Worse than a belly-ache

It takes two to four weeks of feeding on a new food source for deer to establish the microorganisms necessary to obtain nutrients from that food. The time and energy it takes to convert to new microorganisms uses precious fat reserves that could have been spared if the deer had fed continually on natural winter browse. Studies have documented the death of wild ruminants from feeding on highly digestible, high energy, low fiber feed such as corn in winter. This rapid exposure to a concentrated grain diet can cause a fatal disruption of the animal's acid-base balance. Those that survive the immediate effects of "grain overload" often die in the days or weeks that follow, due to secondary complications of the disease.

The agony of "de feed"

High densities of deer at feed sites create increased competition and stress within and among deer and other wildlife. Compounding the problem is that stress from crowding and competitive aggression weakens immune systems. Social hierarchies prevent the deer most susceptible to starvation (fawns and those that are already weakened) from feeding. Most of the supplemental feed, in reality, is consumed by a small number of deer, and they are the same deer that got their choice of food in the autumn, and were able to put on a thick layer of fat. Deer in the poorest condition don't get fed, yet waste energy they can't afford to lose by traveling to feed sites with the herd.

The right prescription

There are better, harmless, ways to attract deer and other wild animals to an area. Population and habitat management offer long-term solutions. You can help deer survive the winter by creating and maintaining good quality deer habitat and improving food resources that will actually benefit all wildlife.

Plant mast producing trees and shrubs, and protect those plantings until they are large enough to survive deer browsing; plant evergreen trees for winter thermal cover and cut sections of mature forests to create forest openings and increase the amount of woody browse available to deer.

The welfare and future of wildlife depends on the ability of natural habitats to support diverse, healthy and sustainable populations. Wildlife populations must be managed at levels that are compatible with the long-term carrying capacity of a diversity of habitats.

Research demonstrates that a smaller, well-fed herd can produce more deer than a larger, poorly-fed herd. The key to productivity is fawn survival, and remember, fawns feed last, if at all, at feed sites. The herd will be more fit if it is not dependent on humans for food.

As Matt Tarr of Whitetail Stewards, Inc. wrote, "feeding deer because you think it does them good, or because you just like to watch them, are poor reasons for a 'sportsman' to place our deer resource and hunting heritage at so much risk."

For more information

View The Wildlife Society's final position statement on the baiting and supplemental feeding of game wildlife species at www.wildlife.org/policy/positionstatements/42-Baiting%20and%20Feeding.pdf.

Order The Wildlife Society's *Baiting and Supplemental Feeding of Game Wildlife Species Technical Review*, 58 pages. $15. Call 301-897-9770.

Read *Feeding Wildlife… Just Say No!* A 34-page booklet by the Wildlife Management Institute, $3.25. Call 202-371-1808 or email jrahm@wildlifemgt.org to order.

View *Winter Feeding of Deer and Turkeys*, a 26-page document prepared for the Pennsylvania Game Commission in 1997 at www.pgc.state.pa.us. Click on "Wildlife" on the left, then scroll down to the "Wildlife Reference Guides" section.

View information from the New York Department of Environmental Conservation on feeding deer at www.dec.ny.gov/animals/7197.html.

Read the Canadian Cooperative Wildlife Health Centre's *Comprehensive Review of the Ecological and Human Social Effects of Artificial Feeding and Baiting of Wildlife*, $25, 51 pages. Go to their website, http://wildlife1.usask.ca/en/other_publications.php, or call 1-800-567-2033 to order.

www.pgc.state.pa.us

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Photo credit, Michigan Department of Natural Resources

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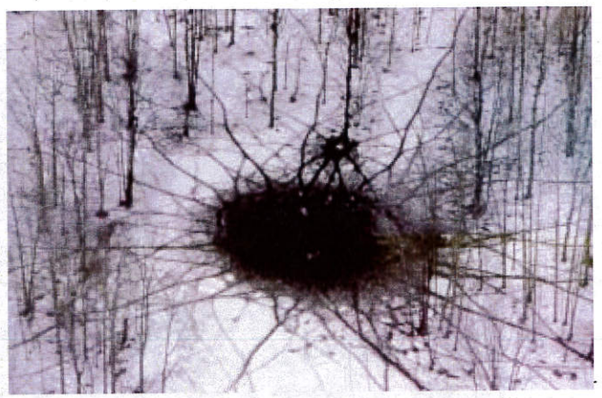
Please Don't Feed the Deer

More harm than good

While feeding deer may enhance wildlife viewing and, under certain extreme circumstances, provide some benefits, decades of research has clearly shown that supplemental feeding leads to increased disease risk, long-term habitat destruction, increased vehicle collisions, habituation to humans and alteration of other deer behavioral patterns and, ultimately, the demise of the value of deer and deer-related recreation. With CWD approaching our borders, the increased potential for disease transmission and outbreak is perhaps our greatest and most immediate concern, but habitat degradation, loss of wildlife diversity and abundance, and the introduction and invasion of exotic plants are consequences of feed that have been documented throughout North America and are a concern for Pennsylvania. Supplemental feeding diverts the attention, resources and efforts of wildlife management personnel away from more beneficial work; and studies universally reveal many disadvantages and few advantages to the practice.



Spreading feed spreads disease

Supplemental feeding congregates deer in unnatural densities. Gathering large numbers of deer into small areas creates a serious risk for spreading terminal diseases such as chronic wasting disease, tuberculosis and, in turkeys that feed on "deer corn," aspergillosis. Mange is another disease that spreads between animals in close contact. The spread of disease within and among species is encouraged by repeated and prolonged contact at feeding sites.

"Feed junkies" behave unnaturally

In winter, deer normally move less and rest more as an adaptation for conserving energy and safeguarding their fat reserves. Activities that increase energy demands, that use those precious fat reserves, are detrimental. Feeding can lure deer away from protected areas and entice them to move further than they otherwise would, several times a day, often for only a small amount of food or perhaps none at all. Energy-wise it's a losing proposition, like a motorist burning three gallons of gas to go buy only two gallons of gas.

Feed sites are often in open areas, where deer are exposed to cold winds, causing them to lose body heat, requiring them to consume even more calories to stay warm. If the feed is near roadways, it increases the likelihood of vehicle collisions. Feeding areas lure deer away from natural wintering areas, increase energy loss and often lead to malnutrition and even death.

Supplemental feeding alters the normal avoidance behavior of deer toward humans. Animals conditioned to human food sources lose their natural wariness and may become aggressive toward people either in protection of, or in seeking, human food sources. We've all heard sobering stories of people suffering the direct attacks of habituated deer and other wildlife. Feeding sites reduce animals' home ranges, and deer that are fed continuously can become dependant on supplemental feed.

Wild deer that are fed may adopt the habits of domestic animals. When deer spend lots of time on private property, landowners often feel as if they are personal possessions rather than wild animals that belong to all citizens.

The dead of winter

Winter mortality will never be eliminated; it's nature's way of ensuring that only the strongest of the species survive to reproduce. Winter survival is determined by the availability of high quality fall food (to ensure fat accumulation) and winter thermal cover (to conserve energy). By late-fall, deer (even captive deer) instinctively reduce their food intake and continue to do so through most of the winter. During that time deer rely heavily on fat reserves and their ability to conserve energy, thereby making those reserves last longer. They travel less and seek protection in cover where snow is less deep, wind is less severe and temperatures are warmer. Winter energy conservation is especially important to fawns, which use a good portion of their fall foods to grow bone and muscle, not build up fat reserves. If an animal's fat reserves are used up before the end of winter, it is much more likely to die.

That being said, any activity that causes increased energy demands can harm deer by compelling them to waste essential fat reserves. Supplemental feeding can cause deer to expend more energy by coercing them to travel farther and more often, and can increase winter starvation by luring in more animals than the feed can support. In one study, feeding was found to increase the winter death rate from 25 to 42 percent. Supplemental feeding also lowers the quality of the herd by enabling less fit individuals to avoid selective, natural winter culling.

High concentrations of wildlife at feeding sites also attract predators. Animals expending energy to avoid those predators burn fat reserves that would have otherwise enabled them to survive the winter.

Eaten out of house and home - literally

Feeding can cause more deer to survive than the natural habitat can support, leading to long-term degradation of the habitat and diminishing the carrying capacity of the area. This is not new. A 1944 study reported, "feeding serves to concentrate deer in small areas year after year where animals do serious and possibly irreparable damage to native forage species, which in turn further reduces the carrying capacity of the range and makes deer increasingly dependent upon supplements."

Over years, the composition of the plant and animal communities can change markedly – diversity is reduced and less desirable plant species up to a mile from feeding locations increase. Weeds contained in feed can threaten the integrity of a community, and feeding increases the likelihood of invasion by exotic plant species. The forest understory declines and ground cover disappears, trees become larger and the number of dead trees increases. With less nesting cover available and nest predators such as raccoons and skunks being drawn to feeding sites, ground-nesting bird populations such as wild turkeys decline in feeding areas.

ON THE LEFT, an aerial view of a supplemental feeding site shows heavy use by deer from all directions. The deer in the photo used important energy reserves to get to the site only to find no feed. ABOVE, a distinct browse-line is visible in habitat where deer have eaten all the forage within their reach; the deer have literally eaten themselves out of house and home.