

## DEER BAITING AND FEEDING ISSUE

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### Introduction

At present, there are at least 4 issues surrounding the deer baiting and feeding debate: 1. Ethical concerns regarding placement of bait for the purpose of shooting deer, 2. Disease transmission concerns caused by repeatedly concentrating animals to a small patch of food, 3. Concerns about the impacts of the artificial energy on deer productivity, survival, distribution, and natural processes, and 4. The wildlife privatization-effect that baiting and feeding causes.

Ethical issues have dominated the discussion among the hunting public and this seems an endless debate of sociological significance but little biological consequence. Disease concerns during the past decade have elevated the debate to the biological arena. But as yet, there has been little discussion of the effects of baiting and feeding practices on energy impacts or wildlife privatization. These latter effects appear to profoundly impair the ability of the State to effectively manage deer populations.

My purpose is to provide a brief history of baiting and feeding in the Great Lakes Region, to identify the biological concerns about these practices, and to provide a proposal which may largely address these concerns.

### Baiting History

It appears that baiting of deer for hunting purposes has always been legal in Michigan, Minnesota and Wisconsin. But, the prohibition on using bait for waterfowl and the use of salt for attracting deer may have contributed to the widespread belief that baiting of deer was illegal. Despite this popular belief, a low level of baiting was known to exist in some northern areas of these states that had very low deer densities. Growing awareness that baiting was legal led to a rather sudden and widespread increase in baiting during the 1980s and 1990s.

Michigan harbinger: Michigan biologists were first to document the magnitude of baiting and reported findings at Great Lakes regional deer meetings. A 1984 survey found that Michigan hunters had placed 3.3 million bushels of bait at a time when most hunters still believed that baiting was illegal (Langenau, et al. 1985). Only 7 years later, this amount had increased to 13.1 million bushels (Mich. DNR 1992). Anticipating ethical and ecological problems, biologists from Wisconsin and Minnesota, where baiting was not yet popular, were encouraged to consider prohibiting baiting as a proactive measure.

Minnesota acts: Minnesota precipitously banned baiting by Commissioner's Order in 1991 amid localized grumbling. This prompted an impromptu task force study that criticized the action for lack of well-articulated justification (Antonich, et al. 1993). But, a survey in 1993 by the Minnesota Deer Hunters Association found that 73% of respondents opposed baiting (MDHA 1993). The statewide baiting ban still stands.

*Wisconsin actions:* Prior to 1980, Wisconsin had no restrictions on baiting for deer. In 1979, baiting for bear was limited to a quantity that would fit in a 2x2x2-foot hole (60 gallons!). In 1980, this rule was made to apply to deer baiting. In 1991, Wisconsin limited bait to 10 gallons at any one time and place (Gary Homuth, WDNR Legislative Officer, 11AUG00).

Recent surveys of Wisconsin hunters found that a relatively low proportion (13%, 16%) of firearm hunters reportedly used bait (Borgerding 1993, Dhuey and McCaffery 1999), and about a third (34%) of archers admitted using bait (Dhuey 1998). Despite a majority (53% to 66% depending on issue) of all hunters seeing some problems with baiting, fewer than half favored a baiting ban in all hunting seasons (Pechenik 1993).

The veracity of public responses about the prevalence of baiting or the amounts placed is increasingly questioned. Warden pilots refute the relatively low level of baiting reported by gun deer hunters in Wisconsin. They reported with some hyperbole that the north “glowed yellow” from shelled corn prior to the 1999 gun deer hunt (Dave Zeug, Enforcement Supervisor, WDNR, 19NOV99). Plus, organized deer drives no longer seem to be a primary method of hunting. Factors other than bait (newly recruited hunters, fragmentation of land ownership, QDM) undoubtedly have also contributed to the preponderance of sit-stand hunting.

### **Baiting and Ethics**

Most of the baiting debate in the popular literature has been about ethical considerations. A recent Michigan DNR report (Witcomb 1999) also indicated that the controversy among hunters was initially driven primarily by their perceptions of hunting ethics and only recently became a biological issue as a result of disease concerns. This pattern seems representative of most “Deer 2000” discussions in Wisconsin from 1996 to 2000.

While there clearly are ethical aspects to deer baiting, these debates have added more heat than light. Other than Law Enforcement records of violations (late hunting, cabin shooting), there is little guidance for this discussion other than hunter opinions. More objective discussion is likely if it is focused on the biological concerns of baiting. These involve primarily disease transmission and artificial energy impacts. And, these biological concerns apply equally, if not more, to feeding practices. Thus, both baiting and feeding practices must be addressed together.

### **Disease Considerations**

During the past 35+ years, deer diseases were rarely discussed among deer biologists in the Great Lakes region. The recent discovery of CWD (chronic wasting disease—“mad cow”) in Colorado deer and elk, TB (bovine tuberculosis) in free-ranging deer of Michigan, and recurring outbreaks of EHD (eastern hemorrhagic disease) in other states has changed the equation. In the last several years, disease concerns have been major agenda items of Midwest deer meetings. It has also refocused discussions of baiting and feeding.

Though baiting and feeding do not cause these diseases, the potential for disease transmission by these practices and the economic consequences of disease cannot be ignored. A 1998 study by

Michigan State University estimated that the loss of TB-free status could cost the economy of the state \$156 million during the ensuing decade (Wisconsin State Farmer 2000). The recent find by the National Disease Laboratory at Ames, Iowa that TB bacteria remained infectious on foods for at least 28 days has added new alarm as it was formerly believed that nose-to-nose contact was necessary for TB transmission. Though formerly ambivalent about baiting and feeding because of the market for cull food products, the Michigan Farm Bureau at their annual meeting in 1999 overwhelmingly voted to ask the Natural Resources Commission (NRC) for a statewide ban on both baiting and feeding of deer.

More recently, the Michigan United Conservation Clubs (representing nearly 500 groups) voted overwhelmingly at their convention to encourage the NRC to ban both baiting and feeding in the Lower Peninsula (MBH 2000a). With this additional encouragement (and continuous encouragement by DNR staff), the NRC did move to ban both baiting and feeding but only in counties with known cases of TB in deer. They also reduced the permitted quantity of bait elsewhere in the Lower Peninsula to 2 gallons (MBH 2000b) to match an earlier restriction on feeding (Mich. DNR 1999).

In addition to the concerns about disease transmission among deer, there is a growing awareness of the impact of baiting and feeding practices on human health and safety. Many people are concerned about the increased probability of ticks (*Ixodes*) that are the vector for Lyme disease being shed in their lawns. Also, deer attracted to feed near residences along travel corridors have added a new dimension to the car-deer crash hazard. Human fatalities have occurred as a result of feeding deer near highways.

### **Energy Impacts**

The cumulative amount of energy being placed in the environment by baiting and feeding deer has not been quantified in Wisconsin. There is serious doubt whether it could be measured as a survey would depend on the veracity of respondents who are already suspicious of how use of such results might affect them personally. However, some conservative assumptions can estimate minimum quantities. For example, if only 34% of 240,000 bowhunters used bait and placed only 100 pounds each during the fall, the cumulative quantity would exceed 4,000 tons. Clearly, this is a minimal estimate. Plus, if a person feeding deer placed only 2 gallons (of corn) once per day for 150 days ("snow on ground" period), that person would put out 1 ton. Multiply that by any reasonable estimate of the numbers that are feeding and the quantity soon becomes huge. At the height (1950-51) of State sponsored winter deer feeding, only 1,131 tons of food was distributed (Dahlberg and Guettinger 1956:183).

We know that occasional bumper crops of acorns significantly affect deer population dynamics. Large acorn crops are natural but occur only infrequently and are restricted in distribution. It seems that little faith is necessary to conclude that the yearly and nearly ubiquitous availability of bait and feed is profoundly affecting deer production, survival, distribution and behavior. While some may view these impacts as favorable, most ecologists do not (Waller and Alverson 1997). Baiting and feeding are widely believed by non-baiting hunters to alter daily and geographic behavior of deer and to impair harvest opportunities. This "artificial" energy is also believed to affect natural processes including timely yarding and (even) winter mortality which are part of the natural process

for deer close to the northern limit of their range. Also, to the extent that this “artificial” energy elevates deer densities, it clearly impacts the distribution and abundance of other plant and animal members in the environment.

## **Privatization of Wildlife**

Like navigable water, wildlife is held in public trust and managed by the states for the benefit of all citizens (Roosevelt Doctrine, North American Wildlife Policy, see Leopold 1933:17-18). Wildlife privatization is currently a major policy issue nation-wide. Baiting and feeding are forms of wildlife privatization as deer are attracted to and held (managed) on private lands. We (DNR and hunters) should be doing all that we can to discourage this trend, even though there are strong political and market forces pushing toward wildlife privatization.

The uneven distribution of hunter access to the deer herd created by the patchwork of public and private lands results in uneven distribution of deer, i.e., hot spots and cold spots. This likely is one factor affecting hunter confidence in the accuracy of deer population estimates and their willingness to accept antlerless harvest quotas prescribed by the agency. Because baiting and feeding tend to attract and hold deer to the food sources, these practices seem to exacerbate the patchiness of deer distribution, the problems of hunter confidence in population estimates, the acceptance of harvest quotas, and in turn the difficulty in effectively managing the public’s deer resource.

Access to private lands will continue to vex landscape scale deer management as variable access, alone, creates a certain patchiness of deer distribution. However, the current baiting and feeding practices exacerbate this patchiness.

## **A Proposal**

The ethics surrounding deer baiting continue to concern many hunters and Law Enforcement officials. But, more fundamental and compelling concerns remain as discussed above. There appears to be sufficient biological concerns to outright prohibit deer baiting by hunters as they don't NEED bait to be successful and DNR doesn't NEED bait to achieve management goals (to the contrary). Not only is baiting not necessary for the DNR to achieve its management goals, but a biological analysis suggests baiting actually interferes with that effort. A recent national survey indicated that 26 states currently prohibit baiting of deer (Marshall 1999).

But, it is clear that the biological effects of both baiting AND FEEDING are similar so both must be regulated. An outright ban on both would clearly obviate all biological concerns and would be most easily codified. A ban on baiting would simply affect some hunters. However, a ban on feeding affects a much broader public. Many residents feed birds and much of deer feeding appears to be a natural extension of this. The Wildlife Management Institute has just published a booklet discouraging feeding of any wildlife (Williamson 2000). But, prohibiting all feeding in Wisconsin may be impractical or impossible. As a total ban is not reasonable, a quantity restriction could actually remove the substantial nature of disease risk to deer if enforced and would address privatization and energy concerns.

A half-gallon limit for feeding would still permit normal bird feeding and even limited deer feeding. This would permit a few deer to be seen from the picture window and provide some level of entertainment for those committed to this practice. But the restriction would minimize the likelihood of attracting more than a few deer and disease concerns would be greatly ameliorated. The small quantity would also go a long way in addressing the cumulative energy impact that is presently changing deer productivity, survival, distribution and behavior. This rule would need language that specifies spacing of feed (e.g., one per residence or property) and also fold the semantics of “recreational,” “supplemental,” and “emergency” feeding into one so as to preclude folks from claiming exemption from specified restrictions.

Total enforceability may be problematical. But the rule (with explanation) would likely be understood as reasonable and necessary. It would set a normative standard for the vast majority of well-meaning, law-abiding citizens and would certainly discourage huge quantities because large feed piles and deer trails leading to them have been shown in Michigan to be easily detected by Enforcement from the air. This restriction would have greatest effect where large quantities of feed have been placed during the year to concentrate, hold, or habituate large numbers of deer on a property (greatly frustrating management efforts, neighbors, and other hunters). Also, it is the latter that create the greatest threat of disease transmission and the greatest concern regarding privatization of wildlife.

### **State’s Responsibility**

In view of the social, ethical, disease, deer management, and human safety concerns surrounding deer baiting and feeding, it would seem that any one of perhaps 3 state departments (DNR, DATCP, DOT) could take or share leadership on addressing these concerns, if only they would. There is strong indication (Winterstein and Langenau 1992, Minnis et al. 1994), that the current debate and dilemma in Michigan and Wisconsin has largely occurred because agencies have waffled and were unwilling to take leadership on this issue. Clearly, it is time somebody did!

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