



Living **ON THE EDGE**

Winter Feeding of Deer: What You Should Know

Many Mainers enjoy feeding deer in the winter. While artificial feeding can improve winter survival during severe winters, it will do more harm than good in most of the state and in most winters. If you choose to feed deer, please consider the information and guidance in this document.

A deer's diet changes with the seasons. In summer and early fall, deer primarily eat leaves and young green twigs from woody plants. In the fall, a deer's diet transitions more to twigs, mast crops, and evergreens like cedar. This change in diet is a gradual process, which gives the microorganisms in a deer's digestive tract time to adjust to the new foods. These microorganisms are specialists. Some species thrive on woody fiber, and others thrive on the proteins and sugars found in green plants. Offering grains or hay to a deer after the deer's digestive system has adjusted to a woody diet

introduces foods that these microorganisms are not prepared to digest. This may slow digestion to the point a deer starves or create an excessively acidic environment in the stomach that can destroy the beneficial microorganisms and kill the deer. Remember: Just because deer will eat food provided by humans in winter does not mean that it is good for them.

In this document we have outlined some of the undesired impacts of artificial feeding and provided alternative techniques to help improve winter survival of deer. In most cases artificial feeding does not reduce deer losses during winter and in some cases increases losses. Although abnormally severe winters cause periodic declines in deer abundance, healthy and naturally-fed deer do not require handouts to thrive in Maine.

WINTER ADAPTATIONS OF DEER



White-tailed deer increase their level of food intake during September and October, increasing fat accumulation by as much as 20–30%. During the winter, they reduce food intake (regardless of availability) and rely on fat reserves for as much as 40% of daily nutritional needs.

Deer conserve energy during winter months to slow fat loss and select specific winter habitat offering features that enhance energy conservation. Deer “yard up” with other deer to share the energetic cost of maintaining a winter trail network that provides access to cover and browse and escape routes from predators.

UNDESIRABLE IMPACTS OF WINTER FEEDING

- Feeding deer in late fall may disrupt deer migration to natural wintering areas.
- Feeding concentrates deer in smaller areas, reducing the size and effectiveness of trail networks.
- Concentrating deer in smaller areas can create a feeding ground for predators.
- Concentrating deer in smaller areas may increase their vulnerability to diseases such as Chronic Wasting Disease.
- Deer confined in smaller areas can consume all vegetation within their reach over one to several hundred acres, impacting regeneration and reducing the forest’s ability to shelter deer in the future.
- Deer at feeding sites may become habituated to people.
- Feeding sites can significantly increase deer/vehicle collisions.
- Deer may starve when fed artificial foods during winter if they have a full belly of indigestible foods; many deer have starved to death with stomachs packed full of hay or corn.
- Providing inadequate amounts of artificial foods can cause malnutrition in normally healthy deer populations.
- Spoiled or moldy food may be ingested and can be fatal.
- Introducing a sugary diet to a deer used to eating a fiber-rich diet of browse can also lead to rapid death.
- Deer compete aggressively for scarce, high-quality foods, and only the strongest, most dominant deer (who would have survived the winter anyway) gain access to food, while deer most vulnerable to starvation in winter (usually fawns) are denied access to artificial feed by more aggressive deer.
- Ending a feeding operation prematurely will lead to nutritional problems for deer that have become dependent on winter feeding, as will beginning a feeding operation too late in the season.



INAPPROPRIATE WINTER FEEDING OF HAY WITHIN A DEER WINTERING AREA: Note how high concentrations of deer have consumed all available browse, indicating that deer densities have exceeded local carrying capacity. With complete regeneration failure, there will be no mature winter-cover trees in the future.



HARMFUL WINTER FEEDING: Hay and potatoes left for deer can cause malnutrition, starvation, and death. Many deer congregated at this site, as shown by the paths. If deer are fed too near to roads, the number of deer crossings will increase, and more deer may be hit by vehicles.

PRACTICES TO MINIMIZE UNDESIRABLE IMPACTS OF FEEDING

- Locate deer feeding sites in or near deer wintering areas (softwood cover).
- Locate deer feeding sites 1/2 mile or more from plowed roads to minimize road-kill losses.
- Distribute food in many locations every day to reduce competition among deer.
- Begin feeding as soon as it is legal, and introduce new foods gradually. Do not abruptly introduce new foods; deer require several weeks to adjust to digesting new foods.
- Provide natural browse items such as dogwood, maple, ash, birch, or witch hobble. Oats or acorns can be given to supplement the diet.
- If providing a pellet or formulated product, use a complete horse, dairy, sheep, or deer formulation in pellet form.
- Do not feed: straw hay, whole corn, kitchen scraps, potatoes, cabbage/lettuce trimmings, or animal proteins.
- Food should be protected from moisture or located on a platform off the ground to prevent mold, which can be fatal.
 - Consider that an average deer may consume 2 to 5 pounds per day (depending on quality), and the duration of feeding could be about 90 days in northern Maine. This can prove very costly over time, so evaluate your readiness to provide food in the long-term before you begin.
- Once a feeding program has begun, do not interrupt or terminate it until spring greenery emerges.
- People who feed a few deer in December should expect more deer by February. Budget accordingly.
- Watch for over-browsing or stripping of bark off trees; this can be an indication of too many deer and not enough food.



BENEFIT OF HARVEST TIMING: Deer browse (treetops) is made readily available from harvesting near their softwood cover.

PREFERRED ALTERNATIVES FOR LANDOWNERS

- Take an active role in managing your woodlands to improve deer habitat naturally.
- The Maine Department of Inland Fisheries and Wildlife (MDIFW) encourages landowners to develop a management plan for their woodlands to provide optimal winter and/or summer habitat for deer.
- Contact your Maine Forest Service District Forester at https://www.maine.gov/dacf/mfs/policy_management/district_foresters.html for advice on managing your woods.
- Many wood harvesting practices are good for deer while also providing income from timber production. Some practices, such as thinning, crop tree selection, and firewood cutting can provide immediate benefits for deer and simultaneously enhance the value of future timber sales.
- Timing forest management activities, whether for firewood or lumber, to occur during winter also provides deer with a large amount of natural browse from treetops at a time when they can best use it. Generally, deer prefer hardwood treetops for browse.
- Apple trees can be released from competition to encourage better production of fall foods.
- Small fields can be planted with cool season forages to create food plots for deer.
- Hardwood stands can be managed to favor acorn and/or beechnut production.
- Team up with your neighbor to increase the benefit of these efforts.
- Consider contacting the USDA Natural Resource Conservation Service for information on cost-sharing programs, educational materials, and technical advice.
- Contact your Regional MDIFW office to talk about managing wildlife habitat on your property. For contact information, visit our website at www.mefishwildlife.com.