

NEW DIRECTIONS IN DEER DAMAGE MANAGEMENT IN WISCONSIN

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The question of responsibility for wildlife damage is a difficult one to answer, especially for damage caused by white-tailed deer. Some states have chosen, or been forced by political pressures, to assume the responsibility for wildlife damage, with or without some responsibility on the part of the agricultural producer who is sustaining the damage. According to a 1980 survey by the Utah Division of Wildlife Resources, only 10 states were bound by law to make payments for damage done by game species. Only Wisconsin included a nongame species (sandhill cranes) in their payment program. Other states offer abatement assistance, while some others are able to do little or nothing beyond providing advice.

The subject of this paper is deer damage and it is by no means a minor problem. In fact, deer damage can have considerable economic significance which, in turn, influences the regulation and management of the deer herd. Recent studies in Pennsylvania and Wisconsin estimated probable annual losses of over \$15 million. No state wildlife agency could absorb the responsibility for such a financial burden. Although the total figures appear overwhelming, the same 2 studies and others, most notably in New York, have demonstrated that the average farmer sustains relatively little damage. Also, the vast majority of farmers are willing to sustain up to \$500 in damage in exchange for perceived benefits from deer-hunting, esthetics, etc.—or because the expense does not exceed the "hassle threshold" of taking action (Table 1). In fact, most farmers seem to enjoy the presence of deer on their property (Table 2). There are, however, many farmers, orchardists, or tree producers for whom deer damage is a serious threat to their economic survival. This is the group which demands action and perceives the deer as the responsibility of the state.

Table 1. Relationship between farmer's attitudes toward deer damage and the amount of damage suffered, Wisconsin, 1981.

Amount (dollars)	Attitude		
	Negligible	Tolerable	Unreasonable
1-100	74	143	9
101-500	47	127	36
501-1,000	6	17	31
1,000-5,000	8	13	36
> 5,000	1	1	13

Table 2. Farmers' attitudes toward deer in Wisconsin, 1981.

Attitude	Number
Enjoy deer	1,179
Tolerate a few	225
Deer are a nuisance	60
No opinion	107

This is precisely the situation in Wisconsin. In 1931, the Wisconsin legislature delegated responsibility for damage caused by deer, bear, waterfowl, and sandhill cranes to the Wisconsin Department of Natural Resources (DNR). From 1931-1980, the DNR was authorized to pay for damage on specified commercial crops and trees, but not for damage to private gardens, ornamental vegetation, or to vehicles involved in collisions with deer. During that period, some \$2 million was paid for damage; usually to corn, truck gardens, or orchards. In the late 1970s, payments approached \$200,000 annually with similar costs for program administration (Table 3).

Table 3. Wisconsin wildlife compensation program costs, 1974-78.

Year	No. claims	Payments (x 1,000)	Administrative costs (x 1,000)
1974	141	63	50
1975	252	133	103
1976	309	197	90
1977	238	177	105
1978	191	135	156

Problems with administrative costs, eligibility requirements, and differences of opinion on extent of damage, damage assessment, and deer management all led to a general dissatisfaction with the compensation program. As a result, the state legislature created a Wildlife Damage Study Committee (WDSC) in 1979 to make recommendations to the legislature on alternatives to the compensation program. The compensation program terminated on 30 June 1980.

The committee ultimately recommended that the state begin a new wildlife damage program based on damage abatement rather than compensation. No action was taken. Two years later, a committee to study hunter-landowner relations was appointed by the governor of Wisconsin. This committee quickly settled on wildlife damage, particularly deer damage, as the most damaging issue in hunter-landowner relations. This new initiative led to the introduction of

legislation to reinstate a Wisconsin wildlife damage program.

In addition to the administrative moves toward restoring a damage compensation program between 1980 and 1983, the situation worsened over the same period. Mild winters combined to allow the deer herd to reach record levels as reflected in the Wisconsin deer harvests (Table 4). Farmers began to see more deer in their fields and presumably more deer can be correlated with more deer damage. Also, farmers with chronic damage problems were left with no assistance after the repeal of the 1931 law in 1980. The result was strong grass roots political pressure for action at the state level.

Table 4. Harvest of white-tailed deer in Wisconsin as an index to deer population trends, 1972-82.

Year	Antlered Bucks	Antlerless Deer	Total
1972	49,416	25,411	74,827
1973	57,364	24,741	82,105
1974	67,313	33,092	100,405
1975	73,373	44,005	117,378
1976	69,510	52,999	122,509
1977	82,762	49,148	131,910
1978	87,397	63,448	150,845
1979	76,550	49,020	125,570
1980	81,041	58,583	139,624
1981	99,034	67,639	166,673
1982	97,534	85,181	182,715

In July 1983, a new wildlife damage compensation program became law. The original recommendations of the WDSC were incorporated and the emphasis of the new program is clearly on abatement. There are some very important new features and some differences between the new law and the 1931-1980 compensation program.

The key difference in the new program is the responsible agency. The program will now be administered at the county level by the Land Conservation Committee (LCC) in each county. Only those counties that choose to participate will do so. The DNR's only responsibility is to approve and enroll counties and administer the funds to the counties. This approach is designed to put the program at the local level and avoid the antagonistic relationship between farmers and the DNR that characterized the old program. The counties will have substantial flexibility beyond participation. Each county may select the species and crops it will admit to the program. Sandhill cranes are no longer covered. Also, each county may devote all of its funds to abatement or use some for direct compensation.

Funding was originally proposed from a \$1 surcharge on all Wisconsin hunting licenses. This idea met with considerable opposition and the funding for the 1983-85 biennium comes from general license revenues. The appropriation for 1983-84 is \$126,000; \$87,000

earmarked for damage abatement, \$16,000 for DNR administration and \$23,000 for an education and demonstration program. It is to the credit of the hunter-landowner committee that they had the foresight to recommend funds to train the LCC members and provide for demonstrations of various abatement techniques for farmers to see and react to. Without this educational component to be administered by University of Wisconsin Extension, the program's success would have been put in jeopardy. The appropriation for 1984-85 is \$383,000, including another \$23,000 for education. Each year DNR will allocate a proportion of the total funds available to each county on the basis of damage history.

The number of counties likely to participate and the known history of damage suggests that the abatement appropriations will not meet demand. Thus, the counties will have to decide on a "first come-first serve" policy or on an end of the year, prorated payment.

A county must be enrolled in the program if a farmer is to receive any assistance. There are also some responsibilities mandated to the farmer. For example, some public hunting of the species causing damage must be allowed. However, the farmer may restrict access to "permission only" and to no more than 2 hunters per 40 acres. This provision is much more palatable than the "open lands with no restrictions" in effect with the previous compensation program.

A farmer will be eligible for 50% reimbursement of abatement costs. The state will provide all materials as its 50% contribution and the farmers in kind costs for installation and maintenance are considered equal to the other 50%. Farmers can be reimbursed on a confirming basis; they are not obligated to provide the up-front cash for abatement costs.

Although the primary emphasis of the program is on abatement of damage, each county will be able to pay direct compensation if no adequate technique is available or if all sincere attempts fail. Compensation claims are subject to several limitations. There is a \$500 deductible which will eliminate most small claims identified in the survey. If a farmer does not follow abatement recommendations prior to filing for compensation, the deductible increases to \$2,000. In either case, the maximum claim limit is \$5,000. Farmers are ineligible for compensation if crops are not harvested under normal agricultural practices or if hunting, under the constraints discussed above, is not allowed.

As a last resort, the DNR will still issue permits to shoot the offending deer at the discretion of the local wildlife manager. Recent shooting permits have generated substantial opposition from area hunters and landowners adjoining the land of the permit holder. Their use is likely to be restricted to areas of chronic damage with no viable abatement techniques. One of the major obstacles to the new abatement program may be the lack of effective abatement tech-

niques for large acreage row crops and the variability for the more effective techniques on small acreage specialty crops. It is clear that the state cannot afford to allow the program to slowly revert to one of compensation because of ineffective abatement.

In addition to new legislation, deer damage has begun to influence herd management. In 6 heavily agricultural quota zones in central and southwestern Wisconsin, farmers were able to convince the Conservation Congress and subsequently the DNR that the deer herd had to be reduced during the 1983 season. The "hunter's choice" tag, which allowed a hunter to shoot a deer of either sex, was restricted to an antlerless deer only and the harvest quotas for antlerless deer in each quota zone were increased. Also, some wildlife managers are beginning to examine the need for a reduction in the basic over-winter numerical goals for the deer herd in agricultural areas. It is important to note that these changes occurred despite survey evidence that the majority of farmers favored the status quo in deer management and roughly as many favored an increase as a decrease (Table 5). Hunters and private, non-farm, landowners had little or no participation in the management decisions.

Table 5. Preference in deer management trends expressed by survey respondents in Wisconsin, 1981.

Preference in herd size	Number	Percent
<i>Moderate increase</i>	331	23
<i>Slight increase</i>	202	14
<i>Status quo</i>	709	49
<i>Slight decrease</i>	110	8
<i>Moderate decrease</i>	99	7

In summary, Wisconsin is moving into a new era of deer damage management. A new law to provide abatement and compensation relief is in place with sufficient flexibility to meet local needs. Both short and long-term reductions in the deer herd in agricultural areas are being implemented or examined as the most cost effective way to reduce deer damage. The DNR is redirecting some of its wildlife management effort from public to private land. These programs should greatly reduce the impact of deer damage on severely impacted farmers if they are willing to make a sincere effort to use abatement practices and allow the sportsman to make his contribution to herd reduction by providing a place to hunt. The old compensation program was a drain on state resources and treated only the symptoms. It did nothing to solve the problem.