Illinois Chronic Wasting Disease: 2016-2017 Surveillance and Management Report

(Project Period: July 1, 2016 - June 30, 2017)

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Executive Summary

First CWD positive: A suspect adult female deer from northwest Boone County was diagnosed with CWD in November 2002.

Total samples through June 30, 2017: 105,836+

Total positives through June 30, 2017: 685

Number of counties affected through 6/30/2017: 17 (Boone, Carroll, DeKalb, DuPage, Grundy, JoDaviess, Kane, Kankakee, Kendall, Lake, LaSalle, Livingston, McHenry, Ogle, Stephenson, Will, Winnebago).

General distribution through 6/30/2017: Total affected area (determined by a minimum convex polygon that includes all positives) is now about 9,000 mi^2. While overall prevalence remains low in JoDaviess and Stephenson counties, disease is firmly established and appears to be worsening, accounting for 21/75 (28%) of all positives identified this year. Prevalence is somewhat higher in some eastern counties (Table 4) of the range, but deer populations in those areas are smaller and habitat much more fragmented.

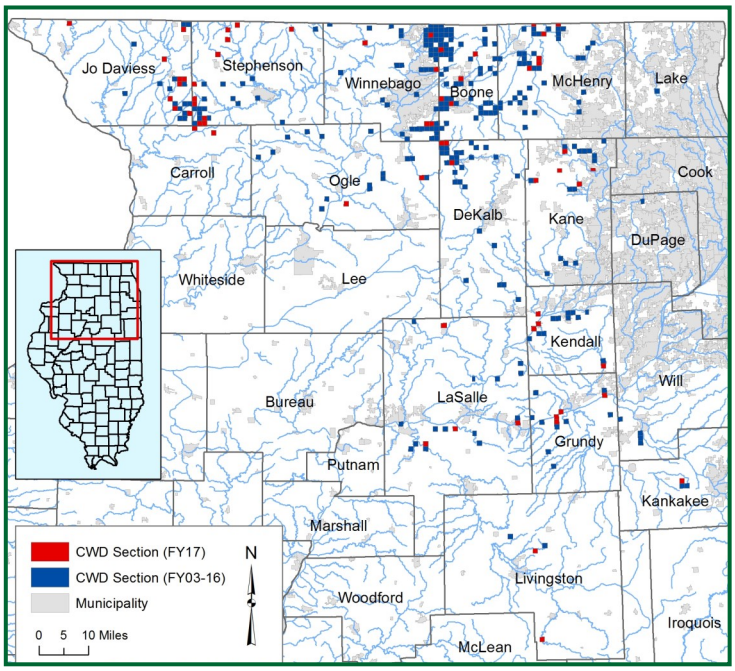


Figure 1. Distribution of all known CWD-infected deer identified in Illinois through June 30, 2017.

CWD Surveillance Protocols During FY2017 (July 1, 2016-June 30, 2017)

Testing: All CWD testing was conducted using immunohistochemistry (IHC) at the University of Illinois' Veterinary Diagnostic Laboratory in Urbana, Illinois. Samples were initially screened using retropharyngeal lymph nodes (RPLN), followed by confirmatory testing of recut RPLN tissue and obex.

Sampling of hunter-harvested deer: Three sources were used to provide tissue samples from adult deer harvested by hunters: (1) mandatory firearm deer check stations in high-risk counties in northern Illinois; (2) designated voluntary drop-off testing locations in northern Illinois; and (3) cooperating meat lockers/taxidermists statewide who collected heads/sample tissues for IDNR.

Surveillance by other agencies/individuals authorized by special permits: Recipients of special permits from IDNR authorizing lethal deer removals were required to collect CWD samples when working in high-risk CWD areas or in areas needing additional surveillance. These 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).

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 consistent with chronic wasting disease.

Surveillance from post-hunting season sharpshooting: Sharpshooting was conducted from mid-January through the end of March by trained IDNR staff. Sharpshooting was restricted to areas where CWD-infected deer had been identified (limited to lands within a 2-section buffer around known positive sections).

CWD Surveillance Results FY2017

Total number of CWD samples collected statewide: 7,840 (7,839 WT deer, 1 elk). Figure 2 depicts the geographic distribution of sampling effort; Figure 3 compares annual sample numbers; Figure 4 presents a comparison of the number of deer sampled and the number of positives identified by source; and Appendix A summarizes the samples collected/positives identified by county.

Number of usable samples collected: 7,800 deer; 1 elk

Number of CWD-positive deer identified: 75. Table 1 presents a comparison of the number of positive deer found each year by county.

Number of counties with positive deer: 14 — Boone (7), Carroll (2), DeKalb (3), Grundy (7), JoDaviess (10), Kane (5), Kankakee (2), Kendall (6), LaSalle (4), Livingston (2), McHenry (8), Ogle (2), Stephenson (11), Winnebago (6). For distribution of positive sections, see Figure 5.

Number of new CWD counties: 1 (Carroll)

CWD prevalence information for the known CWD area (17 counties; adult deer from hunting sources only) —

Average CWD prevalence (all adult deer): 1.17% (43/3686)
Average CWD prevalence (adult males): 1.60% (31/1943)
Average CWD prevalence (adult females): 0.69% (12/1743)

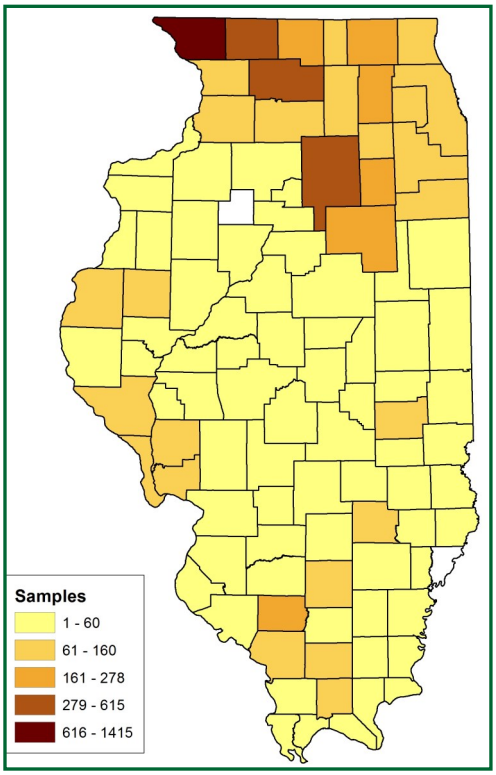


Figure 2. CWD sample distribution across Illinois during FY2017 (all sources).

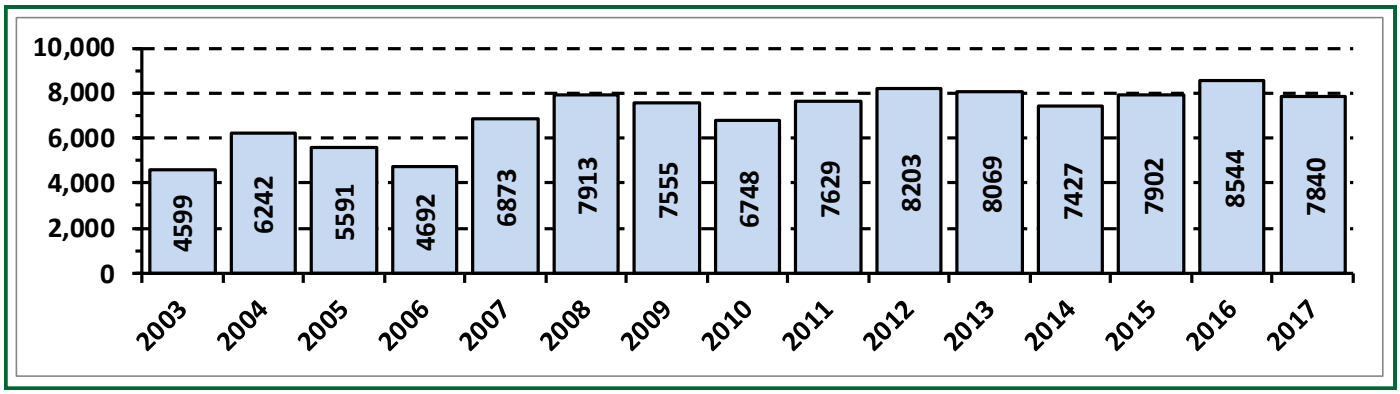


Figure 3. Number of CWD surveillance samples collected statewide each year during FY2003 through FY2017.

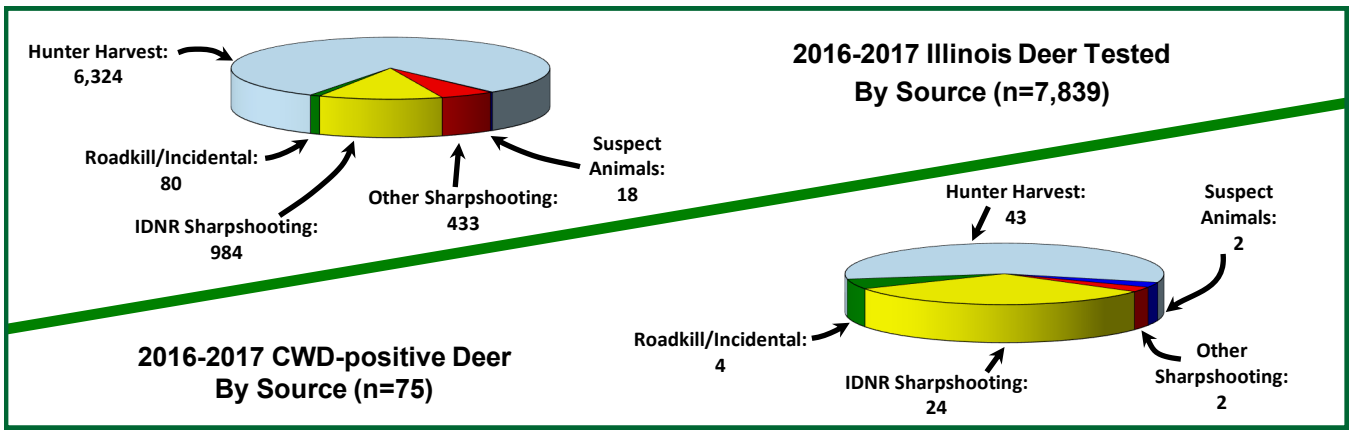


Figure 4. Number of CWD samples tested and number of positives identified by sampling source during FY2017.
Note: Number tested includes all samples submitted for wild deer, regardless of whether a valid test result was obtained.

Table 1. Number of CWD-positive deer identified in each county by sampling year.

Fiscal Year→	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	Total
Boone	9	25	13	15	13	11	9	14	7	5	4	5	6	11	7	154
Carroll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2
DeKalb	-	4	1	5	6	8	4	3	7	5	7	8	8	3	3	72
DuPage	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Grundy	-	-	-	-	-	-	-	-	2	5	3	3	5	3	7	28
JoDaviess	-	-	-	-	-	-	-	-	1	-	1	4	7	9	10	32
Kane	-	-	-	-	-	-	-	-	4	7	4	5	7	8	5	40
Kankakee	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	4
Kendall	-	-	-	-	-	-	-	-	-	-	1	4	6	6	6	23
Lake	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
LaSalle	-	-	-	-	1	-	-	-	3	-	1	2	6	5	4	22
Livingston	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2	4
McHenry	2	2	4	4	4	-	4	3	3	3	3	7	6	8	8	61
Ogle	-	-	-	2	-	-	1	-	4	2	3	1	2	6	2	23
Stephenson	-	-	-	-	-	1	-	1	1	2	3	4	6	10	11	39
Will	-	-	-	-	-	-	-	-	-	-	-	2	1	1	-	4
Winnebago	3	20	13	25	18	18	12	16	10	7	5	13	8	1	6	175
Total	**14**	**51**	**31**	**51**	**42**	**38**	**30**	**37**	**42**	**36**	**36**	**59**	**71**	**72**	**75**	**685**

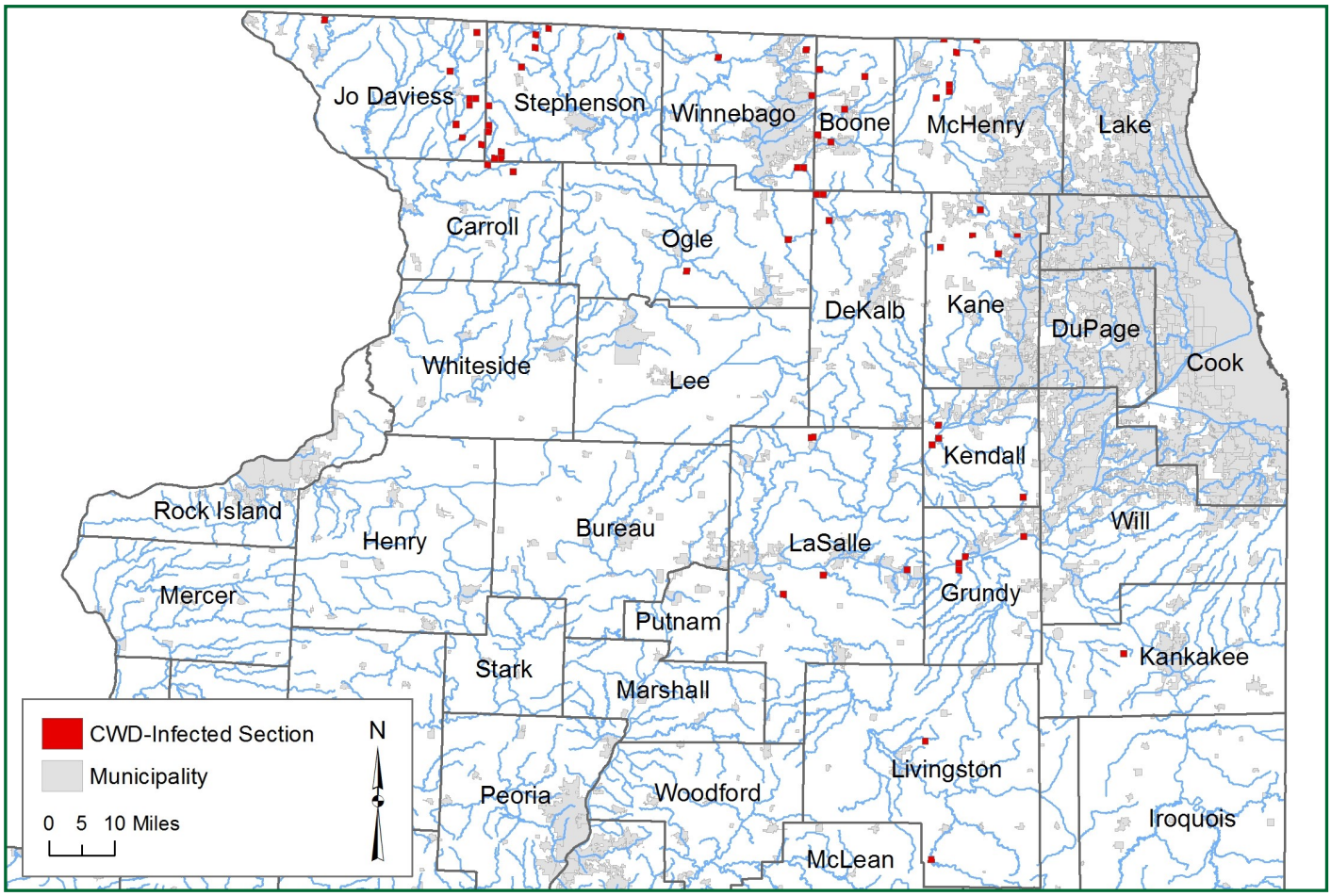


Figure 5. Distribution of CWD-positive deer identified during FY2017.

CWD Management During FY2017

Hunting Seasons for Herd/Disease Control

Length: Archery deer season (Oct. 1-Jan. 15; closed during firearm season) consisted of 107 days in DuPage and Lake counties (no firearm hunting), and 100 days in all other CWD counties. Gun seasons totaled 20 days, consisting of the regular firearm season (7 days), youth season (3 days), muzzleloader season (3 days), and special CWD season (7 days). Gun deer seasons were not open in DuPage and Lake counties, except for Chain O' Lakes State Park (firearm season only) in Lake County.

Bag limits: Only two antlered deer could be taken per hunter during all seasons, except that during the special CWD season no antlered limit was in effect. There was no bag limit for antlerless deer.

Gun permit quotas: In counties with established CWD, permit quotas far exceeded demand, so that the number of permits was for all practical purposes unlimited. In counties with limited cases of CWD, permit quotas were more limited, so as not to significantly lower the entire county population. For the Special CWD season, hunters were allowed to purchase unlimited over-the-counter (OTC) permits, and could also use any unfilled deer tags from firearm, muzzleloader, or youth deer seasons.

Significant changes: None.

Hunter harvest: Hunters harvested 14,760 deer from the 16 CWD counties during 2016-2017 (Table 2), compared to 16,309 deer during 2015-2016. The previous 5-year average harvest for the 16 counties was 16,784. In the 2001-2002 hunting season, the last season prior to the discovery of CWD in Illinois, hunter harvest totaled 16,301.

Table 2. Deer harvest in CWD counties during the 2016-2017 hunting seasons.

County	Youth	Muzzleloader	CWD	Firearm	Archery	All Seasons
Boone	1	2	38	121	117	279
DeKalb	6	2	29	139	177	353
DuPage	*Not open to firearm deer hunting*				35	35
Grundy	6	13	72	296	294	681
JoDaviess	75	84	500	1859	975	3493
Kane	0	1	7	29	263	300
Kankakee	10	14	55	186	281	546
Kendall	6	5	25	98	163	297
Lake	*Not open to firearm deer hunting*			4[1]	273	277
LaSalle	25	34	149	745	687	1640
Livingston	14	16	36	400	191	657
McHenry	7	10	99	266	526	908
Ogle	29	41	240	793	691	1794
Stephenson	14	17	160	843	474	1508
Will	5	31	60	233	729	1058
Winnebago	10	13	106	346	459	934
Totals	**208**	**283**	**1576**	**6358**	**6335**	**14760**

[1] *Only Chain O' Lakes SP is open to firearm deer hunting in Lake County.*

IDNR Sharpshooting Protocols

Rationale: Management using sharpshooting to supplement hunter harvest allows the Department to conduct localized, focused deer reductions in small areas known to have CWD. Our goal is to reduce disease transmission rates by lowering densities in infected areas, to reduce environmental contamination from infected deer, and to remove sick deer from the population at a higher rate than deer are becoming newly-infected. Advantages of sharpshooting include: (1) reductions are limited to areas with disease, so healthy populations in the remainder of a county are not impacted as they would be if we relied solely on hunting for management; (2) sharpshooting can be conducted on properties that do not normally allow hunting (or allow only very limited hunting), so management can occur in areas that normally serve as refuges to hunting; (3) focused sharpshooting has been shown to remove sick animals at a higher rate than hunting programs; and (4) sharpshooting can target specific high-risk deer social groups known to have CWD. Sharpshooting also provides detailed, localized surveillance information about disease distribution and prevalence rates within infected areas.

Timing: Following the close of deer hunting seasons in January, teams of IDNR staff that were trained/certified for sharpshooting began culling deer wintering in or around known CWD locations. All IDNR sharpshooting activities were carried out between January 15 and March 31, 2017.

Aerial Surveys: Helicopter surveys are normally conducted during January-February when suitable snow cover provides conditions to facilitate counting deer. The winter of 2016-2017 was extremely mild, with only occasional light snows during January-February. Without suitable conditions, no aerial surveys were conducted.

Locations used for sharpshooting: Sharpshooting areas were generally limited to locations within a 2-section buffer zone around each known CWD-positive section (1 section = ~1 mile^2). Sharpshooting was only conducted with the permission of the landowner.

Carcass handling/disposition: All animals (including fawns) from which suitable tissue samples could be collected were tested for CWD. Additional tissue samples were collected for genetic testing and evaluation of reproductive status at the University of Illinois Champaign/Illinois Natural History Survey. All deer with negative CWD test results were processed and donated to the Northern Illinois Food Bank.

IDNR Sharpshooting Results

Management area: CWD management unit boundaries were established by buffering each CWD-positive section that occurred during the past five years (2012-2016) with a 2-section buffer (Figure 6). Total size of this CWD management area was 2,194 mi^2, which included 970 mi^2 of deer habitat.

Number of counties in which deer were taken: 15

Number of townships in which deer were taken: 65

Number of sections in which deer were taken: 129

Number of deer taken: 984 (mean # deer taken/section = 7.6; range = 1-26)

Number of CWD-positive deer taken: 24

More specific sharpshooting results for each county are presented in Table 3.

Sharpshooting Programs by Other Agencies/Entities in CWD counties

Deer Population Control Permits (DPCP): Seven land-managing entities with DPCPs collected CWD samples as a condition of their permit. Sampling occurred in 5 CWD counties (DuPage, JoDaviess, Lake, Will and Winnebago) and Cook County, which is bordered by 5 CWD counties. Permit recipients submitted tissue samples for CWD testing from 427 deer (422 usable samples) taken from at least 53 sections in those counties. Two CWD-positive deer were found, both from Winnebago County.

Nuisance Deer Removal Permits (DRP): Six samples were submitted from deer taken in 3 CWD counties using DRPs, with no CWD-positive deer identified.

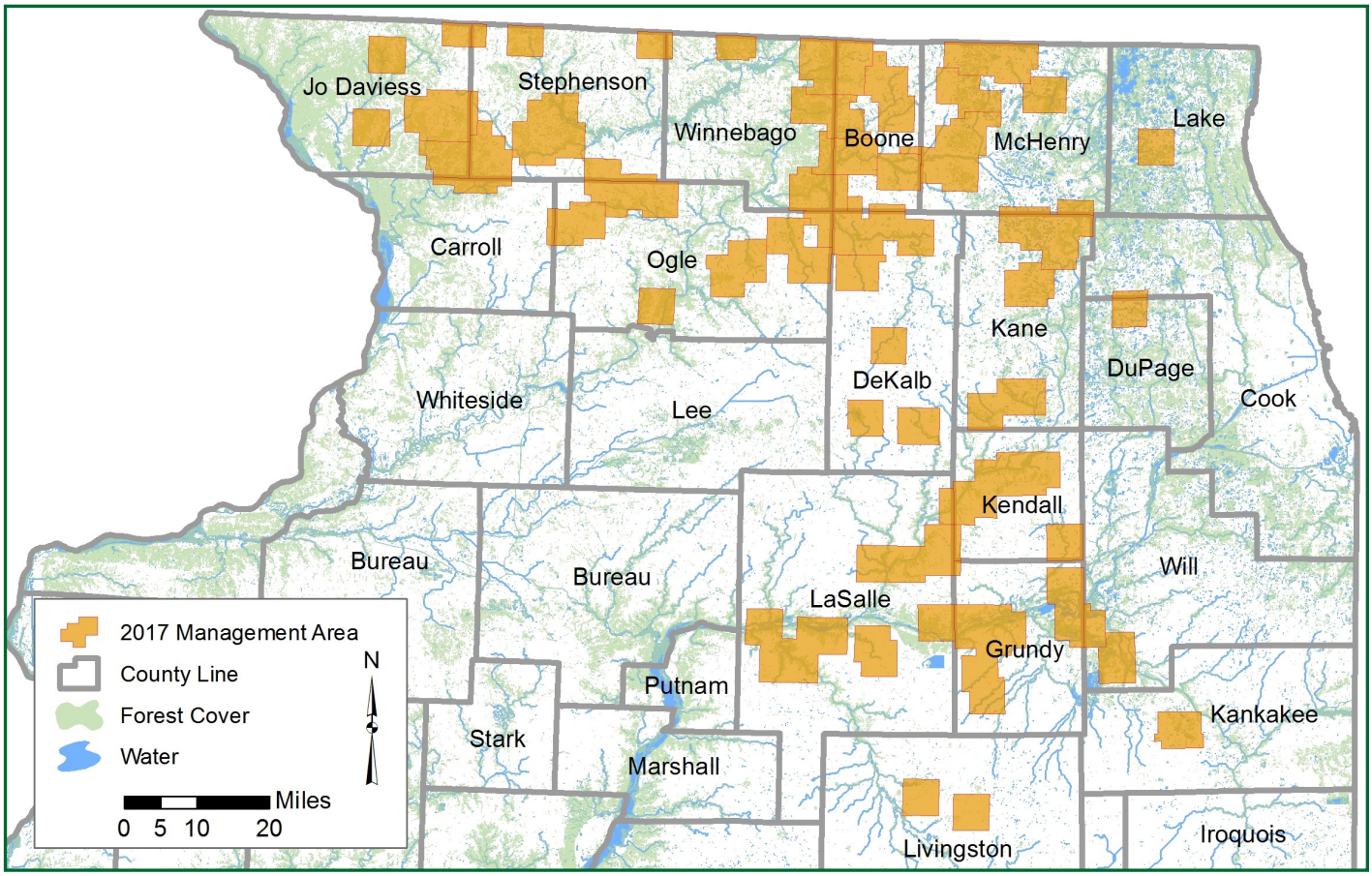


Figure 6. CWD management area boundaries for Winter 2017.

Table 3. Summary of IDNR sharpshooting effort and results by county during winter 2017.

County	# of Townships Where Removals Occurred	# of Sections Where Removals Occurred	Total Number of Deer Removed	Average Number of Deer Removed per Section	Number of Positive Deer Removed
Boone	3	6	29	4.8	3
Carroll	1	1	19	19.0	1
DeKalb	4	8	50	6.3	1
Grundy	5	12	121	10.1	5
JoDaviess	7	18	140	7.8	3
Kane	6	14	125	8.9	1
Kankakee	2	3	18	6.0	2
Kendall	5	8	64	8.0	1
LaSalle	8	13	111	8.5	1
Livingston	1	1	9	9.0	0
McHenry	7	13	67	5.2	3
Ogle	4	4	14	3.5	0
Stephenson	8	18	146	8.1	0
Will	2	3	14	4.7	0
Winnebago	3	7	57	8.1	3
All Counties	**65**	**129**	**984**	**7.6**	**24**

Discussion: Illinois CWD in FY2017

Seventy-five CWD-positive deer were identified from 7,800 usable WT deer samples collected statewide. Across the 17-county CWD range, the disease prevalence rate for all adult deer taken by hunters was 1.17%. The prevalence rate for hunter-harvested adult males (1.60%) was more than twice as high as for adult females (0.69%). For comparison, deer taken by IDNR sharpshooters were more likely to be CWD-positive, with an overall adult prevalence rate of 3.16%. Prevalence rate for adult males taken by sharpshooters was 2.80%; for adult females taken by sharpshooters the rate was 3.41%. Prevalence rates have remained low and changed little over time since discovery of CWD in 2002, but there is a slowly increasing trend in recent years (Figure 7), most notably for adult males.

Surveillance data have identified a number of areas that present challenges for managing CWD, particularly where heightened prevalence rates coincide with significant deer densities (Figure 8):

- Five of six positive deer found in Kendall County were from a relatively small area along the Fox River south of Plano. As a result of this cluster of positives, Kendall County had the highest overall county prevalence rate during 2017 at 9.26% (see Table 4), although sample size was low (n=54) and the confidence interval was large.

- Estimated prevalence was >3.0% in the border area between JoDaviess and Stephenson counties, producing a total of 16 positives from Blocks 0,-4 and 1,-4 (Figure 8). These included 2 positive deer identified from the northern part of Carroll County, the first instances of CWD reported for that county. Deer densities from those blocks have traditionally been very high, but weather conditions during the past few winters have prevented the acquisition of current population data. Countywide prevalence rates in Stephenson County appear to be on the rise (Figure 9), but in the absence of additional landowner cooperators for DNR's sharpshooting program, we are unlikely to change that trend.

- Prevalence rates along the Winnebago-Boone county line have remained above average in the years since finding Illinois' first positive there in 2002. Management has reduced deer densities and fewer positives are being found as a result, but disease prevalence rates have not declined measurably in that original focal area.

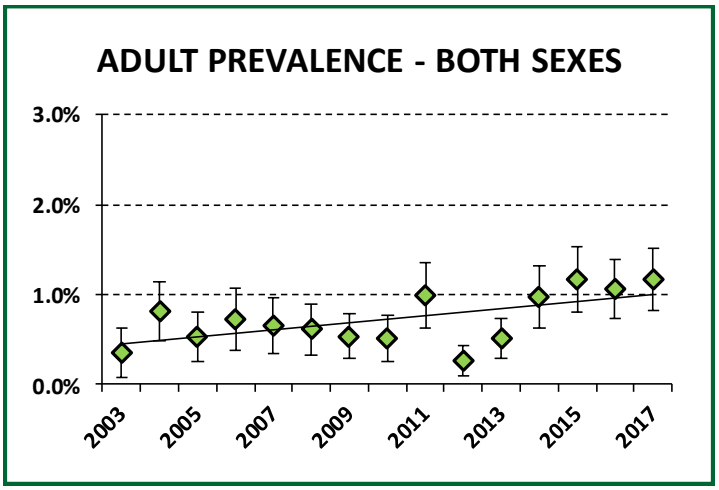
- The Marengo Ridge area in northern McHenry County (Fig. 8, Block 0,2) produced 7 positives from 97 samples. This area has been consistently high for the past four years.

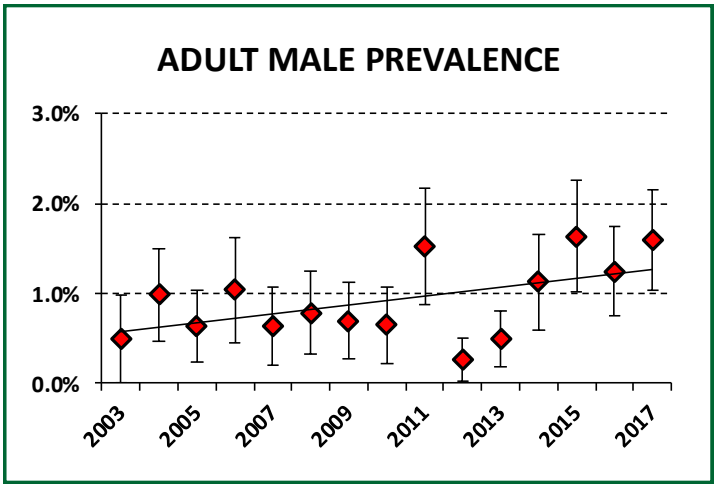
- CWD-positive deer are being regularly identified each year along the Illinois River and its tributaries in LaSalle and Grundy counties (Fig. 5 & Fig. 8). High deer densities along the Illinois River make control efforts difficult, and emigration of deer from this area to non-CWD areas to the south poses a significant risk for further CWD spread.

- CWD-positive deer are now identified routinely throughout northern Kane County (Fig. 8, Blocks 2,2 and 2,3). Much of the deer habitat is within subdivisions or owned by local units of government, so opportunities for control of deer herds (and disease) via hunting are limited.

- The regularity with which we identify positive deer in spark areas such as Livingston and Kankakee counties is disturbing. Deer habitat is limited in those counties but this may contribute to increased mobility of deer across the landscape, with an increased probability for exploratory or migratory movements and resultant increased risk of disease spread.

Figure 7. Trends in CWD prevalence for hunter-harvested adult deer (≥ yearling) during 2003-2017 for the seventeen counties in which CWD has been identified. Error bars at each point depict the 95% confidence interval of the estimate. Mean prevalence rates in males have been 73% higher than in females during this 15-year period.





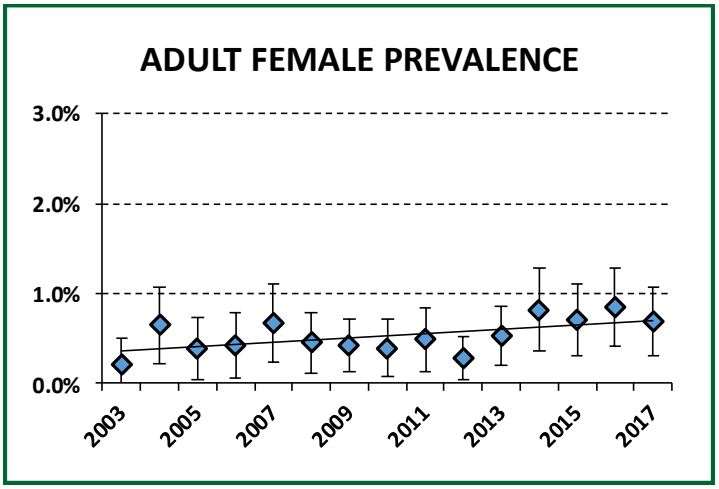


Table 4. County CWD prevalence estimates for adult deer during 1 July 2016 through 30 June 2017. Estimates are based only on samples collected from hunter-harvested deer.[1]

County	# of Samples	# of Positives	Percent Positive	95% Confidence Interval (±)
Boone	59	3	5.08%	5.61%
Carroll	81	0	0.00%	N/A
DeKalb	83	2	2.41%	3.30%
DuPage	3	0	0.00%	N/A
Grundy	148	1	0.68%	1.32%
JoDaviess	1205	6	0.50%	0.40%
Kane	86	3	3.49%	3.88%
Kankakee	93	0	0.00%	N/A
Kendall	54	5	9.26%	7.73%
Lake	18	0	0.00%	N/A
LaSalle	359	3	0.84%	0.94%
Livingston	195	2	1.03%	1.41%
McHenry	206	5	2.43%	2.10%
Ogle	411	2	0.49%	0.67%
Stephenson	455	10	2.20%	1.35%
Will	72	0	0.00%	N/A
Winnebago	158	1	0.63%	1.24%
All CWD Counties	3686	43	1.17%	0.35%

[1] *Estimates derived from hunter-harvested deer represent hunted populations throughout the entire county.*

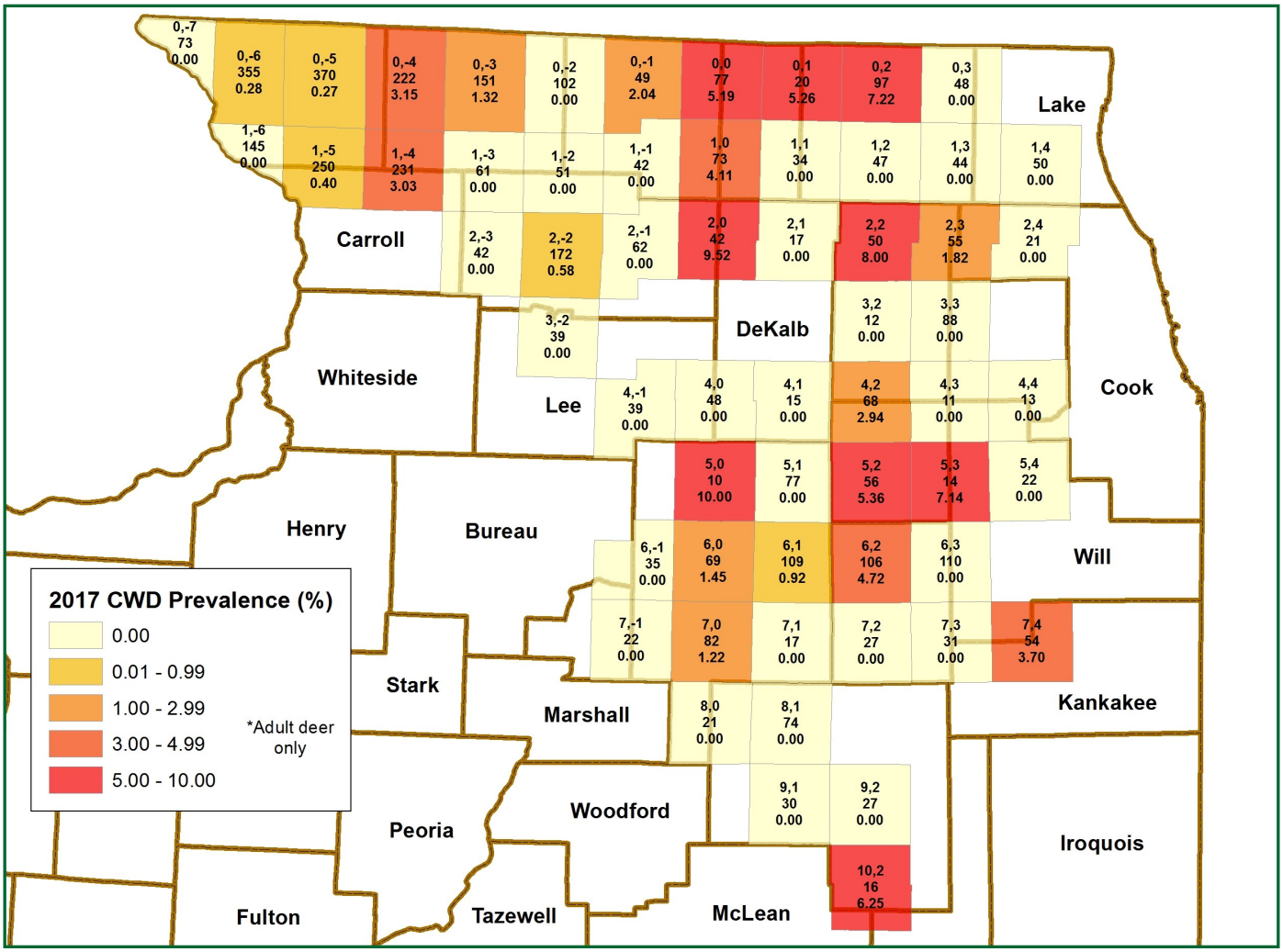


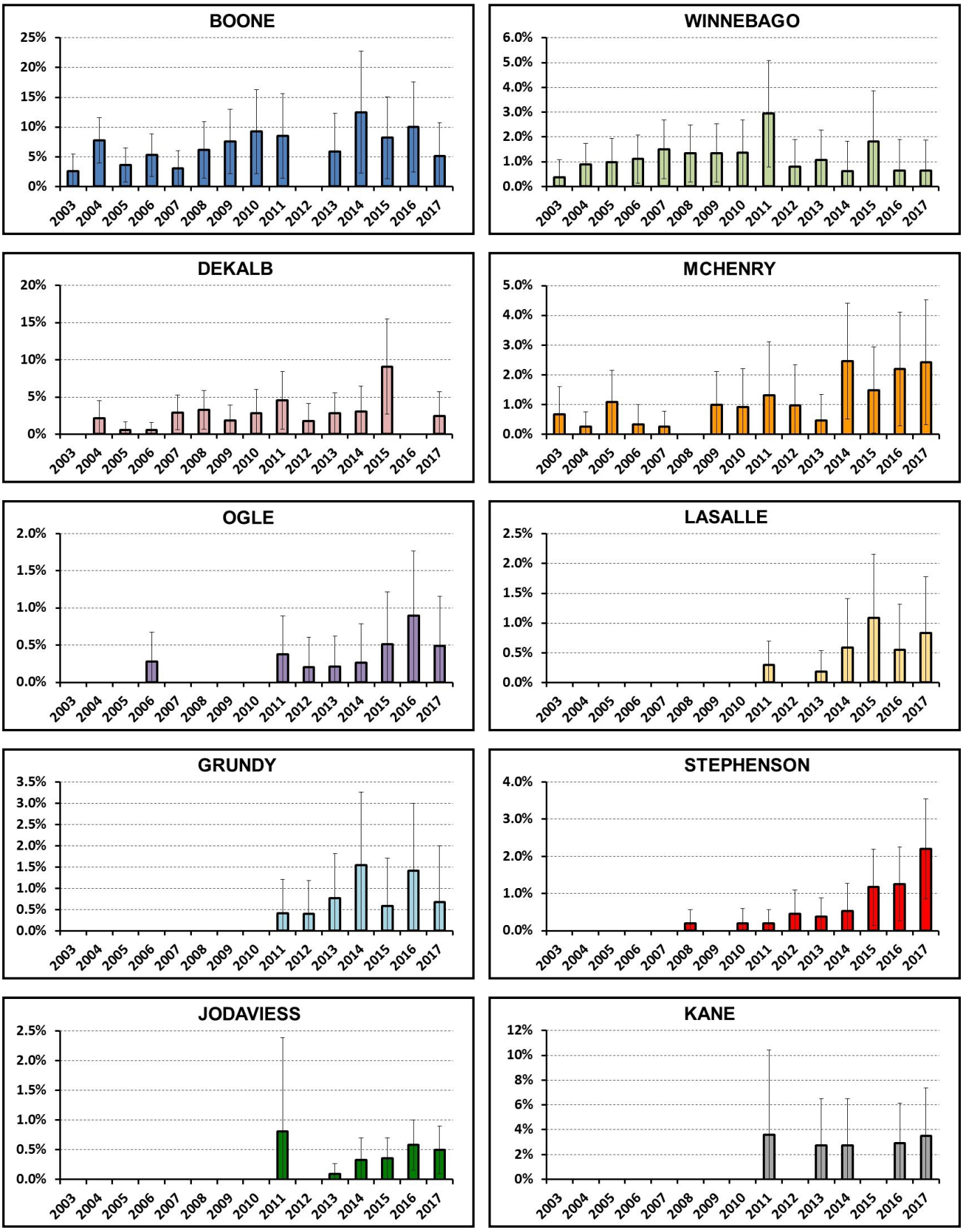
Figure 8. Estimated prevalence rates in adult deer during FY17 per 4-township block. For each block the upper number is the grid coordinate; the middle number is the sample size; and the lower number is the estimated adult prevalence rate (%). Includes all sources except suspect deer.

The spread of CWD into new areas and the establishment of new disease foci in those areas continues to be Illinois' biggest management challenge. During 2002-2010, 80% of all CWD-positives identified in Illinois originated from either Boone or Winnebago County. In FY2017, only 17% of CWD-positives came from those counties. This shift in CWD distribution has posed significant challenges for management, because management must now be directed over a far larger area, spreading resources very thin.

Disease management strategies in Illinois have been successful in controlling CWD prevalence rates at low levels, but in many management units the number of deer removed by sharpshooters is currently insufficient, whether because of limited access to property or because of our limited resources. Continuing our management program will slow increases in prevalence rates and also slow spread to the remainder of the state, but managers will require new tools in the future if we are to successfully fight this disease.

IDNR staff must continue to work to educate Illinoisans about CWD and its potential to negatively impact our white-tailed deer herd. Only through an educated public can the Department continue to receive support for CWD management, even though our program is viewed as a model for disease management by professionals in many other states.

Figure 9. Patterns in estimated CWD prevalence rates in counties with at least five years of data. County prevalence rates were calculated using only hunter-harvested adult deer (both sexes).



Appendix A. Useable CWD samples from white-tailed deer by county in Illinois taken during the 2016-2017 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		9					**9**
ALEXANDER		5					**5**
BOND		8					**8**
BOONE	30 (2)	29 (1)	29 (3)	1	2	1 (1)	**92 (7)**
BROWN		3					**3**
BUREAU		26				1	**27**
CALHOUN		86					**86**
CARROLL	4	77	19 (1)		3	5 (1)	**108 (2)**
CASS		10					**10**
CHAMPAIGN		1					**1**
CHRISTIAN		15					**15**
CLARK		20					**20**
CLAY		154					**154**
CLINTON		2					**2**
COLES		100			1		**101**
COOK		8		75	6		**89**
CRAWFORD		10					**10**
CUMBERLAND		26					**26**
DEKALB	54 (2)	29	50 (1)		1		**134 (3)**
DEWITT		14					**14**
DOUGLAS		9					**9**
DUPAGE		3		117			**120**
EDGAR		30					**30**
EDWARDS		1					**1**
EFFINGHAM		30					**30**
FAYETTE		17					**17**
FORD		1					**1**
FRANKLIN		41					**41**
FULTON		17					**17**
GALLATIN		4					**4**
GREENE		73					**73**
GRUNDY	131 (1)	17	121 (5)		4 (1)	1	**274 (7)**
HAMILTON		14					**14**
HANCOCK		63					**63**
HARDIN		8					**8**
HENDERSON		19					**19**
HENRY		3					**3**
IROQUOIS		5					**5**
JACKSON		62					**62**
JASPER		36					**36**
JEFFERSON		130					**130**
JERSEY		83					**83**
JODAVIESS	909 (4)	296 (2)	140 (3)	41	19 (1)	2	**1407 (10)**
JOHNSON		91					**91**
KANE	9	77 (3)	125 (1)		5 (1)		**216 (5)**
KANKAKEE	82	11	18 (2)				**111 (2)**
KENDALL	43 (4)	11 (1)	64 (1)		1		**119 (6)**
KNOX		23				1	**24**
LAKE	1	17		84			**102**
LASALLE	336 (3)	23	111 (1)		3		**473 (4)**
LAWRENCE		2					**2**

Appendix A cont'd.

County	Check Stations	Drop-off Stations/ Meat Processors	Agency Culling	Special Permits[1]	Roadkill/ Incidental	Suspect	Total
LEE		70					**70**
LIVINGSTON	184 (2)	11	9			1	**205 (2)**
LOGAN		3					**3**
MACON		23			1		**24**
MACOUPIN		23					**23**
MADISON		27					**27**
MARION		36					**36**
MARSHALL		21					**21**
MASON		1					**1**
MASSAC		18					**18**
MCDONOUGH		75					**75**
MCHENRY	120 (4)	86 (1)	67 (3)	3	2		**278 (8)**
MCLEAN		10					**10**
MENARD		4					**4**
MERCER		8					**8**
MONROE		5					**5**
MONTGOMERY		10					**10**
MORGAN		10					**10**
MOULTRIE		29					**29**
OGLE	345 (2)	66	14		4		**429 (2)**
PEORIA		5			1		**6**
PERRY		188					**188**
PIATT		13					**13**
PIKE		160					**160**
POPE		36					**36**
PULASKI		1					**1**
PUTNAM		11				1	**12**
RANDOLPH		44					**44**
RICHLAND		10					**10**
ROCK ISLAND		15			2	1	**18**
SALINE		10					**10**
SANGAMON						1	**1**
SCHUYLER		4					**4**
SCOTT		10					**10**
SHELBY		35					**35**
ST CLAIR		24			1		**25**
STEPHENSON	337 (7)	118 (3)	146		12 (1)	1	**614 (11)**
TAZEWELL		11					**11**
UNION		21					**21**
VERMILION		1			1		**2**
WARREN		6					**6**
WASHINGTON		40			1		**41**
WAYNE		60					**60**
WHITE		2					**2**
WHITESIDE		126			3		**129**
WILL	71	1	14	65	2	1	**154**
WILLIAMSON		121					**121**
WINNEBAGO	128 (1)	30	57 (3)	42 (2)	5	1	**263 (6)**
WOODFORD		18					**18**
TOTALS	**2784 (32)**	**3506 (11)**	**984 (24)**	**428 (2)**	**80 (4)**	**18 (2)**	**7800 (75)**

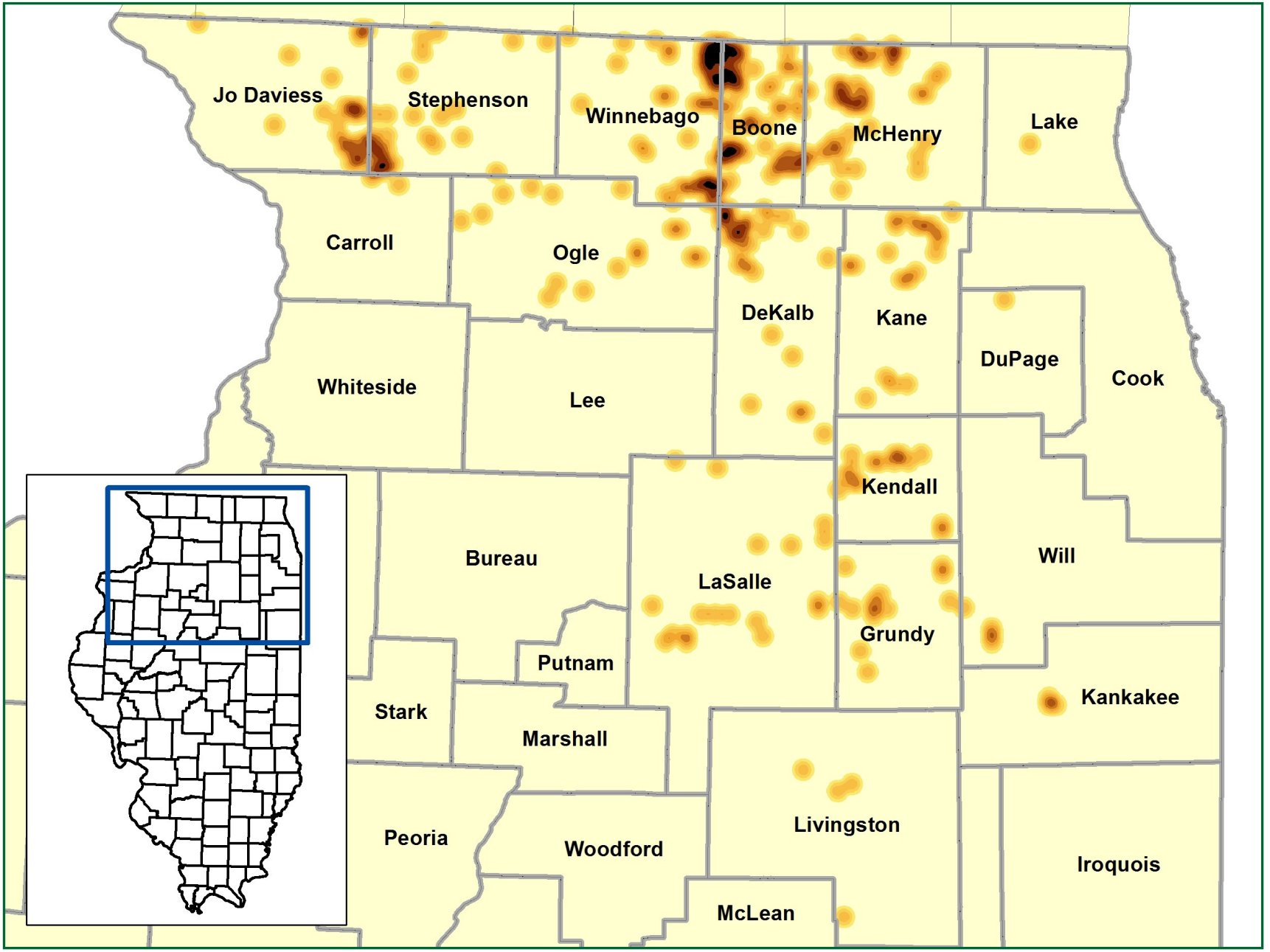
[1] Special permits include urban Deer Population Control Permits, nuisance Deer Removal Permits, and Scientific Permits.

Appendix B. Summary of CWD-positive Illinois deer collected during FY2017.

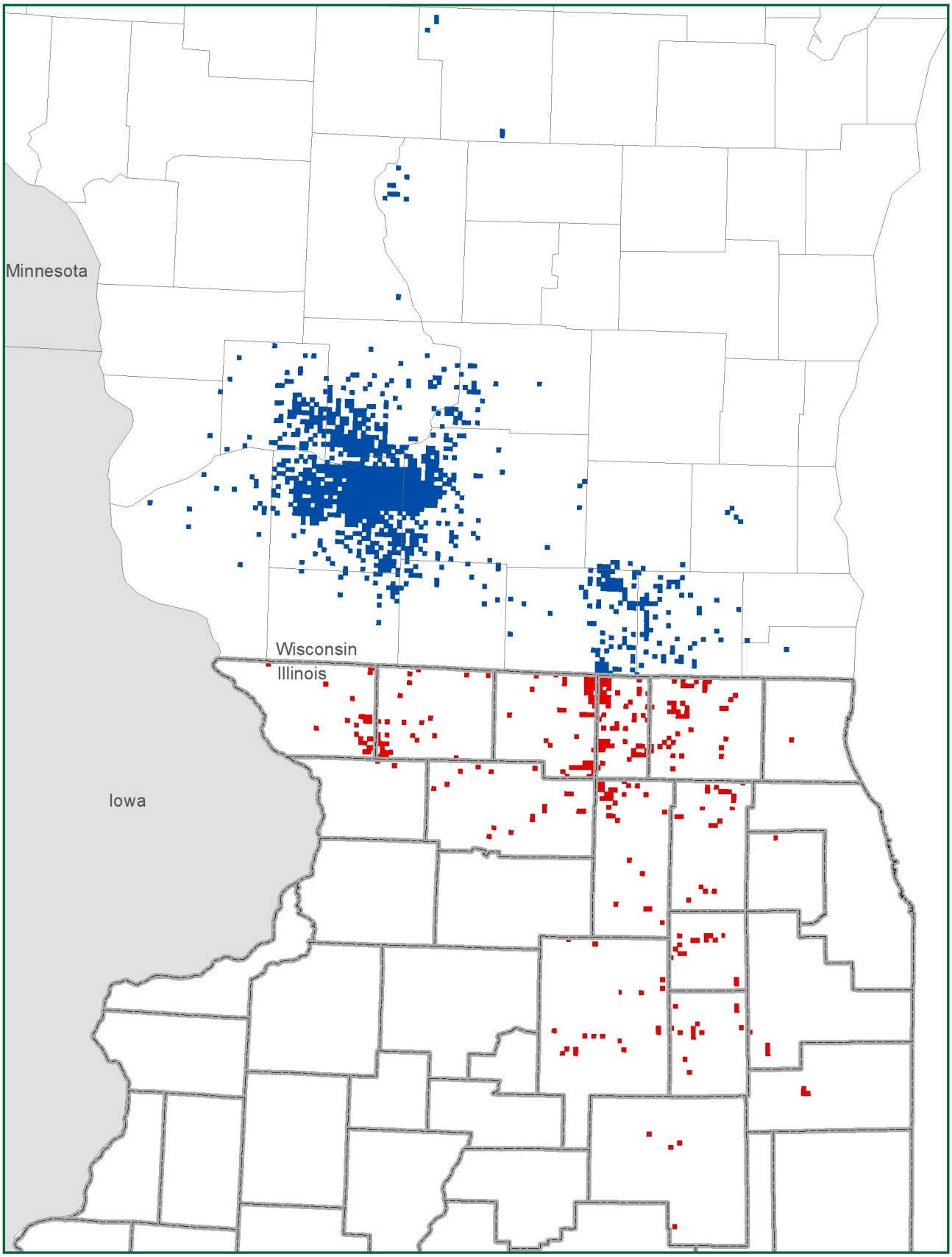
Date Collected	County	Township, Range, Section	Sex	Age	Collection Method
9/22/16	JODAVIESS	427N 5E19	F	4	ROADKILL
10/9/16	KANE	341N 8E 4	F	1	HUNTING
10/28/16	KANE	341N 7E 5	M	2	ROADKILL
10/31/16	GRUNDY	333N 6E13	M	2	ROADKILL
11/6/16	BOONE	346N 3E31	M	1	HUNTING
11/13/16	KANE	342N 7E17	M	2	HUNTING
11/13/16	KANE	341N 6E16	M	2	HUNTING
11/18/16	DEKALB	342N 3E 5	M	2	HUNTING
11/18/16	LASALLE	333N 3E28	M	2	HUNTING
11/18/16	LIVINGSTON	326N 6E32	M	2	HUNTING
11/18/16	STEPHENSON	427N 5E22	F	5	HUNTING
11/19/16	BOONE	345N 4E 5	M	3	HUNTING
11/19/16	KENDALL	335N 8E27	F	4	HUNTING
11/19/16	GRUNDY	333N 7E 7	M	4	HUNTING
11/19/16	STEPHENSON	426N 5E 3	F	1	HUNTING
11/19/16	JODAVIESS	427N 5E17	M	1	HUNTING
11/19/16	STEPHENSON	426N 5E25	M	2	HUNTING
11/19/16	STEPHENSON	429N 6E26	F	2	HUNTING
11/19/16	JODAVIESS	429N 1E21	M	2	HUNTING
11/19/16	WINNEBAGO	428N11E 9	F	4	HUNTING
11/19/16	KENDALL	336N 6E 9	F	3	HUNTING
11/19/16	KENDALL	336N 6E17	M	1	HUNTING
11/19/16	MCHENRY	346N 6E15	M	2	HUNTING
11/19/16	OGLE	423N10E23	M	2	HUNTING
11/20/16	BOONE	344N 3E19	M	3	HUNTING
11/20/16	MCHENRY	346N 6E 5	M	3	HUNTING
11/20/16	STEPHENSON	429N 8E25	M	A	HUNTING
11/20/16	STEPHENSON	426N 5E36	F	1	HUNTING
11/20/16	JODAVIESS	429N 5E29	M	2	HUNTING
11/20/16	LASALLE	332N 2E 9	F	2	HUNTING
11/20/16	MCHENRY	345N 6E 9	M	1	HUNTING
11/21/16	LIVINGSTON	329N 6E31	M	3	HUNTING
11/23/16	STEPHENSON	426N 5E35	M	4	HUNTING
11/25/16	JODAVIESS	No Location Provided	M	1	HUNTING
11/29/16	BOONE	345N 3E35	M	3	SUSPECT
12/1/16	LASALLE	336N 3E 7	M	1	HUNTING
12/2/16	KENDALL	337N 6E33	F	2	HUNTING
12/2/16	OGLE	341N 2E 9	M	2	HUNTING
12/2/16	JODAVIESS	426N 5E21	F	3	HUNTING
12/3/16	DEKALB	342N 3E 6	M	1	HUNTING
12/3/16	MCHENRY	345N 6E19	M	1	HUNTING
12/3/16	STEPHENSON	428N 6E21	M	2	HUNTING
12/3/16	STEPHENSON	429N 7E19	M	1	HUNTING
12/4/16	JODAVIESS	428N 4E27	M	5	HUNTING

Appendix B cont'd.

Date Collected	County	Township, Range, Section	Sex	Age	Collection Method
12/14/16	CARROLL	425N 5E 3	M	2	SUSPECT
12/20/16	MCHENRY	345N 6E16	M	3	HUNTING
12/22/16	STEPHENSON	426N 5E10	M	2	HUNTING
1/24/17	BOONE	344N 3E28	F	1	SHARPSHOOTING
1/24/17	GRUNDY	334N 8E27	F	F	SHARPSHOOTING
1/25/17	WINNEBAGO	346N 2E14	F	3	SHARPSHOOTING
1/26/17	BOONE	344N 3E19	F	2	SHARPSHOOTING
1/26/17	GRUNDY	333N 6E24	F	2	SHARPSHOOTING
1/27/17	KENDALL	336N 6E 9	F	2	HUNTING
1/30/17	WINNEBAGO	343N 2E14	M	F	SHARPSHOOTING
2/2/17	MCHENRY	346N 6E15	F	2	SHARPSHOOTING
2/2/17	MCHENRY	346N 6E15	F	F	SHARPSHOOTING
2/6/17	WINNEBAGO	345N 2E24	F	2	SHARPSHOOTING
2/7/17	CARROLL	425N 6E 8	M	1	SHARPSHOOTING
2/8/17	JODAVIESS	426N 4E 2	M	2	SHARPSHOOTING
2/8/17	GRUNDY	333N 6E24	F	2	SHARPSHOOTING
2/13/17	JODAVIESS	426N 4E13	F	F	SHARPSHOOTING
2/14/17	BOONE	344N 3E19	F	F	SHARPSHOOTING
2/15/17	WINNEBAGO	343N 2E15	F	F	SHARPSHOOTING
2/16/17	DEKALB	342N 3E28	M	1	SHARPSHOOTING
2/20/17	JODAVIESS	427N 5E18	M	1	SHARPSHOOTING
2/22/17	KANKAKEE	331N11E30	F	3	SHARPSHOOTING
2/22/17	KANKAKEE	331N11E30	M	2	SHARPSHOOTING
2/27/17	LASALLE	333N 5E22	F	3	SHARPSHOOTING
3/6/17	KANE	341N 7E24	F	1	SHARPSHOOTING
3/6/17	MCHENRY	346N 7E 6	F	2	SHARPSHOOTING
3/7/17	KENDALL	337N 6E33	M	A	SHARPSHOOTING
3/14/17	WINNEBAGO	346N 2E14	F	2	SHARPSHOOTING
3/15/17	GRUNDY	333N 6E24	F	F	SHARPSHOOTING
3/16/17	STEPHENSON	428N 6E 2	F	F	ROADKILL
3/27/17	GRUNDY	333N 6E13	M	3	SHARPSHOOTING



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. Historical distribution of CWD in southern Wisconsin and northern Illinois as of June 30, 2017. Squares represent sections in which CWD has been detected.