for Maine.

Four feeding practices were identified and discussed (artificial feeding, baiting, food plots, and mineral licks), and the scientific literature were reviewed on these topics. Through a series of intradepartmental meetings, stakeholder meetings, and public survey, public and stakeholder perspectives were gathered and discussed. In addition to scientific literature review, these perspectives helped form recommendations for consideration by the Joint Standing Committee on Inland Fisheries and Wildlife.

Perspectives were mostly consistent regarding baiting, food plots, and mineral licks. After consultation and literature review, there was no identified need to change current practices and allowances for baiting, food plots, or mineral licks. MDIFW does not recommend any changes be implemented regarding these practices. The Dept. has not developed informational materials related to food plots, and it is recommended that such materials be developed and distributed.

Perspectives on artificial feeding were much more mixed both within MDIFW and stakeholder groups. The scientific literature suggests that artificial feeding may improve survival and condition of deer during severe winters. However, if improper feeding practices are followed, negative impacts of feeding include artificial concentration of animals and increased likelihood of disease transmission, increased localized deer-vehicle collisions, habituation to and dependence on people, and degradation of habitat surrounding feeding sites.

Given the seriousness of the negative impacts associated with artificial feeding with implications for both deer and human safety, it is not recommended that MDIFW maintain status quo. However, intradepartmental and stakeholder discussions revealed a consensus that MDIFW messaging on artificial feeding has been mixed and inadequately promoted. Therefore, MDIFW recommends an approach to artificial feeding beginning with improved messaging and education. MDIFW will adopt a more cogent message on artificial feeding, which will be spread through MDIFW and to the public and will promote voluntary changes to feeding practices. Additionally, MDIFW proposes creating a pilot program, which will demonstrate the use of artificial feeding in a manner that minimizes negative impacts and encourages use of existing wintering habitat. We will continue to monitor negative impacts of artificial feeding and rely on existing authorities to control problem areas. Though legislative change is not recommended at this time, if negative impacts associated with feeding grow and existing authorities prove inadequate to address problems, legislative change may be pursued in the future.

The ability of artificial feeding to facilitate the spread of communicable diseases is widely acknowledged in the scientific literature and by MDIFW and stakeholders. If a communicable disease of deer is found in

Maine with implications for the deer population, MDIFW will pursue regulatory or legislative changes to prohibit feeding in proximity to disease cases.

Introduction

During the First Regular Session of the 129th Maine Legislature, the Joint Standing Committee on Inland Fisheries and Wildlife carried over two legislative documents- LD 638 (An Act To Legalize the Use of Supplemental Minerals To Assist with Wildlife) and LD 1804 (An Act Regarding the Baiting of Deer)- to the Second Regular Session to provide the Maine Department of Inland Fisheries and Wildlife (MDIFW) with additional time to review the scientific literature, explore and discuss options within the Department and with stakeholders, and develop recommendations for how to proceed in response to these legislative documents. This report will define terms associated with deer feeding, discuss applications of each feeding method, report on the use of these methods throughout the Northeast and in Maine, discuss the impacts and implications of deer feeding, and present recommendations for the consideration of the Committee.

Artificial feeding, baiting, placement of mineral blocks, and planting of food plots are all commonly used methods of manipulating the environment and deer to benefit deer, hunters, and others interested in deer. In the following section, I will present definitions of terms associated with deer feeding as they are discussed in the scientific literature. These definitions will serve as a baseline for further discussions throughout this report.

Types of Deer Feeding

Artificial Feeding

“Artificial feeding” of deer- also referred to generally as deer feeding or supplemental feeding- involves placing natural or artificial foods or food materials on the landscape to augment the quantity and or quality of food available to deer in an area (Dunkley and Cattet 2003, Sonant and Maestro 2006, Sorenson et al. 2014). Applications may overlap in some cases with baiting, but most commonly include improving condition of deer, limiting mortality rates associated with limited food resources particularly in winter, and encouraging deer away from areas where deer may have damaging impacts by improving food sources elsewhere. Artificial feeding may also be incidental as deer may take advantage of food provided to other wildlife species, such as seeds from bird feeders, agricultural spillage, and other products of agriculture, such as hay bales, which are not intended for deer but may be utilized where available (Dunkley and Cattet 2003).

Maine deer feeding statutes handle baiting and feeding similarly and restrict only the timing of when these practices are allowed, so by these definitions and by statute, deer baiting is also legal from December 16th through May 31st, though there are no open hunting seasons on deer during this time. This statute also covers the use of salt and any other bait, which includes mineral licks and blocks. Mineral and salt blocks may be used as standalone or supplementary components in deer baiting or artificial feeding.

Baiting

“Baiting” involves placing natural or artificial foods or food materials on the landscape to manipulate deer behavior and influence deer movement to an area (Dunkley and Cattet 2003, Sonant and Maestro 2006, Sorenson et al. 2014). Though other materials and attractants may be used to similar effect, we will focus primarily on the placing of foods and nutritional supplements in this report. Baiting is most often associated with hunting, where bait piles may be used to lure deer into shooting range. Other applications may include using bait to capture or remove research or nuisance animals or capture animals for relocation (Sonant and Maestro 2006). Baiting may also be used to lure deer into range for photography. Baiting is typically a small-scale exercise where the amount of food introduced onto the landscape is low and replenished as needed.

Food Plots

“Food plots” are annual or perennial plantings of grains, cover crops, forbs, legumes, or a mix of these used to provide food for deer (NRCS 2009). The purpose of food plots may be to provide nutritional benefits to deer, to create openings and persistent food sources, and to improve wildlife viewing or hunting opportunities. The NRCS recommends food plots of 5-10 acres, though in areas where most private landownership consists of small parcels, food plots less than this size are likely much more common.

Mineral Licks

“Mineral licks” are artificial aggregates of salt or other mineral(s) placed on the landscape to provide supplemental nutrients or manipulate deer behavior and influence movement to a specific place on the landscape.

Deer Feeding in the Northeast and in Maine

Deer Feeding in the Northeast

New England and Northern Middle Atlantic States

New Hampshire

- Baiting - Hunting deer over bait is allowed, by permit - during defined seasons.
- Feeding - Deer feeding is allowed but discouraged.
eregulations.com/newhampshire/hunting/general-hunting-regulations/wildlife.state.nh.us/hunting/baiting-wildlife.html

Vermont

- Baiting - No person may hunt or take deer over bait. Exemptions include incidental feeding related to livestock operations, standing crops or food plots, agricultural spillage, and naturally deposited vegetative food sources.
- Feeding - Deer feeding is prohibited except by permit for research or nuisance control, planting crops for agricultural purposes or food plots, incidental feed associated with livestock operations, brush and tree cutting, and incidental feed associated with bird feeders.
eregulations.com/vermont/hunting/deer-hunting/legislature.vermont.gov/statutes/section/10APPENDIX/001/00037

Massachusetts

- Baiting - Baiting of white-tailed deer is prohibited during and 10 days prior to the deer hunting season. Bait includes any natural or artificial substance that is ingested and used to entice deer.
- Feeding - Deer feeding is allowed but discouraged.
eregulations.com/massachusetts/huntingandfishing/deer-hunting/mass.gov/regulations/321-CMR-300-hunting#3-02-4-hunting-and-tagging-of-deer

New York

- Baiting - Baiting of wild white-tailed deer is prohibited.
- Feeding - No person shall intentionally feed deer or moose at any time except with a license or permit to conduct research or special control activities, by use of automated feeding devices with 4-poster 'Tickicide' as permitted by DEC, by cultivating vegetation, distributing feed for livestock, or cutting trees or brush.
dec.ny.gov/animals/7197.htmldec.ny.gov/regulations/117666.html

Rhode Island

- Baiting - Baiting of wild white-tailed deer is prohibited.
- Feeding - No person shall feed cervids at any time unless part of a bona fide research, bona fide agricultural practices, wildlife food plots, brush cutting or bird feeding from elevated feeders within 100 feet of dwelling.
eregulations.com/rhodeisland/hunting/deer-hunting/

Connecticut

- Baiting - Hunters are allowed to use bait in 2 out of the 12 Deer Management Zones. You may hunt over planted fields where normal agricultural planting, harvesting, or post-harvest manipulation is used.
- Feeding - Deer feeding is allowed but discouraged.
ct.gov/deep/cwp/view.asp?A=2700&Q=487616

New Jersey

- Baiting - Hunting of deer over bait is allowed.
- Feeding - Deer feeding is allowed but discouraged. Legislation is currently being considered that would ban deer feeding.
law.justia.com/codes/new-jersey/2016/title-23/section-23-4-24.4

Pennsylvania

- Baiting - State law prohibits baiting throughout most of the state, but regulations have been created to allow its use to assist in urban deer removal on a limited basis in SE Pennsylvania. State law currently allows the feeding of deer, but it is unlawful to take advantage of or make use of a feeding (baited) area while hunting.
- Feeding - Feeding of elk has been banned. Statewide feeding of deer has not yet been banned, but PGC is promoting this action. Feeding is prohibited in the DMAs (disease management areas).
legis.state.pa.us/WU01/LI/LI/CT/HTM/34/34.HTM

Neighboring Provinces

New Brunswick

- Baiting- Hunting of deer over bait is allowed.
- Feeding- Deer feeding is allowed but discouraged.

Quebec

- Baiting- Hunting of deer over bait is allowed.
- Feeding- Deer feeding is allowed but discouraged. Legislation is currently being considered that would ban deer feeding and/or baiting.

Deer Feeding in Maine

Current Status

Deer feeding is currently prohibited in Maine from June 1 to December 15 (12 M.R.S. §10659). The commissioner of MDIFW has statutory authority to prohibit deer feeding if chronic wasting disease (CWD) is present in or within 50 miles of Maine and/or if feeding is creating a public safety hazard or is detrimental to the animals (12 M.R.S. §10105). Hunting deer over bait in Maine is prohibited with exceptions allowing deer to be targeted over bait in matters of nuisance deer control and special controlled hunts; this prohibition includes salt blocks but does not include standing crops or foods left over from agricultural practices (12 M.R.S. §11452). Food plots are not specifically addressed though it is implicit in §11452 that a hunter may plant food plots for deer and may hunt over them. Relevant rules and statutes are presented in Appendix 1.

The extent to which deer are fed in Maine is not fully known, but Maine's deer feeding culture appears to be more extensive than what's seen in other Northeastern states, perhaps owing to relatively severe winters. It is generally agreed upon that feeding is prevalent south to north but that the scale of feeding varies regionally. Southern Maine is believed to consist of predominantly small backyard feeding sites, and while northern Maine has these as well, deer feeding is occasionally much larger in scale and much more organized in northern Maine. (Reserved for public survey results. Results expected by 1/14/2020.)

MDIFW messaging on deer feeding has been that the Department would prefer people not feed deer, but that deer feeding is legal. Messaging approach has been inconsistent. Some staff have simply stated that the public should not feed deer and cited negative impacts. Others have additionally expressed that there are preferred methods of feeding and have provided guidance. Guidance on preferred feeding methods has included:

- Feed near natural wintering areas.
- Feed away from plowed roads.
- Provide natural browse by cutting tops and dropping branches.
- Slowly introduce artificial feeds.
- Feed until spring green-up.

This guidance and other supporting information were incorporated into an informational handout entitled, "Living on the Edge. Winter Feeding of Deer: What You Should Know." This informational handout was made available in February of 2011, is available on the MDIFW website, and is the first search hit if one searches for "Maine winter deer feeding" in any web browser (MDIFW 2011).

Department Perspectives

To inform recommendations and better understand the dynamics of deer feeding in Maine, a series of meetings and calls with department staff were held during fall 2019. On September 9, a meeting was held at the Bangor office of MDIFW with Wildlife Division administrative, Research and Assessment

Section, Wildlife Management Section, and Warden Service staff in attendance. This meeting was used to catalog Department views on deer feeding and inform recommendations to present to stakeholders. Notes from this meeting are presented in Appendix 2.

Throughout the course of the Sept. 9 meeting, several common themes and perspectives were shared that are summarized below.

- Feeding deer in Maine is likely much more widespread than we currently realize.
- Feeding can disrupt natural deer wintering behaviors and deer being drawn away from yards to feeding areas. This leaves zoned wintering areas unoccupied, which leaves them at risk for de-zoning.
- Deer-vehicle collisions in areas with both large and small-scale feeding are concerning. Large feeding operations support more deer leaving them vulnerable to nearby road traffic. Small-scale feeders support fewer deer, but deer often travel between small feed sites as local feed resources are depleted, and they encounter vehicle traffic while making these regular movements between feeding sites.
- CWD is a serious threat, and we should be proactive rather than reactive.
- MDIFW messaging on feeding has been weak and unclear. We shouldn't continue to message that deer feeding is a risky behavior while simultaneously providing direction to those who want to feed.
- Feeding is supporting more deer than the habitat alone can. We are in some areas treating deer as if they were livestock. Keeping deer "wild" has value.

Stakeholder Perspectives

A meeting with department staff and stakeholders was held October 15 at the Sportsman's Alliance of Maine facility in Augusta, Maine. Representatives were present from the Aroostook County Conservation Association, Aroostook County Quality Deer Management Association, Backcountry Hunters and Anglers, Maine Department of Agriculture, Conservation, and Forestry, Maine Department of Inland Fisheries and Wildlife, Maine Department of Transportation, Maine Farm Bureau, Maine Municipal Association, Maine Professional Guides Association, Sportsman's Alliance of Maine, and University of Maine. This meeting was held to discuss pressing matters related to deer feeding, discuss possible recommendations, and gather information on stakeholder perspectives. Notes from this meeting are presented in Appendix 3.

Throughout the course of the Oct. 15 meeting, several common themes and perspectives were shared that are summarized below.

- Deer baiting was not widely supported but there was some diversity of perspectives. Some expressed that deer baiting could still be a useful management tool in controlled hunt situations and that it may be a more palatable option if deer densities got too high in some areas.

- General support for food plots was expressed and no groups equated them with deer baiting. It would be impossible to differentiate between food plots, agriculture, and gardens, and there was no support for requiring any sort of permit or fee to plant a food plot.
- There was little or no support from groups to allow mineral blocks to be used for a longer portion of the year. There were some concerns about mineral block sites remaining attractive due to soil permeation after block is removed.
- There was a wide array of perspectives on artificial feeding.
 - Some groups expressed that MDIFW should make more effort to educate the public about deer feeding and how to do it properly.
 - Some groups voiced understanding that detection of CWD would greatly change opinions on deer feeding and supported actions.
 - The group was split on whether deer feeding has drawn deer into towns or whether deer moving into towns has necessitated feeding.
 - Most agreed that there should be regional considerations, north vs. south. Largely in agreement that feeding deer is not necessary in central and southern Maine, but that feeding operations are much smaller in these parts of the state.

Public Perspectives

In cooperation with the University of Maine and the lab of Dr. Carly Sponarski, we administered a public survey covering topics related to deer feeding practices by and impacts on the Maine public. This survey divided the state into two regions, northern and southern, and sought to generate insight into the following questions:

1. How prevalent is deer feeding in Maine? For those who feed, why are they feeding, what are they feeding, what time of the year are they feeding, and what do they spend on feed each year?
2. What are Mainers perceptions of different types of deer feeding: baiting, artificial feeding, and food plots? (Are they the same? Are some fair and others not?)
3. What are the perceived impacts of deer feeding on deer and on people in Maine? (Impacts on deer mortality, impacts on deer condition, impacts on deer-human conflict levels, etc.)
4. Given various threats (CWD, deer-vehicle collisions, etc.), what management actions would Mainers support with regard to deer feeding?

A summary of survey findings is presented below and complete survey results will be included with this report and are available upon request.

Feeding Prevalence and Practices

- 10% indicated that they feed deer; 10% indicated that they have planted a food plot for deer

- Most agreed that they believe people who feed deer have good intentions and that landowners should be able to do what they want on their private lands, but that feeding deer creates problems with nuisance animals
- Most people are spending a couple hundred dollars a year on feed; large feeders are uncommon
- Most feeders are feeding within ½ mile of a town road or highway
- The most important reasons people feed deer are to provide food or stabilize populations in the winter and to view deer
- If MDIFW were to provide guidance on feeding, few people who are not currently feeding would start feeding; of those who are already feeding deer, 43% of feeders are less likely to change their current feeding practices, 35% of feeders are unsure if they'd change, and 22% are more likely to change

Deer and Human Health and Safety

- Nearly 80% agreed that in the presence of CWD, feeding should either be banned statewide or banned in the areas around positive cases (38% and 41% respectively)

Management Responses

- People are more willing to consider more extreme management responses when it comes to deer and human health and safety issues

Hunting

- Survey recipients view hunting over bait, mineral licks, and food plots all unfavorably with bait being the least supported followed by mineral licks followed by food plots
- 31% agreed that they would bait during the hunting season if it was legal (13% slightly agreed, 18% strongly agreed)
- 28% responded that the presence of CWD would slightly or strongly deter them from hunting deer (17% and 11% respectively)

Impacts of Deer Feeding

As other comprehensive reviews on the impacts of feeding deer have been prepared and are readily available to the public, this report has focused on information specific to Maine. In this section, I will provide a brief review of summary findings with additional literature review on other topics related to deer feeding that have received less coverage in existing reviews on artificial feeding.

A Comprehensive Review of the Ecological and Human Social Effects of Artificial Feeding and Baiting of Wildlife - Canadian Cooperative Wildlife Health Centre (Dunkley and Cattet 2003)

Ecological Effects of Artificial Feeding and Baiting

- Feeding impacts spatial distribution of deer by artificially concentrating animals near food sources, increasing competition among individuals in some cases and potentially disrupting normal movements.
- Risk of disease transmission is a great concern, noting connections between feeding and Bovine tuberculosis cases in Michigan and chronic wasting disease spread in Colorado.
- Feeding programs may increase reproductive success and physical condition during severe winter conditions.
- Increased survival may result in a population of deer with inadequate habitat to support it. This may negatively impact plant and animal biodiversity and increase dependence of humans.
- Artificial feeding may introduce invasive plant species if food is not sourced carefully.

Human Social Effects of Artificial Feeding and Baiting

- Since many issues associated with feeding and baiting are philosophical or ethical in nature, education and messaging may be more appropriate than scientific research to address them.
- Differences across jurisdictional lines make messaging and enforcement very challenging.
- Public opinion toward hunting over bait varies between groups and jurisdictions.
- Impact of baiting on harvest is variable.
- Artificial feeding too near motorways may increase likelihood of deer-vehicle collisions.
- Wild animals may lose their fear of humans and become a public hazard or nuisance.

Baiting and Feeding of Game Wildlife Species: Wild Ungulates - The Wildlife Society (Sonant and Maestro 2006)

- Artificial feeding may habituate wildlife and make them reliant on humans for food.
- Impacts of feeding on social and migratory behaviors is variable, but migratory impacts appear to be minimal.
- Artificial feeding may improve body condition and increase survival depending on quality and quantity of feed provided.
- The impact of baiting on hunter success rates is highly variable.
- Concentrating animals at feed sites can lead to degradation of adjacent habitats and increase risk of disease spread and transmission.
- There is a lack of information about costs and benefits associated with artificial feeding.
- Differences across jurisdictional lines make messaging and enforcement very challenging.

Wildlife Health and Supplemental Feeding: A Review and Management Recommendations- Biological Conservation (Murray et al. 2016)

- Artificially feeding deer may increase survival and reproductive success and improve body condition.

- Animals that are being fed may experience elevated risk of infection from increased contact rates, environmental contamination, immunosuppression, and stress.
- Artificial feeding may concentrate animals, which may decrease range requirements and increase contact rates.
- If provided, artificial feed should be presented in lower quantities spread through time and space to avoid artificially concentrating animals and should be foods that are particularly appealing to the target species to reduce likelihood of feeding other species.
- It is important to understand stakeholder perspectives to increase likelihood of compliance with voluntary feed guidelines or regulations.

To Feed or Not to Feed? Evidence of the Intended and Unintended Consequences of Feeding Wild Ungulates- Journal of Wildlife Management (Milner et al. 2014)

- Artificial feeding has varied results, but many studies suggest improved survival, reproductive, and population growth rates and body condition.
- Artificial feeding may result in increased aggression behavior and stress.
- Local browsing and loss of plant diversity may be associated with artificial feeding.
- Increased contact rates can lead to increased transmission of pathogens and parasites.
- Artificial feeding should not be used to exceed natural carrying capacity of available habitat, should be spread on the landscape, should be most appealing to the target species and ideally consist of natural forage; impacts should be monitored, and long-term feasibility should be assessed before any artificial feeding program begins.

Additional Literature Review

Mineral Licks

- Mineral licks increase site visitations and use by deer and elk raising concerns about disease spread risk (Lavelle et al 2014).
- Supplemental minerals did not impact body or antler mass, but milk protein levels may impact first antler growth of offspring (Schultz and Johnson 1992, Gomez et al. 2008).
- Mineral content in diet may be reflected in mineral content of antlers (Estevez et al. 2009).
- Mineral contents in soil remain elevated after removing mineral licks from the landscape, but deer utilization of sites decreases in early fall regardless (Peterson et al. 2015).

Recommendations

Artificial Feeding

It was widely agreed that MDIFW messaging has been unclear and not accessible on this subject. While both telling people not to feed and providing recommendations on how to feed, the Department has

adopted a mixed message. In acknowledgement of this, we recommend an approach to artificial feeding that begins with improved messaging, education, and outreach efforts. In order to provide an example of best feeding practices, we also recommend initiating a pilot program designed to demonstrate best feeding practices and use artificial feeding as a tool to increase use and survival of deer within existing deer wintering habitat.

Messaging and Education

Our approach to artificial feeding in Maine should begin with the development of a more cogent message on deer feeding. We recommend messaging going forward focus on current regulations, impacts of feeding, and recommendations for how to feed and avoid negative impacts. Educational materials should be updated and promoted. Materials should include enhanced public messaging and intradepartmental guidance on how to message to the public and on when it is appropriate to exercise existing statutory authorities related to deer feeding. Intradepartmental guidance may be provided in the form of memos, policy updates, and in meeting discussions.

We recognize that to credibly advocate for a set of feeding practices, it would be beneficial to demonstrate an example of feed being used in a manner that limits negative impacts. We believe- and the scientific literature supports- that it is bad practice to rely solely on artificial feeding to increase deer survival and that there must be underlying efforts to increase use of available habitats. We recommend developing a pilot program that will demonstrate the use of feed as a tool to increase use of and enhance survival in existing deer wintering habitat. We plan for this program to begin during the winter of 2020/2021 and will maintain feeding efforts for at least 3 years before evaluating the effectiveness of the program and of improved messaging. This program will seek to:

- Identify a pilot program area, which will consist of a large deer wintering area with some history of artificial feeding nearby conducted by an organized feeding group or town. We will work with the feeding group to alter feeding practices and help facilitate moving feed towards existing wintering habitat.
- Use artificial feeding to encourage deer to use existing deer wintering cover and enhance survival of deer in the area.
- Use rotational and selective forest cutting adjacent to the deer wintering area to enhance the availability of natural foods.
- Direct predator management program participants to conduct predator removal in the area.

Desired outcomes will include:

- Increased deer use of the deer wintering area
- Increased deer survival within the deer wintering area
- Decreased deer use of adjacent artificial feeders
- Continued consultation with area feeding group as they shift feeding practices towards wintering habitat

The Department does not endeavor to create a long-term feeding program, rather to provide an example for large-scale feeders of how feed may be used constructively and in a manner that limits negative impacts. The pilot program will seek to provide proof of concept, and the Department will consult with willing feeders to improve their practices accordingly, but the Department does not intend to feed deer in any location indefinitely. We recognize that this approach will not be feasible for small-scale/backyard feeders, but components of this program would be adoptable at any scale.

Monitoring and Regulation

We recommend monitoring the negative impacts of deer feeding to assess whether promoting best feeding practices has any impact on improving deer feeding practices and reducing negative impacts. Monitored impacts and approaches may include but are not limited to:

- Deer-vehicle collision rates. This will require identification of areas experiencing high levels of collisions associated with artificial feeding.
- Public perceptions of artificial feeding. Through public survey, we may monitor public perceptions of artificial feeding and see how these perceptions change through time with enhanced messaging efforts. Additionally, feeders may be surveyed to determine whether enhanced messaging on artificial feeding has any impact on feeding practices.
- Habitat degradation. Areas adjacent artificial feeding that are experiencing habitat degradation may be assessed periodically to determine whether conditions improve in response to enhanced messaging about feeding.

We do not recommend regulatory changes to feeding practices at this time, however, we will continue to monitor negative impacts, and we will provide guidance to department personnel on when to exercise existing authorities to close problem feeders. If enhanced messaging and education do not change and improve feeding practices in problem areas, we will first encourage department staff to use existing authorities to alleviate problems, and if this is unsuccessful and if problems persist broadly, it may be necessary to pursue regulatory change in the future. Possible regulatory changes include:

- Prohibiting feeding within proximity of roads of a given posted speed limit
- Limiting the amount of feed that may be placed per parcel or per land area

Disease Response

Through department and stakeholder meetings, it was widely recognized that the landscape for feeding would be greatly changed if CWD or another communicable disease were detected in or near Maine. The commissioner of MDIFW, pursuant to 12 M.R.S. §10105, may prohibit artificial feeding if CWD is found within Maine or within 50 miles of the Maine border or in situations where artificial feeding may create a public safety hazard or be detrimental to deer. Other jurisdictions have exercised similar authority by prohibiting artificial feeding within a certain distance of positive cases of CWD.

If CWD or another communicable disease of cervids with population implications is discovered in or near Maine, we recommend prohibiting artificial feeding within at least 15 kilometers of positive cases, and we recommend a concerted effort be made to identify and close large feeding operations as these represent the greatest risk.

Baiting

Given a lack of support among department staff, stakeholders, and the general public, lack of need as a management tool except in rare circumstances with controlled hunts or removal efforts, and given uncertainty about harvest and success rate impacts, we recommend no changes to allow baiting are made at this time.

Food Plots

Given considerable law enforcement challenges associated with differentiating between food plots and agriculture or gardens, given the lack of support among department staff and among stakeholders for requiring a permit or fee to plant food plots, and given that no other jurisdiction has equated food plots and deer baiting, we recommend no regulatory changes to disallow or regulate food plots are made at this time.

There is concern that food plots offer an unfair advantage to landowners that have more resources available to cultivate land and maintain food plots. As the Department works to improve messaging materials related to deer feeding, we recommend incorporating more information about food plots with suggestions for improving planted or natural deer foods on small and large plots and with limited resources. Messaging themes may include but are not limited to:

- Purpose and impacts of food plots
- Basic recommendations for establishing food plots, small and large
- Working with neighboring or area landowners to increase available land for food plots
- Options for improving natural browse through selective tree and shrub removal

Mineral Licks

Given lack of consensus in the scientific literature that mineral blocks would have desirable impacts, given lack of current need as a management tool, given lack of department and stakeholder support for increasing the allowance for mineral block placement, and given challenges with enforcing mineral block removal, we recommend no regulatory changes to allow mineral blocks to be placed for a longer portion of the year are made at this time.

Literature Cited

- Dunkley, L. and M.R.L. Cattet. 2003. A comprehensive review of the ecological and human social effects of artificial feeding and baiting of wildlife. Canadian Cooperative Wildlife Health Centre: Newsletters & Publications, 21. <http://digitalcommons.unl.edu/icwdmccwhcnews/21>
- Estevez, J.A., T. Landete-Castillejos, A. Martinez, A.J. Garcia, F. Ceacero, E. Gaspar-Lopez, A. Calatayud, and L. Gallego. 2009. Acta Theriologica. 54(3): 235-242.
- Gomez, J.A., T. Landete-Catillejos, A.J. Garcia, E. Gaspar-Lopez, J.A. Estevez, and L. Gallego. 2008. Lactation growth influences mineral composition of first antler in Iberian red deer *Cervus elaphus hispanicus*. Wildlife Biology 14(3): 331-338.
- Lavelle, M.J., G.E. Phillips, J.W. Fischer, P.W. Burke, and N.W. Seward. 2014. Mineral licks: motivational factors for visitation and accompanying disease risk at communal use sites of elk and deer. Environmental Geochemistry and Health. 36: 1049-1061.
- Maine Department of Inland Fisheries and Wildlife (MDIFW). 2011. "Living on the edge. Winter feeding of deer: what you should know." Fact sheet. Retrieved from https://www.maine.gov/IFW/docs/deer_winter_feeding.pdf
- Milner, J.S., K.T. Schmidt, F.M. van Beest, and R.K. Brook. 2014. To feed or not to feed? Evidence of the intended and unintended effects of feeding wild ungulates. Journal of Wildlife Management. 78(8): 1322-1334.
- Murray, M. H., D. J. Becker, R. J. Hall, and S. M. Hernandez. 2016. Wildlife health and supplemental feeding: A review and management recommendations. Biological Conservation 204: 163-174.
- Natural Resources Conservation Service (NRCS). 2009. "Wildlife Food Plots." Fact sheet. Retrieved from https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs141p2_035572.pdf
- Peterson, B. C., K. D. Koupal, A. K. Schissel, and C. M. Siegel. 2015. Longevity of mineral supplements within the soil and associated use by white-tailed deer. Transactions of the Nebraska Academy of Sciences and Affiliated Societies. 479. <http://digitalcommons.unl.edu/tnas/479>
- Schultz, S.R. and M.K. Johnson. 1992. Effects of supplemental mineral licks on white-tailed deer. Wildlife Society Bulletin. 20: 303-308.
- Sonant, K. and D. Maestro. 2006. Baiting and feeding of game wildlife species. The Wildlife Society: Technical Review, 06-1.
- Sorensen, A., F.M. van Beest, and R.K. Brook. 2014. Impacts of wildlife baiting and supplemental feeding on infectious disease transmission risk: A synthesis of knowledge. Preventive Veterinary Medicine. 113: 356-363.

Appendix 1. Legislative document content, LD 638 and LD 1804.

LD 638 - An Act to Legalize the Use of Supplemental Minerals to Assist with Wildlife Nutrition

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 12 MRSA §10659, sub-§3 is enacted to read:

3. Exception; supplemental minerals. Notwithstanding subsection 1, from March 1st to July 31st, both days inclusive, a person may place supplemental minerals for deer if:

- A. The supplemental minerals are placed on the person's own land or, if the person is placing supplemental minerals on another person's land, the person has obtained oral or written permission of the owner of that land to place the supplemental minerals; and
- B. The supplemental minerals do not contain any grain or food products.

Sec. 2. 12 MRSA §11452, sub-§1, as affected by PL 2003, c. 614, §9 and amended by c. 655, Pt. B, §171 and affected by §422, is further amended to read:

1. Prohibitions. A Except as otherwise permitted by section 10659, subsection 3, a person may not, during an open hunting season on deer:

- A. Place salt or any other bait or food in a place to entice deer to that place; or
- B. Hunt from an observation stand or blind overlooking salt, grain, fruit, nuts or other foods known to be attractive to deer. This prohibition does not apply to hunting from an observation stand or blind overlooking:
 - (1) Standing crops;
 - (2) Foods that are left as a result of normal agricultural operations or as a result of a natural occurrence; or
 - (3) Bear bait that is placed at a bear hunting stand or blind in accordance with section 11301, subsection 1.

SUMMARY

This bill allows a person to place supplemental minerals for deer from March 1 to July 31 if the supplemental minerals are placed on that person's own land, or on another person's land with the other person's oral or written permission, and the supplemental minerals do not contain any grain or food products.

LD 1804 - An Act Regarding the Baiting of Deer

Be it enacted by the People of the State of Maine as follows:

CONCEPT DRAFT

SUMMARY

This bill is a concept draft pursuant to Joint Rule 208. This bill proposes to make changes to the laws regarding the baiting of deer.

Appendix 2. Rules and regulations related to artificial feeding and baiting of deer.

RULES

Chapter 3: PUBLIC INTERACTION AND CONFLICTS WITH WILDLIFE

3.0 Feeding of Deer

A. Scope of Rules

In accordance with Title 12 §10105, sub-§14, the Commissioner may regulate the feeding of deer in order to minimize potential public safety hazards or detrimental effects on deer, as well as minimize the risk of chronic wasting disease, as defined in Title 7, §1821, sub-§1.

The Department of Inland Fisheries and Wildlife recognizes the interest from the citizens of Maine in watching and feeding wildlife. However, it has been documented that when done inappropriately, feeding deer can increase mortality due to malnutrition, vehicle collisions, predation and disease. To assist the public in minimizing these conflicts, the Department provides information on its website and works with landowners to ensure feeding is done appropriately. This rule outlines a process where, when the issues listed in statute arise, the Department will work with the landowner to address them first through education, second by suggesting adaptations for feeding to minimize the problem and then if activities that are detrimental to deer as outlined in D3 below still exist, issue a warning and then a summons if needed.

B. Definitions

1. Public safety hazard – A Public safety hazard may include but is not limited to the following:
 - a. Increased incidence of motor vehicle accidents
 - b. Causing a traffic hazard
2. Responsible party – The individual(s) actually feeding deer.
3. Deer Feeding – The placement of food(s) determined to be attractive and/or consumed by deer in an area accessible to deer.
4. Food Items - Foods determined to be attractive to and/or consumed by deer.

C. Regulations on Introduction of Chronic Wasting Disease (CWD)

If there is documented evidence of chronic wasting disease in deer in the State of Maine, as defined in Title 7, §1821, sub-§1, the Commissioner may prohibit the feeding of deer or cause the removal of previously placed food items consumed by deer at any location, in the county of occurrence, or any adjacent county to it within the State.

D. Regulations on Feeding Deer

1. When a deer feeding activity creates a situation that is determined by the Department to be detrimental to deer and/or a public safety hazard, the Department will provide the responsible party or parties with a written notice of required actions to modify the feeding activity, or require that the feeding activity cease and food items be cleaned up and removed. The required action(s) will focus on avoiding the public safety hazards and activities detrimental to deer associated with the feeding activity. A written warning may be issued along with the written notice of required action(s).
2. If the required action(s) are not initiated and completed within 48 hours of receipt of a written warning, a summons may be issued for a violation of a Commissioner's rule, Title 12, Section 10650.
3. Activities detrimental to the deer population include but are not limited to:
 - a. Providing food to deer that could or does result in the death of deer by acidosis (grain overload) and enterotoxemia (overeating disease-proliferation of Clostridium);
 - b. Increased vulnerability to collisions with vehicles, predation or other mortality risks.

Nothing in this rule is meant to supersede statutes prohibiting the baiting of deer as provided in Title 12, sub-§11452.

STATUTES

12 M.R.S. §10105. Other powers (of the Commissioner)

14. Regulating the feeding of deer, bear, moose and wild turkey

The commissioner may by rule:

A. Prohibit or limit the feeding of deer, bear, moose and wild turkey at any location if there is documented evidence of chronic wasting disease, as defined in Title 7, section 1821, subsection 1, in the State or within 50 miles of the border of the State or if the commissioner has reason to believe that the type or location of feed may create a public safety hazard or may have a detrimental effect on deer, bear, moose and wild turkey; and

B. Repealed.

C. Prohibit or otherwise limit the placement of garbage or other known attractants for deer, bear, moose and wild turkey if the Department has reason to believe the placement creates a public safety hazard.

Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

§10659. Feeding or baiting of deer

1. Prohibition

A person may not place salt or any other bait or food in a place to entice deer to that place from June 1st to the start of an open hunting season on deer and, if all open hunting seasons on deer are closed before December 15th for that year, from the close of the last open hunting season on deer to December 15th.

§ 10902 7-C. Hunting deer over bait.

A hunting license of a person convicted of placing or hunting over bait in violation of section 11452, subsection 1 must be revoked, and that person is ineligible to obtain a hunting license as follows:

- A. For a first offense, for a period of one year from the date of conviction; and
- B. For a 2nd offense, for a period of 2 years from the date of conviction.

§11227. Placement of bait for hunting

1. Definitions

As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Bait" means an animal or plant or a part of an animal or plant used to attract wild animals for the purpose of hunting. "Bait" does not include:

- (1) A derivative of an animal or plant in a liquid or paste form, including but not limited to urine or commercially prepared lures or scents; or
- (2) Packaging or container materials that fall within the definition of "litter" under Title 17, section 2263, subsection 2.

B. "Bait site" means the place where the bait has been placed and the immediate surrounding area.

1-A. Prohibited bait

Notwithstanding any authorization to use or place bait or bear bait under this Part, a person may not place a medicinal, poisonous or stupefying substance to entice an animal to that place. A person who violates this subsection commits a Class E crime.

2. Placement of bait

A person may not place or hunt over bait without the oral or written permission of the landowner or the landowner's agent. The bait site must be plainly labeled with a 2-inch-by-4-inch tag identifying the name and address of the person establishing the bait site. This subsection does not apply to bear baiting, which is governed by section 11301.

A. A person who violates this subsection commits a civil violation for which a fine of not less than \$100 or more than \$500 may be adjudged.

B. A person who violates this subsection after having been adjudicated as having committed 3 or more civil violations under this Part within the previous 5-year period commits a Class E crime.

3. Hunting over another's bait

A person may not hunt at a bait site established by another person unless that person has permission from the person that established the bait site.

A. A person who violates this subsection commits a civil violation for which a fine of not less than \$100 or more than \$500 may be adjudged.

B. A person who violates this subsection after having been adjudicated as having committed 3 or more civil violations under this Part within the previous 5-year period commits a Class E crime.

4. Bait site cleanup

A person placing bait may not leave the bait or bait label at the bait site and must clean up the bait site immediately after the landowner requests the removal of that bait or, if not requested by the landowner, within 20 days from the last day the bait site was hunted over by the person that established the bait site.

A. A person who violates this subsection commits a civil violation for which a fine of not less than \$100 or more than \$500 may be adjudged.

B. A person who violates this subsection after having been adjudicated as having committed 3 or more civil violations under this Part within the previous 5-year period commits a Class E crime.

5. Litter at bait sites

A person establishing a bait site under this section is subject to the littering provisions of Title 17, chapter 80.

6. Construction

Nothing in this section authorizes hunting of wild animals that is otherwise prohibited by law or rule.

7. Applicability

This section does not apply to:

- A. Bear baiting under section 11301;
- B. Placing of bait on the ice of inland waters.

§11452. Baiting deer

1. Prohibitions

A person may not, during an open hunting season on deer:

- A. Place salt or any other bait or food in a place to entice deer to that place; or
- B. Hunt from an observation stand or blind overlooking salt, grain, fruit, nuts or other foods known to be attractive to deer. This prohibition does not apply to hunting from an observation stand or blind overlooking:
 - (1) Standing crops;
 - (2) Foods that are left as a result of normal agricultural operations or as a result of a natural occurrence; or
 - (3) Bear bait that is placed at a bear hunting stand or blind in accordance with section 11301, subsection 1.

2. Penalty

A person who violates subsection 1 commits a Class E crime

Appendix 3. Meeting agenda and notes from intradepartmental meeting on deer feeding, Sept. 9, 2019.

September 9, 2019- Deer Feeding Meeting: Agenda

Attendees

Wildlife Division- Nate Webb, Bob Cordes.

Management Section- Ryan Robicheau, Scott Lindsay, Cory Stearns, Brad Zitske, Keel Kemper, Kendall Marden, Josh Matijas, Carl Tugend, Chuck Hulse, Sarah Boyden, Scott McLellan, Mark Caron, Allen Starr, Shawn Haskell, Amanda DeMusz.

Research and Assessment Section- Wally Jakubas, Nathan Bieber, Lee Kantar, Connor White, Brittany Peterson.

Warden Service- Dan Scott, Durward Humphrey, Scott Martin, Eric Blanchard, Joe McBrine, Josh Beal, Ethan Buuck, Michael Latti, Justin Fowlie (phone)

Purpose: Meeting held in Bangor to discuss regional and law enforcement perspectives on deer feeding in Maine. Information gathered will be used to develop department recommendations, which will be presented in a report to the Maine Legislature.

Agenda

10:00 – 10:15: Introduction and Background

10:15 – 12:00: Regions and Warden Service have the floor:

- 10:15 – 10:25: Region A
- 10:27 – 10:37: Region B
- 10:39 – 10:49: Region C
- 10:51 – 11:01: Region D
- 11:03 – 11:13: Region E
- 11:15 – 11:25: Region F
- 11:27 – 11: 37: Region G
- 11:39 – 12:00: Warden Service

12:00 – 12:30: Lunch Break

12:30 – 2:00: Open discussion guided by common discussion topics from first half of meeting

September 9, 2019- Deer Feeding Meeting: Notes

Note- meeting proceeded differently with bios and wardens from each region commenting rather than having a dedicated time slot for warden service comments.

These notes are not comprehensive, but I've documented some of the primary discussion topics as they occurred. Comments are organized by Fish and Wildlife Region, though both biologists and area Wardens provided comments during each relevant discussion period. These comments are not successive and do not represent the natural flow of the conversations.

Region A

- Feeding not prevalent in the region; a 'large' feeder here may accommodate 20 deer or so
- Higher deer densities in this area, so people may not feel feeding is needed
- There are a few special hunts where baiting is currently used; baiting may be a useful tool in some Wildlife Management Districts where we aren't currently meeting management objectives
- Few complaints related to deer feeding are reported in this region
- General feeling is that most of the public in this region do not feed deer and do not support deer feeding, but there would likely be pushback if we did anything to change feeding regulations
- Mixed opinions on whether baiting and food plots are equivalent
- Some issues described with orchards giving away apple pulp to be used as deer feed so they don't have to deal with disposal

Region B

- Lots of small-scale feeding, which typically causes no issues
- Large-scale feeders have been problematic and Warden service and bios have worked together to clean up these issues
- Food plots are prevalent in this region, mostly plots less than an acre
- Scale of operations tends to increase as you head north in the region and in the state
- Food plots are used as a management tool on some WMAs
- Wardens commented that they primarily see conflicts when people who live adjacent to feeders are impacted: "One landowner wants to 'save the deer' by feeding them and the other wants to shoot them as they damage their property."
- If we tell people they have to stop feeding, they will likely continue anyways
- Lots of feed sale occurring at Agways, Walmart, etc.; feed sellers would be highly impacted by any changes
- General agreement that food plots and baiting are not the same and that enforcement related to food plots would be problematic
- Enforcement hasn't been too bad for the way things are currently; citations for baiting are common and compliance in this region generally is good
- Challenging to deal with large feeders who then question why small feeders can continue
- Some over-browsing near feed areas has been observed, but this is very localized

Region C

- Mostly small-scale feeding in this region; mostly coastal
- This region gets less snow and yarding behavior is less prevalent, so people may not feel the need to feed
- Met with 2 large feeders in Machias and E. Machias last year after experiencing high number of deer-vehicle collisions- these towns were receptive to changing practices
- Increase in penalty for baiting has drastically cut down on amount of baiting seen in the region
- Not much ag. remaining in the region and food plots have become much more common as a way to support deer
- All of the small corner stores sell deer feed of some kind and are generally responsible about only selling it at a time of the year when feeding is legal
- Winter feeding has caused issues in areas with high-use roadways
- Most feeders are older folks 50+ and mostly retirement age
- Most feeders think they are having a positive impact on limiting deer winter mortality
- Most people do not feed or bait and don't support it, but those who do think it's critical for deer
- Dept. messaging has been too soft and mixed over the years, "Don't feed deer, but if you do, here's how to do it."
- Feeding in general is much more prevalent probably than we realize and most deer in the state are probably impacted in some way by non-natural feed
- Regional bio: favors ban of feed in areas where winter is less severe and regulating it in areas where winter is a more severe

Region D

- Dept. messaging has been that feeding is bad for a long time, yet we allow it and provide advice on how to do it
- Feeders often unwilling to move feed away from roads because then they can't see the deer
- Very concerned that zoned PFWs that are unoccupied may lose their zoning, but many are unoccupied and there is belief that they are unoccupied because deer feeding is drawing deer away from them
- Some deer yards are being heavily degraded by over-stocking; are we trying to support more deer in the winter than the habitat can handle?
- Many deer-vehicle collisions noted around large feeding operations
- One regional bio: recognizes some of the possible benefits of feeding, but feels the practice is very detrimental on the whole
- Extent of feeding not well understood in some areas as it's very labor intensive to ID all feeders
- Having a biologist and a warden deliver a unified message to a feeder is often effective
- Agreement with others that feeding is more prevalent than we realize
- Deer using small feeders will travel between feeders on a feeding circuit looking for feed and this often makes them cross roads
- Regional bio: we are getting complaints that the dept. isn't doing enough to monitor or control feeding; perhaps a more realistic and graphic message about the impacts of feeding would resonate

Region E

- A lot of small-scale operations, but there are a few large ones (NE Carry, Pittston, etc.)
- Deer-vehicle collisions are a big issue, primarily right around feeding operations
- Some issues noted with potato feeding: one regional bio: has seen extensive diarrhea in woods associated with potato feeding
- Plenty of local places sell feed
- Change to baiting laws have lessened the number of issues enforcement deals with
- Agree with previous comments that deer are leaving traditional wintering areas to go to feeding stations; their absence from deer yards puts zoning at risk
- Dept. messaging has not been clear; RE: food plots, dept. has not put out any messaging on this, and food plots have become common. What is our message on this?
- Warden: how can we continue to allow the large feeding operations given the seriousness of CWD and given how far deer are traveling in winter to feed operations. This is a spread risk.
- Regional bio: landscape of deer wintering areas has been 'demolished.' Deer are moving to feed; agreed with concern over yards losing their zoning status because deer are leaving them for feeding operations
- Regional bio: Though he'd like to see feeding stop, doing it immediately would be bad. A more gradual approach should be used.
- Question raised by several: Should we try to artificially support a higher number of deer or just carry fewer deer as the habitat allows?
- Have seen some forest regeneration issues around feeding areas

Region F

- Feeding widespread in this area with some large feeders
- Regional bio: Brownville feeding operation is ridiculous.
- Some feeders that have been contacted have been unwilling to make changes
- Sale of feed is prevalent; "Stores are selling it, so people buy it..."
- I-95 deer-vehicle collisions very common around Sherman. Warden: does not believe this is related to deer feeding in this particular spot.
- Concern about deer being drawn away from PFWs by feeding operations, which puts zoning at risk. This concern has been raised by several groups.
- Saw increased harvest this year during late rifle and muzzleloader because early snows made deer move to their winter feeding areas early where they were easy targets
- Regional bio: Supports outright ban of feeding.
- Food plots are tricky since we use them as a management tool on DWAs and things to support wildlife
- There are fairness questions to consider with the food plot vs. baiting debate
- Food plots are not drawing deer away from deer wintering areas like feeding
- Deer feeding messaging has been bad, we agree about that: "Don't feed, but here's how."
- Agreed that we need to decide on whether to support the number of deer the habitat can sustain or artificially maintain higher levels than we have habitat for; regional bio: Rather just support fewer deer

- Enforcement has not been a big issue
- Signs for deer wintering areas along roads have not been that effective

Region G

- Majority of deer are using towns for feed now and rely on it
- There are smaller independent feeders, which haven't typically caused issues. Then there are the large and very coordinated feeding operations that are very difficult to manage.
- ACCA has been developing a feeding program and based their business model on PCCA; they are selective about who they support with their program and provide feed to; something like 160 bales of alfalfa hay used this year
- We continue to artificially increase carrying capacity with feed, which packs deer into towns where they're feeding
- Coyote program has had some success
- Regional bio: Concerned with how big coordinated feeding programs like the ACCA program are getting; will the number of feeders continue to increase as the program grows? What happens if a large feeding program dies down and can't support the same number of deer anymore?
- Regional bio: introducing CWD via feed is not a risk if the feed is locally sourced; if CWD shows up, we should stop feeding in area around CWD cases but allow feeding elsewhere.
- Warden: total ban on feeding is going to be impossible to enforce or accomplish politically; is there a way to regulate feeding and go from there?
- Warden: no deer left in the big woods areas where deer aren't being fed.
- Regional bio: collared deer during early snows went to feed sites, found that feeders weren't feeding yet, left to return to their summer ranges, and then came back later.
- Warden: if we just stop feeding, we'll lose all our deer. Regional bio agreed.
- RAS bio: deer have been existing without feed for thousands of years. They won't just sit in a place with no feed and die if feeding is stopped. They'll revert to natural behaviors.
- Ras bio: we need to stop treating deer in a way that equates them with livestock. They are wild animals.
- Warden: whatever we do, we need to do something that's enforceable. We have to take a stance on what the correct path forward is and stick to that message.
- Regional bio: if we stop feeding, we need to have an aggressive habitat management plan to support deer as best we can.

Open Discussion

- Regional bio: If we made changes, would we retain ability to use bait and mineral licks as a management tool for special hunts and control efforts?
- Warden: We don't need baiting as a management tool currently, so why would we make it legal?
- Warden: Envision a lot of conflicts between people maintaining bait piles for hunting and other area hunters.
- Warden: Baiting and food plots are completely different things.

- Warden: It's basically going to be unenforceable if you try to regulate food plots. How will you differentiate between a food plot and someone with ag. fields or something with a garden or someone with some apple trees in their yard?
- Warden: Baiting trains deer to show up and use a particular area to where it's no longer fair chase.
- Wildlife division: There may be R3 implications if Maine can market itself as a bait free and CWD free state.
- Warden: A mineral lick is bait. It is placed.
- Warden: Regulating the distance from roads where feed can be placed would effectively end feeding in some areas.
- Wildlife division: Something needs to be done before we have CWD; we shouldn't wait until it shows up to try and fix the issue.
- Warden: If we do any sort of regulating, we must be able to explain why some people can feed in some ways and others can't. That could be seen as endorsing feeding at some level.
- Wildlife division: May be worth having a CWD expert present to the committee.
- Several: Need to continue to be strong on enforcement around the border and on messaging about carcass transport laws.
- Regional bio: Favors requiring feed to be 'X' distance from a road, or a road of a certain traffic level or speed limit or some other measure of use.
- Regional bio: Our recommendations must pass the straight face test. Saying all feeding is bad may not be correct. Some small and occasional feeders may not have much impact or any impact relative to big feeders.
- RAS bio: We have to consider what changes would actually be palatable to public and legislators. What positive steps can we realistically propose?
- Regional bio: If people say they feed deer to help them survive, then they shouldn't be deterred by a distance-from-road requirement. People deterred by this probably just wanted to watch them in their yard.
- RAS bio: Can we have a sunset clause on feeding to prepare feeders for the eventuality?

Appendix 4. Meeting agenda and notes from stakeholder meeting on deer feeding, Oct. 15, 2019.

October 15, 2019- Deer Feeding Stakeholder Meeting: Agenda

Attendees

Maine Dept. of Inland Fisheries and Wildlife (MDIFW): Tim Peabody, Dan Scott, Chris Cloutier, Nate Webb, Bob Cordes, Ryan Robicheau, Wally Jakubas, Nathan Bieber

Maine Dept. of Agriculture, Conservation and Forestry (MDACF)- Carolyn Hurwitz

Maine Dept. of Transportation (MDOT)- Eric Ham

Aroostook County Conservation Association (ACCA)- David Farnum

Aroostook County Quality Deer Management Association (QDMA)- Jon Roark with Debbie Roark

Backcountry Hunters and Anglers (BHA)- Jon Robbins

Maine Farm Bureau (MFB)- Julie Ann Smith

Maine Municipal Association (MMA)- Rebecca Graham

Maine Professional Guides Association (MPGA)- Don Kleiner

Sportsman's Alliance of Maine (SAM)- Gerry Lavigne

University of Maine (UMaine)- Carly Sponarski, Francesca Gundrum

Agenda

1:30- Background and Meeting Purpose: MDIFW Wildlife Division Director, Nate Webb, will provide an overview of Legislative efforts related to deer feeding and the purpose of the meeting.

1:40- Introductions: Stakeholder groups will introduce themselves and their stake in deer feeding.

1:55- An Overview of Feed-related Issues: MDIFW Deer Biologist, Nathan Bieber, will provide an overview of issues central to the deer feeding discussion and issues central to Legislative efforts related to deer feeding.

2:10- Discussion of Issues

- Artificial deer feeding and winter deer feeding
- Hunting over bait

- Food plots
- Mineral licks

3:25- Break

3:35- Continued Discussion of Issues

4:50- Meeting Conclusions and Adjournment

October 15, 2019- Deer Feeding Stakeholder Meeting: Notes

Opening comments...

MPGA- Can any of these (artificial feeding, baiting, food plots, mineral licks) actually increase or decrease deer populations? Are there other areas where feeding is done that are comparable to Maine and have study results to look at? Trying to get beyond the fact that our collaring study in Maine is not complete yet.

QDMA- Perhaps Alberta or another province would have comparable data to look at?

ACCA- How prevalent is feeding really in southern Maine? Never see it there.

SAM- If we are going to claim that a deer population is being fed or not, we have to do some sort of survey to verify this.

MDIFW- It has been very surprising to see the difference in survival rates so far in our study sites that are fed vs. those that are unfed.

ACCA- Southern and northern Maine are very different and should be treated as such. Northern Maine is the big issue; one big storm can be catastrophic if there isn't supplemental feed to keep deer going. Cited Portage Lake as an area where deer don't have quality winter habitat and have been driven into town by predators and have eaten much of what was growing around town. Feeding is necessary in northern Maine to get more deer through the winter. They have seen it work and believe it is necessary. Fawn production and fawn survival has increased in northern Maine areas where supplemental winter feeding occurs. We can't increase the deer population without fawn survival.

QDMA- People will be less likely to harvest young deer if there are more deer and they feel they're likely to see more if they pass one up.

On hunting deer over bait...

SAM- Baiting is much different from food plots.

ACCA- In northern Maine, once you get 8" of snow, deer are going to migrate no matter what you do.

MPGA- Surveyed about 30 members; there was no support among the group for hunting deer over bait; there was quite a bit of support for allowing some level of feeding.

BHA- No support among group for hunting deer over bait.

MFB: Mixed support by farmers for hunting deer over bait: some farmers think it could lead deer away from crops and be beneficial, and others think it will just draw deer into an area where they'll target crops.

ACCA- Deer will eat what they want regardless of what you put out for food. They'll pick and choose what they like. We don't believe that food plots or baiting will significantly affect keeping deer away from agricultural crops.

MPGA- Is there some framework to allow hunting over bait in areas that need deer reduction?

MDIFW- We have the ability to use bait for reduction hunts; this would likely be a component of deer reduction efforts around cases of CWD if CWD is found in Maine.

SAM- Sharpshooters and bait can be used effectively for deer reduction.

MDIFW- We don't call shooting deer over bait "hunting, "; if baiting were allowed at some scale, such as the town scale, this would not likely be much of an enforcement challenge, but land access is the trouble in many towns with too many deer, and baiting doesn't alleviate that problem.

MDIFW- Hunting over bait was allowed at Wells Reserve, did that pose any enforcement challenges?

MDIFW- RE: MFB points, baiting would occur during the hunting seasons, Oct-Nov; main crop damage issues are earlier in July-Sept.

MDIFW- If baiting did increase hunting success rates, we would have to consider ways to prevent excessive harvest, which may involve altering hunting season length.

MFB- If we allow bait during hunting, how will that impact enforcement of feeding during other times of the year? There is concern that learned behaviors from feeding and food plots may influence deer and deer movements to where they gravitate towards crops.

MDIFW- There is a distinction between food plots, which are rooted and growing, and bait, which is placed. It's unlikely that baiting or food plots would significantly impact deer habits.

ACCA- ACCA plants food plots for late summer and fall to benefit deer as they go into the winter; some species they plant aren't even palatable until hard frosts, so these shouldn't impact deer movements or crop damage.

MDIFW- Have any groups heard support for hunting over bait?

SAM- Let's address the 'fair chase' issue; fair chase is on a spectrum, and certain management actions will be more accepted at certain deer densities; some less popular or "less fair" methods may be more acceptable when deer densities are too high. In Maine, there's not enough deer to justify allowing a less popular, less 'fair chase' method.

ACCA- Consider Maine, North vs. South, when talking about baiting as well. Baiting is not recommended for northern Maine. We are not overpopulated with deer like southern Maine.

On food plots...

MDIFW- Some people have expressed that food plots and hunting over them are not fair as not everyone has the resources and land to grow and tend a food plot. Thoughts? The Legislative Committee has asked that we discuss the implications of banning food plots.

MPGA- Where is the line between food plots and agriculture? Too hard to sort that out.

MFB- Very concerned about implications of regulating what we can grow. Consider license costs in some other jurisdictions- there will always be some kind of barrier to hunting opportunities.

ACCA- The group plants a lot of food plots, but few actually hunt over them, and even fewer do so successfully. This is not a fair chase issue in northern Maine.

MDIFW- There is a difference between bait and food plots when it comes to disease spread dynamics. No other jurisdictions currently regulate food plots.

ACCA- Deer in deer wintering areas are congregated at higher densities than usual. This is similar to concentrating deer at baiting or feeding sites. Not a disease issue in the North.

SAM- Are there any studies that have looked at contact rates in natural environments vs. feeding areas? Especially in areas with CWD?

BHA- This organization has no issues with food plots.

QDMA- It's a slippery slope when you try to legislate fairness. Is this issue really a high priority for the legislature? QDMA relies heavily on food plots in their management activities.

MDIFW- It seems groups are generally supportive of food plots. The Legislature has asked that we discuss the idea of having fees or permit to maintain food plots.

BHA, ACCA, MPGA, MMA, others: We would not support requiring a fee or permit to maintain food plots.

QDMA- We would like the state to help with food plots.

SAM- The 'how to distinguish between food plots, ag, gardens' issue is a problem.

MDIFW- The difficulty in distinguishing between a food plot and agriculture or a garden would make food plot regulations unenforceable.

On mineral licks...

MDIFW- A bill was put in to extend allowance for mineral licks to allow them from March 1st to July 31st with exceptions. This would require that we define mineral lick in statute.

SAM- Originally, someone close to SAM wanted to pursue an allowance for baiting; SAM members worked with them to provide information and reach some helpful middle ground, which was an extension to mineral lick allowances. Deer and moose crave salt in spring. Once you place these on the landscape, however, they may sink into soil and prove attractive even when the source has been removed. Removing 'salt' from the allowance may help with this.

MDIFW- The burden of proving what was used at a site with the source removed would be on IFW. There are a lot of different products out there now, and some have taken to removing ingredients labels. On the enforcement end, it won't be possible to determine what's been used at a site.

SAM- As a counter-point to our own bill, deer and moose have existed for centuries and centuries finding the minerals they need naturally without people providing supplements.

BHA- Our group opposes the use of mineral blocks and licks. CWD is a big concern and reducing risks is very important.

On captive cervids...

SAM- There is concern about the transport of captive cervids.

MDACF- You can still move live cervids into Maine, but it is very difficult to do so. We are testing (for CWD) all escaped cervids that are killed and have increased testing of captive cervids greater than a year old that die.

On mineral licks...

MDIFW- If a salt lick soaks into the soil, and if infectious CWD prions were shed there, that becomes a very high risk feeding area that will be infectious for a long time.

MPGA- We view mineral licks the same as baiting.

On artificial feeding...

MDIFW- To provide a summary of associated issues: - There is some question as to benefits of feeding, and a variety of staff and public perspectives – Vehicle collision rates when feed is near roads may be high – If CWD arrives, artificial concentration of deer is a real problem – Deer may have negative impacts on habitat around feeding sites. We have some deer yards that are suitable but unoccupied; is this feed

related? Feeding is very socially ingrained in Maine. The Legislature has asked for general guidance on whether a change is needed.

MDIFW- In some cases, the number of deer fed and the condition of feed sites lead them to look like livestock operations. How do people feel about these large feeding sites?

ACCA- Last year, we provided \$18,000 of feeding support to 51 feeders. We used to use only oats and barley as a mix, as recommended by the state deer biologist at the time, but now we saw that alfalfa bales have been used in Canada. Last year, we experimented with using 38 round bales of alfalfa for feeding deer. This year ACCA bought 120 bales of alfalfa hay. Bales are very large and available all day, require less maintenance, and provide more opportunity for young deer to feed. Bales can be used to keep deer further away from roads. We help feed hundreds of deer in 51 locations in 10 towns in northern Maine. In Portage Lake, we feed over 100 deer yearly, up to 70 at a time. We don't support the large feeding operations that resemble livestock operations. Migration is not likely disrupted by feeding, we don't believe that's the case. The deer yards that remain are like an island in the ocean; they are too fragmented and lack interspersed foods. If we stop feeding altogether, we'll lose 50-70% of our deer in northern Maine in a year with a severe winter. All of our feed is locally grown.

QDMA- We've planted soybeans, chicory, peas, oats, we'll try everything. Results are not clear yet. We typically plants smaller food plots of a few acres.

UMaine- Are people participating in your feed programs from within your organization or are other members of the public that are interested participating?

QDMA- We do some work with non-members; a lot of people want to help but lack the time.

ACCA- We provide seed for free if they join the group. Membership is \$20 and a 1-acre bag of seed costs us \$33. We give our deer feed away.

MDOT- We monitor for collision hot spots and recommend that we avoid activities that encourage deer to hang out around or cross roads.

SAM- There is a new road buffer project going on between [Augusta] and Waterville. This may attract deer.

MDOT- This is a pollinator plant mix, which hopefully will not prove attractive to deer.

MMA- Absentee landowners are common and difficult to reach; some landowners on water bodies struggle with community plant damage. It's not clear what the best path forward is to deal with some of the localized issues.

ACCA- Our group is particular about who feed is given to, and we've stopped giving feed to some people that were feeding deer near roads and the like. We work with Wardens to find better places to feed.

MDIFW- Is there anything from a regulatory perspective that we should be doing to alleviate some of the risks and negative impacts of feeding? How do we address feeding in response to CWD?

ACCA- Existing feed regulations have been sufficient in the North. Some feeders have been shut down that were causing problems. ACCA recognizes that it's a whole different ball game if CWD is found in Maine.

MFB- Some have asked for a longer hunting season to remove more deer and alleviate crop damage.

SAM- Deer over-browse habitats adjacent to feeders and prevent regeneration. Feeding can spiral out of control; once feeding starts, more deer will eventually come and feeders won't be able to afford to feed the increasing numbers. This puts the habitat at risk and puts young deer at risk. We surveyed habitat around Wilson's Mills and others in 2003(?) and found a lot of dead young deer that never got to feed.

MDIFW- Deer naturally lower their metabolism in winter. Will removing feeding really result in a large increase in mortality or just cause deer to revert to more natural winter feeding habits?

SAM- If feeding is stopped, deer may move along and browse elsewhere... or they might just stick around in towns where they were previously fed and die.

ACCA- The problem began with forestry practices cutting deer yards, not with feeding. Deer without feed will have nowhere to go. If there's no feed, deer will starve. Deer won't go elsewhere to find food.

SAM- My guess is that most of the deer that are feeding in Portage Lake, etc. did not originate there. There was a major mortality event and only the deer around towns were able to survive. Those that persisted are feed dependent now.

MPGA- IFW should provide information on how to feed deer. Saying 'no' to feeding isn't working. IFW should provide guidance.

MDIFW- IFW has a long history of saying 'feeding is bad, but it's legal and here's how to do it.' This has not been effective messaging. Should MDIFW take a more proactive stance towards feeding?

ACCA- You can't change the type of feed you provide mid-winter. There are some do's and do not's. This type of guidance could be given by IFW.

MPGA- And guidance like 'don't feed by roads' can be provided.

MDIFW- Is there interest or support for regulating the distance feed must be placed from a road?

ACCA- Hard to draw a line like that. Some feed sites near roads will never cause a problem but some will.

MDIFW- If the best thing for deer is to feed them away from the road, will people still do it?

MPGA- People will understand if we explain best feeding practices.

MDIFW- We knocked on doors in western Maine to inform people how to feed deer better, but it hasn't been impactful.

MDIFW- Deer have lived without supplemental feed for ages. Do they need it now? Feed is just used to carry more deer than the habitat can support. Maybe we should just carry fewer deer.

MDACF- In addition to CWD, there are many other pathogens and parasites that could be spread more easily in an environment where deer are fed and concentrated.

ACCA- Deer came to towns because the habitat was cut.

MDIFW- When would you say the deer moved into town as you noted?

ACCA- ~15 years ago.

MDIFW- How important do you feel feeding is in northern Maine vs. southern Maine? Is there a substantial difference between central and southern Maine?

BHA and ACCA- People in central and southern Maine want to see deer. Deer don't need the feed.

BHA- Our grouped is focused on CWD risks when we say that we don't support feeding deer in central and southern Maine.

MDIFW- What do we tell the legislature about feeding in central and southern Maine?

BHA- We shouldn't be feeding in central and southern Maine.

MMA- Consider the reasons behind the north vs. south differences. We should focus on voluntary compliance and a better education campaign.

MDIFW- Would municipal bans on feeding be effective when so many feed sellers exist?

MMA- It would be very difficult to enforce. There are a lot of people selling feed.

MDIFW- We're not going to ticket people just feeding a little bit in their yard to watch deer.

MDIFW- Education is a tough way to solve this. We have educational materials on this subject readily available, but many people still haven't seen them.

SAM- Are we harming deer by feeding them at a small scale in central and southern Maine? It's mostly small feeders and likely these are not causing any problems. It's not worth making feeding illegal if impacts are minimal. If CWD shows up, impacts of feeding are less certain then.

UMaine- Edmundston, NB recently put an ordinance in place to ban feeding. The town is now trying to walk that back and use changes to societal norms rather than laws to change feeding practices.

MPGA- We don't know for sure if feeding is good or bad for deer, so let's help the people that are trying to do some good by feeding to do it better.

MMA- Educational campaign would be a better way to reach absentee landowners.

MDIFW- Messaging via towns may be more impactful than messaging through IFW website.

Closing...

MDIFW- We'll compile and circulate meeting notes for comments and corrections.

On deer feeding public survey-

UMaine- Our human dimensions lab studies people's attitudes, beliefs, and perspectives on species, management options, etc. Partnering with colleagues in New Brunswick and now MDIFW to survey the public and better understand public perspectives on deer feeding and deer impacts. Results available ~mid January and will be included in report to Legislature.