## **The Outside Story**



## Feeding Deer Does Much Harm, Little Good By: Meghan McCarthy McPhaul

A few winters back, there was a doe who frequented our compost heap. The garden fence around it proved an inadequate barrier, as she simply hopped over it to nosh on the rotting shards of jack-o-lanterns and the latest veggie scraps tossed atop the pile. Not far from the garden sits an old orchard, and we'd also spot her there, scratching with sharp hooves to get to the long-frozen, shriveled fruit beneath the snow.

Watching deer forage for whatever bits of food they can find through the cold months of winter, I can understand why some people feel an urge to feed them. Only supplemental feeding isn't helpful at all to deer. Instead, it's detrimental to their digestive health, and it pulls them away from safer, more nutritious food sources.

"Supplemental feeding has little or no benefit to the overall health of deer," said Nick Fortin, Deer Project Leader for the Vermont Fish and Wildlife Department. "Interestingly, northern deer will lose weight in winter no matter what or how much they are fed, even in captivity."

Like virtually all animals living in climates where winter is cold and snowy, deer use a variety of adaptations to adjust and survive. In the northern part of the Northeast, they often gather in deer yards, where softwood cover offers shelter from wind and cold as well as decreased snow depth. As deer move to and through their winter shelter, they pack down paths, allowing for easier travel to food and quicker escapes from predators.

In winter, deer reduce their energy expenditures by hunkering down during extended cold stretches; this way they can focus their activity during times when temperatures are warmer. Similar to animals that hibernate, deer store fat – it can constitute up to 20 percent of their body weight, said Fortin – and they can use that fat as a sort of energy savings account.

A deer's digestive system also goes through changes to cope with less abundant – and different – food sources. Deer are ruminants, which means they have a four-chambered stomach, like cows and sheep. Each chamber contains microorganisms to help with digestion. These microbes become tuned in to a winter diet of twigs and buds, nuts, any fruits and berries that persist, and whatever grasses they can find. A sudden change in diet – say

to supplemental corn or rich hay – can wreak havoc on this system.

"As their diet changes with the seasons, so do the microorganisms," said Fortin. "Deer can easily deal with a slow transition to supplemental feed, but a rapid transition can actually be fatal... There was a case in New Hampshire a couple years ago where 12 deer were found dead as a result of feeding."

Because of this and other dangers of supplemental feeding, it is illegal to feed deer in Vermont. Maine and New Hampshire have not outlawed the practice; New Hampshire Fish and Game Deer Project Leader Dan Bergeron said several bills – supported by his department – seeking to ban deer-feeding have been introduced in the state legislature over the years, but none have passed into law.

So, what about the doe in my compost pile? "There shouldn't be enough food [in a compost pile] to draw deer in from long distances and concentrate large numbers," Bergeron said. Larger feed sites, however, where people put out corn or livestock feed, can cause problems beyond harmful digestive effects by drawing deer away from the shelter of deer yards, leading to greater expenditure of stored energy reserves. The animals often have to cross roads to access the feeding sites, leading to fatal collisions.

Large gatherings of deer outside of natural wintering sites can also lead to increased – and easier – predation. And with so many animals concentrated in a small area, transmission of diseases – like chronic wasting disease, which is present in both New York state and Quebec – becomes a concern as well.

Bergeron and Fortin agree that the best way to help deer survive winter is to focus on efforts to conserve, support, and create areas that offer good shelter and natural food sources. "Quality winter habitat is far better for the long term management and sustainability of our deer population," Bergeron said. "In my mind, having to rely on winter feeding is not a management approach, it is a complete management failure."

Meghan McCarthy McPhaul is an author and freelance writer based in Franconia, New Hampshire. The illustration for this column was drawn by Adelaide Tyrol. The Outside Story is assigned and edited by Northern Woodlands magazine (northernwoodlands.org) and sponsored by the Wellborn Ecology Fund of New Hampshire Charitable Foundation (wellborn@nhcf.org).

