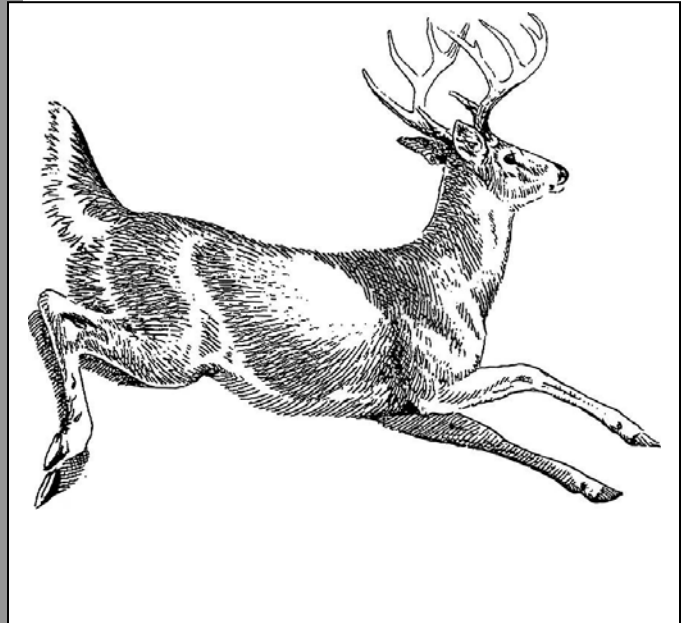


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# Managing Chronic Wasting Disease in Oneida County, New York: Assessment of Landowners



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## HUMAN DIMENSIONS RESEARCH UNIT PUBLICATIONS SERIES

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## EXECUTIVE SUMMARY

The discovery in March-April 2005 of chronic wasting disease (CWD), first in captive and soon after in wild, free-ranging white-tailed deer (*Odocoileus virginianus*) in Oneida County, NY set the machinery of state and federal government in motion to implement an emergency response plan. Research on the effects of CWD in New York has included 4 external stakeholder groups. Brown et al. (2005) investigated the public awareness and concerns about CWD among hunters and the general public. Brown et al. (2006) conducted an internal assessment from the perspective of the multi-agency state and federal natural resources staff who (1) worked on the ground in Oneida County, (2) supervised those staff, and (3) provided technical support to the effort. This study assesses the perceptions and reactions of landowners with properties in the area of Oneida County where CWD was discovered.

Many state and federal agencies involving agriculture, food safety, and health, as well as natural resources, collaborated to address the discovery of CWD in New York. Agencies and organizations who participated in this large multi-agency effort included the New York State Department of Environmental Conservation (DEC), New York State Department of Agriculture and Markets, New York State Department of Health, NYS Emergency Management Office, USDA APHIS Wildlife Services and Veterinary Services, and the Cornell University College of Veterinary Medicine. The multi-agency response to CWD was implemented under the NYS Incident Command System (ICS), which for New York parallels the National Incident Management System established under the Federal Emergency Management Agency.

As a result of the discovery of CWD in captive deer in Oneida County in March 2005, DEC began an intensive effort to determine whether CWD was present in wild deer in the area. Field operations included a containment area that initially included 8 towns and 4 cities in Oneida County. Several additional towns in Oneida and Madison Counties were later added. A field laboratory was established within the containment area. Landowner access was sought and frequently obtained for purposes of shooting a sample of deer for diagnostic purposes. Proper disposal methods for deer carcasses were established. By April 30, 2005, 292 deer had been killed and tested for CWD, and 2 cases of CWD in wild deer were confirmed, the first on April 27 in the Town of Verona, Oneida County.

Outreach was also an important part of the CWD response and included (1) communications to inform the public about CWD issues in general, the response plan, and post sampling results and implications; and (2) public meetings prior to and following the April field operations, as well as in September, timed to precede the deer hunting season. Individual letters were also sent from the DEC to both cooperating and non-cooperating landowners within the containment area during September, 2005. These letters provided a brief status report on CWD in New York State, an update of sampling results, and an invitation to attend the third set of public meetings. Those who had agreed to provide access to their lands for the April operations were thanked for their cooperation.

The purpose of this study was to obtain landowners' reactions to the multi-agency effort to determine the extent to which CWD had spread to the wild deer herd. These owners had been approached by a government official seeking permission to enter their properties to kill deer for

testing purposes. The survey dealt primarily with:

- (1) how these owners learned about the discovery of CWD and their level of concern about it;
- (2) their interaction with the government official who approached them to explain the multi-agency program and request the use of their property;
- (3) their reasons for allowing or refusing access to their properties; and
- (4) their level of satisfaction with both on-the-ground activities and follow-up communication from government officials.

## **Methods**

DEC staff provided a list of landowners in the area of Oneida County where CWD was discovered who were contacted for permission to shoot deer to test for the presence of CWD. A mail survey was sent to each owner with sufficient name and address, with the initial mailing sent out on November 23, 2005. In total, 271 questionnaires were mailed out, and up to 3 reminder notices were sent, as is the standard practice used to maximize response rates to mail surveys.

## **Results**

Of a total of 271 questionnaires mailed out, 7 were undeliverable and 167 were returned for a response rate of 63%. Of the 271 properties with separate owners, 256 were registered as owned by one or more private individuals, 8 were owned by businesses (including farms), and 7 were owned by a variety of public and quasi-public entities. The acreage of these owners ranged from less than 0.5 acre to over 500 acres, with a mean of approximately 80 acres.

### **Initial Response to Discovery of CWD**

Most responding landowners first became aware of the discovery of CWD through the media, with newspapers being the leading source. One-third (31%) indicated they were very concerned, 31% were moderately concerned, 28% were slightly concerned, and 10% indicated they were not at all concerned about CWD. The greatest topic of concern was about the effects of CWD on the deer herd, indicated by 54% of landowners. The two perspectives indicated next most often showed a lack of strong concern—"I heard the chances of a human getting CWD from a deer were very slim" (31%) and "I thought the hype about CWD was overblown" (23%).

### **Interactions with State Officials and Satisfaction Level**

Landowners in the sample were visited by state officials, provided information about the state response to the discovery of CWD, and asked if they would allow shooters on their property to kill deer for testing purposes. Over two-thirds of the responding landowners rated the quality of their interaction with state officials as good to excellent on topics related to CWD, why access to their property was being sought, and flexibility about the use of their property. Information provided on why access to landowners' properties was being sought was rated good to excellent by 93% of respondents. Information about the risk of CWD to people received the lowest rating (good to excellent by 69%).

Most respondents (77%) indicated they allowed state officials access to remove deer from their property. Of those who allowed access, most (79%) indicated they wanted to help with the monitoring program to see if CWD had spread to the wild deer herd. Roughly half of these respondents indicated they allowed access because they were convinced by information conveyed to them by state officials or that they had confidence in the state officials who approached them. Only 11% reported believing there were too many deer on their property, for whom taking deer for CWD detection would be an opportunity to thin the deer herd.

The leading reasons why 23% of respondents did not allow access were that they were not convinced that testing deer from their property was necessary (38% of non-cooperators), liking the deer and not wanting them removed (38%), believing there are too few deer on the property (32%), thinking the risk of CWD was overblown (30%), and concerns about the safety of deer removal (24%).

At least 80% of respondents who permitted deer removal and who completed the question about their satisfaction with the removal process itself were very satisfied or moderately satisfied with the number of deer removed, when they were removed, and the handling and care taken with the deer carcasses. Smaller proportions (57%-65%) were very satisfied or moderately satisfied with follow-up communications on whether deer taken from their property had tested positively for CWD, and the overall monitoring results in Oneida County. However, these percentages may be misleading because approximately one-third of respondents who allowed deer removal did not complete the question on this topic.

### **Communication Assessment**

Landowners were given the opportunity to write in additional types of information they would like to have received, and 60 of the 167 respondents provided at least one entry. Items noted most frequently concerned information about removal of deer from their property and testing results. Landowners were asked the method by which they would prefer to receive additional information from DEC. The preferred method by far was a letter from state officials (63%), followed by a personal visit (15%).

Regarding communication in the other direction—from landowners to DEC--respondents were asked to write in any topic they would have liked to communicate to DEC but didn't have the opportunity. Forty-five responses were received, with no more than 4 responses on a single topic. "Good professional job," "hold deer farmers accountable—shut down deer farms," "spend more time with owners on the initial visit; ask for input," and "let owners know if deer were taken; provide them a report" were the most frequent suggestions.

### **Hunting Policy and Hunting Expectations**

The vast majority of these landowners (88%) allow hunting on their lands, but only 6% indicated their property is open to anyone who wants to hunt on it. The largest group (42%) allowed friends and neighbors to hunt by permission, 22% allowed only family members to hunt, and 18% allowed others in addition to friends and family, by permission. Landowners were asked how much hunting they expected on their property in the fall of 2005 compared to recent

years. Because follow-up reminder mailings went well into December, many of the responses to this question may reflect reality and not just expectations. A weighting of all of the responses suggests an overall expectation of less hunting. Of those who allow hunting, (61%) expected about the same amount of hunting as in recent years. However, 36% expected less hunting, while only 3% expected more hunting.

## **Summary and Implications**

Most landowners in the area where CWD was discovered indicated moderate to strong concern about the discovery of CWD, especially with respect to its effects on the deer herd. The vast majority (86%) rated the quality of their interaction with the state official who visited with them as good to excellent. Most owners (77%) allowed access to their property to kill deer for testing purposes, and primarily for reasons directly related to CWD—they wanted to assist in the monitoring program to determine whether CWD had spread to wild deer, and the State staff person who contacted them had been persuasive about the importance of testing.

Most owners (at least 80%) were moderately satisfied or very satisfied with the physical aspects of deer removal—the number of deer taken, where they were taken, and how deer carcasses were handled, including ways that minimized exposing people to CWD. Owners' ratings of their communications with state officials were less positive. A majority (about 60%) was moderately satisfied or very satisfied, but 31% were not at all satisfied with communication they received about whether deer taken from their property tested positive for CWD. This is somewhat surprising because it was communicated to all landowners both by letter and at the second and third public meetings that (1) only two of the 292 deer sampled from the containment area in April tested positive for CWD, and (2) the owners of the lands where the two positives were collected had been notified of the results directly. Thus, any cooperating landowner should have been able to conclude that if they had not been contacted directly by the DEC, any deer collected from their property did not test positive for CWD.

Nonetheless, given the level of landowner dissatisfaction with the level of follow-up communication that did occur, the lesson learned from this assessment of landowners appears to be that any landowner who grants access to his/her property to kill deer expects a follow-up communication that specifically indicates whether their property was in fact used, how many deer were killed, and the testing results. Most owners indicated that a letter was the best way to communicate this type of information to them.

## **ACKNOWLEDGMENTS**

Conducting an overall assessment related to the CWD outbreak in Oneida County was a cooperative undertaking of the Human Dimensions Research Unit (HDRU), Cornell Cooperative Extension, the Cornell University Agricultural Experiment Station, and the New York State Department of Environmental Conservation's Division of Fish, Wildlife, and Marine Resources (DEC). Funding for this portion of the study was provided by DEC.

In addition to the authors, DEC staff Gerald Barnhart, John O'Pezio, Edward Kautz, Chuck Dente, Randall Stumvoll, Louis Berchielli, Mark Lowery, and Laurel Remus attended a planning meeting for the overall effort. Primary input for topic coverage of this portion of the study came from Bill Gordon and John Major of DEC. Robert Sanford and staff of DEC's Habitat Inventory Unit provided the data file of names and addresses of landowners who were contacted as part of this study.

This survey was conducted through the HDRU survey laboratory under the supervision of Nancy Connelly. Karlene Smith, Mark Dettling, and Heather Irvine handled the mailings, data entry, and prepared summary tables of the data. Margie Peech provided formatting assistance for the final report.

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## INTRODUCTION

The discovery in March-April 2005 of chronic wasting disease (CWD), first in captive and soon after in wild, free-ranging white-tailed deer (*Odocoileus virginianus*) in Oneida County, NY (Figure 1) set the machinery of state and federal government in motion to implement an emergency response plan. This was the first case of CWD in the Northeast. CWD was discovered in 2002 in white-tailed deer in Wisconsin, and earlier in several other midwestern and Rocky Mountain states in mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsoni*), as well as white-tailed deer (Needham et al., 2004). Subsequent to finding CWD in New York, it was discovered in West Virginia later in 2005.

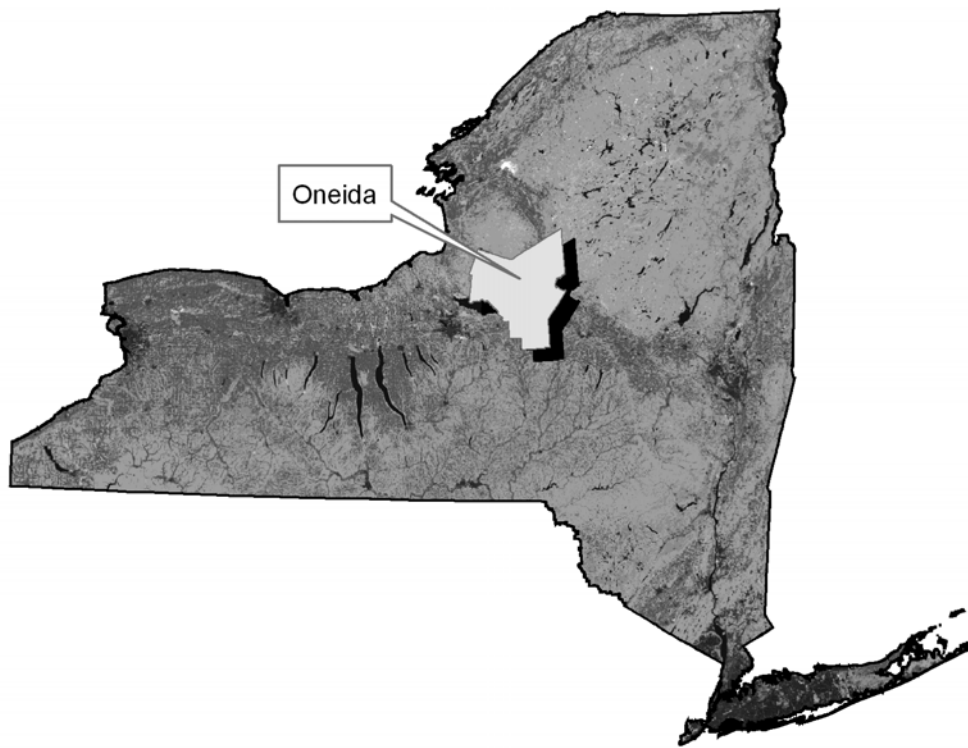


Figure 1. Location of Oneida County in New York State

Research-related assessments of CWD have occurred in several states. Studies examining attitudes, perceptions, and likely future behavior of hunters have been conducted in New York (Brown et al. 2005), South Dakota (Gigliotti 2004), Illinois (Miller 2004), and Wisconsin (Vaske et al. 2004). Needham et al. (2004) also conducted a study of hunters' reactions to hypothetical CWD-related situations in 8 western states. Little human dimensions research has been done beyond examining hunters' perspectives. Heberlein (2004) criticized the state wildlife agency's handling of CWD in Wisconsin in terms of cost (see Bishop 2004 for a further economic impact analysis) and other concerns, but no stakeholders were surveyed.

Research on the effects of CWD in New York has included 4 external stakeholder groups. Brown et al. (2005) investigated the public awareness and concerns about CWD among

hunters and the general public. Brown et al. (2006) conducted an internal assessment from the perspective of the multi-agency state and federal natural resources staff who (1) worked on the ground in Oneida County, (2) supervised those staff, and (3) provided technical support to the effort. This study assesses the perceptions and reactions of landowners with properties in the area of Oneida County where CWD was discovered.

CWD was detected in Oneida County during routine testing of a captive white-tailed deer herd. Such testing of captive deer is done by the NYS Department of Agriculture and Markets. CWD was then found in a second deer that had been kept in a herd that had received animals from the first herd. In early April 2005, CWD was detected in three additional captive deer in the first herd after the remaining 19 members of the two herds were euthanized and tested. In late April, as part of an intensive surveillance effort, CWD was detected in 2 wild deer from Oneida County.

From the fall of 2002 to the discovery of CWD in 2005, the New York State Department of Environmental Conservation (DEC) had tested over 3,400 deer statewide and approximately 40 from Oneida County for CWD as part of a surveillance effort. Further background on DEC's prior planning efforts related to the possible discovery of CWD in New York, including public meetings and other communications with stakeholder groups, and the role of Cornell Cooperative Extension in educating stakeholder groups about CWD, can be found in Brown et al. (2005).

Many state and federal agencies involving agriculture, food safety, and health, as well as natural resources, collaborated to address the discovery of CWD in New York. The size of the government response, unlike anything witnessed previously in natural resource management in the state, was attributable in part to the finding of CWD in both captive deer, which were largely under jurisdiction of state and federal agricultural agencies, and wild deer, where the lead agency is DEC's Division of Fish, Wildlife and Marine Resources. Other agencies and organizations who participated in this large multi-agency effort included the New York State Department of Agriculture and Markets, New York State Department of Health, NYS Emergency Management Office, USDA APHIS Wildlife Services and Veterinary Services, and the Cornell University College of Veterinary Medicine.

The multi-agency response to CWD was implemented under the NYS Incident Command System (ICS), which for New York parallels the National Incident Management System established under the Federal Emergency Management Agency. Established in 1996, the ICS is the New York standard command and control system that is used during emergency operations. The ICS sets forth standardized procedures for managing personnel, communications, facilities, and resources. The overall coordination of the ICS is through the NYS Emergency Management Office.

As a result of the discovery of CWD in captive deer in Oneida County in March 2005, DEC began an intensive effort to determine whether CWD was present in wild deer in the area. Field operations included a containment area that initially included 8 towns and 4 cities in Oneida County. Several additional towns in Oneida and Madison Counties were later added. A field laboratory was established within the containment area. Landowner access was sought and frequently obtained for purposes of shooting a sample of deer for diagnostic purposes. Proper handling and disposal methods for deer carcasses were established. By April 30, 2005, 292 deer

had been killed and tested for CWD, and two cases of CWD in wild deer were confirmed, the first on April 27 in the Town of Verona, Oneida County.

Outreach was also an important part of the CWD response. Communications geared towards informing the public with regard to CWD issues in general, the response plan, and post sampling results and implications were accomplished. The format of these efforts ranged from statewide news releases to public informational meetings at locations within the containment area. Public meetings occurred prior to and following the April field operations. These were considered successful in that they provided a means to get information to two key stakeholder groups, sportspersons and landowners, while providing an organized forum for these groups to voice their opinions and concerns. A third public meeting within the containment area in September, 2005 updated material covered in earlier meetings and reviewed CWD-linked regulation changes as they related to the upcoming big game hunting season. Cornell Cooperative Extension was also active in outreach efforts; their work is covered in more detail in Brown et al. (2005).

In addition to the above outreach efforts, individual letters were sent from the DEC to both cooperating and non-cooperating landowners within the containment area during September, 2005. These letters provided a brief status report on CWD in New York State, an update of sampling results, and an invitation to attend the third set of public meetings. Those who had agreed to provide access to their lands for the April operations were thanked for their cooperation.

## **STUDY PURPOSE**

The purpose of this study was to obtain landowners' reactions to the multi-agency effort to determine the extent to which CWD had spread to the wild deer herd. These owners had been approached by a government official seeking permission to enter their properties to kill deer for testing purposes. The survey dealt primarily with:

- (1) how these owners learned about the discovery of CWD and their level of concern about it;
- (2) their interaction with the government official who approached them to explain the multi-agency program and request the use of their property;
- (3) their reasons for allowing or refusing access to their properties; and
- (4) their level of satisfaction with both on-the-ground activities and follow-up communication from government officials.

## **METHODS**

DEC staff provided a list of landowners in the area of Oneida County where CWD was discovered who were contacted to gain permission to collect deer for testing for the presence of CWD. The file of landowners was created from DEC's GIS real property data layer. Parcels in this file were coded to indicate whether or not landowners gave permission for their property to be used to shoot deer for testing purposes, and for those who granted permission, any conditions imposed with that permission were also coded.

All landowners from this file with sufficient names and addresses were included in this assessment. A mail survey instrument was used, with the initial mailing sent out on November

23, 2005. In total, 271 questionnaires were mailed out, and up to 3 reminder notices were sent, as is the standard practice used to maximize response rates to mail surveys (Dillman 2000).

Because the survey went to a census rather than a sample of landowners in the defined area of Oneida County, the use of statistical tests to determine differences between subgroups is not appropriate and will not be used.

## RESULTS

Of a total of 271 questionnaires mailed out, 7 were undeliverable and 167 were returned for a response rate of 63%. Of the 271 properties with separate owners, 256 were registered as owned by one or more private individuals, 8 were owned by businesses (including farms), and 7 were owned by a variety of public and quasi-public entities. The acreage of these owners ranged from less than 0.5 acre to over 500 acres, with a mean of approximately 80 acres.

### Initial Response to Discovery of CWD

Most responding landowners first became aware of the discovery of CWD through the media, with newspapers being the leading source (Table 1). One-third (31%) of landowners indicated they were very concerned, 31% were moderately concerned, 28% were slightly concerned, and 10% indicated they were not at all concerned about CWD. The greatest topic of concern was about the effects of CWD on the deer herd, indicated by 54% of landowners (Table 2). The two perspectives indicated next most often showed a lack of strong concern—“I heard the chances of a human getting CWD from a deer were very slim” (31%) and “I thought the hype about CWD was overblown” (23%).

**Table 1. How landowners first learned that CWD had been detected in captive and wild deer.**

Communication Method	Captive	Wild
	Percent	
Newspaper	46	43
Radio or TV news	28	24
Word of mouth from friends, family or others	17	13
Personal visit from state agency staff	7	12
Letter from state agency (either NYS Department of Agriculture and Markets, or Department of Environmental Conservation)	2	4
A public meeting or DEC presentation	0	1.
Other	1	2

**Table 2. Landowners’ reasons for their stated level of concern that CWD was found in deer in their area.**

<b>Reason for level of concern or non-concern</b>	<b>Percent <sup>a</sup></b>
I was concerned about the effects of CWD on the deer herd	54
I heard the chances of a human getting CWD from a deer were very slim	31
I thought the hype about CWD was overblown	23
I worried that I might eat venison from a deer that had CWD	20
I thought the media reports were alarming	11
Other: Concerned about transmission to my livestock	6
Other: Concerned about possible transmission to humans	4
Other	4

<sup>a</sup> Percentages add to more than 100% because respondents could check more than one item.

### **Interactions with State Officials and Satisfaction Level**

Landowners in the sample were visited by state officials, provided information about the state response to the discovery of CWD, and asked if they would allow shooters on their property to kill deer for testing purposes. Over two-thirds of the responding landowners rated the quality of their interaction with state officials as good to excellent for each of the aspects reported in Table 3. Information provided on why access to landowners’ properties was being sought was rated good to excellent by 93% of respondents. Information about the risk of CWD to people received the lowest rating (good to excellent by 69%).

**Table 3. Quality of interaction during visits from state officials as rated by landowners.**

<b>Aspect of interaction</b>	<b>Poor</b>	<b>Fair</b>	<b>Good</b>	<b>Excellent</b>
	<b>Percent</b>			
Information I was told about why access to my property was being sought	1	6	47	46
Information I was told about the effects of CWD on deer	5	16	47	31
Information I was told about the risk of CWD to people	11	20	46	23
Flexibility I was offered as to how many deer would be taken from my property	14	11	41	34
Flexibility I was offered as to when those deer would be taken from my property	14	12	40	34
Overall interaction I had with the state officials who visited me	4	10	40	46

Most respondents (77%) indicated they allowed state officials access to remove deer from their property. Of those who allowed access, most (79%) indicated they wanted to help with the monitoring program to see if CWD had spread to the wild deer herd (Table 4). Roughly half of these respondents indicated they allowed access because they were convinced by information conveyed to them by state officials or that they had confidence in the state officials who

approached them. Only 11% reported believing there were too many deer on their property, for whom taking deer for CWD detection would be an opportunity to thin the deer herd.

**Table 4. Reasons why landowners allowed state officials access to their land to remove deer for testing for the presence of CWD.**

<b>Reasons for allowing access</b>	<b>Percent <sup>a</sup></b>
I wanted to help with the monitoring program to find out if CWD had spread to wild deer	79
The information the officials told me about CWD convinced me that it was important to test deer from my area for CWD	54
I had confidence in the state official(s) who approached me	46
Because I could say how many deer could be taken and when they could be taken	15
There are too many deer on my property	11
Other	4

<sup>a</sup> Percentages add to more than 100% because respondents could check more than one item.

Reasons why 23% of respondents did not allow access are summarized in Table 5. Respondents at similar levels of magnitude didn't think testing from their property was necessary, indicated they like the deer, felt they had too few deer on their property, and that the CWD risk was overblown. Other reasons were given by 40% of these respondents but no reason was given by more than 2 respondents. These reasons include:

- I gave permission to access the land but not to take deer.
- There are many acres of public land next to us.
- There is an active wildlife plan in effect on my property.
- I didn't trust that they wouldn't take more than they said they would.
- Family members or I don't agree with killing wildlife.
- Our property is outside of the 5-mile radius of a CWD incident. If detected within 5-miles, OK.
- My neighbor obtains many nuisance permits every year and is reducing the population.
- I thought the initial response was unnecessary because hunting season was coming soon.
- I was pressured by my neighbors to decline access to the DEC responders.



**Table 5. Reasons why landowners decided not to allow state officials access to their land to remove deer for testing for the presence of CWD.**

<b>Reasons for withholding consent</b>	<b>Percent <sup>a</sup></b>
I wasn't convinced that testing deer from my property was necessary	38
I like the deer and didn't want any removed	38
There are too few deer on my property	32
I thought the CWD risk was overblown	30
I was concerned about safety aspects of deer removal	24
I thought removing deer would affect deer hunting on my property this fall	19
Other	40

<sup>a</sup> Percentages add to more than 100% because respondents could check more than one item.

At least 80% of respondents who permitted deer removal and who completed the question about their satisfaction with the removal process itself were very satisfied or moderately satisfied with the number of deer removed, when they were removed, and the handling and care taken with the deer carcasses (Table 6). Smaller proportions (57%-65%) were very satisfied or moderately satisfied with follow-up communications on whether deer taken from their property had tested positively for CWD, and the overall monitoring results in Oneida County. However, these percentages may be misleading because approximately one-third of respondents who allowed deer removal did not complete this question or indicate a level of satisfaction for each item in Table 6. Many of these people wrote in using white space around the question that they didn't think any deer were taken, or that they had no idea how many deer were taken, or that they received no follow-up from state officials.

**Table 6. Respondents' level of satisfaction with various aspects of deer removal from their property<sup>a</sup>.**

<b>Aspect of deer removal</b>	<b>Very Satisfied</b>	<b>Moderately Satisfied</b>	<b>Slightly Satisfied</b>	<b>Not at all Satisfied</b>
	<b>Percent</b>			
The number of deer taken	60	21	6	13
When the deer were taken	65	15	6	13
How the deer carcasses were handled	67	17	4	11
The care taken with the carcasses to minimize risk of exposing people to CWD	65	23	4	8
Follow-up communication from state officials to me about whether deer taken from my property had tested positive for CWD	39	18	11	31
Follow-up communication from state officials to me about the general findings of the CWD monitoring in Oneida County	42	24	12	22

<sup>a</sup> One-third of respondents who allowed deer removal did not provide this information.

## **Communication Assessment**

Landowners were given the opportunity to write in additional types of information they would like to have received, and 60 of the 167 respondents provided at least one entry. The most frequent responses are categorized below:

- Any information about deer and deer carcass removal from our property. We don't know if they removed any deer: 10 responses
- Where the positive deer were found, test results, how many positive deer were found: 6 responses
- Results of the 2005 deer season and further follow up on future findings, updates: 4 responses
- Map or summary of total deer harvest for the response: 4 responses
- Where the deer with CWD were taken how were carcasses disposed of: 3 responses
- What caused CWD and how did it get into the population: 3 responses
- What percent of the deer herd in the area was killed for sampling: 3 responses
- How CWD spreads and how can it be controlled: 3 responses

Landowners were asked the method by which they would prefer to receive additional information from DEC. The preferred method by far was a letter from state officials (63%). The next most frequently preferred method, 15%, was for a personal visit, followed by newspapers (10%), radio or television news (5%), a public information meeting (4%), and the DEC website (1%).

Regarding communication in the other direction—from landowners to DEC--respondents were asked to write in any topic they would have liked to communicate to DEC but didn't have the opportunity. Forty-five responses were received:

- Good professional job: 4 responses
- Hold deer farmers accountable—shut down deer farms: 4 responses
- Spend more time with owners on the initial visit; ask for input: 3 responses
- Let owners know if deer were taken; provide them a report: 3 responses
- We were concerned about the use of rifles in our area: 2 responses
- Treat CWD as if it is in the population; test during hunting season: 2 responses

## **Hunting Policy and Hunting Expectations**

The vast majority of these landowners (88%) allow hunting on their lands, but only 6% indicated their property is open to anyone who wants to hunt on it. The largest group (42%) allow friends and neighbors to hunt by permission, 22% allow only family members to hunt, and 18% allow others in addition to friends and family, by permission.

Landowners were asked how much hunting they expected on their property in the fall of 2005 compared to recent years. Because follow-up reminder mailings went well into December,

many of the responses to this question may reflect reality and not just expectations. A weighting of all of the responses suggests an overall expectation of less hunting. Of those who allow hunting, (61%) expected about the same amount of hunting as in recent years. However, 36% expected less hunting, while only 3% expected more hunting.

## **SUMMARY AND IMPLICATIONS**

Most landowners in the area where CWD was discovered indicated moderate to strong concern about the discovery of CWD, especially with respect to its effects on the deer herd. The vast majority (86%) rated the quality of their interaction with the state official who visited with them as good to excellent. Most owners (77%) allowed access to their property to kill deer for testing purposes, and primarily for reasons directly related to CWD—they wanted to assist in the monitoring program to determine whether CWD had spread to wild deer, and the State staff person who contacted them had been persuasive about the importance of testing. Those who did not allow testing had various reasons—some thought the stated risk of CWD was overblown, some indicated they like the deer and felt there were too few deer on their property, and some were concerned about safety aspects of the operation.

Most owners (at least 80%) were moderately satisfied or very satisfied with the physical aspects of deer removal—the number of deer taken, where they were taken, and how deer carcasses were handled, including ways that minimized exposing people to CWD. Owners' ratings of their communications with state officials were less positive. A majority (about 60%) was moderately satisfied or very satisfied, but 31% were not at all satisfied with communication they received about whether deer taken from their property tested positive for CWD. This is somewhat surprising as it was communicated to all landowners both by letter and at the second and third public meetings that (1) only two of the 292 deer sampled from the containment area in April tested positive for CWD, and (2) the owners of the lands where the two positives were collected had been notified of the results directly. Thus, any cooperating landowner should have been able to conclude that if they had not been contacted directly by the DEC, any deer collected from their property did not test positive for CWD.

Nonetheless, given the level of landowner dissatisfaction with the level of follow-up communication that did occur, the lesson learned from this assessment of landowners appears to be that any landowner who grants access to his/her property to kill deer expects a follow-up communication that specifically indicates whether their property was in fact used, how many deer were killed, and the testing results. Most owners indicated that a letter was the best way to communicate this type of information to them.

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