## An Evaluation

# **Chronic Wasting Disease**

**Department of Natural Resources** 

### 2005-2006 Joint Legislative Audit Committee Members

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From the Department of Natural Resources



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> Janice Mueller State Auditor

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Senator Carol A. Roessler and Representative Suzanne Jeskewitz, Co-chairpersons Joint Legislative Audit Committee State Capitol Madison, Wisconsin 53702

Dear Senator Roessler and Representative Jeskewitz:

As requested by the Joint Legislative Audit Committee, we have completed an evaluation of state efforts to manage chronic wasting disease (CWD), a fatal neurological disease of deer. The Department of Natural Resources (DNR) is responsible for coordinating CWD management in the wild deer population. Farm-raised deer are the responsibility of the Department of Agriculture, Trade and Consumer Protection (DATCP). The Wisconsin Veterinary Diagnostic Laboratory provides CWD testing and carcass disposal services, while the Department of Health and Family Services investigates possible effects on human health. Through fiscal year (FY) 2005-06, these agencies spent \$32.3 million managing the disease.

DNR has developed several strategies to manage CWD, within the geographic areas in which infected deer are known to live, which are known as CWD zones. They include altering the length and rules of hunting seasons, establishing a ban on baiting and feeding deer, using sharpshooters, and creating monetary incentives for hunters to shoot more deer.

To date, DNR's efforts to eradicate CWD in the free-ranging deer population have not been effective. Neither the estimated number of deer in CWD zones nor the percentage infected with CWD has decreased. In addition, fewer deer have been killed in the CWD zones: the number declined from 23.1 deer per square mile in the 2003 hunting season to 17.4 deer per square mile in the 2005 hunting season.

In an October 2006 report to the Natural Resources Board, DNR conceded the need to modify its management efforts to more effectively address CWD. We include options for DNR and the Legislature to more effectively address the disease and control costs in the future.

We appreciate the courtesy and cooperation extended to us by staff of DNR, other state agencies, and interest groups. DNR's response follows the report.

Respectfully submitted,

Janice Mueller State Auditor

JM/PS/ss

DNR wardens enforce the rules on baiting and feeding, which were the rules most frequently violated during the 2005 hunting season. In general, we found that most hunters and interest groups favor the ban on baiting and feeding in counties where CWD had been identified. However, some researchers are concerned that the ban has not been extended statewide to slow the spread of the disease in areas where CWD has not been identified. Among the seven states we contacted, deer baiting and feeding is banned statewide in Colorado, Illinois, Minnesota, Nebraska, New York, and South Dakota. Michigan uses an approach similar to Wisconsin's to determine the counties in which baiting is banned.

### **Sharpshooters**

DNR uses sharpshooters to remove deer in areas where CWD has been identified. Beginning in March 2002, DNR used approximately 100 of its own staff to shoot deer in areas where CWD-infected deer have been found. These staff are commonly referred to as sharpshooters. Starting in October 2004, DNR sharpshooters other than wardens were required to attend a three-day training session at a shooting range near Wausau. The session involved training in safety, weapon care, shooting at moving targets, and proper decision-making when there is more than one deer available to shoot.

Initial sharpshooting efforts were concentrated in Iowa and western Dane counties and had the primary purpose of CWD surveillance. During February and March 2003, additional sharpshooting was conducted in Richland and Rock counties, in response to the identification of one CWD-infected deer in Richland County and of CWD in northern Illinois, just across the border from Rock County. As shown in Table 15, DNR sharpshooters shot 2,359 deer through March 2006.

Table 15

Number of Deer Shot by Sharpshooters<sup>1</sup>

March 2002 through March 2006

Time Period	Western Disease Eradication Zone	Eastern Disease Eradication Zone	Herd Reduction Zone	Total
March 2002 through March 2003	721	51	139	911
October 2004 through March 2005	635	107	5	747
January 2006 through March 2006	501	139	61²	701
Total	1,857	297	205	2,359

Does not include 102 deer that were trapped.

<sup>&</sup>lt;sup>2</sup> Includes 31 deer from state parks.

DNR staff seek landowner permission before sharpshooting on private lands. Sharpshooters have hunted deer on both public and private land. Section 29.924(5), Wis. Stats., states that DNR may "after making reasonable efforts to notify the owner or occupant, enter private lands to retrieve or diagnose dead or diseased wild animals and take actions reasonably necessary to prevent the spread of contagious disease." However, DNR staff noted that they always secure permission from landowners before shooting deer on their property. Between October 2004 and March 2005, DNR received permission to shoot deer on 77 properties in the western disease eradication zone and 43 properties in the eastern disease eradication zone. Between January and March 2006, DNR received permission to shoot deer on 87 properties in the western disease eradication zone and 42 properties in the eastern disease eradication zone. Information related to the number of acres of private land within CWD zones to which sharpshooters were allowed access was not readily available.

Although DNR staff initially had the authority to shoot and herd deer using aircraft, they did not do so. This authority expired on June 30, 2004. Using aircraft to herd and shoot deer is currently prohibited under s. 29.307, Wis. Stats.

Through March 2006, 102 deer have been trapped and then killed in the eastern disease eradication zone. In that zone, the location of deer is more fragmented and less dense because of a diverse landscape, and the risk of harming people through sharpshooting is greater than in the western zone.

Since 2004, DNR sharpshooting and trapping have been responsible for 5.2 percent of deer killed in the disease eradication zones.

To understand the effect of sharpshooters in reducing the infected deer population, we compared the number of deer in the disease eradication zones killed by hunters during the 2004 and 2005 hunting seasons and by sharpshooters during and after those seasons. Hunters killed a total of 27,032 deer in the disease eradication zones, while sharpshooters shot 1,382 deer and trapped another 102 deer. However, sharpshooters were more effective at culling CWD-positive deer than hunters, because they focused on shooting deer in areas where infected deer were found. DNR sharpshooting and trapping efforts were responsible for killing 41 of the 322 deer that tested positive for CWD between October 2004 and March 2006, or 12.7 percent, but only 5.2 percent of the deer taken.

Using DNR expenditure information, we calculated the average cost per deer taken by sharpshooting and trapping during the past two fiscal years. The average cost per deer was \$478 between October 2004 and March 2005, and \$768 between January and March 2006. It should be noted that at least \$84,000 of FY 2005-06 expenditures funded equipment that can be used in future seasons, such as night vision scopes. As a result, it is likely that future sharpshooting costs will decrease.

DNR officials believe sharpshooting is an effective tool for managing CWD. DNR officials believe sharpshooting is an effective tool for managing CWD because sharpshooters can work in areas that have low hunting pressure, areas where CWD is most prevalent, and areas with large deer populations. DNR currently has no plans to discontinue its sharpshooting efforts. However, some hunters and interest groups remain opposed to the use of sharpshooters.

Some hunters are concerned that sharpshooters may be shooting bucks and keeping the antlers for themselves. According to DNR staff, when a sharpshooter shoots a buck that still has its antlers, the antlers are removed. Some sharpshooters bind the pair of antlers together and tag them with the date of the kill and a barcode number used to track the deer, but this has not been done consistently. Antlers may be given to the landowners who want them, but DNR has not tracked the number of instances in which this has occurred.

Sharpshooters reported taking 332 adult bucks from 2004 through 2005.

According to DNR staff, only about one-third of the 332 adult bucks taken by sharpshooters from 2004 through 2005 had antlers, because bucks begin to shed their antlers in late December and sharpshooting efforts continue through March. Among the antlers that DNR staff indicated were taken from deer shot by sharpshooters in the western disease eradication zone, we identified a total of 89 sets. DNR staff responsible for the eastern disease eradication zone reported having an additional 11 sets of antlers from sharpshooting efforts there. We found the number of antlers maintained by DNR to be reasonable considering the number of adult bucks taken, the time of year they were taken, and that some antlers were reported to have been given to landowners.

DNR sharpshooters sometimes bait deer in areas where baiting is otherwise banned. Some hunters with whom we spoke are concerned about DNR's authority and practice of baiting deer in areas where baiting has otherwise been banned. They contend that baiting was justifiably banned because it can lead to the transmission of CWD when deer congregate at bait piles. DNR staff argue that by drawing the deer into a common area where they can be more easily shot, DNR's baiting allows sharpshooting efforts to be more efficient and effective, and the importance of eliminating more infected deer outweighs the increased risk of spreading the disease through the use of bait. An external review of DNR's CWD management plan released in October 2003 recommended that DNR prohibit baiting and feeding throughout the state and not allow agency personnel to shoot over bait, which sends a mixed message to Wisconsin hunters and erodes support for a statewide ban. However, DNR plans to continue baiting in the 2006 hunting season.

DNR staff also have the authority to shoot deer at night, which is prohibited for other hunters under NR 10.06, Wis. Adm. Code. Some

hunters do not believe it is appropriate for sharpshooters to shoot deer outside of normal hunting hours, but DNR staff assert that because deer are largely nocturnal between January and March, shooting at night is necessary for their efforts to be most effective.

#### **Hunter Incentives**

To encourage hunters and landowners to shoot more deer, DNR has provided various incentives that include free carcass tags, monetary rewards, low-cost permits, and a food pantry donation program. In addition, DNR does not limit the number of deer that hunters may shoot in CWD zones.

DNR has provided free carcass tags to hunters and landowners.

Hunters in the CWD zones may receive up to four free tags per day. A tag is required to be placed on the carcass of each deer taken. They were known as special CWD earn-a-buck tags during the 2002 through 2005 hunting seasons, and are known as CWD deer carcass tags for the 2006 hunting season. In addition, landowners in the disease eradication zone were given two free buck tags during the 2003 hunting season to encourage them to shoot deer on their land, and one free buck tag during the 2004 and 2005 hunting seasons. More than one-half of landowners who responded to a survey conducted after the 2003 hunting season indicated that because of the free buck tags, they spent more time hunting than they would have if the tags had not been offered.

During the 2003 hunting season, landowners also received \$200 for each CWD-positive deer shot on their land. The hunters who shot the deer received \$200 as well. Funding was provided under a program known as Focus on Positives, which was operated by Whitetails Unlimited in partnership with DNR. The program was financed through a \$250,000 reward fund that included \$200,000 in DNR funds and \$50,000 from an anonymous donor, and it provided \$43,400 in payments to 218 individuals. Most of the remaining \$206,600 in the reward fund was disbursed through a program called Every Deer Helps, which provided \$20 per deer through a lottery to 9,956 hunters who registered deer in the disease eradication zone. Including administrative expenses such as postage, \$247,600 of the \$250,000 was spent on these incentive programs in 2003.

In the past, DNR provided monetary incentives to hunters and landowners.

During the 2004 hunting season, DNR operated the same programs, disbursing 258 payments of \$200 and 9,726 payments of \$20. Through random drawings, DNR has also provided \$2,000 payments to landowners and \$500 payments to hunters who shot deer in what it referred to as the "Hollandale and Richland County sparks areas." Funding for these programs came from DNR sources,