



Illinois Chronic Wasting Disease: 2017-2018 Surveillance and Management Report

(Project Period: July 1, 2017 - June 30, 2018)

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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, 2018: 114,534

Total positives through June 30, 2018: 736

Number of counties affected through 6/30/2018: 17 (Boone, Carroll, DeKalb, DuPage, Grundy, Jo Daviess, Kane, Kankakee, Kendall, Lake, LaSalle, Livingston, McHenry, Ogle, Stephenson, Will, Winnebago).

General distribution through 6/30/2018: Total affected area (determined by a minimum convex polygon that includes all positives) is now about 8,800 mi². While overall prevalence remains low in Jo Daviess and Stephenson counties, disease is firmly established and appears to be worsening, particularly in Stephenson County; 28% (21/75 positives) came from these two counties last year. Declining prevalence in most other counties appears to be resulting in a shift of disease intensity away from traditional infection areas toward the northwest corner of the state (Table 4, Figure 9).

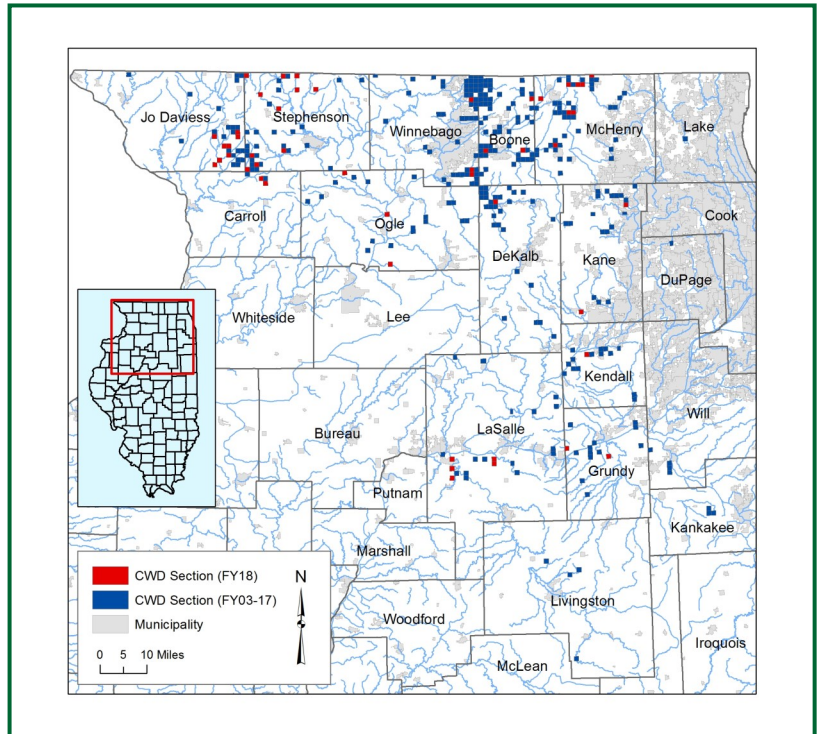


Figure 1. Distribution of all known CWD-infected deer identified in Illinois through June 30, 2018.

Public Outreach

Informational Materials: CWD related informational materials are provided on the CWD page of the IDNR website (<https://www.dnr.illinois.gov/Programs/CWD/Pages/default.aspx>), in the annual IDNR Hunting and Trapping Digest (<https://www.dnr.illinois.gov/hunting/Pages/HuntingTrappingDigests.aspx>), and in CWD specific pamphlets.

CWD Public Meetings: Six public meetings were held in September and October at locations near CWD infection areas including: Galena (Jo Daviess County), Lena (Stephenson County), Belvidere (Boone County), Ringwood (McHenry County), Bonfield (Kankakee County), and Pontiac (Livingston County). Approximately 150 people attended.

CWD Presentations: CWD related presentations were provided by request to private organizations including NW Illinois Forestry Association (Carroll County), Lake Carroll Deer Management Committee (Carroll County), and Northwest Illinois Deer Alliance (Stephenson County); approximately 350 people were in attendance.

CWD Surveillance Protocols During FY2018 (July 1, 2017-June 30, 2018)

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 FY2018

Total number of CWD samples collected statewide: 8,697 (8,697 WT deer). 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: 8,665

Number of CWD-positive deer identified: 51. Table 1 presents a comparison of the number of positive deer found each year by county.

Number of counties with positive deer: 12 — Boone (3), Carroll (2), DeKalb (1), Grundy (2), Jo Daviess (8), Kane (2), Kendall (1), LaSalle (5), McHenry (8), Ogle (3), Stephenson (12), Winnebago (4). For distribution of positive sections, see Figure 5.

Number of new CWD counties: 0

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

Average CWD prevalence (all adult deer): 0.84% (32/3825)

Average CWD prevalence (adult males): 1.07% (23/2158)

Average CWD prevalence (adult females): 0.54% (9/1667)

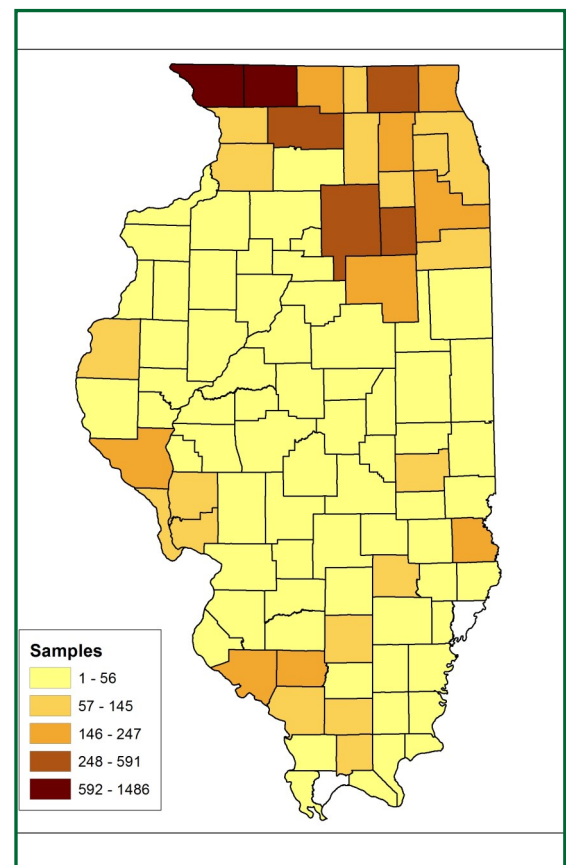


Figure 2. CWD sample distribution across Illinois during FY2018 (all sources).

Figure 3. Number of CWD surveillance samples collected statewide each year during FY2003 through FY2018.

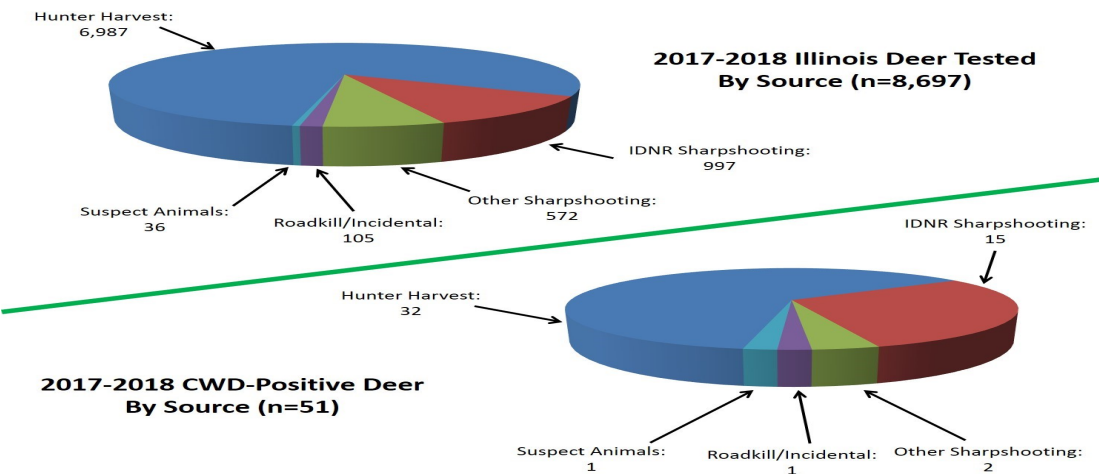
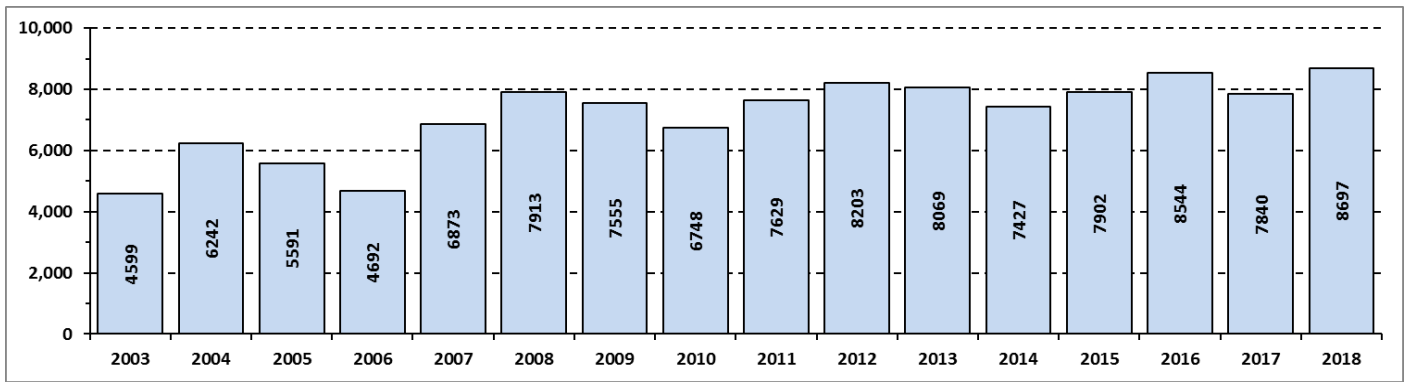


Figure 4. Number of CWD samples tested and number of positives identified by sampling source during FY2018.

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 by sampling year.

| | 02-03 | 03-04 | 04-05 | 05-06 | 06-07 | 07-08 | 08-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 | Total |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Boone | 9 | 25 | 13 | 15 | 13 | 11 | 9 | 14 | 7 | 5 | 4 | 5 | 6 | 11 | 7 | 3 | 157 |
| Carroll | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 2 | 2 | 4 |
| DeKalb | — | 4 | 1 | 5 | 6 | 8 | 4 | 3 | 7 | 5 | 7 | 8 | 8 | 3 | 3 | 1 | 73 |
| DuPage | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | — | — | 1 |
| Grundy | — | — | — | — | — | — | — | — | 2 | 5 | 3 | 3 | 5 | 3 | 7 | 2 | 30 |
| Jo Daviess | — | — | — | — | — | — | — | — | 1 | — | 1 | 4 | 7 | 9 | 10 | 8 | 40 |
| Kane | — | — | — | — | — | — | — | — | 4 | 7 | 4 | 5 | 7 | 8 | 5 | 2 | 42 |
| Kankakee | — | — | — | — | — | — | — | — | — | — | — | — | 1 | 1 | 2 | — | 4 |
| Kendall | — | — | — | — | — | — | — | — | — | — | 1 | 4 | 6 | 6 | 6 | 1 | 24 |
| Lake | — | — | — | — | — | — | — | — | — | — | — | 1 | — | — | — | — | 1 |
| LaSalle | — | — | — | — | 1 | — | — | — | 3 | — | 1 | 2 | 6 | 5 | 4 | 5 | 27 |
| Livingston | — | — | — | — | — | — | — | — | — | — | — | — | 2 | — | 2 | — | 4 |
| McHenry | 2 | 2 | 4 | 4 | 4 | 0 | 4 | 3 | 3 | 3 | 3 | 7 | 6 | 8 | 8 | 8 | 69 |
| Ogle | — | — | — | 2 | — | — | 1 | — | 4 | 2 | 3 | 1 | 2 | 6 | 2 | 3 | 26 |
| Stephenson | — | — | — | — | — | 1 | — | 1 | 1 | 2 | 3 | 4 | 6 | 10 | 11 | 12 | 51 |
| Will | — | — | — | — | — | — | — | — | — | — | — | 2 | 1 | 1 | — | — | 4 |
| Winnebago | 3 | 20 | 13 | 25 | 18 | 18 | 12 | 16 | 10 | 7 | 5 | 13 | 8 | 1 | 6 | 4 | 179 |
| Total | 14 | 51 | 31 | 51 | 42 | 38 | 30 | 37 | 42 | 36 | 36 | 59 | 71 | 72 | 75 | 51 | 736 |

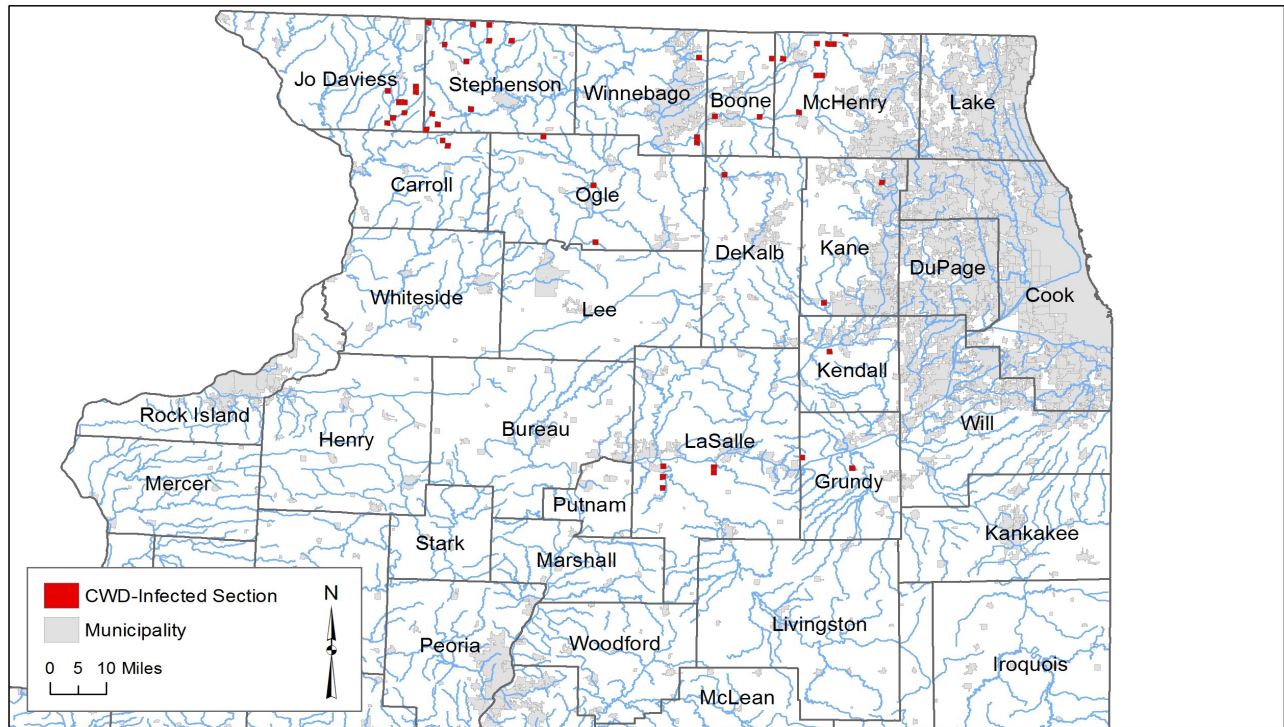


Figure 5. Distribution of CWD-positive deer identified during FY2018.

CWD Management During FY2018

Hunting Seasons for Herd/Disease Control

Length: Archery deer season (Oct. 1-Jan. 14; closed during firearm season) consisted of 106 days in DuPage and Lake counties (no firearm hunting), and 99 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 15,186 deer from the 17 CWD counties during 2017-2018 (Table 2), compared to 14,760 deer during 2016-2017. The previous 5-year average harvest for the 17 counties was 17,812. In the 2001-2002 hunting season, the last season prior to the discovery of CWD in Illinois, hunter harvest totaled 17,642.

Table 2. Deer harvest in CWD counties during the 2017-18 hunting seasons.

| County | Youth | Muzzleloader | CWD | Firearm | Archery | All Seasons |
|---------------|---|--------------|-------------|-------------|-------------|--------------|
| Boone | 3 | 0 | 22 | 136 | 127 | 288 |
| Carroll | 14 | 27 | 103 | 686 | 553 | 1383 |
| DeKalb | 1 | 4 | 25 | 106 | 147 | 283 |
| DuPage | <i>Not open to firearm deer hunting</i> | | | | 37 | 37 |
| Grundy | 3 | 20 | 66 | 285 | 308 | 682 |
| JoDaviess | 50 | 74 | 318 | 1862 | 1022 | 3326 |
| Kane | 0 | 6 | 12 | 28 | 296 | 342 |
| Kankakee | 6 | 20 | 34 | 185 | 261 | 506 |
| Kendall | 2 | 5 | 22 | 79 | 174 | 282 |
| Lake | <i>Not open to firearm deer hunting</i> | | | 1 | 326 | 327 |
| LaSalle | 22 | 20 | 118 | 669 | 651 | 1480 |
| Livingston | 8 | 5 | 32 | 364 | 210 | 619 |
| McHenry | 5 | 13 | 30 | 292 | 502 | 842 |
| Ogle | 13 | 20 | 131 | 807 | 591 | 1562 |
| Stephenson | 17 | 23 | 120 | 708 | 475 | 1343 |
| Will | 8 | 15 | 56 | 225 | 697 | 1001 |
| Winnebago | 10 | 13 | 53 | 354 | 453 | 883 |
| Totals | 162 | 265 | 1142 | 6787 | 6830 | 15186 |

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, 2018.

Aerial Surveys: Deer were counted via helicopter survey during periods of suitable snow cover to determine distribution and population size within the known CWD areas, enabling us to focus sharpshooting activities on deer in winter concentration areas that included or were near CWD-infected properties.

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 mile²). 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.

Results of Helicopter Deer Counts

CWD management unit boundaries were established by buffering each CWD-positive section that occurred during the past five years (2013-2017) with a 2-section buffer (Figure 6). Total size of this CWD management area was 2,603 square miles. IDNR staff conducted deer counts over all area identified. Highest deer densities were observed in Livingston County, followed by Jo Daviess, Carroll, Stephenson, and Ogle counties (Table 3).

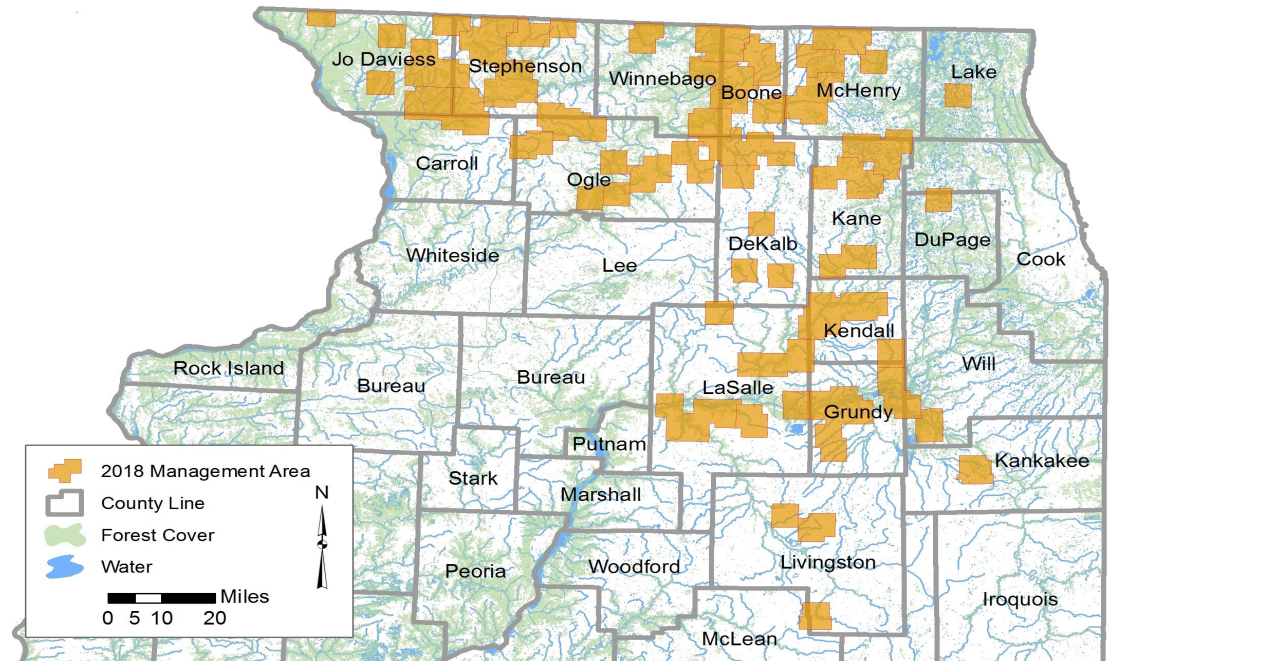


Figure 6. CWD management area boundaries for Winter 2017.

Table 3. Summary of aerial deer counts within CWD management units per county during Winter 2018.

| County | Management Unit Total Area (mi ²) | Total Deer Habitat Surveyed (mi ²) | Total Number of Deer Counted | Deer per mi ² of Deer Habitat Surveyed |
|------------|---|--|------------------------------|---|
| Boone | 199.75 | 73.48 | 1,144 | 15.57 |
| Carroll | 44.35 | 32.81 | 1,085 | 33.07 |
| DeKalb | 181.12 | 38.89 | 540 | 13.89 |
| DuPage | 19.32 | 2.44 | 5 | 2.05 |
| Grundyl | 177.12 | 67.08 | 1,390 | 20.72 |
| Jo Daviess | 212.32 | 145.19 | 5,105 | 35.16 |
| Kane | 206.74 | 87.06 | 1,289 | 14.81 |
| Kankakee | 35.97 | 15.36 | 207 | 13.47 |
| Kendall | 136.39 | 53.49 | 889 | 16.62 |
| Lake | 24.76 | 13.79 | 121 | 8.77 |
| LaSalle | 286.57 | 110.29 | 1,538 | 13.94 |
| Livingston | 86.44 | 6.24 | 338 | 54.19 |
| McHenry | 218.47 | 88.68 | 1,904 | 21.47 |
| Ogle | 279.36 | 113.43 | 2,968 | 26.17 |
| Stephenson | 301.82 | 108.29 | 3,148 | 29.07 |
| Will | 49.41 | 30.32 | 255 | 8.41 |
| Winnebago | 143.42 | 80.22 | 1,870 | 23.31 |
| Total | 2603.31 | 1067.09 | 23,796 | 22.30 |

IDNR Sharpshooting Results

Management area: CWD management unit boundaries were established by buffering each CWD-positive section that occurred during the past five years (2013-2017) with a 2-section buffer (Figure 6). Total size of this CWD management area was 2,603 mi², which included 1,175 mi² of deer habitat.

Number of counties in which deer were taken: 15

Number of townships in which deer were taken: 44

Number of sections in which deer were taken: 125

Number of deer taken: 997 (mean # deer taken/section = 8.0; range = 1-25)

Number of CWD-positive deer taken: 15

More specific sharpshooting results for each county are presented in Table 4.

Sharpshooting Programs by Other Agencies/Entities in CWD counties

Deer Population Control Permits (DPCP): Nine land-managing entities with DPCPs collected CWD samples as a condition of their permit. Sampling occurred in 7 CWD counties (DuPage, Jo Daviess, Kane, Lake, McHenry, Will and Winnebago) and Cook County, which is bordered by 5 CWD counties. Permit recipients submitted tissue samples for CWD testing from 563 deer (563 usable samples) taken from at least 63 sections in those counties. Two CWD-positive deer were found, both from Winnebago County.

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

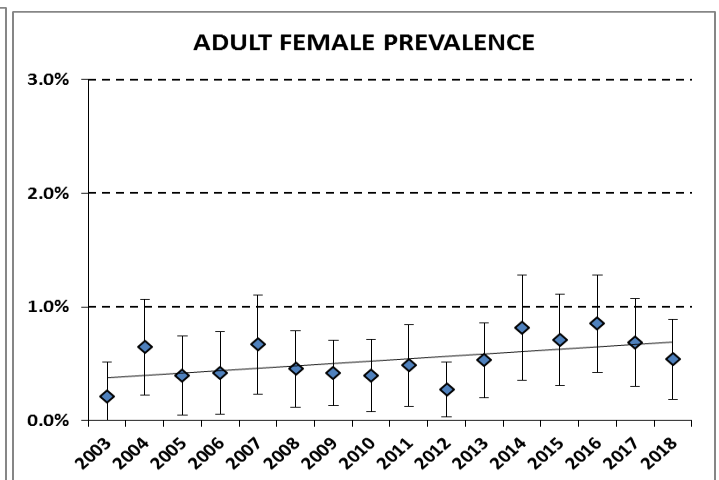
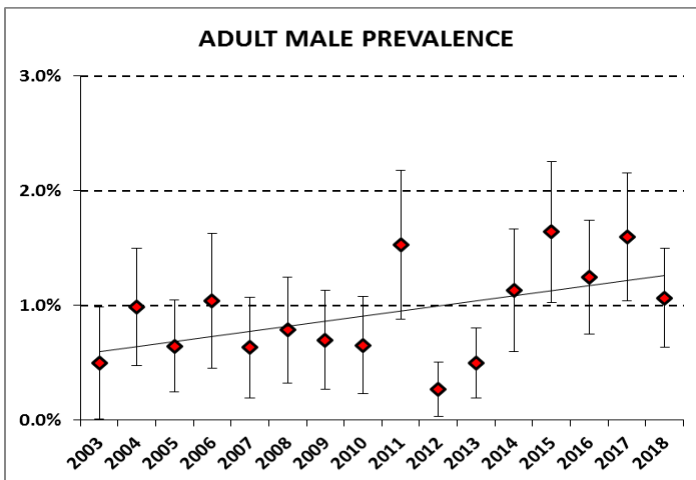
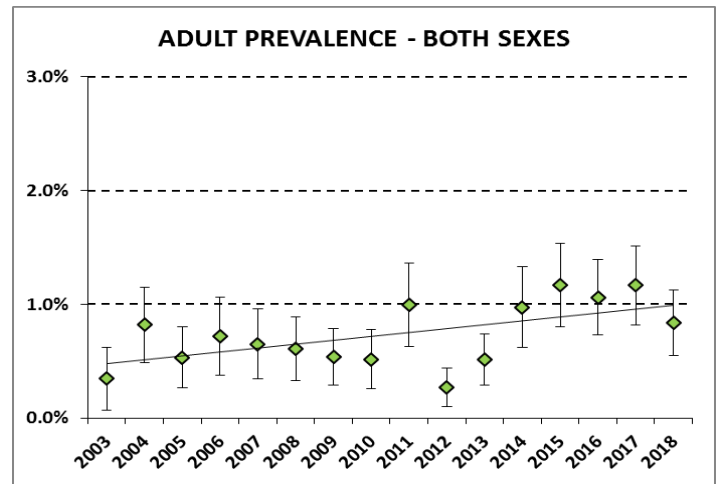
Table 4. Summary of IDNR sharpshooting effort and results by county during winter 2018.

| 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 | 7 | 52 | 7.4 | 1 |
| Carroll | 1 | 2 | 24 | 12.0 | 1 |
| DeKalb | 3 | 6 | 44 | 7.3 | 0 |
| Grundy | 3 | 12 | 160 | 13.3 | 1 |
| Jo Daviess | 4 | 16 | 149 | 9.3 | 4 |
| Kane | 4 | 15 | 140 | 9.3 | 1 |
| Kankakee | 1 | 3 | 21 | 7.0 | 0 |
| Kendall | 3 | 9 | 52 | 5.8 | 1 |
| LaSalle | 6 | 13 | 110 | 8.5 | 2 |
| Livingston | 1 | 1 | 6 | 6.0 | 0 |
| McHenry | 3 | 9 | 41 | 4.6 | 2 |
| Ogle | 4 | 5 | 18 | 3.6 | 0 |
| Stephenson | 5 | 20 | 137 | 6.9 | 0 |
| Will | 2 | 2 | 7 | 3.5 | 0 |
| Winnebago | 1 | 5 | 36 | 7.2 | 2 |
| All Counties | 44 | 125 | 997 | 8.0 | 15 |

Discussion: Illinois CWD in FY2018

Fifty-one CWD-positive deer were identified from 8,665 usable WT deer samples collected statewide. Across the 17-county CWD range, the disease prevalence rate for all adult deer taken by hunters was 0.84%, lowest observed for the last 5 years (5 yr avg—1.06%; range 0.84—1.17%) . The prevalence rate for hunter-harvested adult males (1.07%) continues to be approximately twice that of adult females (0.54%). For comparison, deer taken by IDNR sharpshooters were more likely to be CWD-positive, with an overall adult prevalence rate of 2.11%. Prevalence rate for adult males taken by sharpshooters was 2.12%; for adult females taken by sharpshooters the rate was 2.09%. Prevalence rates have remained low and changed little over time since discovery of CWD in 2002, and although rates were lower this year, it is too early to suggest that this trend will continue (Figure 7).

Figure 7. Trends in CWD prevalence for hunter-harvested adult deer (\geq yearling) during 2003-2018 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 75% higher than in females during this 16-year period.



Surveillance data suggest that prevalence rates are improving in a number of areas, but problem areas remain which will continue to present challenges for managing CWD, particularly where heightened prevalence rates coincide with significant deer densities (Figure 8):

- Prevalence rates along the Winnebago-Boone county line (blocks 0,0; 1,0; 2,0) collectively were 3.2% which is the lowest level observed during the 16 year history of this management effort. Prevalence has been trending lower in blocks 0,0 and 1,0 since 2014. Prevalence in block 2,0 is the lowest observed since 2014, but rates have fluctuated during this period.
- Counties along the Fox and Illinois rivers including Kane, Kendall, LaSalle, Grundy, and Will produced

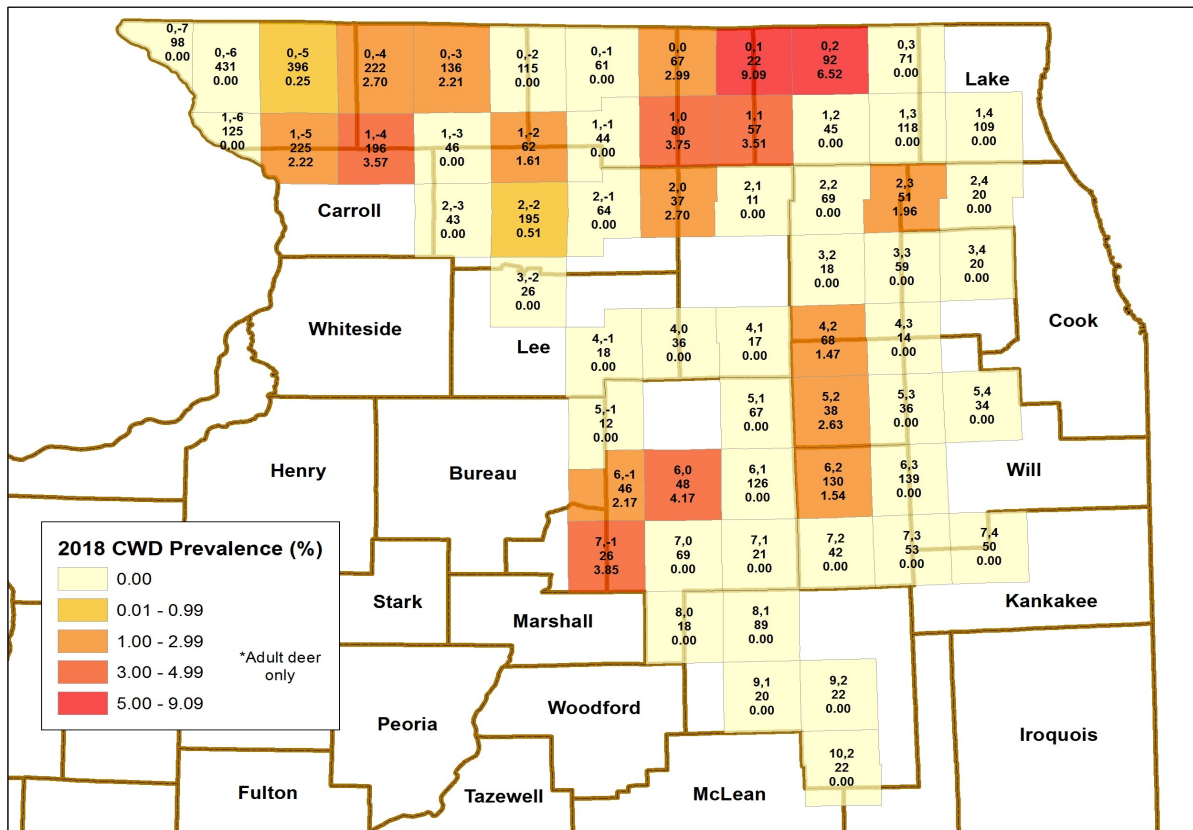


Figure 8. Estimated prevalence rates in adult deer during FY18 per 4-township block. For each block the upper number is the grid coordinate; the middle number is the sample size; and the lower number is the estimated adult prevalence rate (%). Includes all sources except suspect deer.

Table 5. County CWD prevalence estimates for adult deer during 1 July 2017 through 30 June 2018. Estimates are based only on samples collected from hunter-harvested deer.¹

| County | # of Samples | # of Positives | Percent Positive | 95% Confidence Interval (±) |
|------------------|--------------|----------------|------------------|-----------------------------|
| Boone | 70 | 2 | 2.86% | 3.90% |
| Carroll | 76 | 1 | 1.32% | 2.56% |
| DeKalb | 72 | 1 | 1.39% | 2.70% |
| DuPage | 6 | 0 | 0.00% | 0.00% |
| Grundy | 176 | 1 | 0.57% | 1.11% |
| JoDaviess | 1229 | 4 | 0.33% | 0.32% |
| Kane | 89 | 1 | 1.12% | 2.19% |
| Kankakee | 92 | 0 | 0.00% | 0.00% |
| Kendall | 42 | 0 | 0.00% | 0.00% |
| Lake | 34 | 0 | 0.00% | 0.00% |
| LaSalle | 340 | 3 | 0.88% | 0.99% |
| Livingston | 206 | 0 | 0.00% | 0.00% |
| McHenry | 283 | 5 | 1.77% | 1.53% |
| Ogle | 432 | 2 | 0.46% | 0.64% |
| Stephenson | 426 | 12 | 2.82% | 1.57% |
| Will | 94 | 0 | 0.00% | 0.00% |
| Winnebago | 166 | 0 | 0.00% | 0.00% |
| All CWD Counties | 3833 | 32 | 0.83% | 0.29% |

comparatively few positive deer this year (5 positives from 741 samples; 0.7% prevalence), with LaSalle producing the bulk of these (3 positives from 340 samples; 0.9%) (Table 5). Prevalence rates have been relatively stable to declining in these counties in recent years (Figure 9).

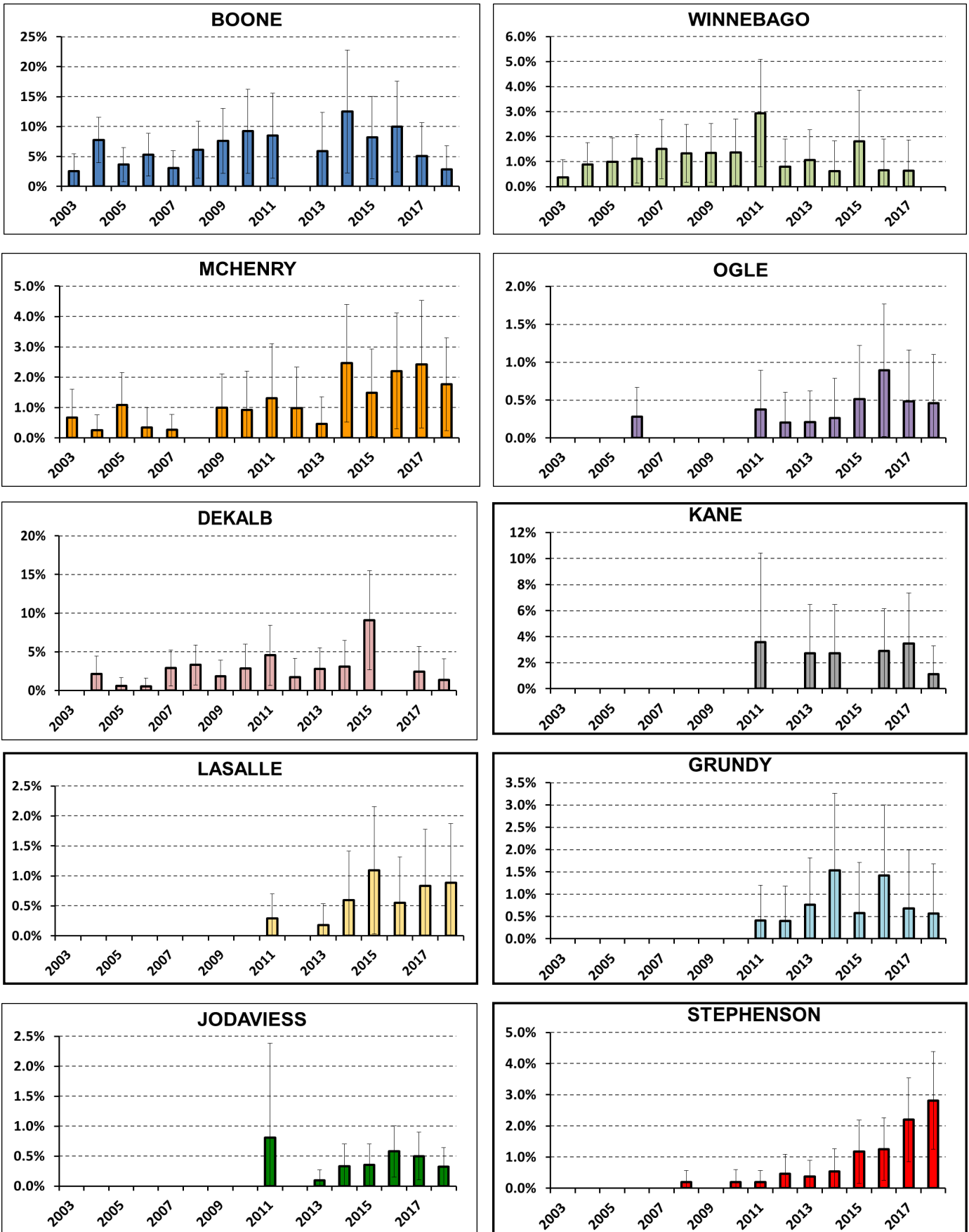
- The tri-county area of Jo Daviess, Stephenson, and northern Carroll continues to be an area of great concern. Blocks 1,-4 and 1,-5 had estimated prevalence of 2.8%, producing a total of 12 positives (Figure 8). Deer densities from these blocks are regionally among the highest observed during aerial deer counts. In addition, an increased number of positive deer was detected in the northern parts of Jo Daviess and Stephenson counties. Blocks 0,-4 and 0,-3 produced 9 positives and may be a result of increasing infection in southern Wisconsin, resulting in expansion into the northern portions of Illinois (Figure 8). The countywide prevalence rate in Stephenson County increased again this year (Figure 9). Additional landowner cooperation needed to affect local population reduction will be essential to reverse this trend. Effort toward disease control in southern Wisconsin would also be helpful.
- The Marengo Ridge area in northern McHenry County (Fig. 8, Blocks 0,1 and 0,2) produced 8 positives from 114 samples. This area has been consistently high for the past five years.

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 FY2018, only 14% 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 2017-2018 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 | | 38 | | | | | 38 |
| ALEXANDER | | 9 | | | | | 9 |
| BOND | | 11 | | | | | 11 |
| BOONE | 46 (1) | 24 (1) | 52 (1) | | 1 | | 123 (3) |
| BROWN | | 14 | | | | | 14 |
| BUREAU | | 17 | | | | | 17 |
| CALHOUN | | 93 | | | | | 93 |
| CARROLL | 2 | 74 (1) | 24(1) | | 1 | 1 | 102 (2) |
| CASS | | 4 | | | | | 4 |
| CHAMPAIGN | | 2 | | | | | 2 |
| CHRISTIAN | | 12 | | | | | 12 |
| CLARK | | 30 | | | | | 30 |
| CLAY | | 144 | | | | | 144 |
| CLINTON | | 3 | | | | 1 | 4 |
| COLES | | 129 | | | | | 129 |
| COOK | | 8 | | 76 | | 1 | 85 |
| CRAWFORD | | 181 | | | | | 181 |
| CUMBERLAND | | 51 | | | | | 51 |
| DEKALB | 44 | 28 (1) | 44 | | | | 116 (1) |
| DEWITT | | 12 | | | | | 12 |
| DOUGLAS | | 17 | | | | | 17 |
| DUPAGE | | 6 | | 80 | 1 | | 87 |
| EDGAR | | 23 | | | | | 23 |
| EDWARDS | | 1 | | | | | 1 |
| EFFINGHAM | | 32 | | | | | 32 |
| FAYETTE | | 18 | | | | | 18 |
| FORD | 1 | | | | | | 1 |
| FRANKLIN | | 44 | | | | | 44 |
| FULTON | | 18 | | | | 1 | 19 |
| GALLATIN | | 1 | | | | | 1 |
| GREENE | | 88 | | | 1 | 1 | 90 |
| GRUNDY | 155 (1) | 21 | 160 (1) | | 9 | | 345 (2) |
| HAMILTON | | 12 | | | | | 12 |
| HANCOCK | | 66 | | | 1 | | 67 |
| HARDIN | | 7 | | | | | 7 |
| HENDERSON | | 10 | | | | | 10 |
| HENRY | | | | | | 1 | 1 |
| IROQUOIS | | 1 | | | | | 1 |
| JACKSON | | 125 | | | | | 125 |
| JASPER | | 21 | | | 1 | 1 | 23 |
| JEFFERSON | | 118 | | | | | 118 |
| JERSEY | | 66 | | | | | 66 |
| JO DAVIESS | 956 (3) | 273 (1) | 149 (4) | 72 | 17 | 4 | 1471 (8) |
| JOHNSON | | 102 | | | | | 102 |
| KANE | 7 | 82 (1) | 140 (1) | 11 | 4 | 1 | 245 (2) |
| KANKAKEE | 84 | 8 | 21 | | 1 | | 114 |
| KENDALL | 32 | 10 | 52 (1) | | 5 | 1 | 100 (1) |
| KNOX | | 7 | | | 1 | | 8 |
| LAKE | | 34 | | 141 | 2 | 1 | 178 |
| LASALLE | 324 (2) | 17 (1) | 110 (2) | | 7 | | 458 (5) |
| LAWRENCE | | 11 | | | | | 11 |

Appendix A cont'd.

| County | Check Stations | Drop-off Stations/ Meat Processors | Agency Culling | Special Permits ¹ | Roadkill/ Incidental | Suspect | Total |
|---------------|------------------|---------------------------------------|-----------------|------------------------------|-------------------------|---------------|------------------|
| LEE | | 36 | | | 1 | | 37 |
| LIVINGSTON | 191 | 15 | 6 | | | 1 | 213 |
| LOGAN | | 2 | | | | | 2 |
| MACON | | 21 | | | 1 | | 22 |
| MACOUPIN | | 27 | | | | | 27 |
| MADISON | | 32 | | | 1 | 2 | 35 |
| MARION | | 32 | | | | 1 | 33 |
| MARSHALL | | 21 | | | | 1 | 22 |
| MASON | | 5 | | | | | 5 |
| MASSAC | | 21 | | | | | 21 |
| MCDONOUGH | | 56 | | | | | 56 |
| MCHENRY | 137 | 146 (5) | 41 (2) | 33 | 11 (1) | 2 | 370 (8) |
| MCLEAN | | 16 | | | | | 16 |
| MENARD | | 1 | | | | | 1 |
| MERCER | | 4 | | | | | 4 |
| MONROE | | 15 | | | | | 15 |
| MONTGOMERY | | 9 | | | | | 9 |
| MORGAN | | 3 | | | | | 3 |
| MOULTRIE | | 39 | | | | | 39 |
| OGLE | 381 (2) | 51 | 18 | | 2 | 2 (1) | 454 (3) |
| PEORIA | | 6 | | | | | 6 |
| PERRY | | 176 | | | | 1 | 177 |
| PIATT | | 5 | | | | | 5 |
| PIKE | | 226 | | | | | 226 |
| POPE | | 43 | | | | | 43 |
| PUTNAM | 1 | 16 | | | | | 17 |
| RANDOLPH | | 196 | | | 1 | | 197 |
| RICHLAND | | 9 | | | | | 9 |
| ROCK ISLAND | | 3 | | | | 1 | 4 |
| SALINE | | 14 | | | | | 14 |
| SANGAMON | | 2 | | | 1 | 1 | 4 |
| SCHUYLER | | 11 | | | | | 11 |
| SCOTT | | 10 | | | | | 10 |
| SHELBY | | 40 | | | | | 40 |
| STARK | | 1 | | | | | 1 |
| ST CLAIR | | 36 | | | 1 | 1 | 38 |
| STEPHENSON | 334 (9) | 93 (3) | 137 | | 23 | 5 | 592 (12) |
| TAZEWELL | | 4 | | | | | 4 |
| UNION | | 35 | | | | 1 | 36 |
| VERMILION | | 4 | | | | | 4 |
| WARREN | | 6 | | | | | 6 |
| WASHINGTON | | 37 | | | | | 37 |
| WAYNE | | 51 | | | | | 51 |
| WHITE | | 6 | | | | | 6 |
| WHITESIDE | | 144 | | | | 1 | 145 |
| WILL | 70 | 24 | 7 | 117 | 4 | 1 | 223 |
| WILLIAMSON | | 139 | | | 1 | | 140 |
| WINNEBAGO | 150 | 16 | 36 (2) | 42 (2) | 3 | | 247 (4) |
| WOODFORD | | 16 | | | | | 16 |
| TOTALS | 2915 (18) | 4044 (14) | 997 (15) | 572 (2) | 102 (1) | 35 (1) | 8665 (51) |

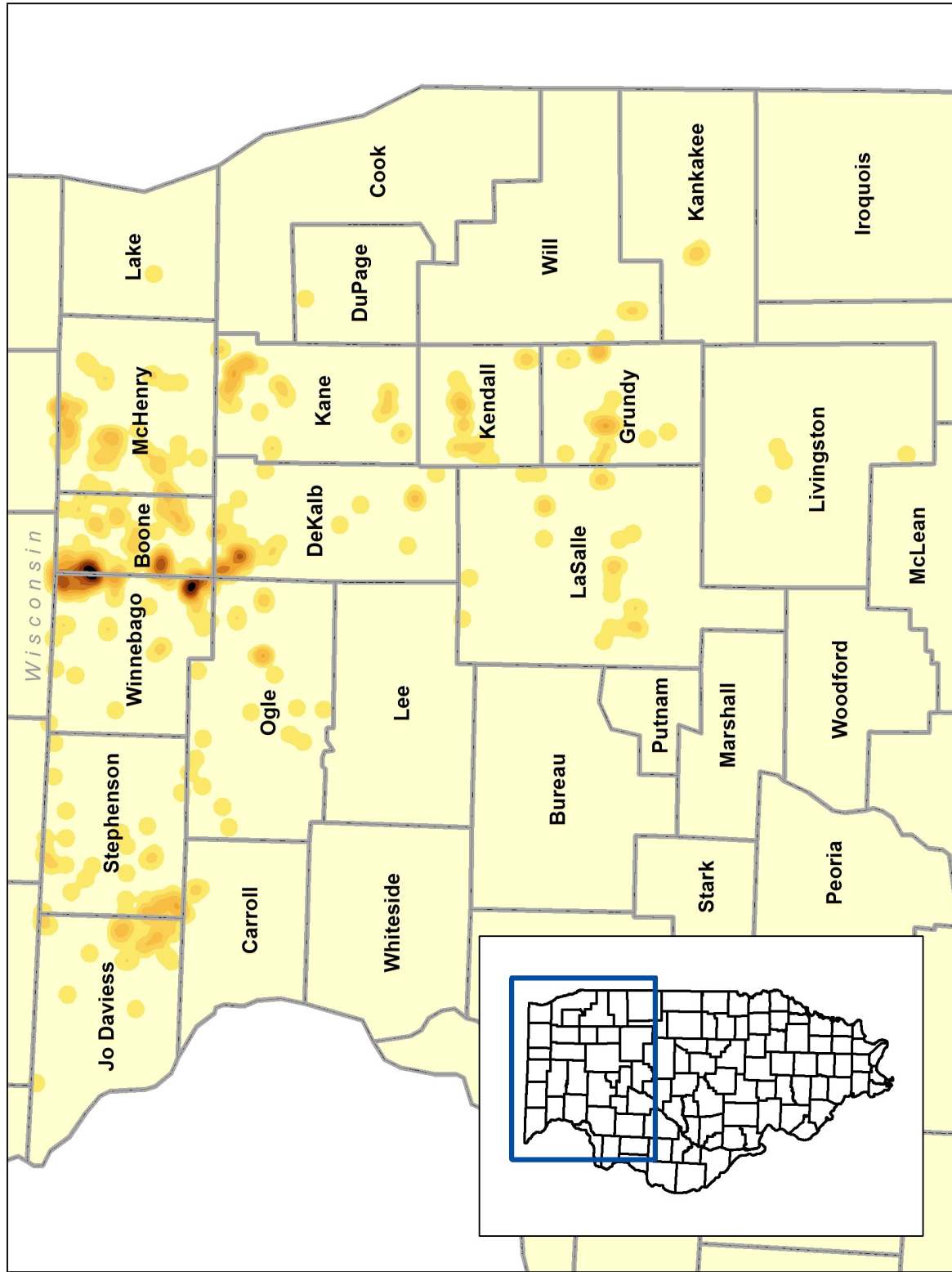
¹ Special permits include urban Deer Population Control Permits, nuisance Deer Removal Permits, and Scientific Permits

Appendix B. Summary of CWD-positive deer collected during FY2018.

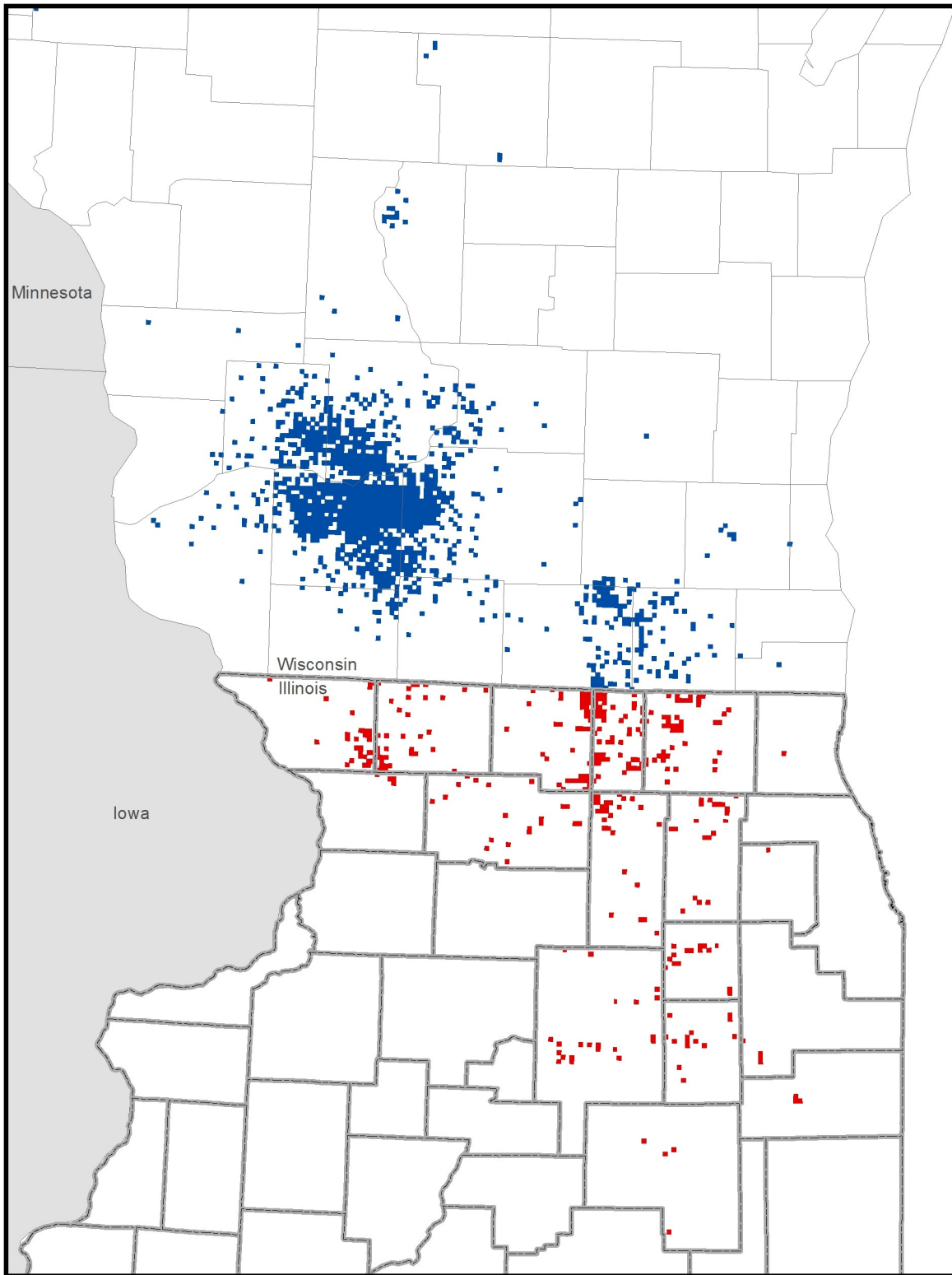
| Date Collected | County | Township, Range, Section | Sex | Age | Collection Method |
|-----------------------|---------------|---------------------------------|------------|------------|--------------------------|
| 10/9/17 | MCHENRY | 344N 5E23 | F | 2 | HUNTING |
| 10/18/17 | MCHENRY | 345N 6E16 | M | 2 | HUNTING |
| 10/24/17 | MCHENRY | 346N 6E15 | M | 3 | HUNTING |
| 10/25/17 | JODAVIESS | 426N 4E 1 | F | A | HUNTING |
| 11/8/17 | STEPHENSON | 429N 5E22 | M | 3 | HUNTING |
| 11/11/17 | DEKALB | 342N 3E22 | M | 2 | HUNTING |
| 11/14/17 | KANE | 338N 6E23 | F | 4 | HUNTING |
| 11/17/17 | JODAVIESS | 426N 4E13 | M | 2 | HUNTING |
| 11/17/17 | JODAVIESS | 426N 4E28 | M | 3 | HUNTING |
| 11/17/17 | JODAVIESS | 426N 4E22 | M | 4 | HUNTING |
| 11/17/17 | LASALLE | 333N 3E33 | M | 3 | HUNTING |
| 11/17/17 | STEPHENSON | 428N 8E 6 | M | 1 | HUNTING |
| 11/17/17 | STEPHENSON | 428N 7E 4 | M | 2 | HUNTING |
| 11/17/17 | STEPHENSON | 426N 5E14 | F | 1 | HUNTING |
| 11/18/17 | BOONE | 344N 3E29 | M | 1 | HUNTING |
| 11/19/17 | GRUNDY | 333N 7E27 | M | 2 | HUNTING |
| 11/19/17 | OGLE | 424N10E22 | M | 2 | HUNTING |
| 11/19/17 | STEPHENSON | 429N 7E21 | F | 2 | HUNTING |
| 11/19/17 | STEPHENSON | 429N 6E24 | F | 1 | HUNTING |
| 11/19/17 | STEPHENSON | 426N 6E12 | F | 2 | HUNTING |
| 11/19/17 | STEPHENSON | 426N 5E26 | F | 3 | HUNTING |
| 11/20/17 | STEPHENSON | 426N 5E14 | M | 2 | HUNTING |
| 11/20/17 | BOONE | 346N 4E36 | M | 1 | HUNTING |
| 11/29/17 | MCHENRY | 346N 6E17 | F | 1 | HUNTING |
| 11/30/17 | CARROLL | 425N 6E 7 | M | 2 | HUNTING |
| 12/1/17 | LASALLE | 332N 1E13 | M | 1 | HUNTING |
| 12/1/17 | OGLE | 425N 9E 6 | M | 2 | HUNTING |
| 12/1/17 | STEPHENSON | 428N 6E 7 | M | 2 | HUNTING |
| 12/2/17 | STEPHENSON | 428N 6E26 | M | 1 | HUNTING |
| 12/4/17 | STEPHENSON | 426N 5E34 | M | 4 | HUNTING |
| 12/15/17 | MCHENRY | 346N 6E14 | M | 4 | HUNTING |
| 12/18/17 | LASALLE | 333N 3E28 | M | 3 | HUNTING |
| 1/15/18 | WINNEBAGO | 343N 2E14 | M | 2 | SHARPSHOOTING |
| 1/23/18 | OGLE | 422N10E11 | M | 4 | SUSPECT |

Appendix B cont'd.

| Date Collected | County | Township, Range, Section | Sex | Age | Collection Method |
|-----------------------|---------------|---------------------------------|------------|------------|--------------------------|
| 1/24/18 | MCHENRY | 346N 7E 6 | F | 5 | SHARPSHOOTING |
| 1/29/18 | BOONE | 344N 4E27 | M | 2 | SHARPSHOOTING |
| 1/30/18 | MCHENRY | 346N 5E32 | M | 1 | SHARPSHOOTING |
| 2/12/18 | WINNEBAGO | 346N 2E35 | F | 2 | SHARPSHOOTING |
| 2/13/18 | LASALLE | 332N 1E 1 | F | F | SHARPSHOOTING |
| 2/21/18 | WINNEBAGO | 343N 2E23 | F | 1 | SHARPSHOOTING |
| 2/28/18 | MCHENRY | 345N 6E17 | F | 2 | ROADKILL |
| 3/5/18 | JODAVIESS | 427N 4E28 | M | 3 | SHARPSHOOTING |
| 3/7/18 | JODAVIESS | 427N 5E20 | F | 2 | SHARPSHOOTING |
| 3/12/18 | JODAVIESS | 426N 4E 2 | F | 2 | SHARPSHOOTING |
| 3/14/18 | CARROLL | 425N 6E17 | M | 2 | SHARPSHOOTING |
| 3/20/18 | LASALLE | 333N 1E25 | M | 2 | SHARPSHOOTING |
| 3/22/18 | KANE | 342N 8E29 | F | 2 | SHARPSHOOTING |
| 3/26/18 | KENDALL | 336N 6E 1 | F | 3 | SHARPSHOOTING |
| 3/27/18 | JODAVIESS | 427N 5E29 | F | 3 | SHARPSHOOTING |
| 3/27/18 | GRUNDY | 333N 6E18 | M | 1 | SHARPSHOOTING |
| 3/28/18 | WINNEBAGO | 346N 2E35 | 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, 2018. Squares represent sections in which CWD has been detected.