

**Illinois Chronic Wasting Disease:
2009-2010 Surveillance/Management Summary**



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Background:

Prior to July 1, 2009, Illinois Department of Natural Resources personnel sampled more than 43,000 wild deer (*Odocoileus virginianus*), and identified 257 individual deer infected with chronic wasting disease (CWD). The most concentrated areas of known disease occurred in two distinct clusters; one just to the northeast of Rockford (Winnebago County, IL) and the other just to the southeast. Spread of the disease from these clusters was primarily to the east and southeast along major riparian corridors (the North and South Fork of the Kishwaukee River) and their tributaries, affecting Boone County, western McHenry County, and northern DeKalb County. CWD had also been found in locations distant from the core disease areas (Stephenson County, western Winnebago County, Ogle County, and LaSalle County), but such locations typically consisted of a single positive individual and no evidence of significant disease establishment. Exceptions were found in eastern Ogle County and southeast DeKalb County, where two and three CWD-positive deer were identified from a single section, respectively (Fig. 1).

CWD Surveillance Activities During FY2009-2010:

All CWD testing was conducted at Illinois Department of Agriculture's (IDOA) Animal Disease Laboratories located at Galesburg and Centralia, Illinois, both of which are certified for CWD testing by USDA. Immunohistochemistry (IHC) was the testing method used. Sampling was accomplished primarily by collecting tissues from (1) hunter-harvested deer; (2) suspect animals reported to IDNR staff; (3) road-killed deer in known CWD-infected areas; (4) deer taken under authority of urban Deer Population Control Permits, nuisance Deer Removal Permits, and Scientific Permits; and (5) deer taken by IDNR sharpshooters in CWD areas.

Deer Hunting Season Surveillance. Tissue samples (retropharyngeal lymph nodes and the obex) for CWD testing were collected from hunter-harvested deer at three sources: (1) mandatory check stations in high-risk counties in northern Illinois during the firearm seasons; (2) designated self-service drop-off locations in northern Illinois where hunters during any season could leave a deer head to be tested; and (3) cooperating meat lockers at which cooperators were paid a fee to collect heads or sample tissues for IDNR. Counties with mandatory check stations for CWD surveillance and locations of cooperating meat lockers are shown in Figure 2. Mandatory check stations were operated during firearm deer season (November 20-22 and December 3-6, 2009) for nine counties considered high-risk for CWD (Stephenson, Winnebago, Boone, McHenry, Ogle, DeKalb, Kane [west of Highway 47], LaSalle and Grundy). Tissue samples were taken by IDNR staff from all adult deer that hunters would allow to be tested. The sampling objective was 500 samples per county, which provides 99% confidence of detecting a 1% disease prevalence rate. Harvest location was recorded to the nearest square mile according to the government land survey (Township, Range, and Section). Additional hunter-harvest samples were taken by Illinois Natural History Survey and University of Illinois personnel in conjunction with special archery and firearm hunts at Allerton Park in Piatt County. A total of 2,461 usable samples were collected at check stations, with 14 CWD-positive individuals identified from five counties (Boone [5], DeKalb [3], McHenry [1], Stephenson [1] and Winnebago [4]). Although CWD testing of hunter-harvested deer is voluntary, compliance has remained high with

Fig. 1. Distribution of CWD-infected deer identified in Illinois prior to July 1, 2009.

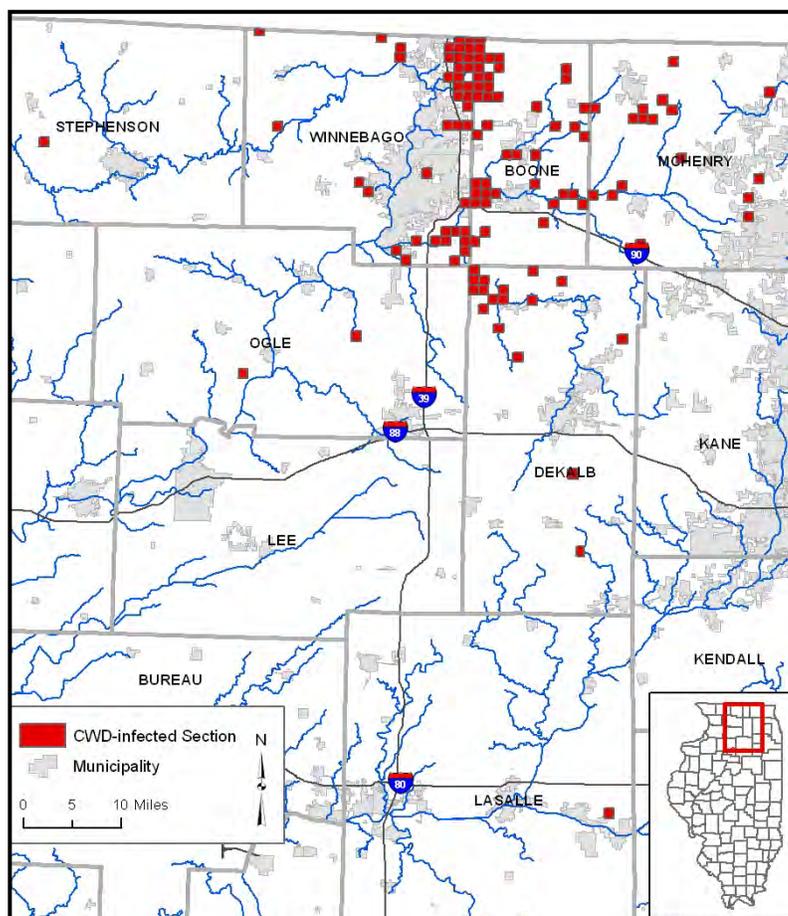
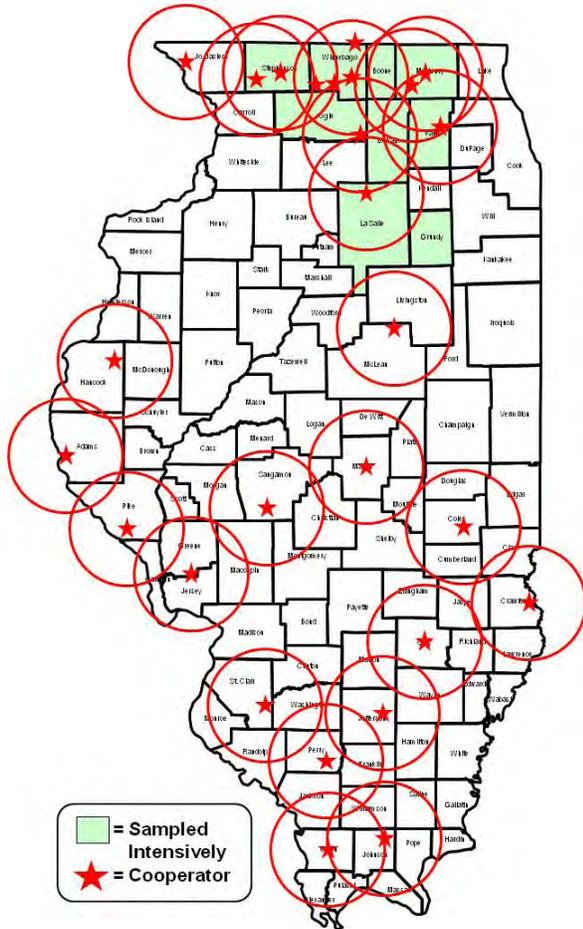


Fig. 2. Illinois counties intensively sampled for CWD during 2009 hunting seasons (shaded), and locations/estimated service area of cooperating meat lockers for CWD sampling.



the exception of a few locales. If hunter cooperation declines so that surveillance is ineffective, it may become necessary to implement mandatory surveillance in high-risk areas in the future. Appendix A provides a tabulation of the number of usable samples taken in each county via all collection methods.

In order to collect additional samples from the CWD area during other hunting seasons, and to collect samples from hunter-harvested deer throughout the state, we used a system of self-serve “drop-off” stations and also contracted with commercial meat lockers to collect samples for us. Drop-off stations were available in select northern Illinois counties to allow deer hunters during any season to donate samples for CWD surveillance. To participate, hunters filled out a card to identify themselves and the location from which they harvested the deer, and left the deer head and the completed card in a plastic bag in the provided refrigerator. IDNR staff checked stations at least twice a week, removed tissue samples from heads, and forwarded samples to the Galesburg Animal Disease Laboratory for testing. For statewide CWD surveillance efforts, IDNR contracted with cooperating meat lockers throughout the state to collect samples from hunter-harvested deer being processed at their facility. We assumed that each cooperator took in deer from an approximate 25 mile surrounding radius, and we tried to distribute cooperators accordingly. We were unable to find cooperators in some parts of the state, particularly in areas where processors rely exclusively on commercial renderers for offal disposal. Renderers will not accept offal from deer being tested for CWD, because of the threat of an FDA recall in the event that an animal tests positive. Using both these collection methods, we collected usable samples from 3,320 deer in 95 counties ($\bar{x}=35$, range = 1-175), with 2 positive deer detected in 2 counties (Boone [1], McHenry [1]).

Surveillance Using Agency-issued Permits for Lethal Deer Removal. Recipients of special permits from IDNR authorizing lethal deer removals were required to collect CWD samples when working in high-risk CWD areas, or when working in areas in which other surveillance techniques were judged insufficient. These special permits include (1) Deer Population Control Permits (used by some agencies to control urban deer populations); (2) nuisance Deer Removal Permits (for crop depredation, etc.); and (3) Scientific Permits (various research projects). This approach provided 364 usable CWD samples from northeastern Illinois counties not open to firearm deer hunting (Cook, Lake, DuPage), as well as from properties in Winnebago and JoDaviess counties (Appendix A). Three CWD-positive deer were identified from Winnebago County.

Suspect (“Target”) Deer Surveillance. Upon receiving reports from the public about sick deer, IDNR staff collected samples for CWD testing from deer that exhibited signs/symptoms that could be attributed to chronic wasting disease. Samples were taken from 14 deer in 12 counties (Appendix A). One positive deer was found in Boone County.

Surveillance from Post-Hunting Season Sharpshooting. Sharpshooting was conducted during the period January 15, 2010 - March 31, 2010 by IDNR Wildlife Biologists and IDNR Conservation Police Officers. Sharpshooting locations were confined to those parts of Boone, DeKalb, Kane, LaSalle, McHenry, Ogle, Stephenson, and Winnebago counties in close proximity to areas where CWD-infected deer had been identified.

More specific details of goals, procedures, and results of the experimental sharpshooting program are discussed in the management section of this report. Agency sharpshooters collected 548 usable samples from seven counties (Appendix A). Seventeen positive deer were found in Boone (7), McHenry (1), and Winnebago (9) counties.

Discussion of Surveillance Results to Date. A total of 6,734 usable samples were collected statewide during FY09-10, resulting in the identification of 37 CWD-positive deer from five counties: Boone (14), DeKalb (3), McHenry (3), Stephenson (1), and Winnebago (16). The number of CWD-positive deer identified annually since the discovery of CWD in Illinois has varied from 14 to 51 (Figure 3).

Known distribution of CWD did not change significantly during FY09-10, and 68% of positives identified (25/37) were found in a 6-mile wide strip of land extending from Wisconsin into northern DeKalb/Ogle counties and centered on the Winnebago-Boone county line (Figure 4). This area includes Illinois' two most established disease foci – one northeast of Rockford and the other to the southeast. Notable locations where CWD was identified included a single positive in western Stephenson County, and a single positive immediately northwest of Rockford. The Stephenson County location constituted only the second case of CWD identified in that county, and was located approximately four miles west of the previous location, which was identified in fall 2007. It is unknown if CWD-positive deer in Stephenson County are originating from the established CWD area in Illinois, or from the Wisconsin CWD area to the north, as the site is approximately equidistant from known positive locations in both states. The new Winnebago County location was also about four miles from the nearest positive, but diseased deer have previously been identified in all directions from that point. No positives were found this sample year in Ogle County or in LaSalle County, where CWD was last observed in March 2009 and June 2007, respectively.

Figure 3. Number of CWD-positive deer identified in Illinois by year.

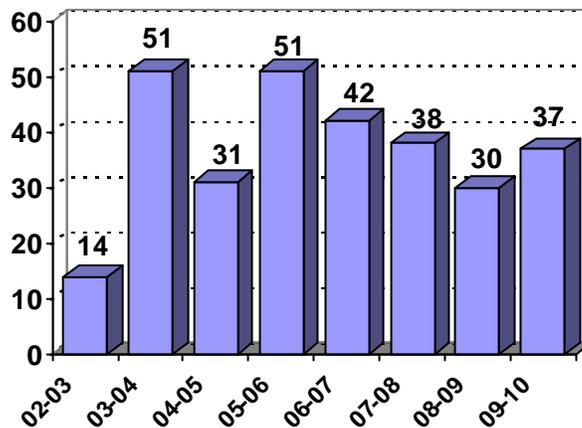
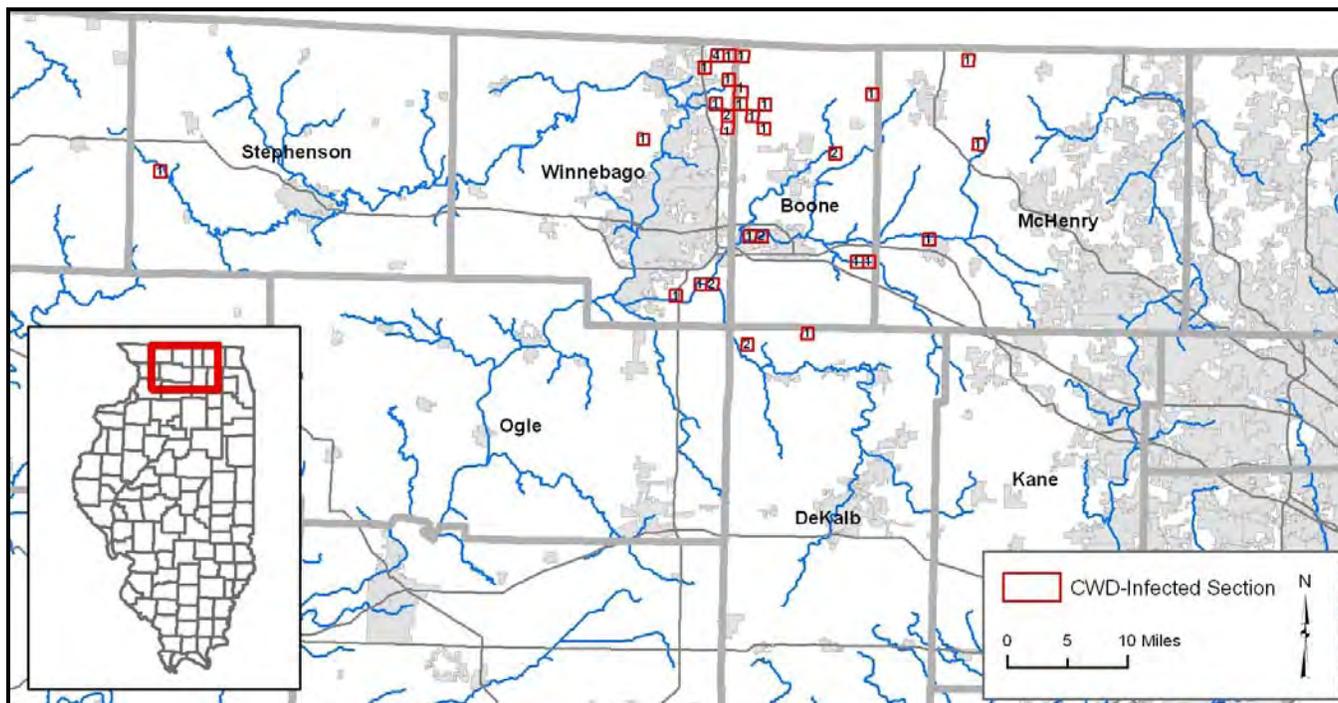


Figure 4. Distribution of CWD-positive deer identified during FY09-10.



Using surveillance data collected from hunter-harvested deer only, disease prevalence rates were calculated for the 7 counties in which CWD has been identified (Table 1). Since no hunter-harvested positives were found this year in two of the counties (LaSalle and Ogle), their estimated prevalence rates were zero. Other countywide adult prevalence rates estimated from hunting season data ranged from 0.2% (\pm 0.4, 95% confidence interval) in Stephenson County to 9.2% (\pm 7.0, 95% confidence interval) in Boone County. Confidence intervals for all county prevalence estimates for this year overlapped with those from last year, indicating that no discernable differences in prevalence rates existed between the two years. Sampling of fawns has been discontinued during the firearm deer season, and IDNR no longer operates check stations during the late winter deer season, so the number of fawn samples was extremely low and no CWD-positive fawns were identified.

Table 1. County CWD prevalence estimates in northern Illinois for the period 1 July 2009 through 30 June 2010. Estimates are based only on samples collected from hunter-harvested deer.¹

County	Deer Age	# of Samples ²	# of Positives ²	Percent Positive	95% Confidence Interval (+/-)
Boone	Adults only	65	6	9.2%	7.0%
	Fawns only	3	0	0.0%	0.0%
DeKalb	All deer	68	6	8.8%	6.7%
	Adults only	106	3	2.8%	3.2%
	Fawns only	0	0	–	–
LaSalle	All deer	112	3	2.7%	3.0%
	Adults only	651	0	0.0%	0.0%
	Fawns only	0	0	–	–
McHenry	All deer	656	0	0.0%	0.0%
	Adults only	216	2	0.9%	1.3%
	Fawns only	1	0	0.0%	0.0%
Ogle	All deer	236	2	0.8%	1.2%
	Adults only	554	0	0.0%	0.0%
	Fawns only	0	0	–	–
Stephenson	All deer	570	0	0.0%	0.0%
	Adults only	494	1	0.2%	0.4%
	Fawns only	0	0	–	–
Winnebago	All deer	497	1	0.2%	0.4%
	Adults only	293	4	1.4%	1.3%
	Fawns only	1	0	0.0%	0.0%
	All deer	301	4	1.3%	1.3%

¹ Estimates derived from hunter-harvested deer represent populations throughout the entire county.

² Summing the figures for adults and fawns may not equal the numbers presented for “All deer” because of individuals for which no age was identified.

In order to evaluate disease prevalence at a smaller scale, prevalence rates were also calculated within a grid across northern Illinois in which each unit consisted of four townships (approximately 144 mi²)(see Figure 5). For these prevalence estimates, we used samples collected by all methods except suspect animal surveillance within each unit (block). The drawback to this approach is that the use of samples from sharpshooting may tend to bias prevalence estimates (generally making them higher) since sharpshooting efforts are most intense within locales known to have highest prevalence. Estimates were made only for adult deer, as sample sizes for fawns were too small. Calculated prevalence rates (with 95% confidence intervals) for blocks with at least one positive are presented in Table 2.

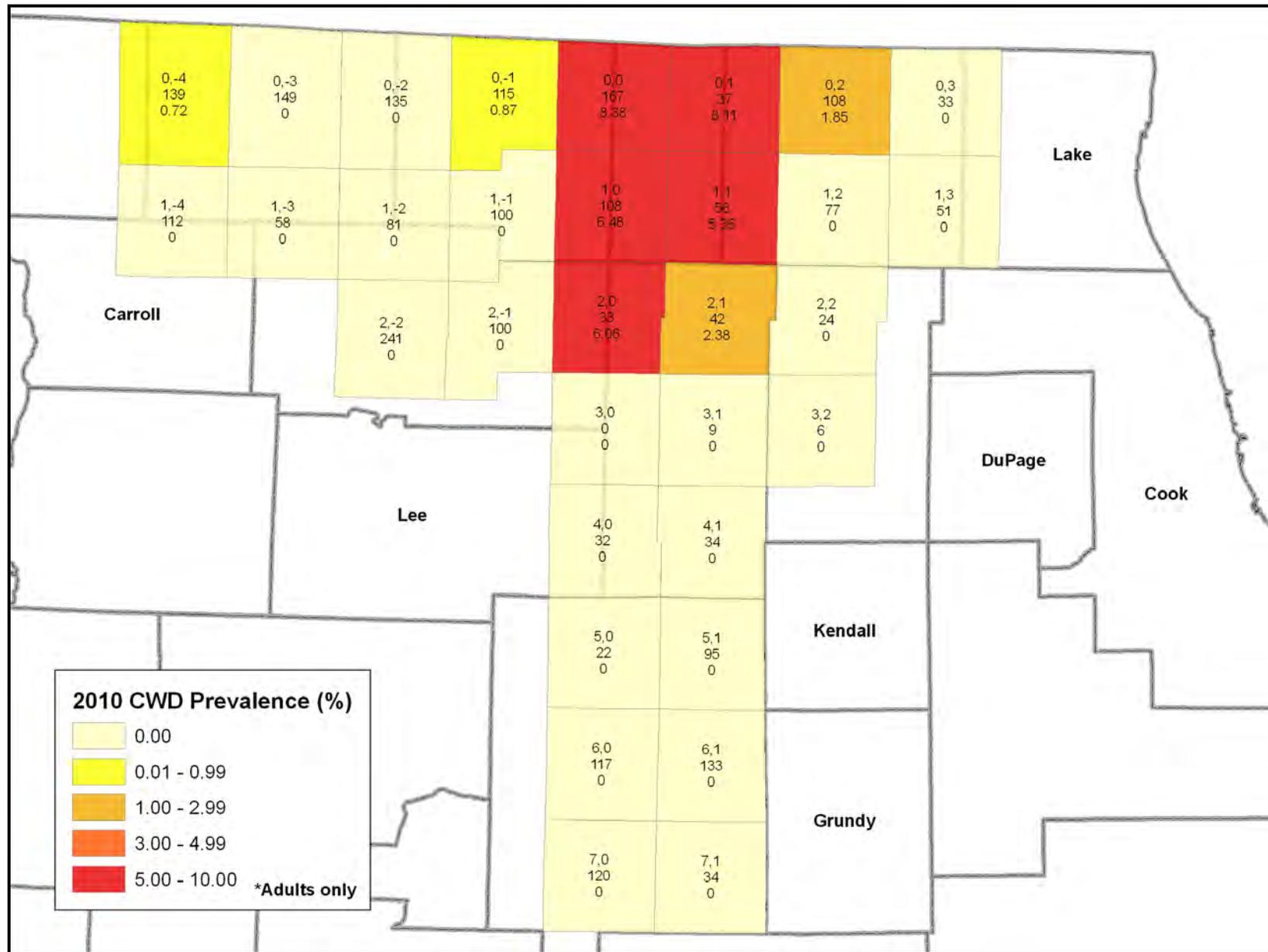


Figure 5. Localized CWD prevalence was estimated during FY09-10 using a grid consisting of 4-township blocks. Within each block, the upper number is the grid coordinate of the block (“name”); the middle number is the sample size; and the lower number is the estimated adult prevalence rate (%). Prevalence rates were calculated from samples collected from all sources except suspect deer.

Table 2. CWD surveillance results for adult deer in known CWD areas for the period 1 July 2009 through 30 June 2010. Blocks are those areas defined in Figure 5. Results include all surveillance samples except suspect animal testing.

Block Number	Location	Number Tested	Number Positive	Estimated Prevalence	95% Confidence Interval
0,0	North Winnebago-Boone	167	14	8.4%	±4.2%
0,1	North Boone-McHenry	37	3	8.1%	±8.8%
0,2	Northcentral McHenry	108	2	1.9%	±2.5%
0,-1	Northcentral Winnebago	115	1	0.9%	±1.7%
0,-4	NW Stephenson-NE Jo Daviess	139	1	0.7%	±1.4%
1,0	South Winnebago-Boone	108	7	6.5%	±4.6%
1,1	South Boone-McHenry	56	3	5.4%	±5.9%
2,0	NE Ogle-NW DeKalb	33	2	6.1%	±8.1%
2,1	Northeast DeKalb	42	1	2.4%	±4.6%

As was the case last year (FY08-09), the area northeast of Rockford where CWD was first found in Illinois (Block 0,0 North Winnebago-Boone) produced the most positive deer (14) with an estimated adult prevalence rate of 8.4% (±4.2%). The second most important disease focus was observed in Block 1,0 (South Winnebago-Boone), where 7 positives were identified (prevalence = 6.5% ±4.6%). Other blocks that produced >1 adult positive were North Boone-McHenry (#0,1), South Boone-McHenry (#1,1), Northcentral McHenry (#0,2), and NE Ogle-NW DeKalb (#2,0). Estimated adult prevalence rates in these blocks ranged from 1.9% - 8.1%.

Eighteen of the 34 adult CWD-positive deer used in calculating block prevalence rates in Table 2 resulted from sharpshooting efforts, and most of those (17/18) originated from the "hottest" blocks (colored red in Fig. 5): 7 of 14 positives in Block 0,0; 7 of 7 positives in Block 1,0; 2 of 3 positives in Block 0,1; and 1 of 3 positives in Block 1,1. As a result, disease prevalence rates in some blocks are heavily influenced by large numbers of samples taken from the highest-risk portions of those blocks by sharpshooting activities, and may tend to overestimate actual prevalence throughout the block.

The overall pattern of disease distribution and intensity has remained largely unchanged over the past five years, with a central core of higher prevalence focused on the Winnebago-Boone county line, and the disease becoming more diffuse at increasing distance from this core. Spread is more predominant to the east and southeast, primarily in habitats along the North and South Forks of the Kishwaukee River and their tributaries.

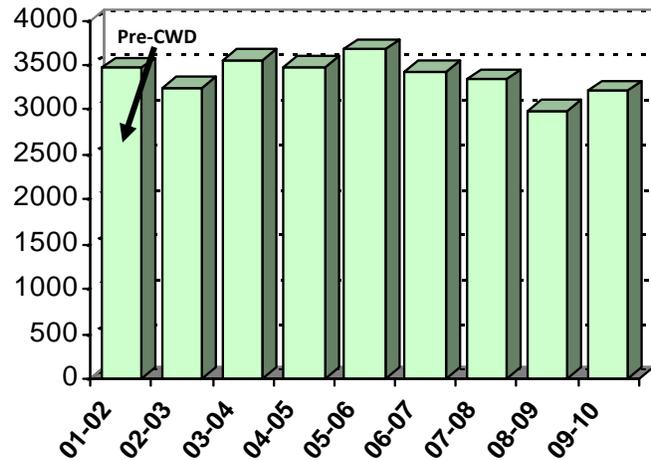
Experimental CWD Management Activities During FY2009-2010:

Use of regulated hunting for herd control in CWD-affected areas. Liberal deer permit quotas remained in effect during gun seasons (regular firearm and muzzleloader), allowing hunters to purchase virtually unlimited numbers of permits. In addition, several hunting season regulation changes were implemented this year that affected CWD counties. The archery deer season was lengthened so that its closure coincided with the end of the special CWD deer season and the late-winter deer season, resulting in 102 days of archery hunting in which there was no bag limit for antlerless deer. The special CWD deer hunting season (Winnebago, Boone, McHenry, Lake, and DeKalb counties) and the concurrent late-winter deer hunting season (Stephenson, Ogle, LaSalle, and Grundy counties) were expanded from a single 3-day season in mid-January to a 7-day split season (December 31, 2009-January 3, 2010; and January 15-17, 2010). Permits (antlerless-only) for both seasons were not subject to county quotas, and were available to hunters over-the-counter (OTC) at license vendors. For the special CWD season, hunters could purchase unlimited numbers of permits, while for the late-winter season hunters were limited to one permit each per county. However, hunters in both seasons could also use any unfilled tags that they had remaining from either the firearm, muzzleloader, or youth deer seasons. As a result of the increased personnel needs for operating check

stations during a season of extended length, the use of physical check stations was discontinued and hunters were required to register their harvest using an automated harvest reporting system (either online or via telephone). This latter change eliminated our ability to directly sample harvested deer at check stations during those seasons, but sample numbers had tended to be low from this source anyway. Hunters that wanted to have their deer tested for CWD were still able to do so through the use of drop-off stations or cooperating meat processors.

In the original 4-county CWD area (Winnebago, Boone, McHenry, and DeKalb) total deer harvest from all seasons combined numbered 3,214, compared to 2,997 the previous year. Average harvest during the previous five years was 3,382. Increasingly liberal deer hunting regulations have not proven effective for increasing deer harvest in these counties (Figure 6), but we believe that they have been important in maintaining harvests comparable to historic levels in spite of evidence of smaller deer population size in the CWD portions of those counties.

Fig. 6. Number of deer taken by hunters annually in Illinois' four original CWD counties



Sharpshooting in CWD “hot spots”. Following the close of deer hunting seasons in January, teams of sharpshooters (IDNR Biologists and Conservation Police Officers) began culling deer that were wintering in or around known CWD locations. An Urban Deer Population Control Permit (DPCP) was issued to the Winnebago County Forest Preserve District to allow their staff to conduct a sharpshooting program on forest preserves in known CWD areas in southeastern Winnebago County. In a few instances, nuisance Deer Removal Permits (DRP) were issued to private landowners in CWD areas that allowed them to shoot deer to help reduce crop depredation. All IDNR sharpshooting activities were carried out between January 15 and March 31, 2010.

Objectives of the sharpshooting were: (1) to provide detailed localized surveillance information about disease distribution and prevalence rates within infected areas; and (2) to examine the feasibility/effectiveness of controlling CWD in free-roaming deer populations by [a] removing as many sick deer as possible from known CWD areas; [b] removing/sampling deer that are inaccessible to hunters because of urbanization; and by [c] reducing densities in known CWD locales to lower transmission rates.

All animals (including fawns) removed during the sharpshooting program from which suitable tissue samples could be collected were tested for CWD to determine disease prevalence in affected areas. The retropharyngeal lymph nodes and the obex were removed at DNR processing facilities in the sampling zones, and transferred to IDOA Disease Laboratories for testing. Additional tissues (tongues, fetuses) were collected and archived for further research/testing at the University of Illinois Champaign/Illinois Natural History Survey.

Aerial deer surveys (via helicopter) were conducted during periods of suitable snow cover to census deer wintering in known CWD areas. Surveys served to identify wintering habitat that contained concentrations of deer, and to provide estimates of deer numbers throughout the affected area. Our goal was to focus sharpshooting activities on deer in winter concentration areas that included or were nearby CWD-infected properties, thus maximizing our effectiveness. Extensive snow cover during winter 2009-2010 provided excellent census conditions. Figure 7 depicts the number of deer counted in each CWD management unit (CMU) in northern Illinois, and Table 3 presents deer densities within each of those individual units. Deer densities (deer per mi² of area surveyed; uncorrected for amount of habitat) ranged from 0.0/mi² (CMU 3,1 - East-Central DeKalb) to 14.0/mi² (CMU 1,-1 - South-Central Winnebago County), with a mean density of 4.2/mi². Of the surveyed areas, deer densities were highest in outlying portions of the CWD area (“spark areas”) where the disease is only documented sporadically and significant sharpshooting has not occurred. Deer densities in the core CWD areas, where management activities have been more intense and long-term, were generally low.

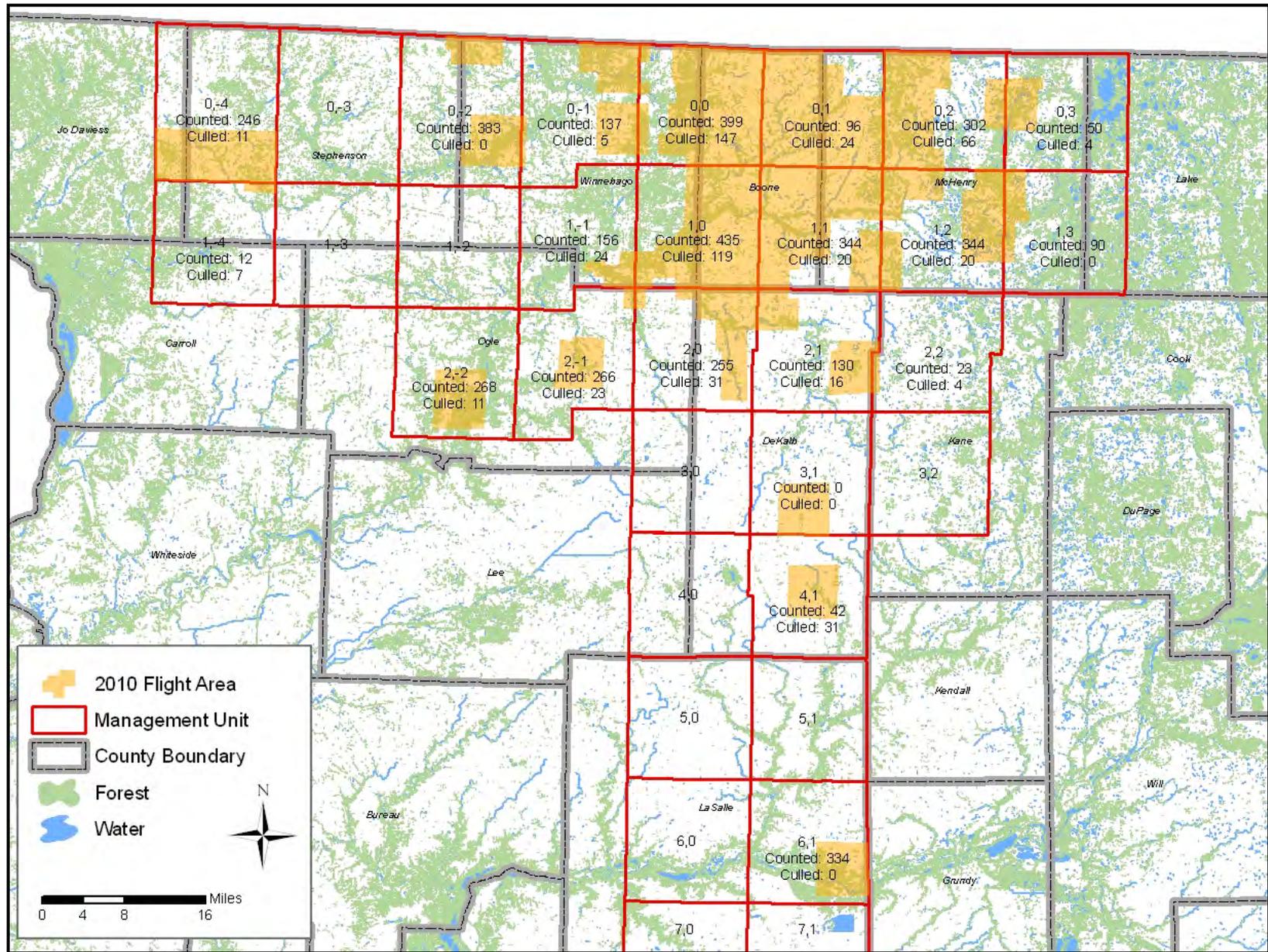


Figure 7. Number of deer counted during aerial censuses and removed by sharpshooters in CWD-infected areas of northern Illinois during winter 2009-2010.

CWD management units were delineated by including all known CWD-positive sections (all years), plus a 2-section (1 section = ~1mi²) buffer around each. Sharpshooting activities in the CWD zones were generally limited to this defined area. A total of 595 deer were removed from the CMUs (Table 3), or about 14.2% of the deer counted via aerial surveys. For comparison, sharpshooters removed 709 deer during Winter 2008-09, and more than 1,000 in each of the five winters prior to that.

Deer densities in several of Illinois' primary disease areas have been lowered in recent years because of long-term management efforts. This year, supervisory managers directed staff to maintain a high level of sharpshooting effort in areas where CWD prevalence has been historically highest and most persistent (i.e., CMUs 0,0 and 1,0 along the Winnebago-Boone county line), in spite of the low densities inherent in those areas and the concomitant low success rate of sharpshooters. Forty-five percent of all deer taken by sharpshooters came from these two CMUs. This approach contributed to smaller numbers of deer removed this year, but also ensured that the deer being removed were very 'high risk' for disease. As a result, sharpshooters accounted for 20 of the 37 (54%) CWD-positive deer identified this year from all sources, and most of those sharpshooting positives originated from areas along the Winnebago-Boone county line.

Deer removed by sharpshooting consisted of 37.2% fawns and 62.8% adults. Sex ratios were 1 male to 1.34 females. County totals were as follows: Boone (117), DeKalb (78), Kane (4), McHenry (139), Ogle (34), Stephenson (18), and Winnebago (205).

Table 3. Deer census and sharpshooting results by management unit in northern Illinois CWD area during winter 2009-2010. Management units are those depicted in Figure 7.

Management Unit	Area (mi ²)	Area Surveyed (mi ²)	# Deer Counted	Density (Deer/mi ²)	# Deer Removed	% of Counted Deer Removed
0,-1 North-Central Winnebago	149.58	47.16	137	2.9	5	3.6
0,-2 W Winnebago-E Stephenson	173.97	40.64	383	9.4	0	0.0
0,-4 W Stephenson-E JoDaviess	182.41	59.49	246	4.1	11	4.5
0,0 NW Boone-NE Winnebago	140.94	111.37	399	3.6	147	36.8
0,1 NE Boone-NW McHenry	135.90	114.86	96	0.8	24	25.0
0,2 North-Central McHenry	137.97	74.74	302	4.0	66	21.9
0,3 NE McHenry	137.88	15.87	50	3.2	4	8.0
1,-1 South-Central Winnebago	137.10	11.17	156	14.0	24	15.4
1,-4 SW Stephenson	143.13	2.78	12	4.3	7	58.3
1,0 SW Boone-SE Winnebago	145.29	106.71	435	4.1	119	27.4
1,1 SE Boone-SW McHenry	143.96	114.89	344	3.0	20	5.8
1,2 South-Central McHenry	144.01	68.12	223	3.3	52	23.3
1,3 SE McHenry	144.37	14.39	90	6.3	0	0.0
2,-1 East-Central Ogle	141.23	23.76	266	11.2	23	8.6
2,-2 South-Central Ogle	152.10	28.55	268	9.4	11	4.1
2,0 E Ogle-NW DeKalb	141.80	44.68	255	5.7	31	12.2
2,1 NE DeKalb	141.91	36.15	130	3.6	16	12.3
2,2 NW Kane	139.26	2.75	23	8.3	4	17.4
3,1 East-Central DeKalb	140.80	24.72	0	0.0	0	N/A
4,1 SE DeKalb	137.87	25.26	42	1.7	31	73.8
6,1 East-Central LaSalle	140.14	26.01	341	13.1	0	0.0
TOTAL	3051.64	994.09	4198	4.2	595	14.2

Summary

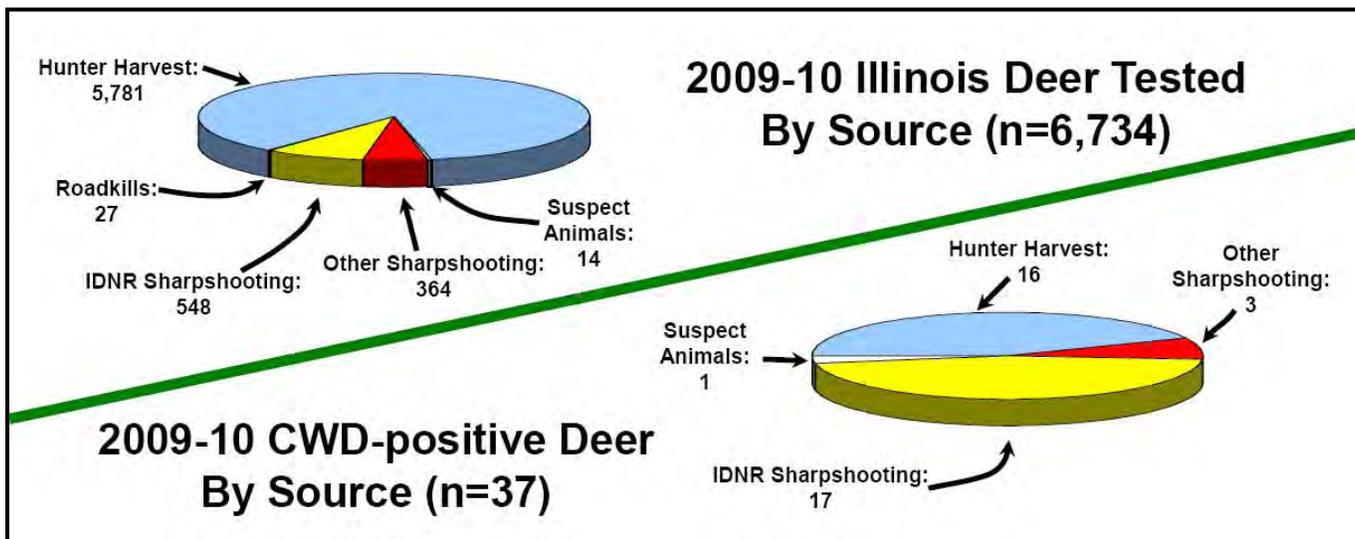
During FY09-10, a total of 6,734 usable samples from wild Illinois white-tailed deer were tested for chronic wasting disease, and 37 CWD-positive deer were identified. Seventeen of 37 CWD-positive deer originated from the primary disease focus northeast of Rockford along the Winnebago-Boone county line, while 18 additional positives were found in the Kishwaukee River drainage to the east and southeast of Rockford. Only two CWD-positive deer were identified west of Rockford, but one of those represents the westernmost CWD location found to date. Surveillance in LaSalle and Ogle counties uncovered no positives there. There is no evidence of significant disease spread, and the number of CWD-positive deer identified annually has been down since a peak in 2005-2006. Table 4 presents a summary of all positive locations identified to date by county of origin.

Following the deer hunting seasons in FY09-10, IDNR sharpshooters and Winnebago County Forest Preserve District personnel removed 595 deer from sites in 83 different sections, averaging 7.2 deer culled per square mile in those sections. Deer densities have been substantially lowered in CWD areas that have undergone multiple years of sharpshooting, and declining sharpshooting success rates reflect those trends. As a result, the number of deer taken by sharpshooters this winter was less than half the total during winter 2006-07, with comparable effort expended. However, the importance of sharpshooting as part of IDNR's CWD management program cannot be overemphasized, as sharpshooters accounted for 20 of the 37 (54%) CWD-positive deer identified this year (Figure 8).

Table 4. Number of CWD-positive deer identified in each county by year.

	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	Total
Boone	9	25	13	15	13	11	9	14	109
DeKalb	0	4	1	5	6	8	4	3	31
LaSalle	0	0	0	0	1	0	0	0	1
McHenry	2	2	4	4	4	0	4	3	23
Ogle	0	0	0	2	0	0	1	0	3
Stephenson	0	0	0	0	0	1	0	1	2
Winnebago	3	20	13	25	18	18	12	16	125
Total	14	51	31	51	42	38	30	37	294

Figure 8. Number of CWD samples tested and number of positives identified by sampling source during FY2009-10.



Appendix A. Usable CWD samples taken by county in Illinois during the 2009-2010 sampling season. Numbers in parentheses reflect the number of CWD-positive deer identified.

County	Check Stations	Drop-off Stations/ Meat Processors	Agency Culling	Special Permits ¹	Roadkill/ Incidental	Suspect	Total
ADAMS		15					15
ALEXANDER		14					14
BOND		1					1
BOONE	44 (5)	24 (1)	117 (7)		3	1 (1)	189 (14)
BROWN	1	17					18
BUREAU	1	8					9
CALHOUN		51					51
CARROLL	6	28					34
CASS		4					4
CHAMPAIGN		4				1	5
CHRISTIAN		11					11
CLARK		54					54
CLAY		143					143
CLINTON		1					1
COLES		44					44
COOK		6		177		2	185
CRAWFORD		123					123
CUMBERLAND		11					11
DEKALB	102 (3)	10	78		2	1	193 (3)
DEWITT		25					25
DOUGLAS		7					7
DUPAGE		7		105			112
EDGAR		10					10
EFFINGHAM		50					50
FAYETTE		33					33
FORD		9					9
FRANKLIN		46					46
FULTON		8					8
GREENE		84					84
GRUNDY	214	19					233
HAMILTON		17					17
HANCOCK		55					55
HARDIN		13					13
HENDERSON		1					1
HENRY						1	1
IROQUOIS		9					9
JACKSON		91				1	92
JASPER		22					22
JEFFERSON		118					118
JERSEY		44					44
JO DAVIESS	26	154		16	4	1	201
JOHNSON		115					115
KANE	17	41	4				62
KANKAKEE		3					3
KENDALL		6					6
KNOX		7				1	8
LAKE		15		20			35
LASALLE	619	37			3	1	660
LAWRENCE		32					32

Appendix A cont'd.

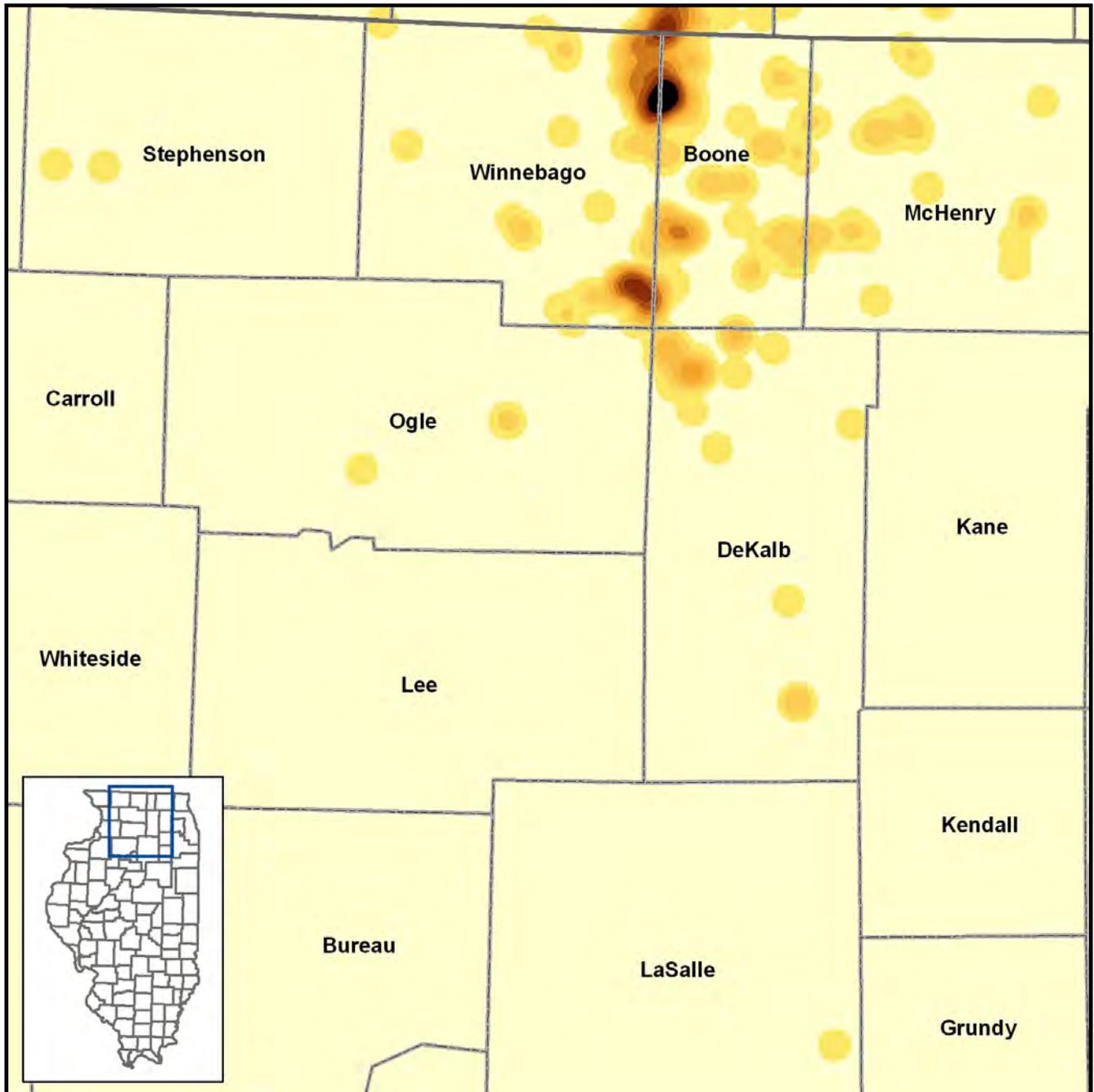
County	Check Stations	Drop-off Stations/ Meat Processors	Agency Culling	Special Permits ¹	Roadkill/ Incidental	Suspect	Total
LEE	1	62			2		65
LIVINGSTON		63					63
LOGAN		13					13
MACON		54					54
MACOUPIN		11					11
MADISON		4					4
MARION		21					21
MARSHALL		2					2
MASON		2					2
MASSAC		16					16
MCDONOUGH		133					133
MCHENRY	189 (1)	47 (1)	139 (1)				375 (3)
MCLEAN		44					44
MENARD		5					5
MERCER		1					1
MONROE		5					5
MONTGOMERY		2					2
MORGAN		1					1
MOULTRIE		26					26
OGLE	550	20	34		4	1	609
PEORIA		5					5
PERRY		175					175
PIATT		57					57
PIKE		130					130
POPE		39					39
PULASKI		25					25
PUTNAM		2					2
RANDOLPH		45					45
RICHLAND		19					19
SALINE		10					10
SANGAMON		22					22
SCHUYLER		3					3
SCOTT		5					5
SHELBY		60					60
ST CLAIR		26					26
STEPHENSON	446 (1)	51	18		2	2	519 (1)
UNION		144					144
VERMILLION		2					2
WABASH		1					1
WARREN		8					8
WASHINGTON		34					34
WAYNE		92					92
WHITE		5					5
WILL		19				1	20
WILLIAMSON		102					102
WINNEBAGO	245 (4)	56	158 (9)	46 (3)	7		512 (16)
WOODFORD		4					4
TOTALS	2461 (14)	3320 (2)	548 (17)	364 (3)	27	14 (1)	6734 (37)

¹ Special permits include urban Deer Population Control Permits, nuisance Deer Removal Permits, and Scientific Permits.

Appendix B. Summary of CWD-positive Illinois deer collected during FY09-10.

Date Collected	County	Township, Range, Section	Sex	Age	Collection Method
11/15/09	MCHENRY	346N 6E S10	Male	Adult	Hunting
11/16/09	BOONE	345N 3E S9	Male	1	Hunting
11/20/09	MCHENRY	344N 5E S26	Male	3	Hunting
11/20/09	STEPHENSON	427N 5E S24	Male	2	Hunting
11/20/09	WINNEBAGO	346N 2E S12	Male	3	Hunting
11/21/09	BOONE	346N 3E S6	Female	1	Hunting
11/21/09	BOONE	343N 4E S2	Male	2	Hunting
11/21/09	BOONE	346N 3E S33	Male	1	Hunting
11/21/09	DEKALB	342N 3E S8	Male	2	Hunting
11/21/09	WINNEBAGO	345N 1E S14	Male	1	Hunting
11/22/09	DEKALB	342N 3E S8	Female	1	Hunting
12/3/09	BOONE	345N 3E S7	Female	1	Hunting
12/3/09	WINNEBAGO	346N 2E S11	Female	2	Hunting
12/5/09	BOONE	346N 4E S25	Female	Adult	Hunting
12/5/09	WINNEBAGO	345N 2E S12	Female	2	Hunting
12/6/09	DEKALB	342N 4E S6	Female	3	Hunting
1/18/10	WINNEBAGO	343N 2E S14	Male	5	DPCP
1/19/10	WINNEBAGO	343N 2E S15	Male	3	DPCP
1/25/10	WINNEBAGO	346N 2E S35	Female	3	Sharpshooting
1/27/10	BOONE	346N 3E S31	Male	3	Sharpshooting
1/27/10	BOONE	345N 4E S21	Male	1	Sharpshooting
1/27/10	BOONE	345N 4E S21	Female	2	Sharpshooting
1/27/10	WINNEBAGO	346N 2E S11	Male	1	Sharpshooting
2/1/10	WINNEBAGO	343N 2E S20	Male	1	DPCP
2/3/10	WINNEBAGO	345N 2E S1	Female	Fawn	Sharpshooting
2/10/10	WINNEBAGO	346N 2E S11	Female	2	Sharpshooting
2/10/10	WINNEBAGO	346N 2E S24	Male	1	Sharpshooting
2/17/10	WINNEBAGO	346N 2E S15	Male	Fawn	Sharpshooting
3/9/10	MCHENRY	345N 6E S16	Male	4	Sharpshooting
3/9/10	WINNEBAGO	345N 2E S1	Female	3	Sharpshooting
3/17/10	WINNEBAGO	346N 2E S11	Female	3	Sharpshooting
3/22/10	WINNEBAGO	343N 2E S14	Female	3	Sharpshooting
3/23/10	BOONE	344N 3E S28	Male	4	Sharpshooting
3/25/10	BOONE	343N 4E S1	Male	3	Sharpshooting
3/31/10	BOONE	344N 3E S29	Female	3	Sharpshooting
3/31/10	BOONE	344N 3E S28	Female	1	Sharpshooting
6/21/10	BOONE	346N 3E S30	Female	2	Suspect

Appendix C. Cumulative distribution and relative intensity of chronic wasting disease in northern Illinois. Darker areas represent larger numbers of positive deer identified.



Appendix D. Distribution of CWD in southern Wisconsin and northern Illinois as of June 30, 2010. Squares represent sections in which CWD has been detected.

