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## DON'T FEED THE DEER

With the arrival of winter weather and deep snow, some New Hampshire landowners think about putting food out for deer. Although in concept this might seem like the sensible thing to do, research and experience has shown that you will do more harm than good both to the deer and to their habitat.

There are two primary factors that determine deer survival during the winter: the availability of high-quality food in the fall and softwood (hemlock, spruce or fir) cover during the winter. Deer must store body fat for the winter. The extent to which they store fat, determines whether they survive until spring. This fat build up occurs by increasing the amount of food they eat in September and October. This year was a particularly good oak acorn year so the deer had an opportunity during the fall to build up their reserves to carry them through the winter months.

During September and October feeding, fat accumulation in adult deer results in a 20% to 30% increase in body weight. Fawns, on the other hand, accumulate only about half as much fat because they use much of the food they eat for growing muscle and bone.

During November, deer in the Northeast voluntarily begin eating less. They continue to reduce the amount of food they eat each day until late February, when they are eating about 50% less food per day than they did in September. Throughout these critical winter months, the deer compensate for their reduced food intake by relying on their stored fat for energy. An adult deer may get as much as 40% of its daily nutrition during the winter from these fat reserves.

To maintain this level of stored fat use, the deer must conserve their energy. They do this by reducing their activity, for example by traveling less, and by spending time in softwood stands of trees where it tends to be warmer, they are protected from the wind and snow accumulations on the ground are less. These energy conserving measures are especially important to fawns because of their lower fat reserves.

Although deer can eat to reduce the amount of fat they burn, natural foods only slow the rate of fat loss-they do not stop it. This is when some people begin to say, "I need to put some grain or hay out for the deer."

Research has discovered that even deer feeding on nothing but grain lose weight during the winter. Captive deer that have access to all the food they want still reduce the amount of food consumption beginning in November and continue to lose body fat through February. That is because deer have evolved a survival strategy that involves eating as much as they can in autumn in order to build up the fat reserves before winter. Once winter arrives, instinct tells the deer to eat less, move around less and seek the protection of winter cover.

Research has also shown that the dominant adult deer will fill their bellies first at feeding sites. The smaller weaker deer and fawns will have wasted valuable energy traveling to the feeding site only to find little feed if any available. Over time, feeding sites attract more and more deer competing for the same food supplies. This can lead to over browsing and degradation of the natural habitat around the feeding site. At the same time, the deer can wreak havoc on the homeowners ornamental plantings.

If you own a woodlot and wish to enhance the deer habitat, there are a number of

steps you can take. If your forest contains large dominant red and white oak trees, some of them should be retained in order to provide a large supply of acorns, a favored food of deer and many other animals. Managing your softwood stands to encourage the development of deer yarding areas that will provide protection from the cold, harsh winter winds and deep snow depths is another important management tool. Thinning your hardwood forests of firewood and pulpwood quality trees will ensure a steady supply of hardwood browse or sprout growth that emerges from the stump of the harvested tree. Deer particularly like young succulent red maple browse. A supply of this food source adjacent to the softwood cover with a near by water source is the ideal winter habitat for our deer herd. Together, landowners, foresters, loggers, hunters and wildlife enthusiasts can take the necessary measures to provide adequate habitat for a healthy New Hampshire deer herd.

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