

**Illinois Chronic Wasting Disease:
2007-2008 Surveillance/Management Summary**



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Background:

Prior to July 1, 2007, Illinois Department of Natural Resources personnel had sampled more than 28,000 wild deer (*Odocoileus virginianus*), and identified 189 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. Both clusters were centered approximately on the Boone County-Winnebago County line. Outside of these clusters, disease distribution was primarily along riparian corridors to the east across Boone County, western McHenry County, and northern DeKalb County. Isolated, outlying CWD-positive deer had been identified in western Winnebago County, Ogle County, southern DeKalb County, and LaSalle County, defining the outer margins of known disease locations (Figure 1).

CWD Surveillance Activities During FY2007-2008:

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 (obex and retropharyngeal lymph nodes) 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 and special CWD hunting 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 the firearm deer season in seven counties considered high-risk for CWD (Stephenson, Winnebago, Boone, McHenry, Ogle, DeKalb, and Kane [west of Highway 47]), with an additional two counties offering voluntary check stations (LaSalle and Grundy). The voluntary check stations were offered because CWD was discovered in a suspect deer in eastern LaSalle County during the summer of 2007, after deer season rules governing check stations had already been promulgated. Seven counties were open to the special CWD season (Winnebago, Boone, McHenry, Ogle, DeKalb, LaSalle, and Grundy); all having mandatory check stations. Tissue samples were taken by IDNR staff from all willing hunters throughout each season (Firearm = November 16-18 and November 29-December 2, 2007; Special CWD = January 18-20, 2008), with a target goal of at least 500 samples per county. A sample size of 500 allows 99% confidence of detecting a 1% disease prevalence rate. Samples were collected from fawns as well as adult deer. Harvest location was recorded to the nearest square mile according to the government land survey (Township, Range, and Section). Additional samples were taken by Illinois Natural History Survey and University of Illinois

Fig. 1. Distribution of CWD-infected deer identified in Illinois prior to July 1, 2007.

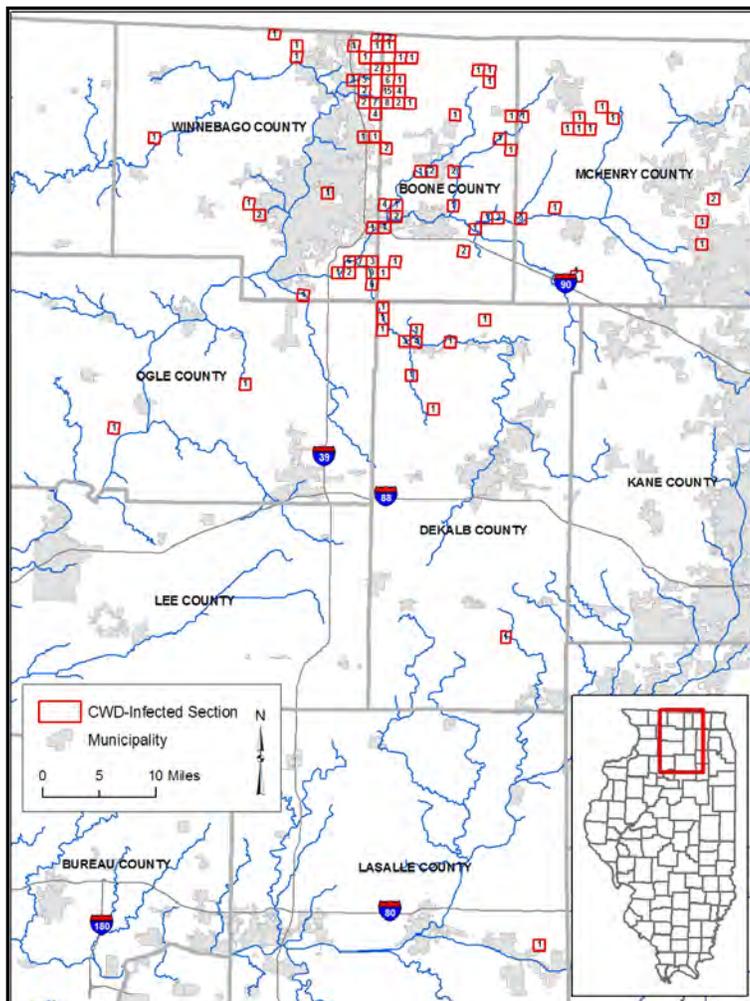
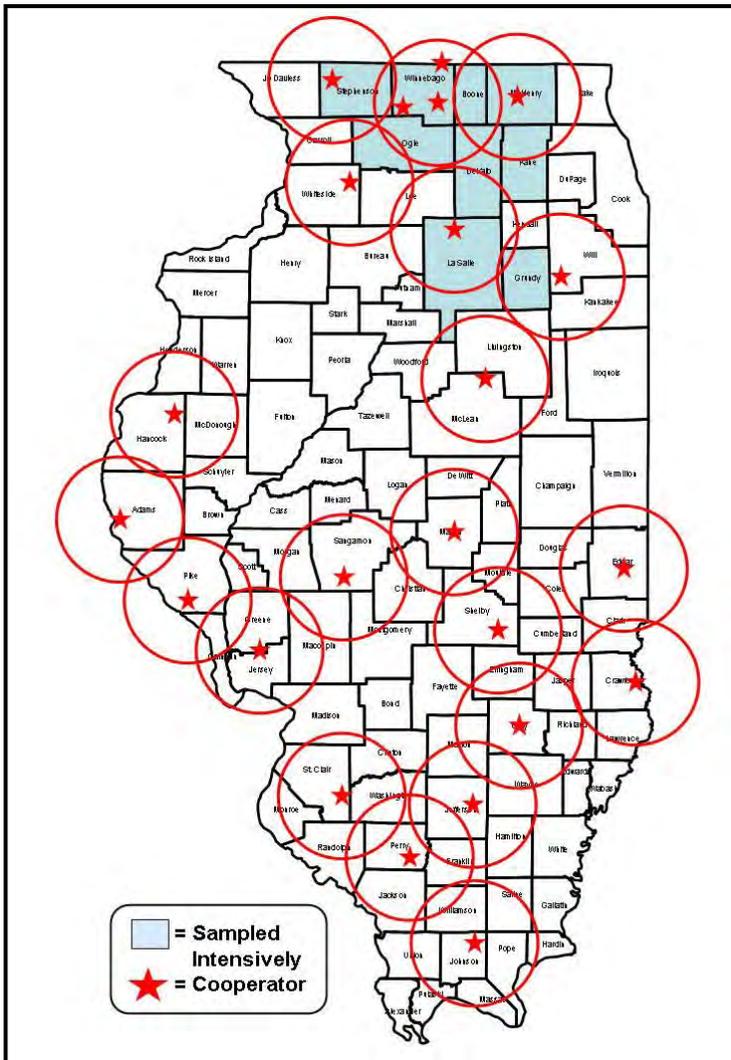


Fig. 2. Illinois counties intensively sampled for CWD during 2007 hunting seasons (shaded), and locations/estimated service area of cooperating meat lockers for CWD sampling.



personnel in conjunction with special archery and firearm hunts at Allerton Park in Piatt County. A total of 3,602 usable samples were collected at check stations, with 16 CWD-positive individuals identified from four counties (Boone [5], DeKalb [6], Stephenson [1], and Winnebago [4]). This was the first instance of CWD discovered in Stephenson County. The Stephenson County positive was located ~24-25 miles from the nearest location in Illinois where CWD had been previously identified, and about 28 miles from the nearest known positive location in southwest Wisconsin. Appendix A provides a tabulation of the number of usable samples actually taken in each county via all collection methods.

Refrigerated sample collection stations were established in select counties in northern Illinois to allow deer hunters during any season to donate samples for CWD surveillance. Stations were “self-serve” – 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. Sampling stations were available in Boone, Lake, McHenry, Ogle, and Winnebago counties. 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. Forty-five (45) usable samples were taken (Appendix A), yielding 1 CWD-positive deer from Boone County.

To accomplish 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. Some gaps remained unsampled, particularly in those parts of the state 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. Usable samples were taken from 2,372 deer in 91 counties (\bar{x} =26, range = 1-227), with 1 positive deer detected from Winnebago County.

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 included (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 590 usable CWD samples from northeastern Illinois counties not open to firearm deer hunting (Cook, Lake, DuPage), as well as from properties in Winnebago, Boone, JoDaviess, Ogle, LaSalle, Grundy, and Kane counties (Appendix A). Four CWD-positive deer were identified from forest preserve district properties in southeast 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 27 deer in 17 counties (Appendix A). One positive deer was found in Winnebago County.

Surveillance from Post-Hunting Season Sharpshooting. Sharpshooting was conducted during the period January 15, 2008 - March 31, 2008 by IDNR Wildlife Biologists and IDNR Conservation Police Officers. Sharpshooting locations were confined to those parts of Boone, DeKalb, LaSalle, McHenry, Ogle, Stephenson, and Winnebago counties from which 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 1,101 usable samples from the seven affected counties (Appendix A). Fifteen positive deer were found in Boone (5), DeKalb (2), and Winnebago (8) counties.

Discussion of Surveillance Results to Date. A total of 7,758 usable samples were collected statewide during FY07-08, resulting in the identification of 38 CWD-positive deer from four counties: Boone (11), DeKalb (8), Stephenson (1), and Winnebago (18). The number of CWD-positive deer identified in previous years has varied from 14 to 51 (Figure 3).

Fewer positive deer in outlying areas (away from the disease core) were identified this year than in the previous four years. The only significant ‘outlier’ was a 2.5 year old female taken by a hunter during the first firearm season in Stephenson County west of Freeport. No positive deer were found in McHenry, Ogle, LaSalle, or southern DeKalb counties in areas where CWD has previously been documented. Most positives identified during the year (36 of 38) occurred in the two most concentrated disease focal areas, with 15 positives being found in the area northeast of Rockford along the Boone-Winnebago County line, and 21 positives identified southeast of Rockford near the junction of Boone, Winnebago, and DeKalb counties (Figure 4).

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

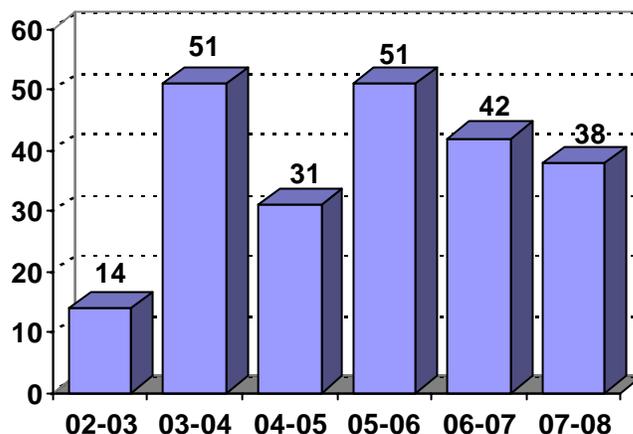
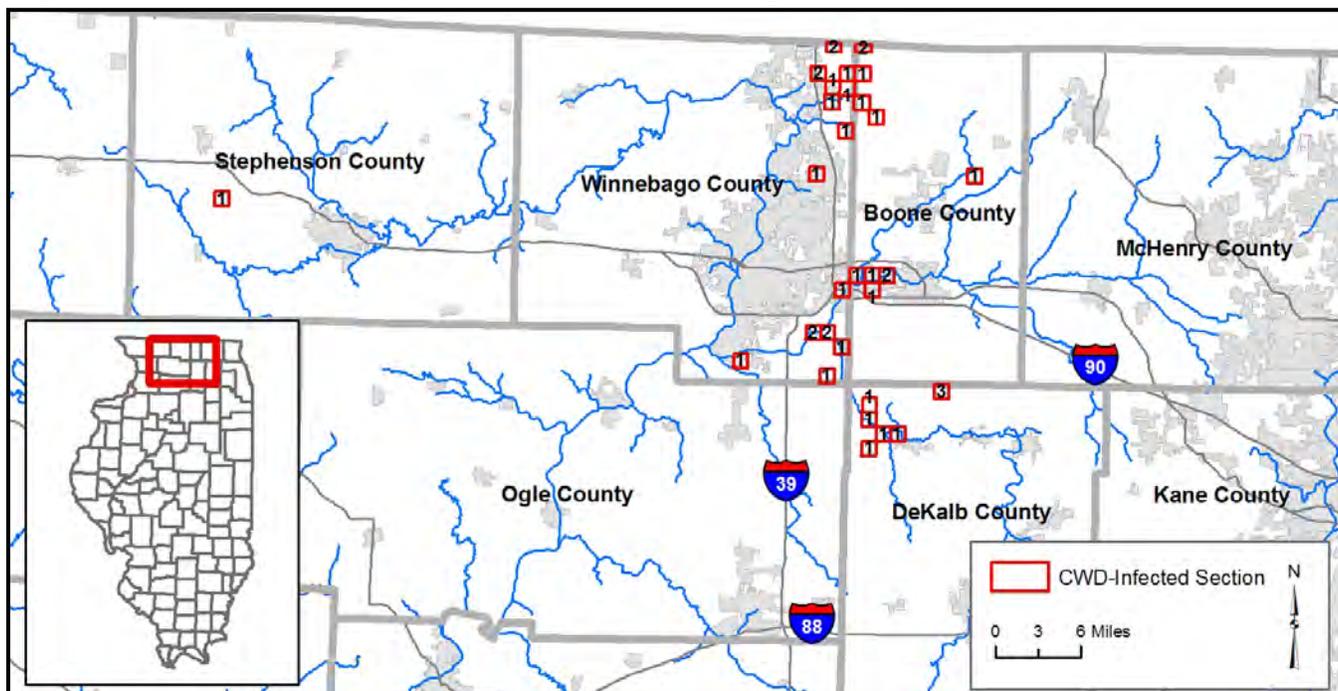


Figure 4. Distribution of CWD-positive deer identified during FY07-08.



Disease prevalence rates were calculated for the 7 counties in which CWD has been identified from random surveillance data collected during the deer hunting seasons (Table 1). Since no positives were found this year in three of these counties, 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 6.1% (\pm 4.7, 95% confidence interval) in Boone County. As in previous years, no CWD-positive fawns were identified by sampling during the hunting season.

Table 1. County CWD prevalence estimates in northern Illinois for the period 1 July 2007 through 30 June 2008. Estimates are based only on samples collected from hunter-harvested deer.¹

County	Deer Age	# of Samples²	# of Positives²	Percent Positive	95% Confidence Interval (+/-)
Boone	Adults only	98	6	6.1%	4.7%
	Fawns only	44	0	0.0%	-
	All deer	142	6	4.2%	3.3%
DeKalb	Adults only	182	6	3.3%	2.6%
	Fawns only	92	0	0.0%	-
	All deer	274	6	2.2%	1.7%
LaSalle	Adults only	211	0	0.0%	-
	Fawns only	114	0	0.0%	-
	All deer	327	0	0.0%	-
McHenry	Adults only	382	0	0.0%	-
	Fawns only	134	0	0.0%	-
	All deer	516	0	0.0%	-
Ogle	Adults only	811	0	0.0%	-
	Fawns only	363	0	0.0%	-
	All deer	1174	0	0.0%	-
Stephenson	Adults only	523	1	0.2%	0.4%
	Fawns only	13	0	0.0%	-
	All deer	537	1	0.2%	0.4%
Winnebago	Adults only	375	5	1.3%	1.2%
	Fawns only	135	0	0.0%	-
	All deer	512	5	1.0%	0.9%

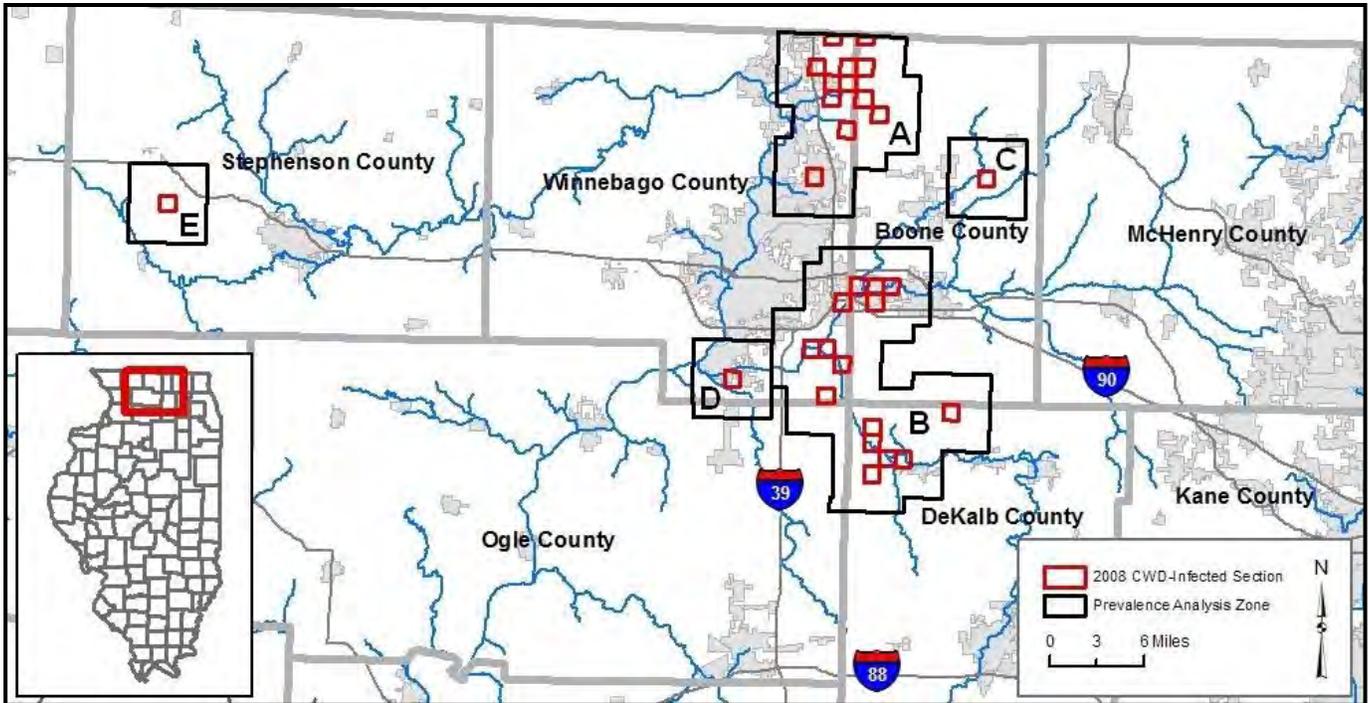
¹ Estimates derived from hunter-harvested deer represent populations throughout the entire county.

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.

Disease prevalence rates were also calculated for discrete locales within Illinois' known CWD area by limiting data analyses to those random samples (all methods except suspect animal surveillance) falling within a two-section buffer around each CWD-positive section identified during FY07-08. Five areas were identified using this buffering approach (Figure 5). Calculated prevalence rates (with 95% confidence intervals) for these areas are presented in Table 2.

Zones C, D, and E each consisted of a single hunter-harvested positive, more or less isolated from the 2 "core areas" of disease observed in 2007-2008. Generally small sample sizes preclude a high degree of precision for prevalence estimates, so caution should be used in interpreting the results. Zone E (western Stephenson County) contained the first positive occurring in Stephenson County. Forty-one deer were taken by agency sharpshooters in this zone after hunting season to boost the sample size of tested deer, with no additional positives found.

Figure 5. Illinois zones in which localized CWD prevalence estimates were made during FY07-08.



Zone A consists of the original disease core area first identified in 2002, located northeast of Rockford along the Boone-Winnebago county line. This zone has an estimated CWD prevalence rate in adult deer of 6.9% (\pm 3.6), comparable to rates observed in the area in past years. A single fawn in this zone was identified with the disease from 98 fawns tested (1.0% \pm 2.0 prevalence).

Zone B represents the other known primary disease focus in northern Illinois, also located along the Boone-Winnebago county line, but southeast of Rockford and extending into northwest DeKalb County. This area had an estimated adult prevalence rate of 6.4% (\pm 2.8), and also produced a single positive fawn from 184 fawns tested (0.5% \pm 1.1 prevalence).

Table 2. Results of random CWD surveillance in known CWD areas for the period 1 July 2007 through 30 June 2008. Zones are those areas defined in Figure 5.

Zone	Area (sq.mi.)	Age Class	Number of Samples ¹	Number of Positives	Percent Positive	95% Confidence Interval (+/-)
A (Rockford NE)	87	Fawn	98	1	1.0%	2.0%
		Adult	189	13	6.9%	3.6%
		Total	288	14	4.9%	2.5%
B (Rockford SE)	152	Fawn	184	1	0.5%	1.1%
		Adult	298	19	6.4%	2.8%
		Total	482	20	4.1%	1.8%
C (Boone Co. East)	25	Fawn	15	0	0.0%	0.0%
		Adult	18	1	5.6%	10.6%
		Total	33	1	3.0%	5.8%
D (South of Rockford)	25	Fawn	30	0	0.0%	0.0%
		Adult	61	1	1.6%	3.2%
		Total	91	1	1.1%	2.1%
E (Stephenson Co.)	25	Fawn	15	0	0.0%	0.0%
		Adult	50	1	2.0%	3.9%
		Total	65	1	1.5%	3.0%
All Units Combined:						
	314	Fawn	342	2	0.6%	0.8%
		Adult	616	35	5.7%	1.8%
		Total	958	37	3.9%	1.2%

¹ Summing figures for adults and fawns may not equal the "Total" because of individuals for which no age was identified.

Experimental CWD Management Activities During FY2007-2008:

Use of regulated hunting for herd control in CWD-affected areas. Liberal regulations remained in effect for the CWD counties, but harvest has remained relatively constant since the discovery of CWD in fall 2002. During gun seasons (regular firearm, muzzleloader, and youth seasons), permit quotas far exceed the number of permits sold, so anyone could purchase additional permits if desired. The special CWD season (January 18-20, 2008) was offered in Winnebago, Boone, McHenry, Ogle, DeKalb, LaSalle, and Grundy counties. Although CWD has not been found in Grundy County, it was included in the season because the LaSalle County positive found in FY06-07 was approximately one mile from its border. The CWD season regulations allowed the use of unfilled deer tags from any of the previously-held seasons, as well as unlimited over-the-counter sales of permits, and successful hunters that allowed their deer to be tested for CWD were given replacement permits free of charge if they wished to continue hunting. The archery deer season (October 1, 2007- January 17, 2008; closed during the 7 days of the regular firearm season) consisted of 102 days during which no limit on antlerless harvest was in effect. In the original 4-county area (Winnebago, Boone, McHenry, and DeKalb), total deer harvest numbered 3341, compared to 3424; 3767; 3473; 3561; and 3247 in the previous 5 years. It is encouraging to note that hunters have been able to maintain fairly stable harvest levels in spite of indications that deer populations in the four counties have declined during this period. Appendix E presents trends in deer-vehicle collision rates (an index to deer population size) in those counties during the past several years.

Sharpshooting in CWD “hotspots”. 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, 2008.

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. Obex and retropharyngeal lymph nodes 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 2007-2008 provided excellent census conditions. Figure 6 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 ranged from $<0.1/\text{mi}^2$ (CMU C - Central Rockford) to $15.4/\text{mi}^2$ (CMU A – Western Winnebago County), with a mean density of $6.2/\text{mi}^2$.

CWD management units were delineated by including all known CWD-positive sections (all years), plus a 2-section (1 section = $\sim 1\text{mi}^2$) buffer around each. Some larger units were arbitrarily divided into more manageable sizes. Sharpshooting activities in the CWD zones were generally limited to this defined area. A total of 1,142 deer were removed from the CMUs (Table 3), or about 19.9% of the deer counted via aerial surveys. For comparison, sharpshooters removed from 1002 to 1358 deer during the previous four winters. Higher numbers of deer were taken from units in which management was judged most critical (along the Winnebago-Boone county line; in NE Boone-NW McHenry counties; and in NW DeKalb County [units D, E, F, and J] because of well-established disease foci or because of significant recent CWD activity. In these areas, the proportion of deer removed ranged from 22% to 27% of the deer counted. CMUs with limited deer numbers, or without recent findings of positive deer, were culled less extensively than the more critical areas. In newly-found CWD areas consisting of a single positive deer,

Table 3. Deer census and sharpshooting results by management unit in northern Illinois CWD area during winter 2007-2008. Management units are those depicted in Figure 5.

Management Unit	Area (Sq.Mi.)	# Deer Counted	Density (Deer/Sq. Mi.)	# Deer Removed	% Deer Removed (Removed/Counted)
A - Western Winnebago	24.59	378	15.4	23	6.1%
B - West Rockford	30.78	30	1.0	14	46.7%
C - Central Rockford	24.92	1	0.0	0	0.0%
D - Northern Boone/Winnebago	140.17	961	6.9	262	27.3%
E - Southern Boone/Winnebago	145.98	1347	9.2	339	25.2%
F - Northern Boone/McHenry	153.57	427	2.8	103	24.1%
G - Southern Boone/McHenry	86.93	338	3.9	65	19.2%
H - Southwest McHenry	24.81	89	3.6	16	18.0%
I - Central McHenry	48.03	296	6.2	47	15.9%
J - Northwest DeKalb	124.20	533	4.3	117	22.0%
K - Southeast DeKalb	24.18	93	3.8	30	32.3%
L - Eastern Ogle	21.95	215	9.8	6	2.8%
M - Ogle/Castle Rock	28.33	430	15.2	39	9.1%
N - Eastern LaSalle	25.18	345	13.7	40	11.6%
O - Western Stephenson	25.05	248	9.9	41	16.5%
TOTAL	928.67	5731	6.2	1142	19.9%

sharpshooting was used as a method to gather additional surveillance data to characterize the area, rather than a serious attempt at herd reduction.

Deer removed by sharpshooting consisted of 40.7% fawns and 59.3% adults. Sex ratios were 1 male to 1.56 females. County totals were as follows: Boone (243), DeKalb (143), LaSalle (54), McHenry (232), Ogle (82), Stephenson (41), and Winnebago (477). Note that these county totals contain some deer that fell outside the CMU boundaries described above. Nineteen CWD-positive deer were removed by sharpshooting, representing 50% of the total number of CWD-positives identified by all surveillance methods during FY07-08 (Figure 7).

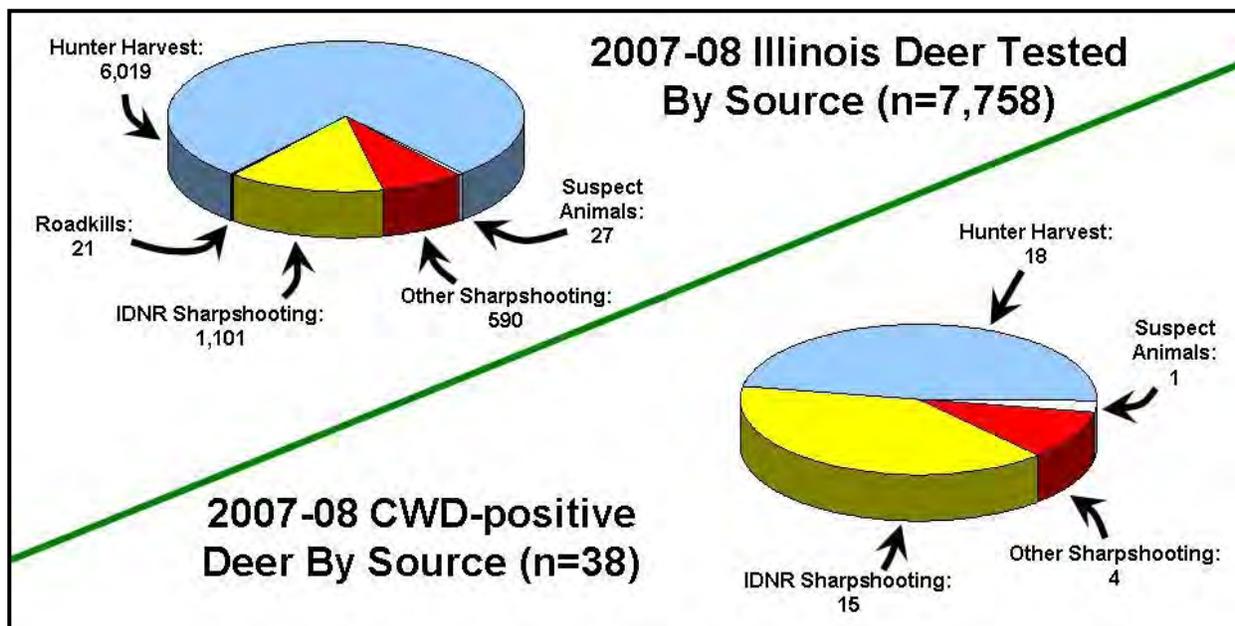


Figure 7. Number of CWD samples tested and number of positives identified by sampling source during FY2007-08.

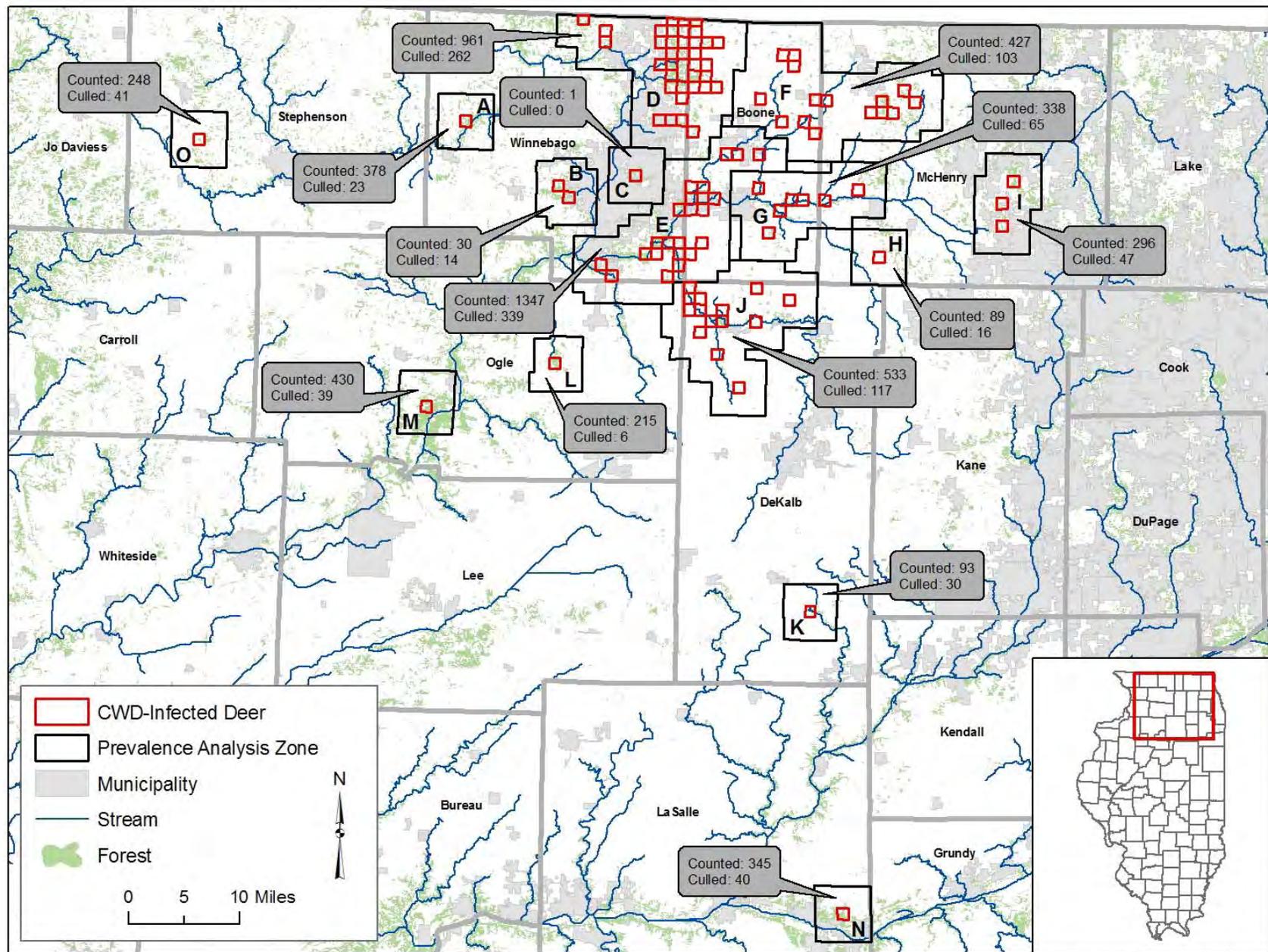


Figure 6. Number of deer counted during aerial censuses and removed by sharpshooters in CWD-infected areas of northern Illinois during winter 2007-2008.

Summary

During FY07-08, a total of 7,758 usable samples from wild Illinois white-tailed deer were tested for chronic wasting disease, and 38 CWD-positive deer were identified. Most CWD-positive deer originated from the two primary disease foci to the northeast and southeast of Rockford along the Winnebago-Boone county line. The first occurrence of a positive in Stephenson County was identified, more than 20 miles from the closest known positive locations in both Illinois and Wisconsin. Subsequent follow-up surveillance using sharpshooting found no additional positive deer around this location. No positive deer were found in several counties in which CWD has been previously identified: none were found in McHenry County, Ogle County, or LaSalle County; as well as the southern portion of DeKalb County. Table 4 presents a summary of all positive locations identified to date by county of origin.

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

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	Total
Winnebago	3	20	13	25	18	18	97
Boone	9	25	13	15	13	11	86
McHenry	2	2	4	4	4	0	16
DeKalb	0	4	1	5	6	8	24
Ogle	0	0	0	2	0	0	2
LaSalle	0	0	0	0	1	0	1
Stephenson	0	0	0	0	0	1	1
Total	14	51	31	51	42	38	227

As our knowledge of the Illinois range of CWD has increased, so has the target area in which we attempt to manage the disease using sharpshooting after the hunting seasons. As a result, it has become increasingly difficult to remove significant numbers of deer throughout the known range, so sharpshooters have focused on the more heavily infected areas that harbor concentrations of late-winter deer. Although identified CWD Management Units in 2007-2008 comprised more than 900 square miles, IDNR and Winnebago County Forest Preserve District Personnel actually only removed deer from sites in 108 different sections, averaging 11.6 deer culled per square mile in those sections.

As planned, IDNR staff are working with CWD researchers at the University of Illinois to conduct a 5-year evaluation of the ongoing CWD surveillance/management program. That evaluation is not yet completed, but in the interim as we await results we will continue surveillance and management efforts without making significant changes to the program.

A few changes are slated for the upcoming year:

1. In an effort to be as cost-effective as possible, the Special CWD Hunting Season will be limited to those counties which have (or had) established foci of disease: Winnebago, Boone, McHenry, and DeKalb. Peripheral CWD counties will be included in the regular Late-Winter Season, which does not require a manned check station. This will save substantially in costs/personnel during the CWD Season, yet will not significantly impact the number of samples collected, as CWD Season harvest is a minor source of samples because of relatively low harvest. All of the counties will continue to have mandatory harvest registration at manned deer check stations during the regular firearm deer seasons, which are the major source of hunter-harvested samples.
2. We will not sample hunter-harvested fawns taken before January 1 for CWD testing, but will continue testing fawns taken after that date. In the past, we have tested fawns taken during the regular firearm deer seasons in a number of counties, but to date have not identified any positives during that time frame. In the seven counties in which we have found CWD, we have tested 4,652 fawns during the past several years and identified 21 positives. All positive fawns identified to date were taken after the first of the year.

Appendix A. Usable CWD samples taken by county in Illinois during the 2007-2008 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			23					23
BOONE	123 (5)	13 (1)	6	242 (5)	1	1	1	387 (11)
BROWN			5					5
BUREAU			3					3
CALHOUN			53					53
CARROLL		1	8				1	10
CASS			9					9
CHAMPAIGN			2					2
CHRISTIAN			8					8
CLARK			51					51
CLAY			227					227
CLINTON			3					3
COLES			1					1
COOK			2		93		3	98
CRAWFORD			127					127
CUMBERLAND			4					4
DEKALB	273 (6)		1	143 (2)		1	1	419 (8)
DEWITT			23					23
DOUGLAS			2					2
DUPAGE					102		1	103
EDGAR			10				1	11
EDWARDS			2					2
EFFINGHAM			25					25
FAYETTE			11					11
FORD			7					7
FRANKLIN			52					52
FULTON			7					7
GREENE			67					67
GRUNDY	150	11	30		6	1	1	199
HAMILTON			8					8
HANCOCK			52					52
HARDIN			4					4
HENDERSON			2					2
HENRY							1	1
IROQUOIS			6					6
JACKSON			78					78
JASPER			21					21
JEFFERSON		2	32					34
JERSEY			66					66
JODAVIESS		1	52		55		4	112
JOHNSON			53					53
KANE	38	2			7	1		48
KANKAKEE	1		6					7
KENDALL			2					2
KNOX			2					2
LAKE		2	7		157			166
LASALLE	319		8	40	14		3	384
LAWRENCE			14					14
LEE	1		10					11
LIVINGSTON			90					90
LOGAN			2					2

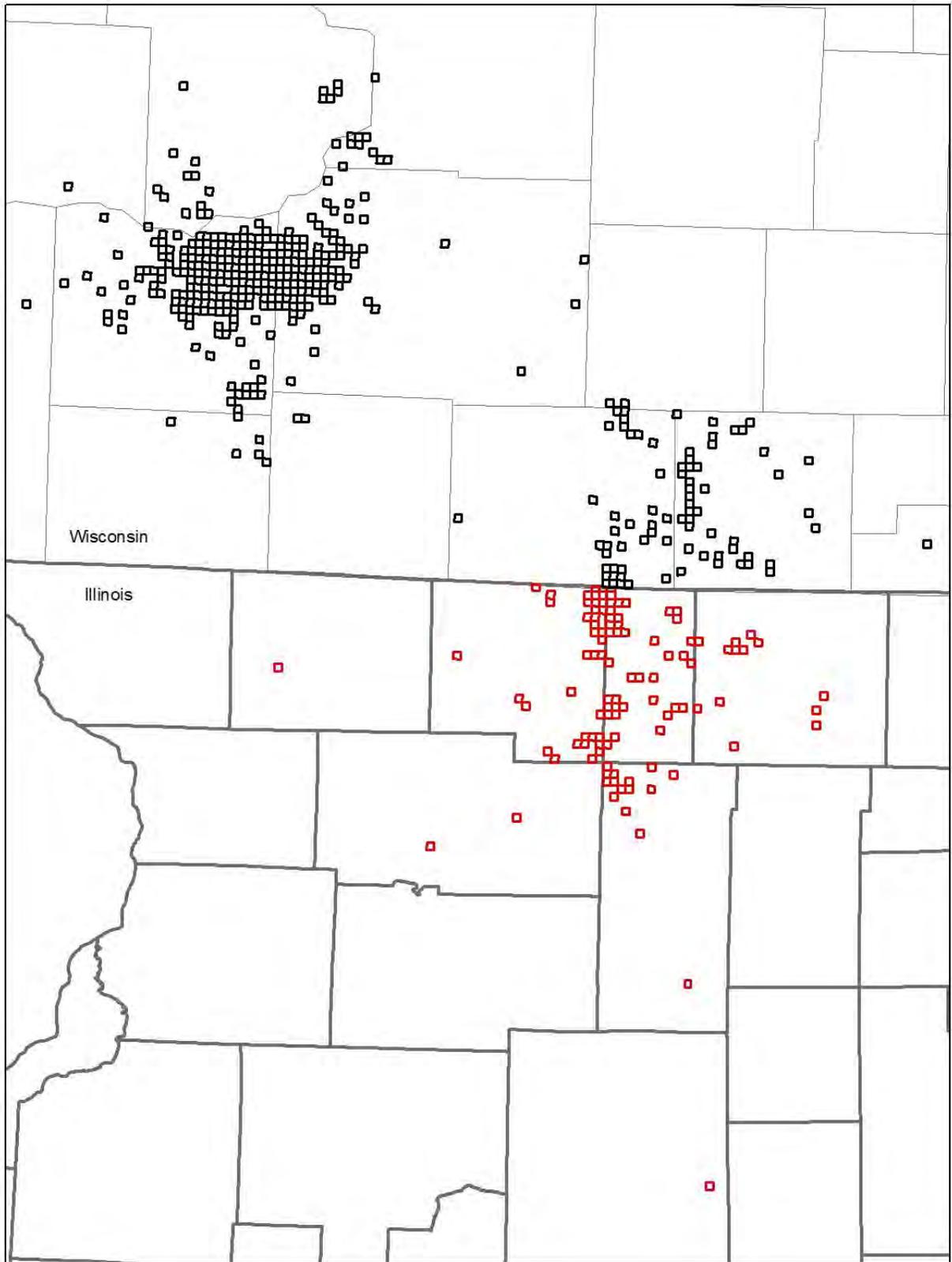
Appendix A cont'd.

County	Check Stations	Drop-off Stations	Meat Processors	Agency Culling	Special Permits ¹	Roadkill/ Incidental	Suspect	Total
MACON			62					62
MACOUPIN			16					16
MADISON			10					10
MARION			18					18
MARSHALL			3					3
MASON			1					1
MASSAC			9					9
MCDONOUGH			108					108
MCHENRY	477	6	33	232		4		752
MCLEAN			42					42
MENARD			4					4
MERCER							1	1
MONROE			2					2
MONTGOMERY			5					5
MORGAN			7					7
MOULTRIE			19					19
OGLE	1165	3	6	81	1	4	3	1263
PERRY			160					160
PIATT	60		2					62
PIKE			81					81
POPE			14					14
PULASKI			5					5
PUTNAM			1					1
RANDOLPH			25					25
RICHLAND			19					19
ROCK ISLAND							1	1
SALINE			12					12
SANGAMON			13					13
SCHUYLER			2					2
SCOTT			7					7
SHELBY			73					73
STCLAIR			34					34
STEPHENSON	509 (1)		28	41		3	1	582 (1)
TAZEWELL			2					2
UNION			12					12
VERMILION			3					3
WARREN			3					3
WASHINGTON			23				1	24
WAYNE			62					62
WHITE			2					2
WHITESIDE			37					37
WILL			41					41
WILLIAMSON			59					59
WINNEBAGO	486 (4)	4	22 (1)	322 (8)	154 (4)	6	2 (1)	996 (18)
WOODFORD			1				1	2
TOTALS	3602 (16)	45 (1)	2372 (1)	1101 (15)	590 (4)	21	27 (1)	7758 (38)

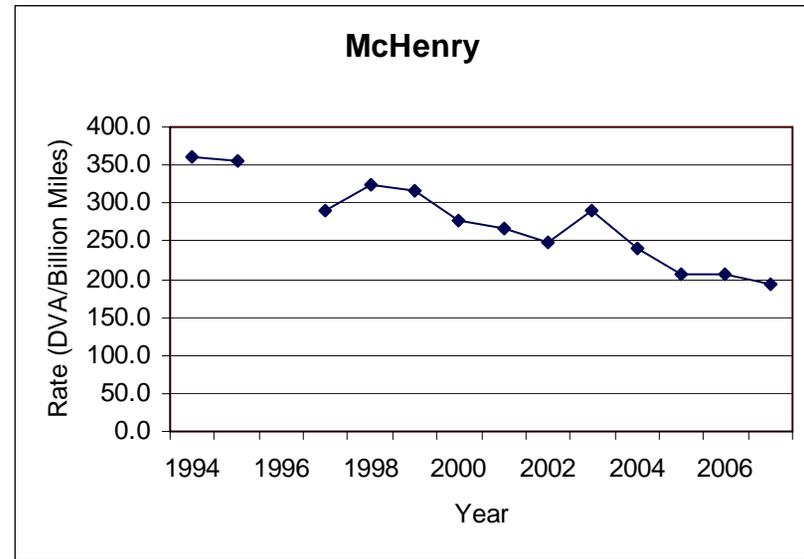
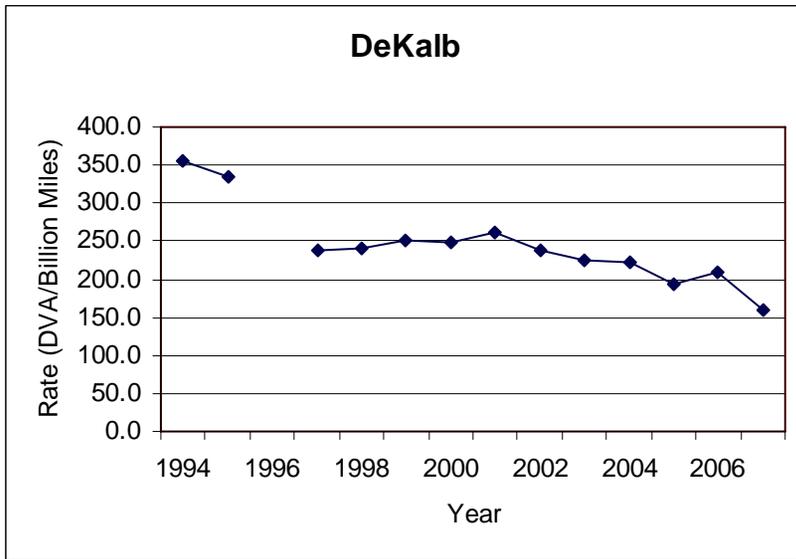
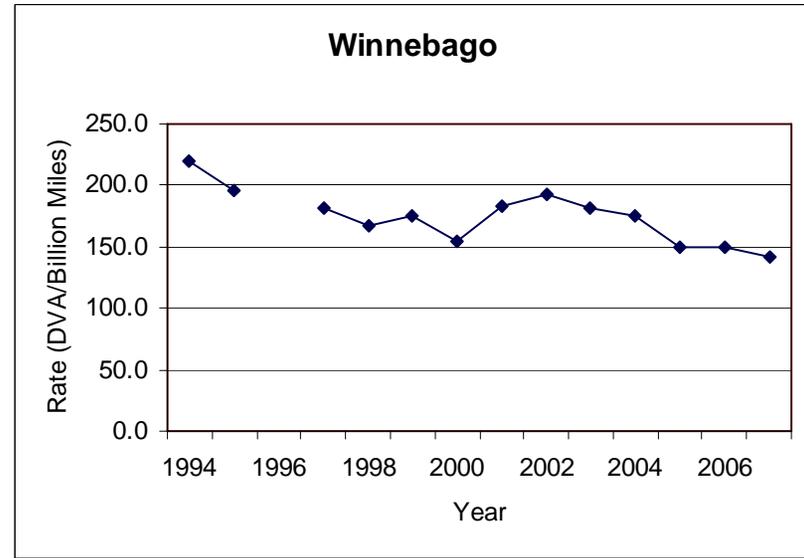
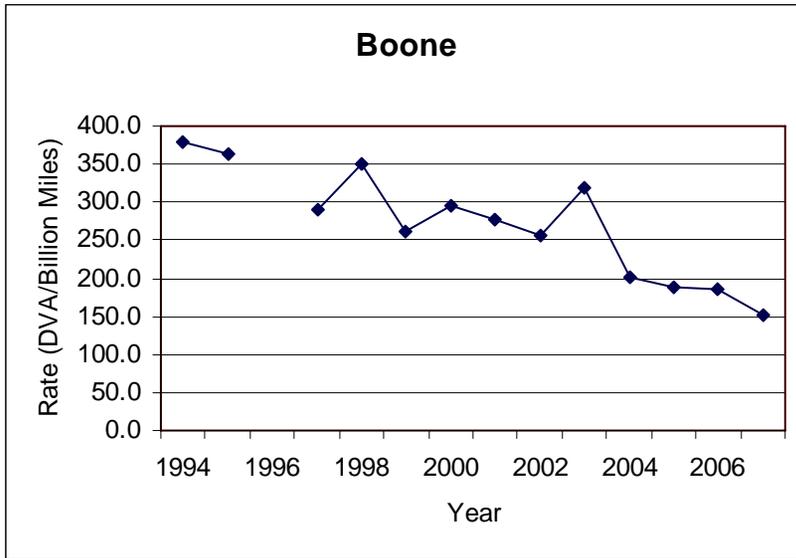
¹ Special permits include urban Deer Population Control Permits, nuisance Deer Removal Permits, and Scientific Permits.

Appendix B. Summary of CWD-positive Illinois deer collected during FY07-08.

Date Collected	County	Township, Range, Section	Sex	Age	Collection Method
10/6/07	Winnebago	346N 2E S26	Female	Unknown	Suspect
10/16/07	Boone	344N 3E S29	Male	1	Hunting
10/23/07	Winnebago	343N 2E S35	Male	Adult	Hunting
11/6/07	Winnebago	345N 2E S22	Male	1	Hunting
11/16/07	DeKalb	342N 3E S21	Male	3	Hunting
11/16/07	DeKalb	342N 4E S6	Male	3	Hunting
11/16/07	DeKalb	342N 4E S6	Male	2	Hunting
11/16/07	DeKalb	342N 3E S17	Female	3	Hunting
11/16/07	Boone	346N 3E S6	Female	1	Hunting
11/16/07	Winnebago	343N 1E S26	Male	1	Hunting
11/16/07	Winnebago	346N 2E S23	Male	2	Hunting
11/17/07	Stephenson	427N 6E S22	Female	2	Hunting
11/17/07	DeKalb	342N 4E S6	Female	3	Hunting
11/17/07	Boone	346N 3E S32	Male	3	Hunting
11/29/07	DeKalb	342N 3E S29	Female	3	Hunting
11/30/07	Winnebago	346N 2E S15	Female	5	Hunting
11/30/07	Boone	346N 3E S30	Male	3	Hunting
1/14/08	Winnebago	343N 2E S24	Female	2	Sharpshooting
1/18/08	Boone	346N 3E S6	Male	1	Hunting
1/18/08	Boone	346N 3E S18	Female	3	Hunting
1/21/08	Boone	344N 3E S28	Female	2	Sharpshooting
1/21/08	Winnebago	343N 2E S14	Male	3	Sharpshooting
1/21/08	Boone	344N 3E S30	Male	1	Sharpshooting
1/22/08	Winnebago	346N 2E S2	Male	1	Sharpshooting
1/22/08	Winnebago	344N 2E S36	Female	4	Sharpshooting
1/28/08	Boone	344N 3E S32	Female	2	Sharpshooting
2/4/08	Boone	344N 3E S28	Male	2	Sharpshooting
2/6/08	Winnebago	346N 2E S2	Female	4	Sharpshooting
2/11/08	Winnebago	346N 2E S15	Female	4	Sharpshooting
2/11/08	Winnebago	345N 2E S1	Female	2	Sharpshooting
2/14/08	Boone	345N 4E S21	Male	2	Sharpshooting
2/14/08	DeKalb	342N 3E S22	Male	3	Sharpshooting
2/14/08	DeKalb	342N 3E S8	Female	3	Sharpshooting
2/19/08	Winnebago	343N 2E S15	Female	3	Sharpshooting
2/19/08	Winnebago	343N 2E S15	Female	5	Sharpshooting
3/6/08	Winnebago	343N 2E S14	Male	Fawn	Sharpshooting
3/19/08	Winnebago	346N 2E S24	Female	Fawn	Sharpshooting
3/26/08	Winnebago	346N 2E S13	Female	2	Sharpshooting



Appendix D. Distribution of CWD in southern Wisconsin and northern Illinois as of June 30, 2008. Squares represent sections in which CWD has been detected.



Appendix E. Rates of deer-vehicle collisions (number of accidents per billion miles of vehicular traffic) as an index to deer population size in the four 'primary' CWD counties in northern Illinois.