



Michigan Deer Harvest Survey Report 2017 Seasons

Brian J. Frawley

ABSTRACT

A survey of deer hunters was conducted following the 2017 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2017, an estimated 574,127 hunters spent 8.7 million days afield. Statewide, the number of people hunting decreased significantly by 2% between 2016 and 2017. Hunters harvested about 376,000 deer. Harvest increased significantly by 10% between 2016 and 2017. Statewide, nearly 50% of hunters harvested a deer in 2017. About 22% of hunters took an antlerless deer and 36% took an antlered buck in 2017. Approximately 15% of deer hunters harvested two or more deer of any type. About 6% of hunters statewide harvested two antlered bucks. Levels of satisfaction with numbers of deer seen, bucks seen, deer harvested, and overall experience increased significantly in 2017 from 2016. Statewide, 53% of hunters were satisfied with their overall hunting experience in 2017. About 206,000 hunters used a crossbow during the 2017 archery season, and they harvested approximately 93,000 deer with the crossbow. About 14% fewer individuals purchased a deer hunting license in 2017 than ten years ago in 2007. Although the overall number of license buyers declined from 2007, an increased number of people younger than 12 years of age and people older than 54 purchased a license in 2017. About 11% of the license buyers in 2017 were younger than 17 years old. Nearly 50% of deer hunters indicated that deer numbers and harvest has decreased during the last five years, while nearly an equal proportion of hunters indicated that deer numbers and harvest was unchanged. About 56% of hunters statewide indicated that they would like to see deer numbers stay the same during the next five years, while 39% of hunters wanted deer numbers to increase. Deer hunters were presented thirteen statements related to CWD and asked whether they agreed or disagreed with these statements. Statewide, most hunters agreed with the following two statements: (1) CWD could spread throughout the Michigan deer herd [74%] and (2) we should reduce deer populations in CWD areas [59%]. Most hunters disagree with the following five statements: (1) CWD is natural and we should let it take its course in deer [58%], (2) I plan to discontinue deer hunting if CWD has infected deer



A contribution of Federal Aid in Wildlife Restoration, Michigan Project W-147-R

Equal Rights for Natural Resource Users

The Michigan Department of Natural Resources provides equal opportunities for employment and access to Michigan's natural resources. Both State and Federal laws prohibit discrimination on the basis of race, color, national origin, religion, disability, age, sex, height, weight or marital status under the U.S. Civil Rights Acts of 1964 as amended, 1976 MI PA 453, 1976 MI PA 220, Title V of the Rehabilitation Act of 1973 as amended, and the 1990 Americans with Disabilities Act, as amended.

If you believe that you have been discriminated against in any program, activity, or facility, or if you desire additional information, please write:

Human Resources, Michigan Department of Natural Resources, PO Box 30473, Lansing MI 48909-7973, or
Michigan Department of Civil Rights, Cadillac Place, 3054 West Grand Blvd, Suite 3-600, Detroit, MI 48202, or
Division of Federal Assistance, U.S. Fish & Wildlife Service, 4401 North Fairfax Drive, Mail Stop MBSP-4020, Arlington, VA 22203.

For information or assistance on this publication, contact Michigan Department of Natural Resources, Wildlife Division, P.O. Box 30444, MI 48909.
This publication is available in alternative formats upon request.

where I hunt [57%], (3) I have concerns about eating deer meat [53%], (4) I plan to locate a different hunting area in Michigan if CWD has infected deer where I hunt [53%], and (5) members of my family have concerns about eating deer meat [52%]. Finally, most hunters (57%) indicated they were uncertain about whether could get CWD if they eat meat from animals infected with CWD.

INTRODUCTION

The Natural Resources Commission (NRC) and Michigan Department of Natural Resources (DNR) have the authority and responsibility to protect and manage the wildlife resources of the state of Michigan. Harvest surveys are one of the management tools used to accomplish this statutory responsibility. Estimating hunter participation, harvest, and hunting effort (hereafter referred to as estimates) are the primary objectives of these surveys. Estimates derived from harvest surveys and information from deer (*Odocoileus virginianus*) harvest check stations, trends in deer-vehicle collisions, population modeling, and input received from the public are used to monitor deer populations and establish harvest regulations.

Estimating harvest, hunter numbers, and hunting effort were the primary objectives of the deer harvest survey (Appendix A). This survey also provided an opportunity to collect information about management issues. Questions were added to the questionnaire to investigate hunter satisfaction with the 2017 hunting season and deer numbers. Deer hunters were also asked their opinions about the status of the deer population and chronic wasting disease (CWD).

Deer were grouped into either antlered or antlerless deer when developing hunting regulations. Antlered deer included deer with at least one antler three inches or longer, and antlerless deer included deer without antlers and deer with antlers less than 3 inches in length. The type of deer that could be harvested by hunters depended upon the area hunted, hunting season, and license purchased (Tables 1 and 2). During 2017, deer could be harvested primarily during nine hunting seasons: Liberty, archery, regular firearm, muzzleloader, early antlerless, late antlerless, Independence, urban archery, and a disease surveillance hunt.

In order to harvest a deer, hunters had to possess a hunting license (deer, combination, antlerless, or mentored youth license) (Table 2). A harvest tag was issued as part of the hunting license. Deer, mentored youth, and antlerless licenses included one harvest tag, while combination licenses had two harvest tags.

Hunters could purchase a maximum of two licenses for taking antlered deer. Hunters wanting to harvest only one antlered deer could purchase a single deer license (one kill tag), while hunters wanting to take two antlered deer could purchase a combination license (two kill tags). Hunters who purchased a single deer license could not purchase a second deer license or a combination license.

If a hunter took two antlered deer, one needed to have at least one antler with four or more points (qualifying points must be at least one inch), except for deer taken by mentored youth

hunters or in the chronic wasting disease (CWD) core zone. A person with a mentored youth license could use their one harvest tag to take a deer of either sex during the archery, regular firearm, muzzleloader, or Liberty seasons.

Antlerless licenses could be purchased in addition to deer, mentored youth, or combination licenses. Antlerless deer licenses allowed hunters to take antlerless deer during any season with equipment appropriate for the season. Use of each antlerless license was restricted to a single DMU designated at the time of purchase. Antlerless licenses were available for most of the state, except in seventeen DMUs (007, 017, 021, 022, 027, 031, 036, 042, 048, 066, 117, 127, 131, 152, 249, 252, and 349) in the UP. A limited number of antlerless licenses were issued specifically for either public or private lands. Public land antlerless licenses were not available in all DMUs that had private land licenses. A public-land antlerless deer license was required to hunt antlerless deer on Commercial Forest land. The number of licenses available in DMUs open to antlerless deer hunting was established by the NRC (Appendix B). Hunters could apply for an antlerless license through the drawing, purchase a private land license for selected areas without application, or wait to purchase a leftover license after the drawing, if available.

A private land antlerless deer hunting license was valid for taking antlerless deer only from privately-owned lands within the DMU specified on the license with landowner permission. A private land license was not valid on land enrolled in the Commercial Forest Act program (Commercial Forest Lands).

A public land antlerless deer hunting license allowed an individual to hunt for antlerless deer upon publicly-owned lands (including state, federal, and county lands) open to hunting and Commercial Forest Lands within the DMU for which it was issued. A public land license was invalid on any privately-owned lands except Commercial Forest Lands.

Deer Management Unit 487 included all of Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties (DMUs 001, 004, 035, 060, 068, 071, and 452). An individual could purchase up to a season limit of 5 private-land antlerless deer licenses statewide, except for licenses valid in DMUs 333, 419, 452, and 487. For DMU 487, an individual could purchase a maximum of ten antlerless deer licenses until the quota had been met. For DMUs 333 and 419, an individual could purchase an unlimited number of antlerless deer licenses. In addition, there was no seasonal limit for public land antlerless licenses in any DMU where licenses were available.

The Pure Michigan Hunt (PMH) was a unique multi-species hunting opportunity offered for the first time in 2010. Individuals could purchase an unlimited number of applications for the PMH. Three individuals were randomly chosen from all applications, and winners received elk, bear, spring turkey, fall turkey, and antlerless deer hunting licenses and could participate in a reserved waterfowl hunt on a managed waterfowl area. The antlerless deer hunting license was valid for all areas open for hunting antlerless deer and during all deer hunting seasons in which they were eligible to participate.

Deer Management Assistance (DMA) permits were special antlerless permits issued to landowners where the number of antlerless licenses was insufficient to meet the objective of specific landowners (e.g., controlling crop damage). These permits allowed hunters to take one antlerless deer per permit during any deer season on the land where issued or adjacent private lands with the landowner's permission. To use these permits, the hunter also must have purchased a valid deer hunting license for the season in which they were hunting and abide by all other hunting regulations.

Managed Deer Hunt permits were antlerless permits that could be used during special seasons on some public lands (e.g., state parks, state wildlife areas, and some federal land). These permits were issued by special random drawings. To use these permits, the hunter also must have purchased a valid deer hunting license and abide by all other hunting regulations.

The Liberty Season was held during September 16-17 on public and private lands statewide. Youth (less than 17 years old) and disabled hunters could take no more than one deer during the season. Eligible disabled hunters included hunters issued a permit to use a laser-sighting device or to hunt from a standing vehicle, veterans with 100% disability or rated unemployable as defined by the United States Department of Veterans Affairs, or legally blind people could participate in this season. Hunters could take one deer of either sex using a deer or combination license, and antler point restrictions did not apply to taking antlered deer. Only an antlerless deer could be taken with an antlerless license or DMA permit. Youth less than 14 years of age could hunt with archery and crossbow equipment on public or private lands or with a firearm on private or Commercial Forest lands only. All hunters under age 17 hunting with a firearm had to be accompanied by a parent, guardian or someone designated by their parent or guardian. In addition, hunters under 10 years of age had to be licensed through the Mentored Youth Hunting Program and accompanied by a qualified mentor.

The archery season occurred statewide on public and private lands. This season was divided into early and late segments (October 1 through November 14 and December 1, 2017, through January 1, 2018). In addition, a January urban archery hunt also was held for the first time this year. This new archery season occurred during January 2-31, 2018, in Macomb, Oakland, and Wayne counties. Deer licenses, antlerless deer licenses, combination licenses, mentored youth licenses, and DMA permits could be used to take deer during the archery seasons using archery equipment.

Deer could also be taken during the Independence Hunt October 19-22, 2017. Hunters could take one deer of either sex on private lands or public lands requiring an access permit. Hunters could use a deer or combination license, and antler point restrictions did not apply to taking antlered deer. Only an antlerless deer could be taken with an antlerless license or DMA permit. Only hunters that were issued a permit to use a laser-sighting device or to hunt from a standing vehicle; veterans with 100% disability or rated unemployable as defined by the United States Department of Veterans Affairs; or legally blind people could participate in this season.

The statewide regular firearm season occurred November 15-30. The muzzleloader season was held December 1-10 in the UP and Northern LP, and December 1-17 in the Southern LP. Hunters were allowed to take deer on both public and private lands with mentored youth, deer and deer combo hunting licenses during the regular firearm and muzzleloader seasons. Antlerless licenses (including DMA permits) also could be used during the firearm seasons.

The early antlerless firearm season occurred from September 16-17. Hunters pursuing deer during this season had to purchase an antlerless or mentored youth license, possess an unused antlerless harvest tag (including DMA permits), and were limited to hunting on private land. The area open to hunting during the early antlerless season was limited to all or portions of 37 counties in the LP (Alcona, Alpena, Antrim, Arenac, Bay, Benzie, Charlevoix, Clinton, Eaton, Genesee, Grand Traverse, Hillsdale, Huron, Ingham, Ionia, Iosco, Isabella, Jackson, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Manistee, Midland, Monroe, Montmorency, Oakland, Oscoda, Presque Isle, Saginaw, Sanilac, Shiawassee, St. Clair, Tuscola, Washtenaw, and Wayne counties). The counties open in 2017 were the same as in 2016.

The late antlerless firearm season occurred from December 18, 2017, through January 1, 2018. Hunters pursuing deer during this season had to have purchased an antlerless or mentored youth license, possess an unused antlerless harvest tag (including DMA permits), and were limited to hunting on private land. All counties open during the early antlerless firearm season were also open for the late antlerless firearm season, as well as 17 additional counties: Allegan, Barry, Berrien, Branch, Calhoun, Cass, Gratiot, Kalamazoo, Kent, Mecosta, Montmorency, Muskegon, Newaygo, Oceana, Ottawa, St. Joseph, and Van Buren. The counties open in 2017 were the same as in 2016.

A newly created January firearm deer hunt occurred during January 4-7 and January 11-14 in portions of Alpena, Ionia and Montcalm counties. This special hunt was created to help with disease surveillance (i.e., CWD and bovine tuberculosis). The hunt in Ionia and Montcalm counties occurred on both public and private land and any type of deer could be harvested. In contrast, the hunt in Alpena County was only held on private land and only antlerless deer could be harvested. In Ionia and Montcalm counties, a deer license, combination deer license, private-land antlerless deer license for DMU 354 or DMU 419, or a public-land antlerless deer license for DMU 354 or DMU 419 were valid during this hunt. In Alpena County, antlerless deer could be harvested with a deer license, deer combination license, or private land antlerless deer license for DMU 487.

Crossbows were legal to use during all archery and firearm seasons statewide, except in the UP, where crossbow use was prohibited during the late archery and muzzleloader seasons, unless the hunter was disabled.

METHODS

The Wildlife Division provided all hunters the option to report information about their deer hunting activity voluntarily via the internet. This option was advertised through the hunting regulation booklet (digest) and on the DNR website, and an email message was sent to all license buyers that had provided an email address to the DNR (151,405). Hunters reported whether they hunted, the days spent afield, and whether they harvested a deer. Deer hunters were also asked their opinions about the status of deer populations and CWD in Michigan. Following the 2017 deer hunting seasons, a questionnaire (Appendix A) was sent to 61,303 randomly selected individuals who had purchased a hunting license (deer, antlerless, mentored youth, or combination deer hunting licenses) and had not already voluntarily reported harvest information via the internet. Hunters receiving the questionnaire were asked the same questions as asked via the internet. Hunters were instructed not to report hunting effort and harvest associated with DMA permits because landowners obtaining these permits already were required to report the number of deer harvested to the DNR.

Estimates were based primarily on information collected from random samples of hunting license buyers. Thus, these estimates were subject to sampling errors (Cochran 1977). Estimates were calculated using a stratified random sampling design (Cochran 1977) and were presented along with their 95% confidence limit (CL). In theory, this CL can be added and subtracted from the estimate to calculate the 95% confidence interval. The confidence interval is a measure of the precision associated with the estimate and implies the true value would be within this interval 95 times out of 100. Unfortunately, there are several other possible sources of error in surveys that are probably more serious than theoretical calculations of sampling error. They include failure of participants to provide answers (nonresponse bias), question wording, and question order. It is very difficult to measure these biases.

License buyers were assigned to one of five groups (strata) based on the type of license purchased and season that it was valid. The first stratum consisted of people eligible only for the archery, regular firearm, and muzzleloader hunting seasons (N = 397,300). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 167,303). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and Liberty seasons (N = 44,041). The fourth stratum consisted of 8,060 people that were eligible to participate in the special disabled hunts. Beginning in 2013, disabled veterans could obtain a free deer hunting license (i.e., Disabled Veteran license type). A unique type of hunting license was not available for non-veteran hunters with disabilities; however, disabled hunters younger than 65 years were sold a discounted hunting license (i.e., sold a senior hunting license). The fifth stratum consisted of 4,303 people that had voluntarily reported information about their hunting activity via the Internet before the random sample was selected. The random sample consisted of 29,677 people from the first stratum; 12,447 from the second stratum; 11,315 from the third stratum; and 7,864 from the fourth stratum. The stratified sampling design accounted for the varying probabilities of being selected from the strata so estimates could be reliably extrapolated from the sample to all license buyers.

Estimates were calculated separately by the area where the hunt occurred. For consistency with previous surveys, the state was divided into eight areas that closely matched the DNR's previous wildlife management administrative units (Figure 1). The state was also divided into three ecological regions (UP, Northern LP, and Southern LP). These regions generally matched major ecoregions (Albert 1995), except in the UP where two ecoregions were combined. Ecoregions are regions having similar soils, vegetation, climate, geology, and physiography. Estimates were also calculated for each DMU (Figure 2, Appendix C). Deer harvested from unknown locations were allocated among areas in proportion to the known harvest.

Statistical tests are used routinely to determine the likelihood that the differences among estimates are larger than expected by chance alone. The overlap of 95% confidence intervals was used to determine whether estimates differed. Non-overlapping 95% confidence intervals were equivalent to stating that the difference between the means was larger than would be expected 995 out of 1,000 times, if the study had been repeated (Payton et al. 2003).

Questionnaires were initially mailed during mid-January 2018, and two follow-up questionnaires were mailed to nonrespondents. To increase the number of questionnaires returned, respondents that returned their questionnaire promptly became eligible to win a firearm or bow. Although 61,303 people were selected to receive a questionnaire, 1,985 surveys were undeliverable resulting in an adjusted sample size of 59,318. Questionnaires were returned by 27,296 people (46% adjusted response rate).

Estimates of harvest, hunting effort, and hunter participation are affected by the willingness of people to complete and return their questionnaires. This problem can confound comparisons of estimates made between years if response rates vary greatly. The percentage of people returning their questionnaire this year was lower than previous years. To reduce bias caused by this lower response rate, an adjustment was made on the 2017 estimates to make them comparable to the adjusted 2016 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 8.0%, 6.0%, and 2.3%, respectively, to make estimates comparable to 2016. These reductions reflected the average decline noted between estimates calculated when 46% and 74% of the responses were used in 2000 and 2001 surveys.

RESULTS AND DISCUSSION

In 2017, 620,932 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2017 decreased by 2.1% from 2016 (634,021 people purchased a license in 2016). Most of the people buying a license were male (89%), and the average age of license buyers was 44 years (Figure 3). About 11% (65,658) of the license buyers were younger than 17 years old. About 4% (22,488) of the license buyers were younger than 12 years old.

The number of people buying a license in 2017 was about 14% less than the number of people who purchased a license ten years ago in 2007 (724,239 people purchased a license in 2007). There were fewer license buyers for all age classes between 12 and 54 years of

age in 2017, compared to 2007 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2017. The increased hunter numbers in the oldest age classes likely represented the rising share of older people in the population as the baby-boom generation aged and life expectancies have increased. In addition, legalization of crossbow use during the archery season probably increased participation among hunters in the oldest age classes. The increased participation among the youngest hunters likely reflected the lowering of the minimum age requirements. In 2012, the minimum age requirement was eliminated to hunt deer with a firearm, while hunters had to be at least 12 years old to participate in 2007.

The number of 2017 deer harvest tags sold for all license types combined decreased by 0.7% from 2016 (Table 3). License buyers were issued an average of 2.1 harvest tags. About 92% of the license buyers obtained three or fewer harvest tags, and about 99% had five or fewer harvest tags (Figure 5). Hunters most frequently obtained antlerless and combination harvest tags (Figure 6). About 40% of the license buyers purchased at least one antlerless license (248,125 people), and greater than 98% of antlerless license buyers purchased three or fewer antlerless licenses, public and private licenses combined (Figure 7).

The antlerless license quota on private lands decreased slightly from 436,400 in 2016 to 432,800 licenses in 2017 (Appendix B). The quota for public land antlerless licenses increased from 58,000 to 64,460 between 2016 and 2017 (i.e., 11% increase). Overall, the antlerless license quota for private and public lands combined was nearly unchanged, and the number of antlerless licenses sold was nearly unchanged in 2017 (Table 3).

About $92.5 \pm 0.3\%$ (585,994 hunters) of the people buying a license in 2017 actually spent time hunting deer (Table 4). Statewide, the number of people hunting deer during all seasons combined declined significantly by 2% from 2016. Most hunters (494,366) pursued deer during the regular firearm season (Figure 8).

Significantly fewer people hunted during the regular firearm (-2%), archery (-4%), Liberty (-8%), muzzleloader (-9%), early antlerless (-22%), and late antlerless (-22%) seasons during 2017 (Table 4). The number of people hunting in the Independence season was not significantly different between 2016 and 2017 (Figure 9).

About 50% of the days hunters spent pursuing deer throughout the state occurred in the archery season (Figure 10). About 39% of the hunting effort occurred during the regular firearm season. Nearly 10% of the hunting effort occurred in the muzzleloader and late antlerless seasons combined. Statewide, hunters devoted an average of 14.8 days afield hunting deer during all seasons combined (Table 5). Archers had the greatest number of days available to hunt deer (77 days) and devoted the greatest number of days afield (\bar{x} = 13.5 days/hunter) (Figure 11, Table 5). Statewide, the number of days hunting deer during all seasons combined increased significantly by 5% from 2016 (Table 4). Significantly more days were devoted to hunting during the regular firearm (8%) and Independence seasons during 2017 (Table 4); however, hunting effort was not significantly different in the remaining seasons.

About 385,554 deer were harvested statewide in 2017, which was a significant increase of nearly 11% from 2016 (Figures 12-13, Tables 6-7). The number of deer harvested increased significantly in archery (9%) and regular firearm (15%) seasons, while the harvest decreased significantly (-21%) in the late antlerless season. Harvest was not significantly changed in the remaining seasons (i.e., muzzleloader, early antlerless, Liberty, and Independence). Statewide harvest of antlered deer in 2017 for all seasons combined increased significantly by 15%, but harvest of antlerless deer was not significantly different from 2016 (Table 6).

About 50% of the deer harvested (sexes combined) in 2017 were taken during the regular firearm season (Figure 14). Nearly 42% of the antlerless deer and 56% of the antlered bucks were harvested in the regular firearm season. Hunters took 36% of the harvested deer (sexes combined) during archery season. These archers took 35% of the antlerless deer and 37% of the antlered bucks harvested. Few antlered bucks (5%) were taken in the muzzleloader season. The early and late antlerless and muzzleloader seasons combined accounted for about 11% of the antlerless deer harvested.

About 86% of the animals harvested (sexes combined) in 2017 were taken on private lands (Table 8). Statewide, most of the antlerless deer (86%) and antlered bucks (86%) were harvested on private lands.

Statewide, 50% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2017 (Figure 15, Table 9), compared to the 44% successful in 2016. About 22% of hunters took an antlerless deer, and 36% took an antlered buck in 2016. About 15% of deer hunters harvested two or more deer.

Hunters were most successful in taking a deer during the archery (38%), Liberty (38%), and regular firearm (35%) seasons (Figure 16, Table 10). Hunter success was lowest in the muzzleloader (17%), Independence (13%), urban archery (2%), and disease surveillance (<1%) seasons. Nearly 26% of hunters took an antlered buck and 12% harvested an antlerless deer during the regular firearm season.

Deer hunters were asked to report how satisfied they were with (1) number of deer seen, (2) number of antlered deer [bucks] seen, (3) size of antlers seen, (4) number of deer taken, and (5) their overall hunting experience. Statewide, \leq 53% of hunters were satisfied with numbers of deer seen, bucks seen, size of antlers seen, deer taken, and their overall hunting experience in 2017 (Tables 11-13). Statewide levels of satisfaction increased significantly for all measures between 2016 and 2017. People hunting deer only on private lands were generally more satisfied than people hunting only on public lands (Tables 14-16).

Deer hunters were asked to indicate how the deer population and harvest in their preferred hunting area has changed during the last five years. Nearly 50% of hunters indicated that deer numbers and harvest has decreased, while nearly an equal proportion of hunters indicated that deer numbers and harvest was unchanged (Table 17). Relatively few hunters (\leq 6%) reported that deer numbers and harvest has increased. Hunters also were asked to indicate how they would like to see deer numbers change during the next five years. About 56% of hunters statewide indicated that they would like to see deer numbers stay the same,

while 39% of hunters wanted deer numbers to increase (Table 18). Only 4% of hunters wanted deer numbers to decrease during the next five years.

Deer hunters were presented thirteen statements related to CWD and asked whether they agreed or disagreed with these statements (Figure 17, Table 19). Statewide, most hunters agreed with the following two statements: (1) CWD could spread throughout the Michigan deer herd [74%] and (2) we should reduce deer populations in CWD areas [59%]. Most hunters disagree with the following five statements: (1) CWD is natural and we should let it take its course in deer [58%], (2) I plan to discontinue deer hunting if CWD has infected deer where I hunt [57%], (3) I have concerns about eating deer meat [53%], (4) I plan to locate a different hunting area in Michigan if CWD has infected deer where I hunt [53%], and (5) members of my family have concerns about eating deer meat [52%]. Finally, most hunters (57%) indicated they were uncertain about whether could get CWD if they eat meat from animals infected with CWD.

Hunters from several states have been asked whether they agree with these CWD-related statements, and the estimates of agreement with the statements have generally been similar among these states (Figures 18 and 19). The estimates for Michigan hunters generally were most similar to the estimates for Illinois hunters. This similarity was likely related to the states close proximity and that surveys in both states were recently completed. The Illinois survey was done in 2012, while the surveys in the other states were done prior 2005.

About 205,958 hunters used a crossbow during the archery season, and they harvested about 92,913 deer with the crossbow (Tables 20-22). The number of archers using a crossbow increased significantly by 7% from 2016 (193,137 archers in 2016). Harvest of deer by archers using a crossbow increased significantly by 25% from last year (74,130 deer taken in 2016). About 39% of these archers using a crossbow in 2017 harvested a deer with a crossbow in the archery season.

An estimated $141,825 \pm 3,286$ hunters took $168,606 \pm 4,451$ deer to a commercial meat processor in 2017. Thus, about 45% of the deer harvested in all seasons (168,606 of 376,365 deer) went through a processor. This proportion is similar to the proportion of antlered deer taken to a processor in Pennsylvania (Pennsylvania Game Commission 2012, 2015).

ACKNOWLEDGEMENTS

I thank all the deer hunters that provided information. Theresa Riebow, Sierra Robbins, and April Spiekhout completed data entry. The figure of DMUs was prepared by Marshall Strong. Ashley Autenrieth and Chad Stewart reviewed a previous version of this report.

LITERATURE CITED

- Albert, D. A. 1995. Regional landscape ecosystems of Michigan, Minnesota, and Wisconsin: a working map and classification. General Technical Report NC-178. U.S. Department of Agriculture, Forest Service, North Central Forest Experimental Station, St. Paul, Minnesota, USA.
- Cochran, W. G. 1977. Sampling techniques. John Wiley & Sons, New York, USA.
- Miller, Craig A. Ph.D., M.E. McCleary, E.E. Harper, and L.K. Campbell. 2013. Stakeholder Attitudes Toward Deer Management and Chronic Wasting Disease in Illinois. Job Completion Report, Federal Aid in Wildlife Restoration W-112-R-21 & 22. Human Dimensions Research Program Report HR-11-05/INHS Technical Report 32. Illinois Natural History Survey, Champaign, Illinois, USA.
- Needham, M. D. and J. J. Vaske. 2006. Beliefs about chronic wasting disease risks across multiple states, years, and interest groups. *Human Dimensions of Wildlife* 11:215-220.
- Payton, M. E., M. H. Greenstone, and N. Schenker. 2003. Overlapping confidence intervals or standard error intervals: what do they mean in terms of statistical significance? *Journal of Insect Science* 3:34.
- Pennsylvania Game Commission. 2012. 2011 Pennsylvania deer hunter survey preliminary statewide results. Unpublished report. Harrisburg, Pennsylvania, USA.
- Pennsylvania Game Commission. 2015. 2014 Pennsylvania deer hunter survey statewide results. Unpublished report. Harrisburg, Pennsylvania, USA.

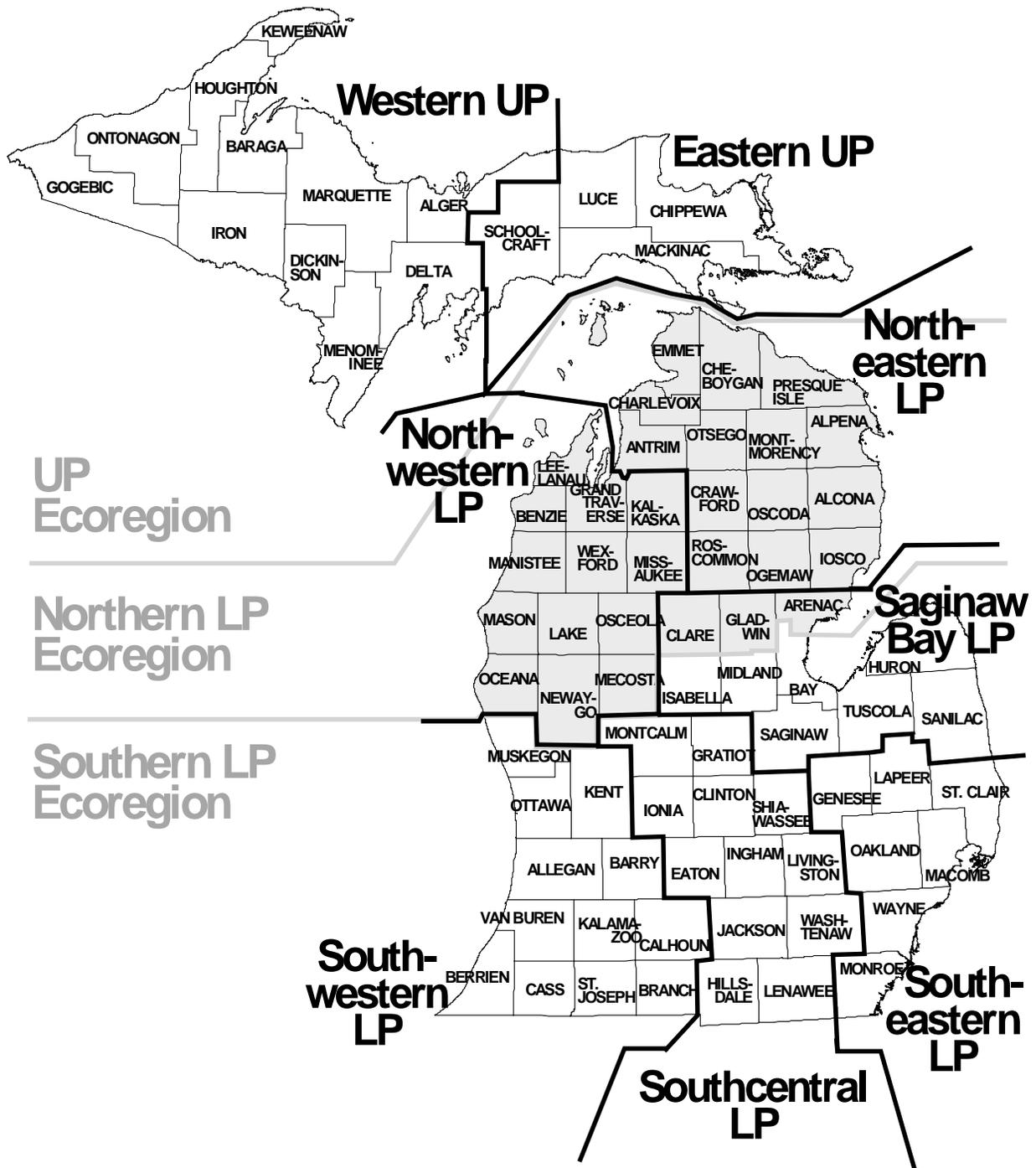


Figure 1. Areas used to summarize deer harvest in Michigan for the 2017 hunting seasons.

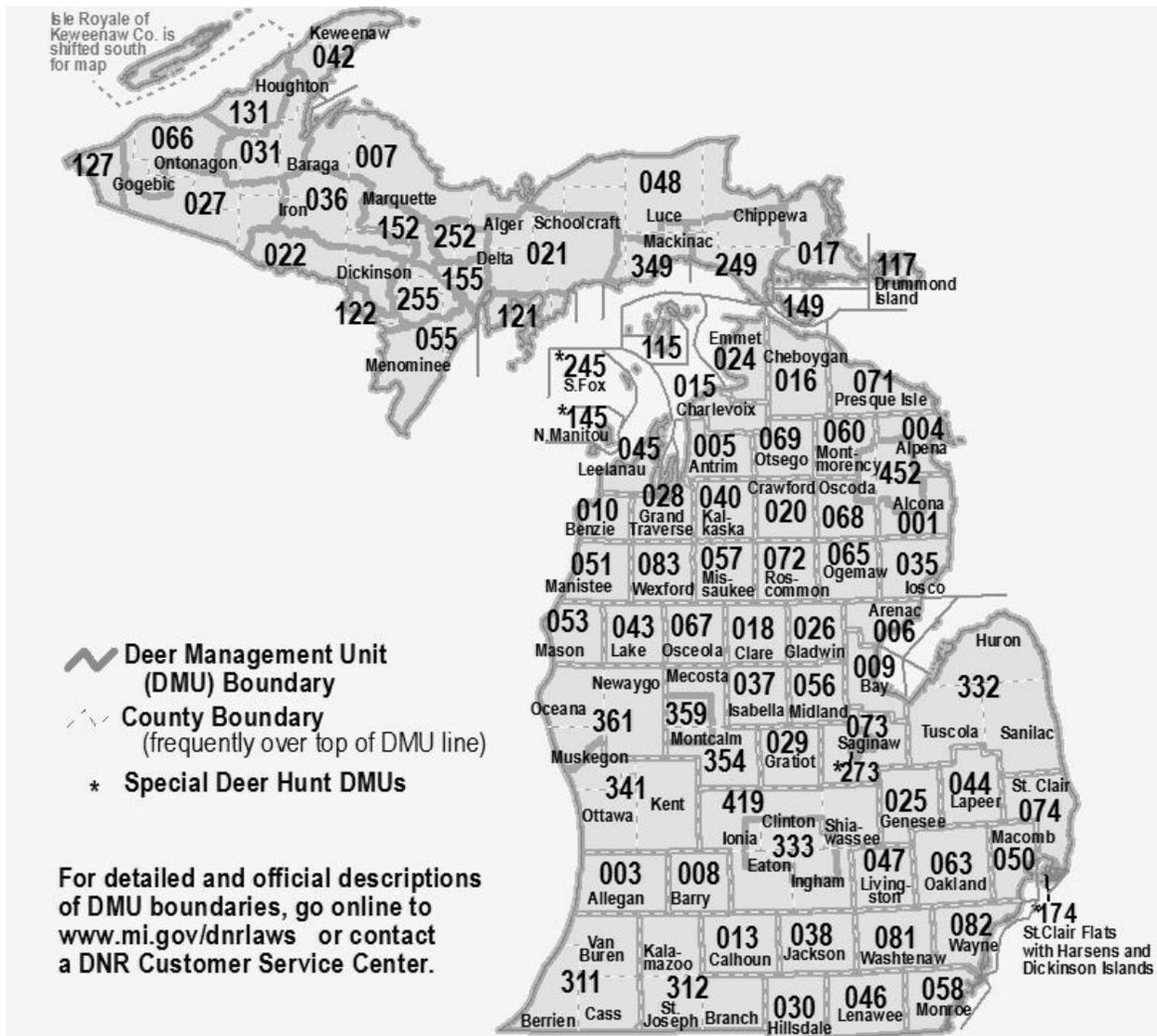


Figure 2. Deer management units in Michigan for the 2017 hunting seasons.

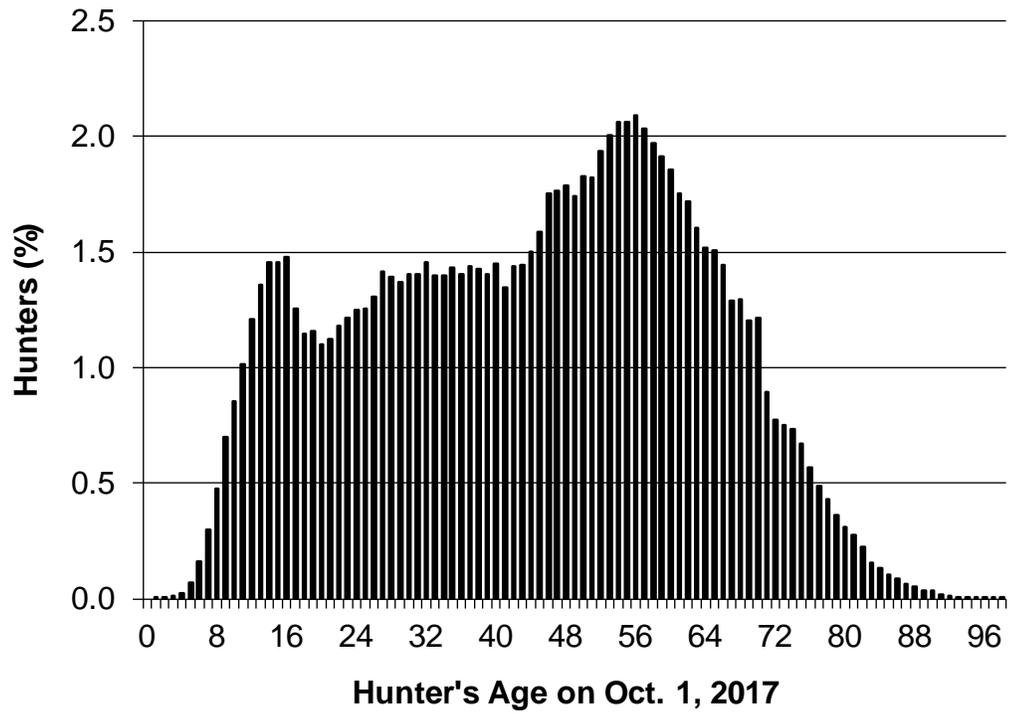


Figure 3. Age of people that purchased a deer hunting license in Michigan for the 2017 hunting seasons (mean = 44 years).

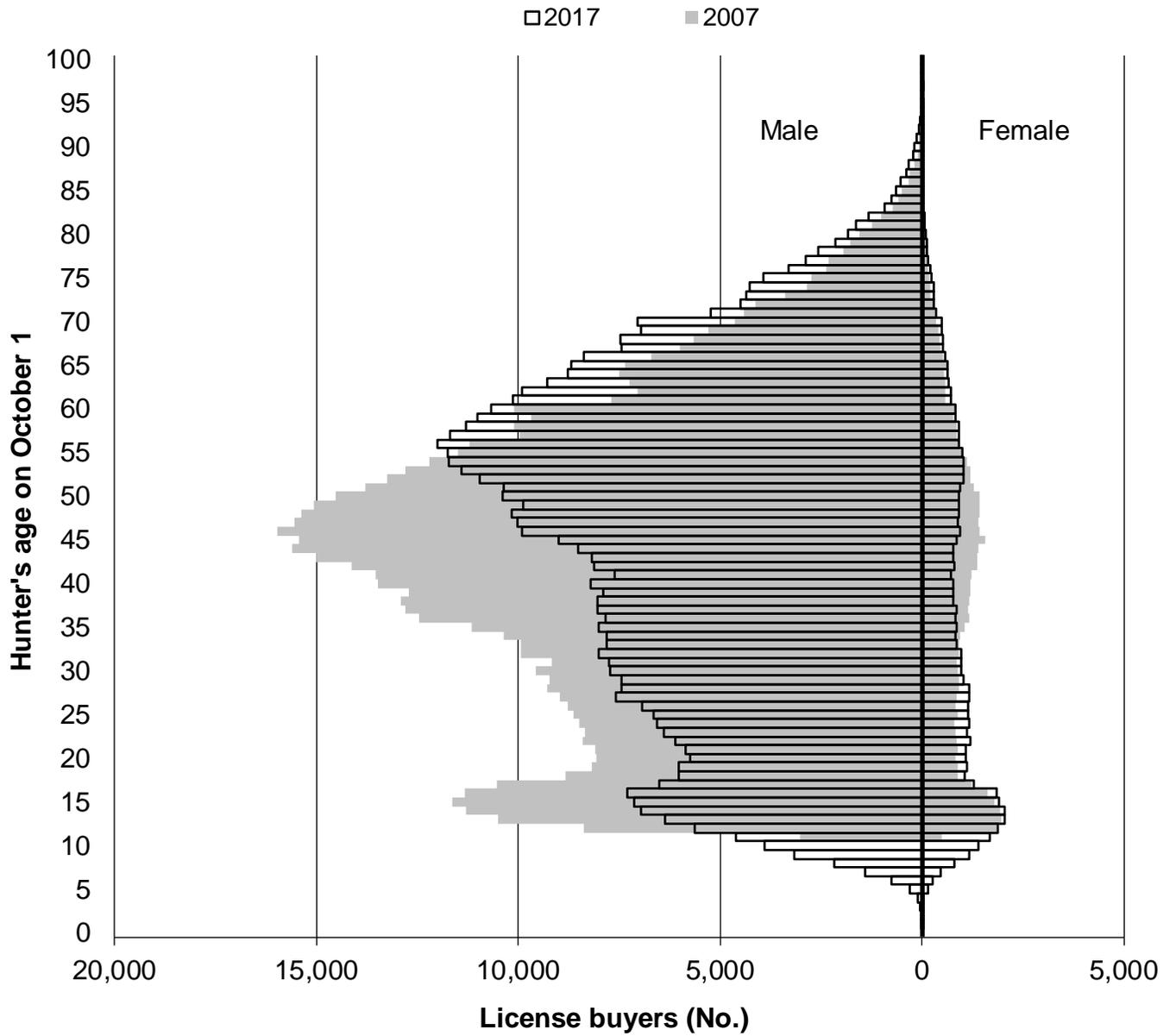


Figure 4. Number of deer hunting license buyers in Michigan by age and sex during 2007 and 2017 hunting seasons. Deer hunting licenses were purchased by 724,239 people in 2007 and 620,932 people in 2017.

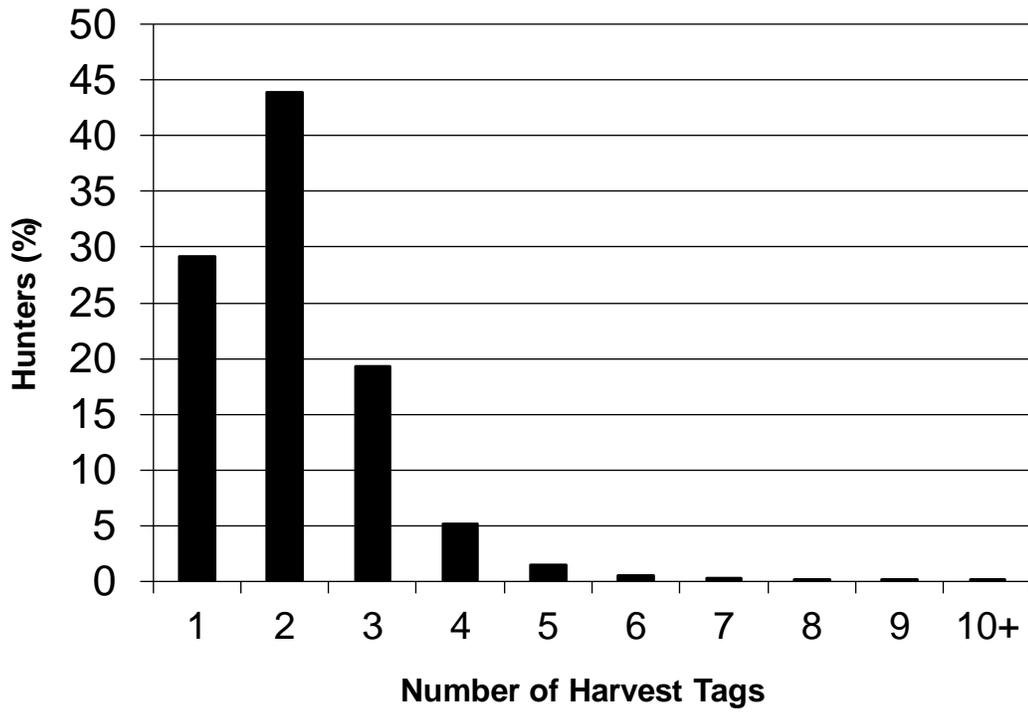


Figure 5. Number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2017 hunting seasons (mean = 2.1 tags). Licenses were purchased by 620,932 people.

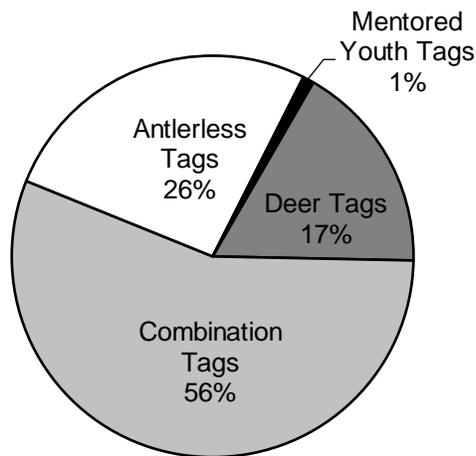


Figure 6. Types of harvest tags issued for deer hunting in Michigan during the 2017 hunting seasons.

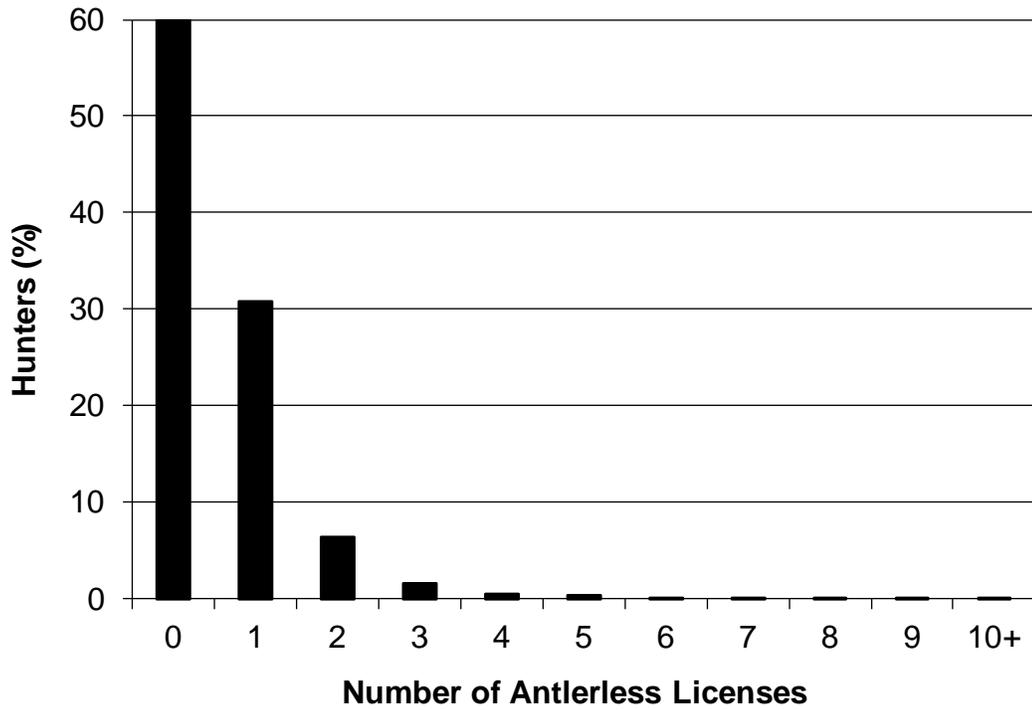


Figure 7. Percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2017 (excluded mentored youth hunting license). Antlerless licenses were purchased by 248,125 of 620,932 people (40%) buying deer hunting licenses.

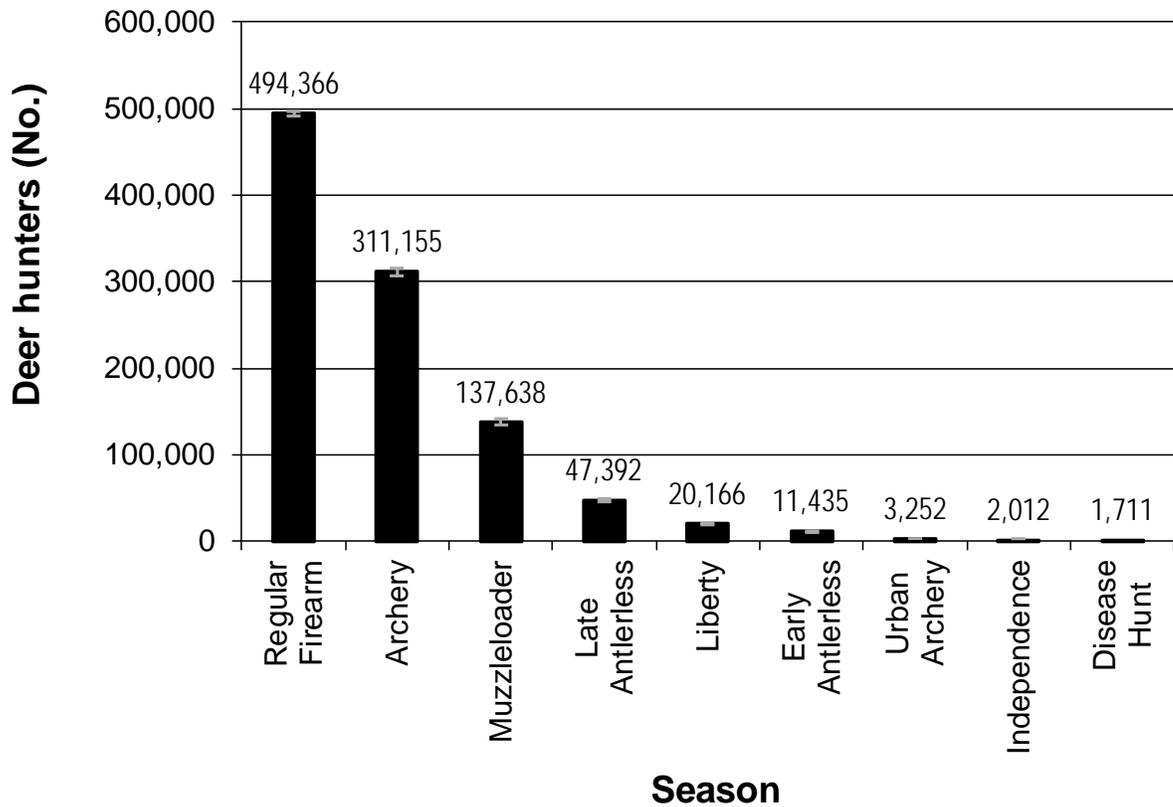


Figure 8. Number of people hunting deer in Michigan during the 2017 hunting seasons. Error bars represent the 95% CLs.

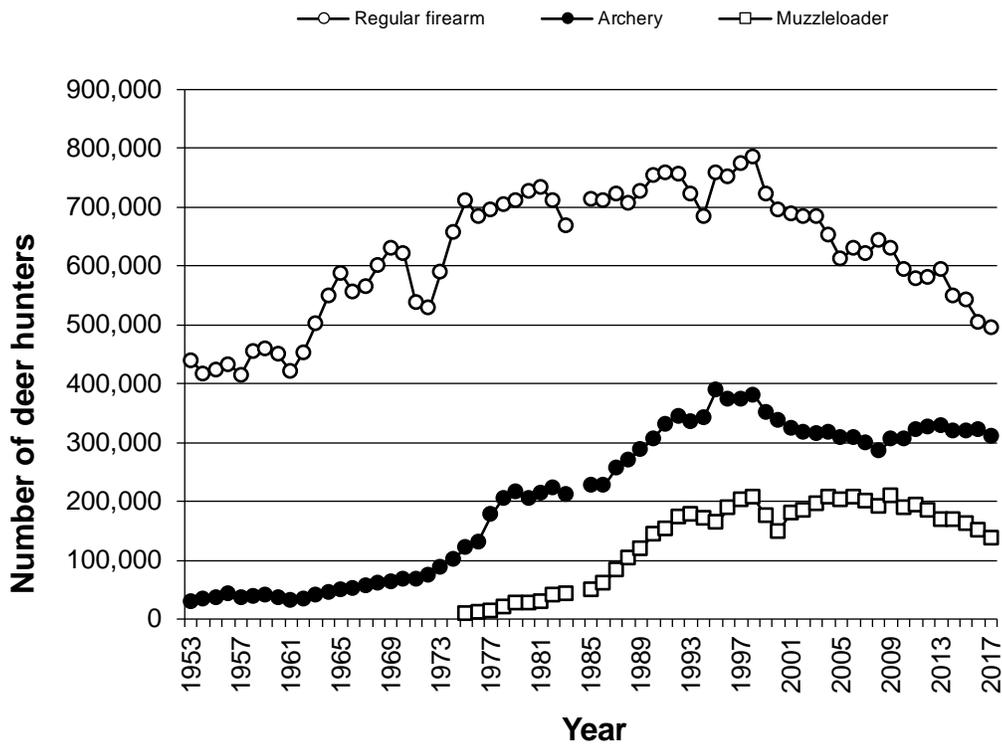


Figure 9. Number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2017.

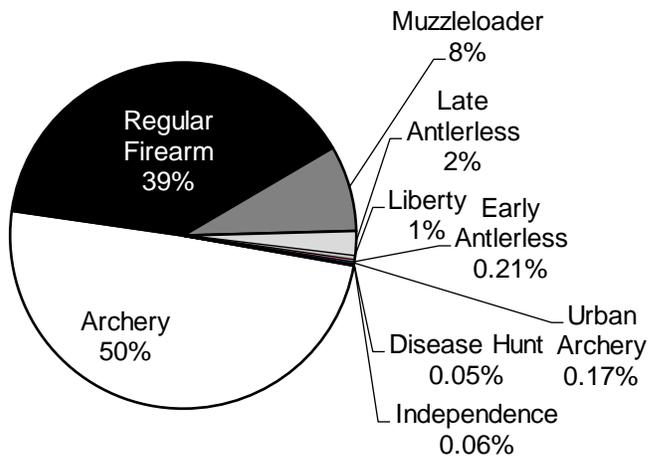


Figure 10. Distribution of hunting effort among deer hunting seasons in Michigan, 2017.

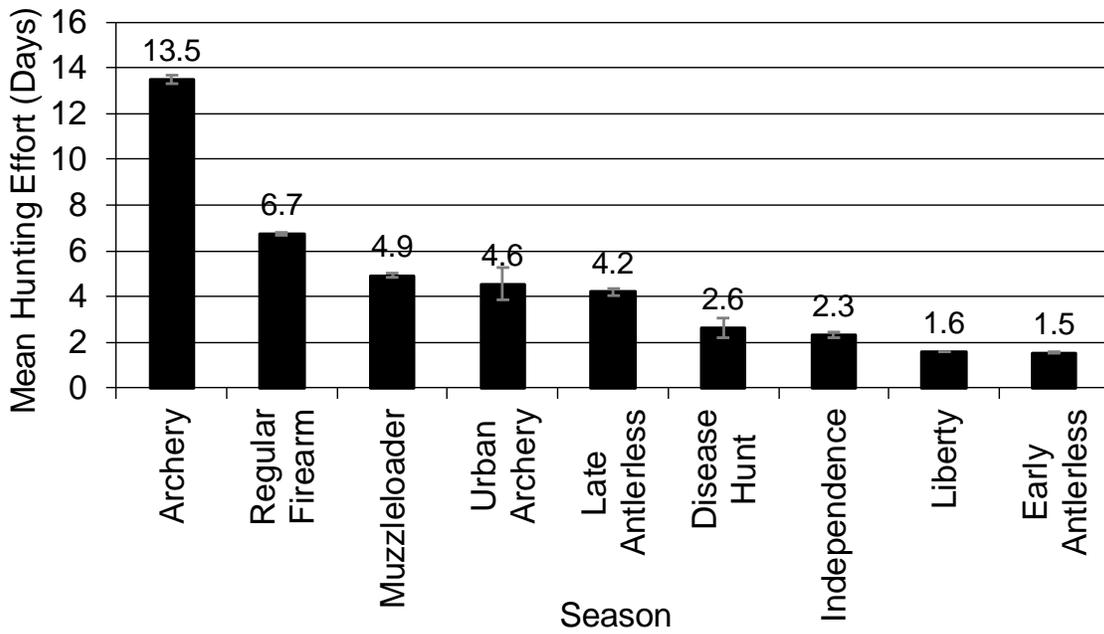


Figure 11. The mean number of days per hunter spent hunting deer in Michigan during the 2017 hunting seasons. Error bars represent the 95%CLs.

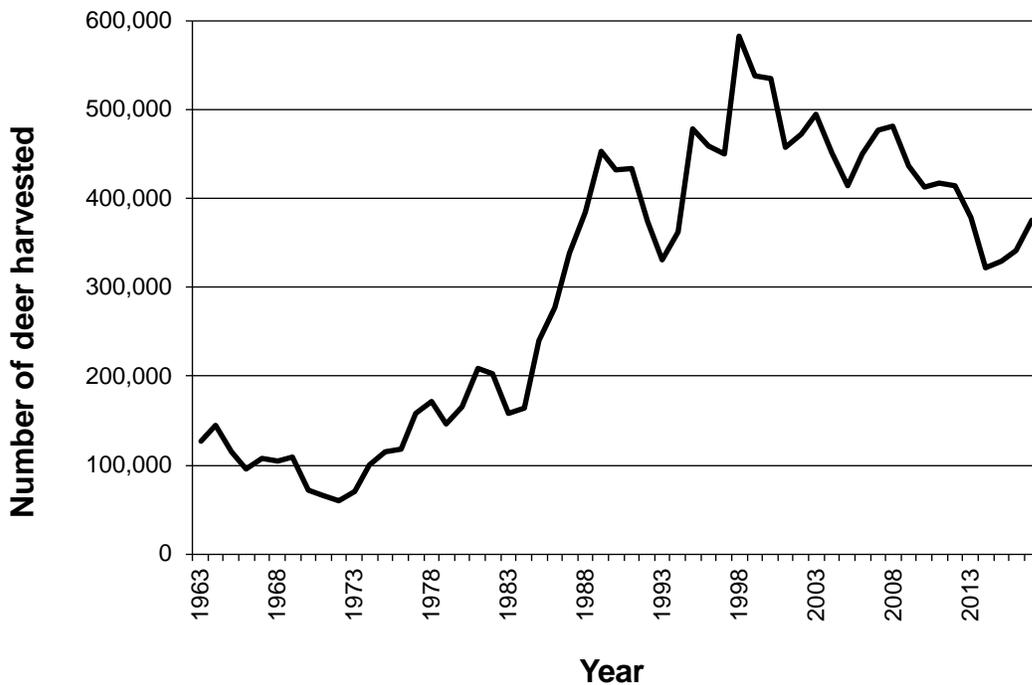


Figure 12. Number of deer harvested in Michigan's hunting seasons, 1963-2017. Harvest from all seasons and for all deer sexes was combined.

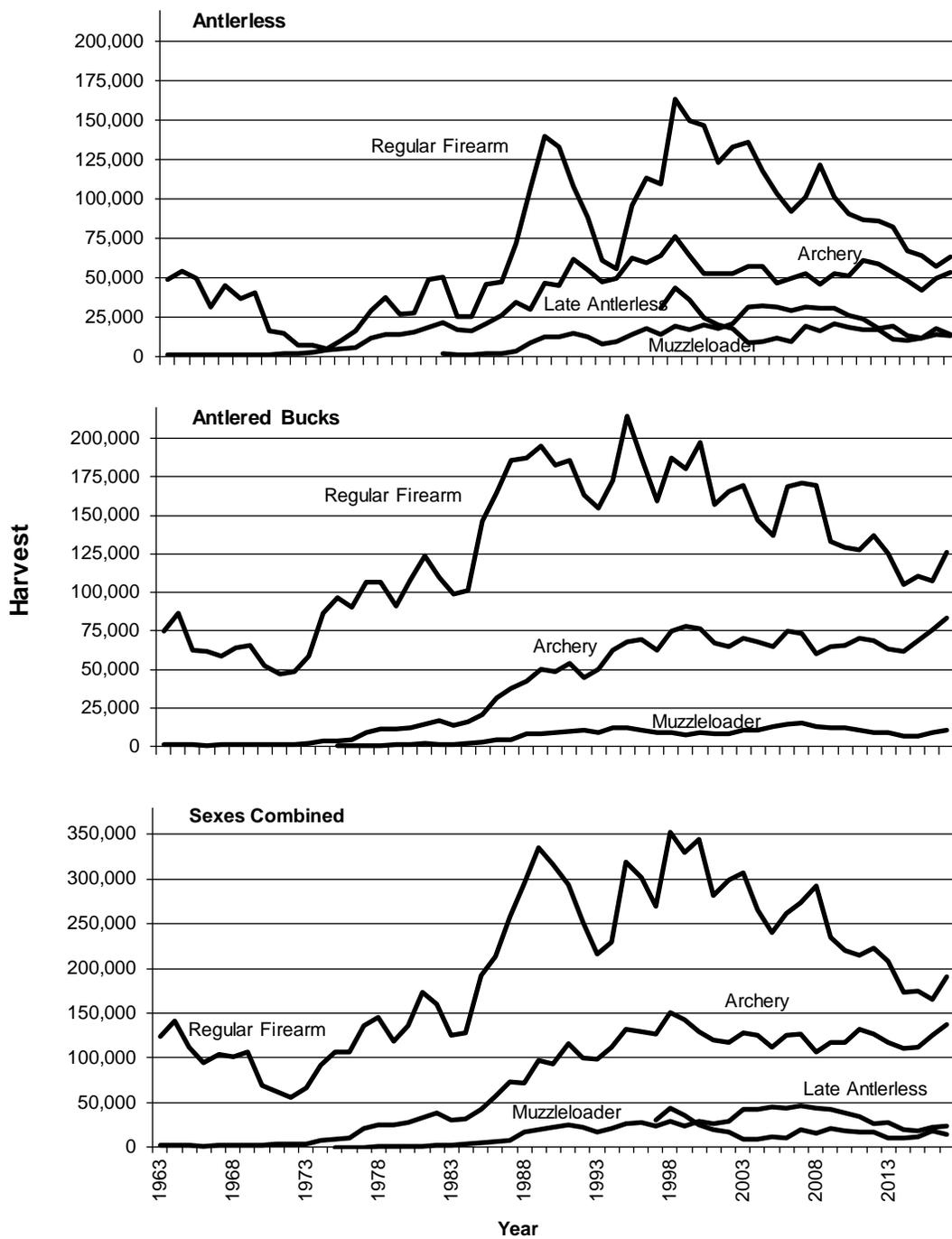


Figure 13. Number of deer harvested in Michigan's hunting seasons, 1963-2017. Harvests for early antlerless, youth, and special disabled hunter seasons were not shown.

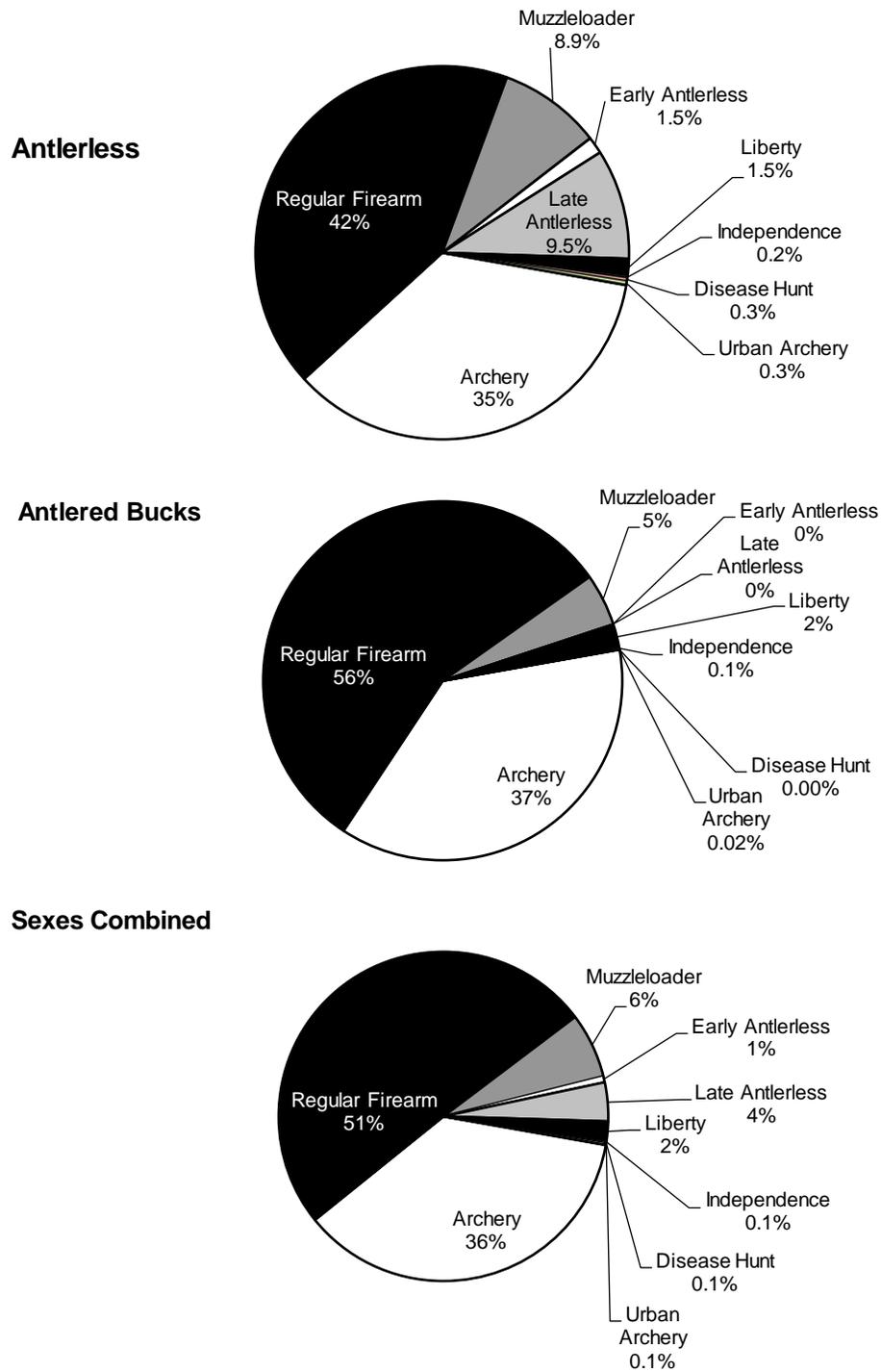


Figure 14. Distribution of harvest among deer hunting seasons in Michigan, 2017. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

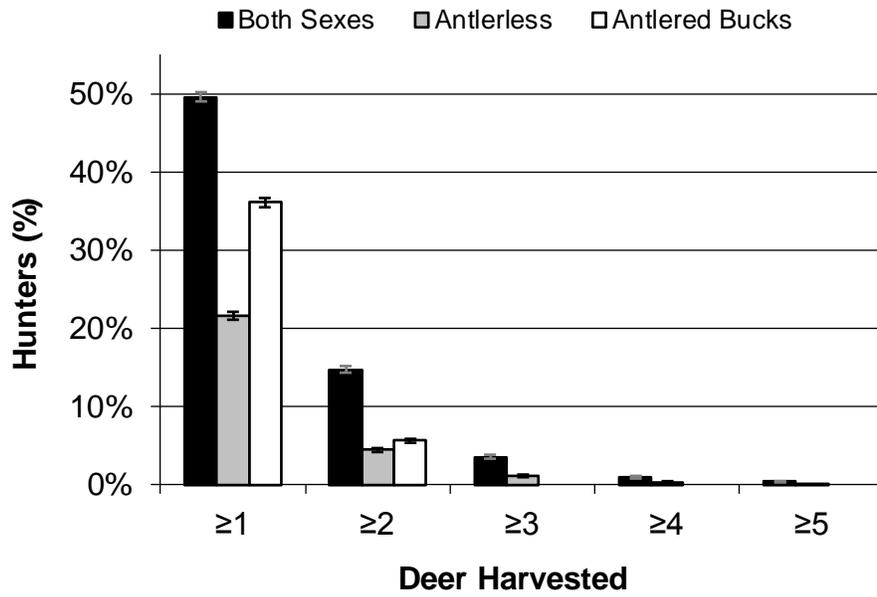


Figure 15. Percentage of hunters harvesting a deer in Michigan, 2017. Error bars represent the 95% CLs.

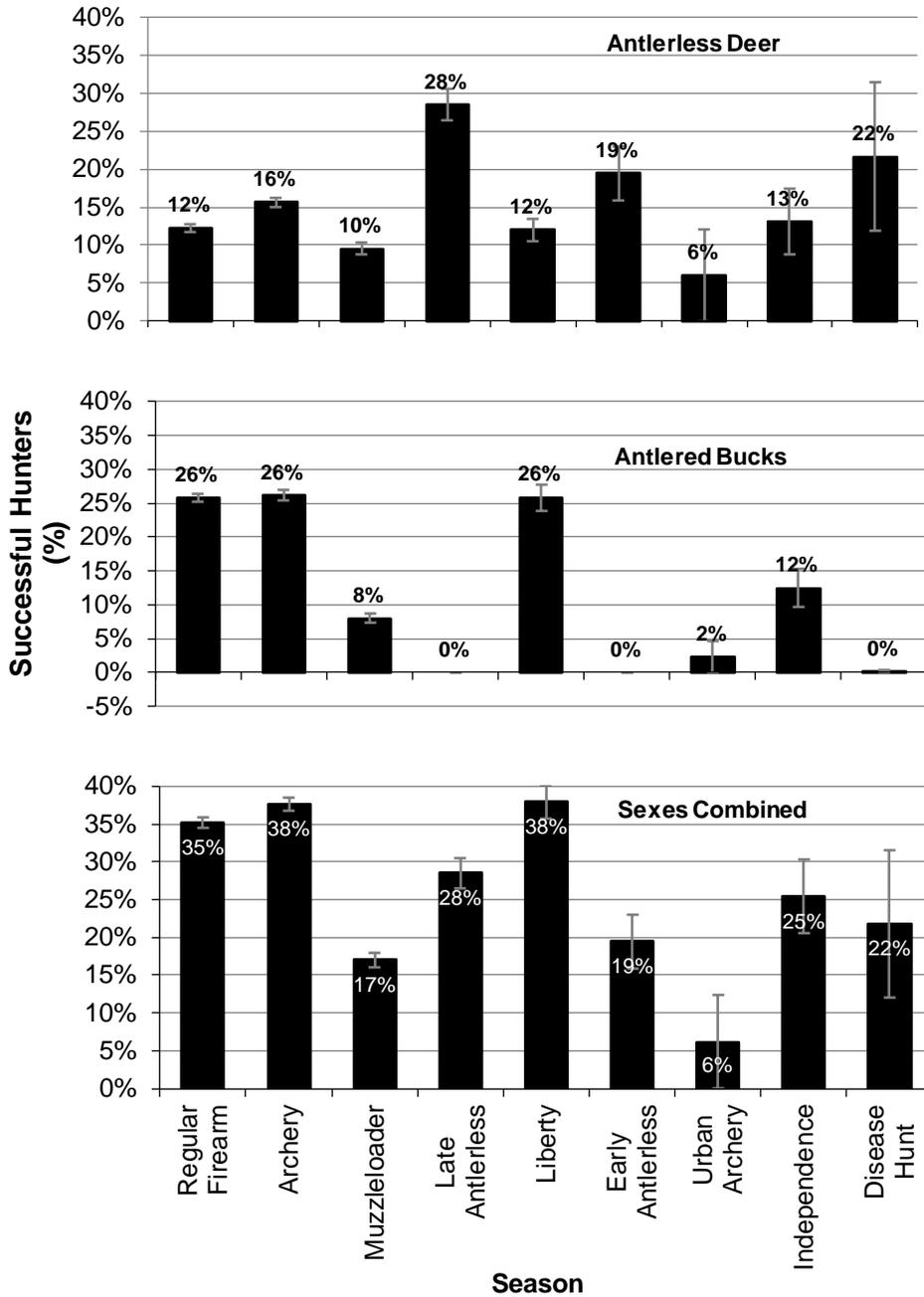


Figure 16. Percentage of hunters harvesting a deer in Michigan’s deer hunting seasons, 2017. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

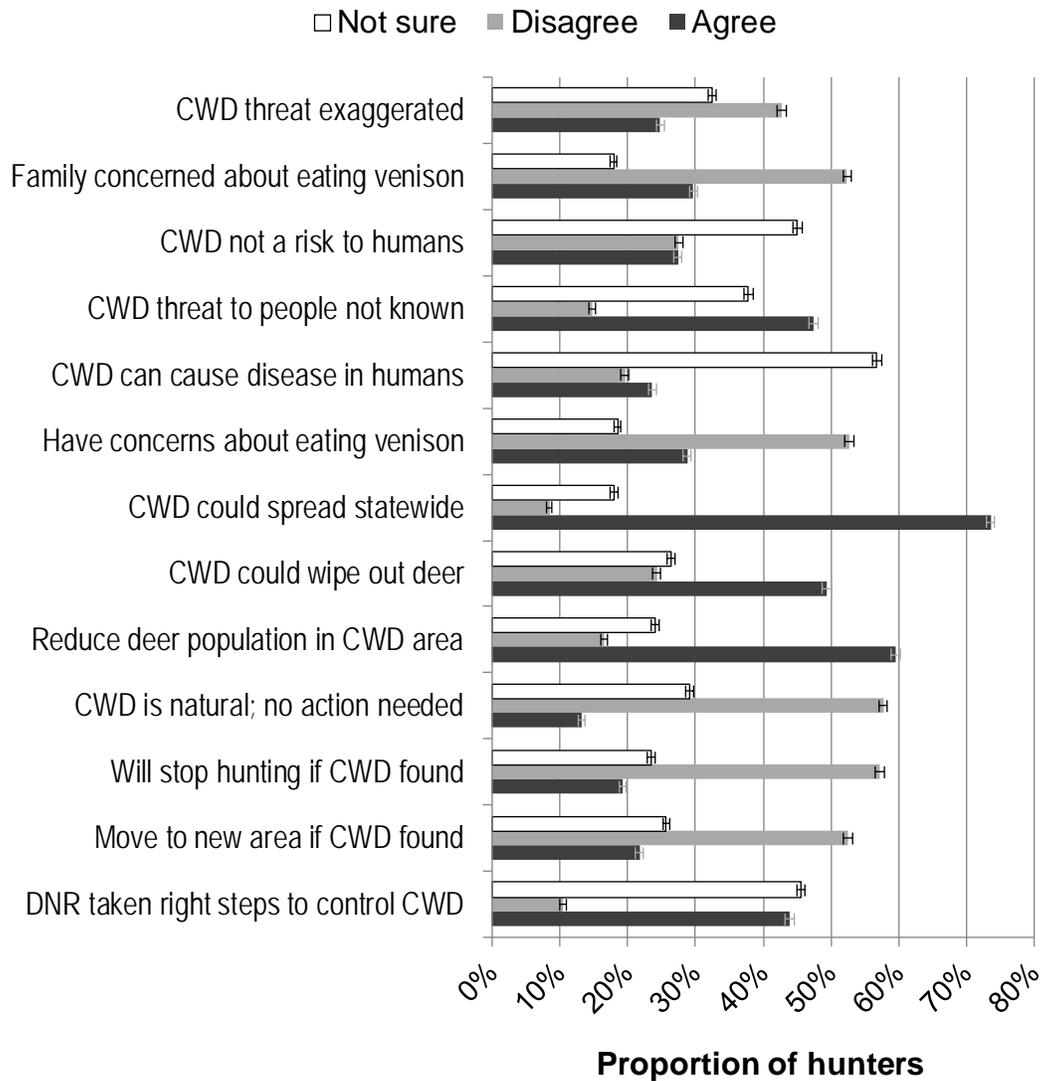


Figure 17. The proportion of hunters agreeing or disagreeing with various statements related to the existence of chronic wasting disease (CWD) in Michigan.

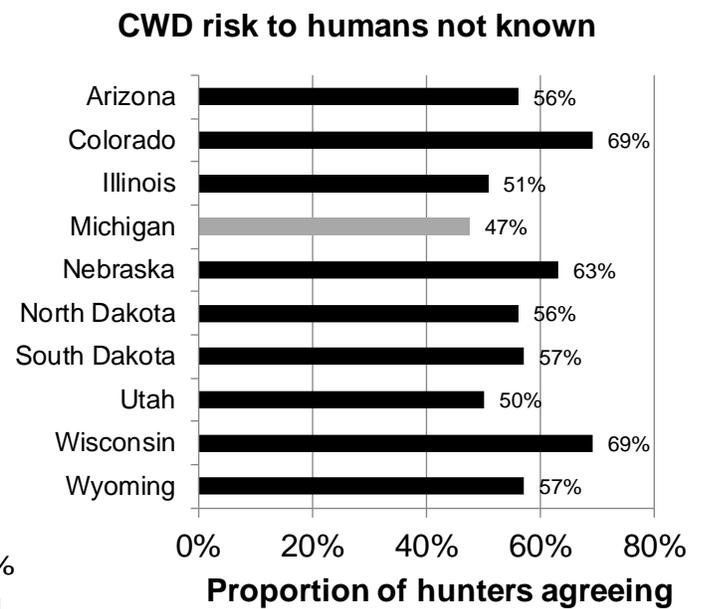
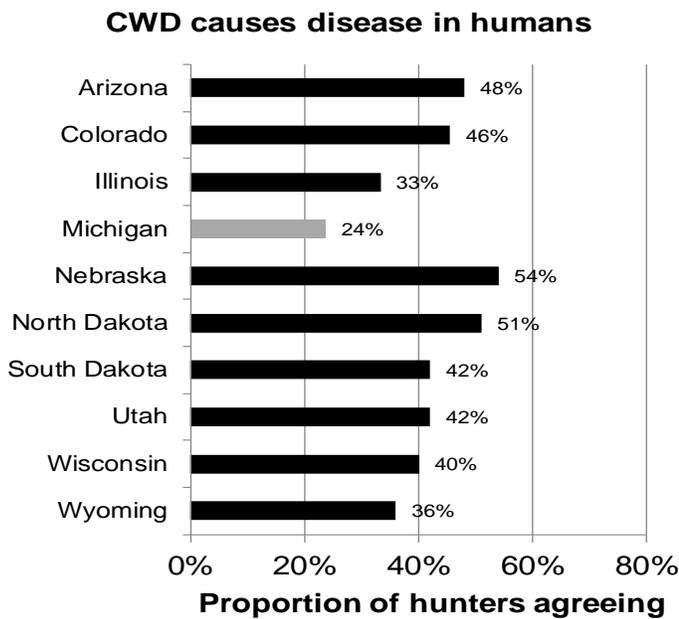
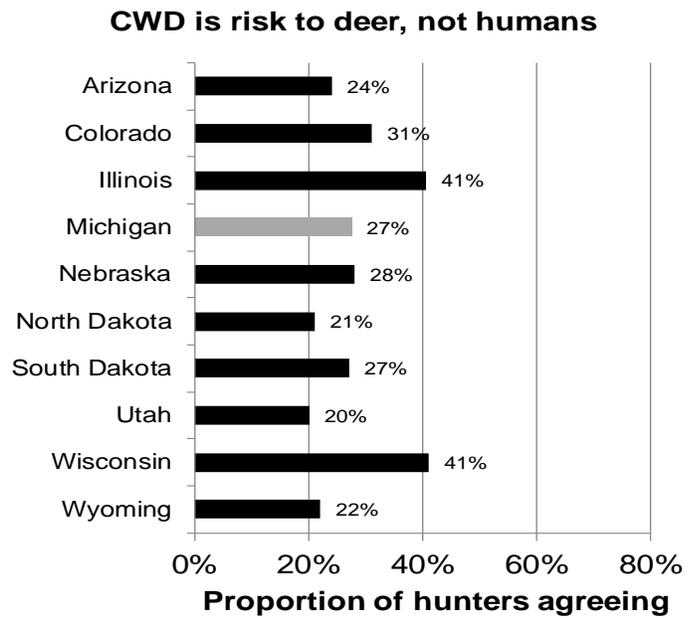
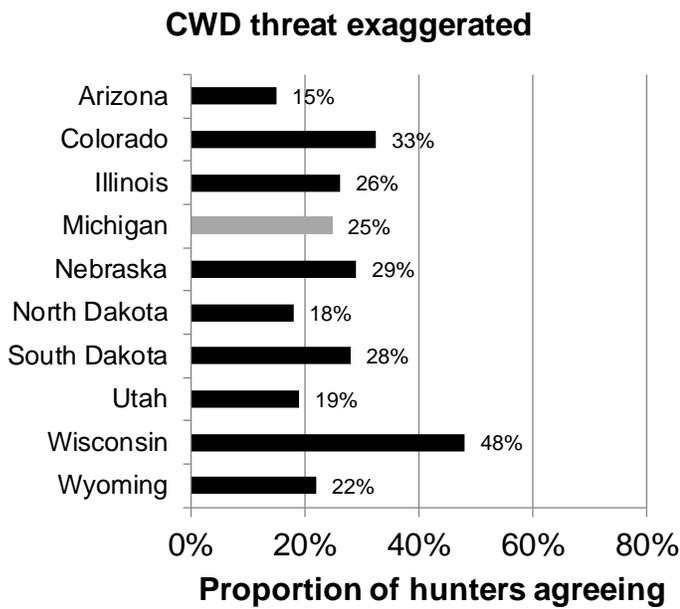
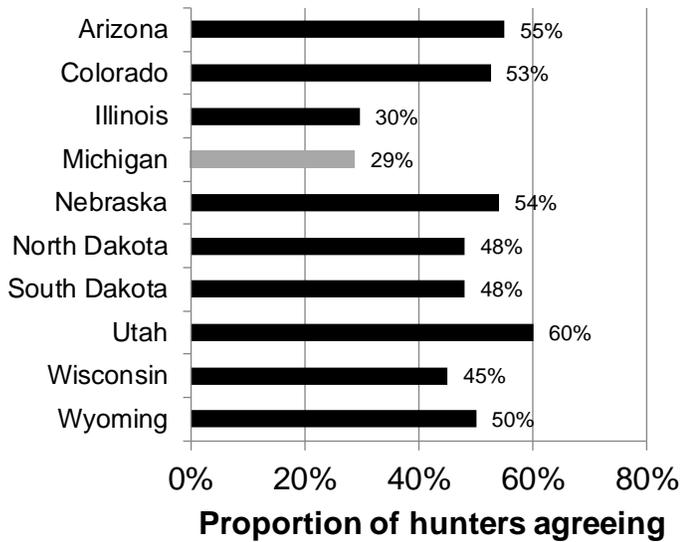


Figure 18. The proportion of hunters agreeing with various statements related to CWD in ten states. Needham and Vaske (2006) reported estimates for resident hunters in Arizona, Colorado, Nebraska, North and South Dakota, Utah, Wisconsin, and Wyoming. Estimates for Illinois hunters included hunters from central and southern Illinois (Miller et al. 2013).

Hunter concerned about eating deer



Family concerned about eating deer

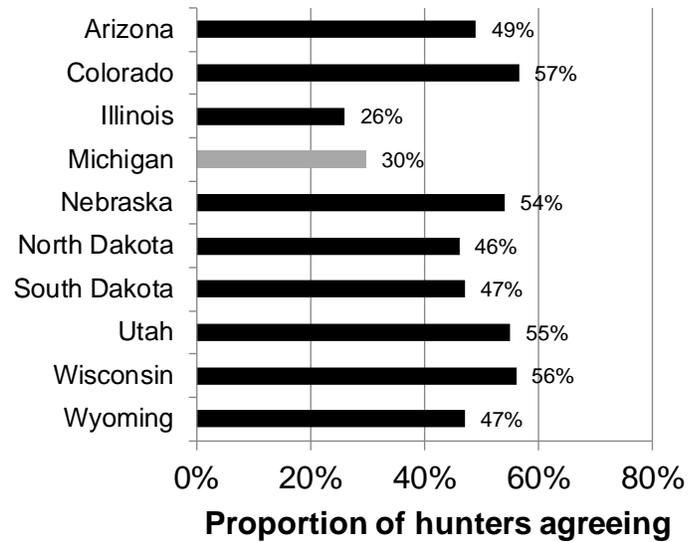


Figure 18 (continued). The proportion of hunters agreeing with various statements related to CWD in ten states. Needham and Vaske (2006) reported estimates for resident hunters in Arizona, Colorado, Nebraska, North and South Dakota, Utah, Wisconsin, and Wyoming. Estimates for Illinois hunters included hunters from central and southern Illinois (Miller et al. 2013).

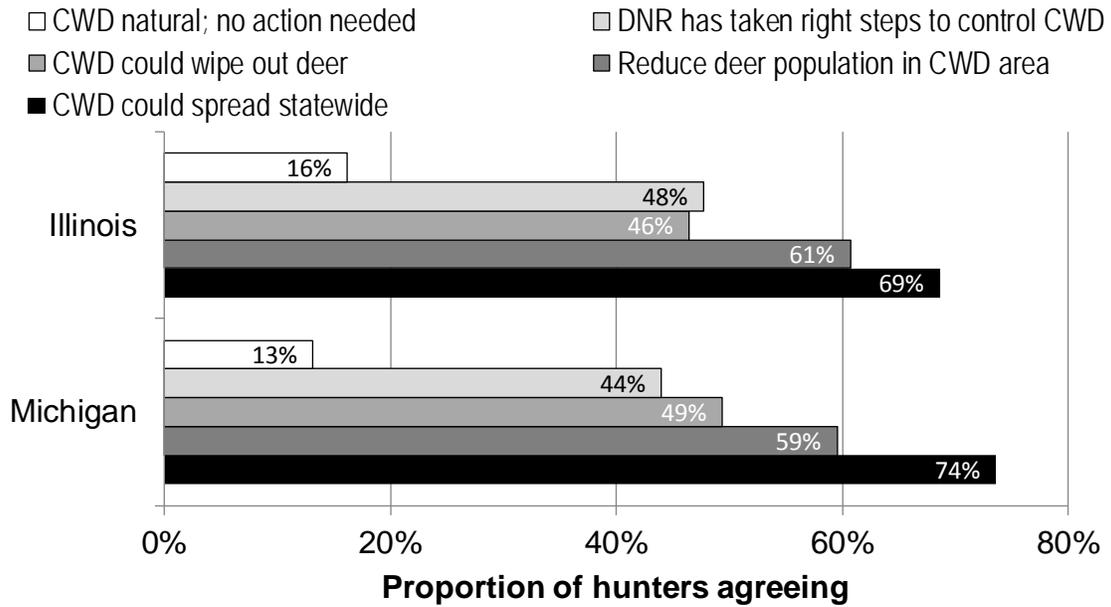


Figure 19. The proportion of deer hunters agreeing with various statements related to CWD in Illinois and Michigan. Estimates for Illinois hunters included hunters from central and southern Illinois (Miller et al. 2013).

Table 1. Deer hunting seasons in Michigan, 2017-2018.

Season	Bag limit	Area	Dates
Early Antlerless Firearm	1 per kill tag	Portions of the LP	September 16-17
Liberty Hunt	1	Statewide	September 16-17
Independence Hunt	1	Statewide	October 19-22
Archery	1 per kill tag	Statewide	October 1 – November 14 and December 1 – January 1
Regular Firearm	1 per kill tag	Statewide	November 15-30
Muzzleloader	1 per kill tag	Statewide	December 1-10 (UP & NLP) and December 1-17 (SLP)
Late Antlerless Firearm	1 per kill tag	Portions of the LP	December 18-January 1
Late Urban Archery	1 per kill tag	Macomb, Oakland, and Wayne counties	January 2-31
Disease Surveillance Hunt	1 per kill tag	Portions of Alpena, Ionia & Montcalm counties	January 4-7 and January 11-14

Table 2. Type of deer that could be taken during the 2017 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Type of deer that could be harvested ^a and area
Deer license or deer combination regular license	Archery seasons	Antlered deer ^b in the Upper Peninsula
Deer license or deer combination regular license	Archery seasons	Antlerless or antlered deer ^b in Lower Peninsula
Deer license or deer combination regular license	Regular Firearm or Muzzleloader seasons	Antlered deer statewide or antlerless deer in DMUs 333, 487, and the core CWD area in portions of Montcalm and Kent counties
Deer license or deer combination regular license	Liberty and Independence seasons	Antlerless or antlered deer statewide
Combination License ^d (Restricted harvest tag)	Archery seasons	Deer that has at least 1 antler with 4 or more antler points, 1 or more inches in length, in the Upper Peninsula
Combination License ^d (Restricted harvest tag)	Archery seasons	Antlerless deer or a deer that has at least 1 antler with 4 or more antler points, 1 or more inches in length, in the Lower Peninsula, except antler point restrictions did not apply to DMU 333 and the core CWD area in portions of Montcalm and Kent counties
Combination License ^d (Restricted harvest tag)	Regular Firearm or Muzzleloader seasons	A deer that has at least 1 antler with 4 or more antler points (1 or more inches in length) or an antlerless deer in DMUs 333, 487, and the core CWD area in portions of Montcalm and Kent counties
Combination License ^d (Restricted harvest tag)	Liberty and Independence seasons ^c	Antlerless or antlered deer statewide

^aAntlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length. Hunters could harvest a maximum of 2 antlered deer per year (all seasons combined).

^bIf a person took 2 antlered deer during all seasons combined (except Mentored Youth hunters), one of the antlered deer must have had at least 1 antler with 4 or more antler points, each point being 1 or more inches in length.

^cYouth less than 14 years of age could hunt with archery and crossbow equipment on public or private lands or with a firearm on private or Commercial Forest lands only. Hunters could harvest only 1 deer in the Liberty and Independence seasons.

^dCombination licenses included two harvest tags (i.e., regular and restricted harvest tags).

Table 2 (Continued). Type of deer that could be taken during the 2017 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Type of deer that could be harvested ^a
Mentored youth deer license	Archery , Regular Firearm, Muzzleloader, or Liberty seasons ^c	Antlerless or antlered deer statewide
Mentored Youth	Antlerless seasons	Antlerless deer only
Antlerless License ^e	All seasons	Antlerless deer only
Deer Management Assistance (DMA) permit ^f	All seasons	Antlerless deer only
Managed Deer Hunt permit ^g	Specified season	Antlerless deer only

^aAntlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length. Hunters could harvest a maximum of 2 antlered deer per year (all seasons combined).

^bIf a person took 2 antlered deer during all seasons combined (except Mentored Youth hunters), one of the antlered deer must have had at least 1 antler with 4 or more antler points, each point being 1 or more inches in length.

^cYouth less than 14 years of age could hunt with archery and crossbow equipment on public or private lands or with a firearm on private or Commercial Forest lands only. Hunters could harvest only 1 deer in the Liberty and Independence seasons.

^dCombination licenses included two harvest tags (i.e., regular and restricted harvest tags).

^eAlthough antlerless licenses were only valid for taking an antlerless deer, a person with a valid antlerless deer hunting license that killed a male deer with antlers less than 3 inches in length could choose to tag the male deer with any deer hunting license (deer or either combination license).

^fPermits issued to landowners in areas where the number of antlerless licenses was insufficient to meet the objective of specific landowners (i.e., controlling disease or the deer population). To use these permits, the hunter must also have purchased a valid deer hunting license for the season in which they were hunting.

^gPermits for special hunts on designated public lands (e.g., some state parks, game areas, and federal property). These permits valid only during specific dates, which varied among areas. Permits issued to applicants using a lottery (i.e., random selection). To use these permits, the hunter must also have purchased a valid deer hunting license.

Table 3. Michigan deer licenses purchased and harvest tags issued, 2015-2017.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2016 and 2017 (%)
	2015	2016	2017	
Deer Licenses				
Resident	164,680	149,954	139,464	-7.0
Non-resident	13,414	13,345	13,746	3.0
Junior	36,224	32,775	31,587	-3.6
Senior	37,198	37,564	36,882	-1.8
Lifetime	444	436	432	-0.9
Active Military	533	455	411	-9.7
Disabled Veteran	425	478	492	2.9
Subtotal	252,918	235,007	223,014	-5.1
Combination Licenses^a				
Resident	283,366	282,707	282,308	-0.1
Non-resident	3,547	3,658	3,960	8.3
Junior	23,957	22,116	20,811	-5.9
Senior	41,896	44,388	46,878	5.6
Lifetime	125	134	135	0.7
Active Military	5,565	5,494	4,990	-9.2
Disabled Veteran	6,272	6,784	7,097	4.6
Subtotal	364,728	365,281	366,179	0.2
Antlerless Licenses				
Resident	272,271	259,661	256,928	-1.1
Non-resident	3,807	4,207	4,807	14.3
Junior	21,529	18,960	17,578	-7.3
Senior	40,903	41,371	43,597	5.4
Lifetime	177	162	177	9.3
Active Military	4,445	4,238	4,411	4.1
Pure Michigan Hunt	3	3	3	0.0
Disabled Veteran	4,775	5,273	6,041	14.6
Deer Management				
Assistance	9,040	9,250	10,967	18.6
Managed Deer Hunt	558	786	743	-5.5
Subtotal	357,508	343,911	345,252	0.4
Mentored Youth Licenses	11,935	11,399	11,662	2.3
Total Licenses Sold	987,089	955,598	946,107	-1.0

^aCombination licenses included two harvest tags. Other license types had one harvest tag.

Table 3 (Continued). Michigan deer licenses purchased and harvest tags issued, 2015-2017.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2016 and 2017 (%)
	2015	2016	2017	
Harvest Tags Issued				
Deer ^a	252,918	235,007	223,014	-5.1
Combination ^b	729,456	730,562	732,358	0.2
Antlerless	357,508	343,911	345,252	0.4
Mentored Youth ^b	11,935	11,399	11,662	2.3
Total Harvest Tags	1,351,817	1,320,879	1,312,286	-0.7

^aCombination licenses included two harvest tags. Other license types had one harvest tag.

Table 4. Number of deer hunters and hunting effort in Michigan by hunting season, 2016-2017.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)
Archery								
West UP	19,250	18,807	1,354	-2.3	211,450	219,946	21,446	4.0
East UP	5,623	5,929	771	5.5	63,018	58,689	10,099	-6.9
NE LP	50,967	52,273	2,187	2.6	540,447	575,286	32,398	6.4
NW LP	67,340	66,849	2,429	-0.7	795,385	847,590	41,899	6.6
Sag. Bay	56,699	53,430	2,189	-5.8	685,160	680,851	36,990	-0.6
SW LP	52,390	50,769	2,135	-3.1	651,367	695,741	38,404	6.8
SC LP	60,353	59,030	2,274	-2.2	755,184	784,793	40,430	3.9
SE LP	35,326	32,656	1,751	-7.6	423,176	431,525	30,952	2.0
UP	24,843	24,673	2,483	-0.7	274,468	278,635	23,705	1.5
NLP	134,515	135,485	3,690	0.7	1,548,903	1,646,619	57,035	6.3
SLP	180,590	172,368	3,545	-4.6*	2,301,816	2,369,166	70,625	2.9
Statewide ^c	322,353	311,155	3,856	-3.5*	4,125,187	4,294,421	93,924	4.1
Regular Firearm								
West UP	53,466	54,907	2,218	2.7	378,345	401,349	19,336	6.1
East UP	16,339	16,918	1,293	3.5	113,748	116,640	10,338	2.5
NE LP	95,388	95,344	2,838	0.0	557,499	609,233	22,564	9.3*
NW LP	99,254	99,300	2,868	0.0	574,479	623,260	22,573	8.5*
Sag. Bay	78,370	76,954	2,572	-1.8	466,405	475,147	19,676	1.9
SW LP	66,556	65,889	2,398	-1.0	392,485	439,190	19,401	11.9*
SC LP	81,700	83,035	2,616	1.6	473,470	540,127	21,528	14.1*
SE LP	35,403	31,857	1,729	-10.0*	199,483	201,600	13,088	1.1
UP	69,532	71,585	1,542	3.0	492,093	517,989	21,926	5.3
NLP	217,502	217,422	3,223	0.0	1,277,196	1,393,188	33,915	9.1*
SLP	232,165	227,877	3,407	-1.8	1,386,625	1,495,370	35,592	7.8*
Statewide ^c	504,287	494,366	2,899	-2.0*	3,155,914	3,406,546	53,978	7.9*

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 4 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2016-2017.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)
Muzzleloader								
West UP	11,589	11,323	1,068	-2.3	56,658	58,210	6,182	2.7
East UP	3,767	3,585	603	-4.8	19,198	18,219	3,435	-5.1
NE LP	17,530	16,624	1,283	-5.2	74,248	74,592	6,619	0.5
NW LP	20,837	19,142	1,363	-8.1	83,141	78,676	6,521	-5.4
Sag. Bay	25,227	22,477	1,469	-10.9	110,655	105,724	8,318	-4.5
SW LP	27,639	27,026	1,601	-2.2	134,758	139,861	10,073	3.8
SC LP	29,909	28,934	1,643	-3.3	145,390	150,326	10,429	3.4
SE LP	16,015	13,551	1,153	-15.4*	73,443	67,945	6,894	-7.5
UP	15,303	14,879	1,218	-2.8	75,856	76,429	7,073	0.8
NLP	44,067	41,291	1,969	-6.3	178,393	178,619	10,061	0.1
SLP	91,394	84,562	2,629	-7.5*	443,242	438,505	17,665	-1.1
Statewide ^c	150,576	137,638	3,229	-8.6*	697,491	693,553	21,576	-0.6
Early Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	2,612	2,269	459	-13.1	3,954	3,731	771	-5.6
NW LP	686	704	242	2.6	888	1,133	409	27.6
Sag. Bay	4,012	2,833	488	-29.4*	6,021	4,749	828	-21.1
SW LP	0	0	0		0	0	0	
SC LP	3,609	3,526	550	-2.3	5,210	5,212	851	0.0
SE LP	2,890	2,006	424	-30.6	3,979	3,107	673	-21.9
UP	0	0	0		0	0	0	
NLP	3,892	3,350	548	-13.9	5,809	5,516	929	-5.0
SLP	9,878	7,932	818	-19.7*	14,243	12,416	1,327	-12.8
Statewide ^c	14,621	11,435	548	-21.8*	20,052	17,931	1,634	-10.6

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 4 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2016-2017.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)
Late Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	5,618	4,246	650	-24.4*	19,229	17,231	3,264	-10.4
NW LP	5,467	4,168	632	-23.8	17,712	16,457	3,067	-7.1
Sag. Bay	10,994	8,878	923	-19.2*	40,829	38,198	4,930	-6.4
SW LP	12,857	10,587	1,004	-17.7*	45,000	46,098	5,260	2.4
SC LP	16,196	14,417	1,163	-11.0	56,530	62,032	6,093	9.7
SE LP	7,942	5,365	724	-32.5*	29,762	23,682	3,883	-20.4
UP	0	0	0		0	0	0	
NLP	11,792	8,833	922	-25.1*	39,398	35,726	4,625	-9.3
SLP	46,637	38,563	1,816	-17.3*	169,664	167,971	10,140	-1.0
Statewide ^c	60,506	47,392	1,981	-21.7*	209,063	203,698	11,183	-2.6
Liberty^d								
West UP	1,340	1,571	257	17.2	2,007	2,480	417	23.6
East UP	281	327	113	16.4	449	545	196	21.2
NE LP	2,835	2,321	310	-18.1	4,533	3,860	545	-14.9
NW LP	5,359	5,453	454	1.8	8,267	9,005	811	8.9
Sag. Bay	4,374	3,740	378	-14.5	6,808	6,017	647	-11.6
SW LP	2,812	2,596	312	-7.7	4,271	4,108	523	-3.8
SC LP	3,075	2,737	345	-11.0	4,768	4,365	591	-8.4
SE LP	1,545	1,419	246	-8.2	2,451	2,401	439	-2.0
UP	1,621	1,898	280	17.1	2,457	3,025	461	23.1
NLP	9,673	9,167	572	-5.2	15,225	15,020	1,047	-1.3
SLP	10,255	9,075	576	-11.5	15,872	14,738	1,045	-7.1
Statewide ^c	21,842	20,166	772	-7.7*	33,554	32,783	1,555	-2.3

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one area.

^dEstimates included results of both youth and disabled hunters.

Table 4 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2016-2017.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)
Independence								
West UP	87	139	35	60.4	214	336	79	56.5
East UP	59	45	13	-24.0	173	112	36	-35.1
NE LP	267	348	116	30.3	466	837	300	79.4
NW LP	417	463	95	10.9	877	1,187	293	35.3
Sag. Bay	314	340	101	8.3	523	775	275	48.3
SW LP	234	164	45	-30.2	420	375	91	-10.7
SC LP	354	357	117	0.9	605	789	236	30.5
SE LP	95	176	86	86.2	200	385	153	92.1
UP	146	184	38	26.3	387	448	87	15.6
NLP	789	917	155	16.3	1,559	2,312	434	48.3*
SLP	888	910	176	2.6	1,533	2,036	387	32.8
Statewide ^c	1,914	2,012	237	5.1	3,479	4,796	589	37.9*
Urban Archery								
West UP	NA	0	0		NA	0	0	
East UP	NA	0	0		NA	0	0	
NE LP	NA	0	0		NA	0	0	
NW LP	NA	0	0		NA	0	0	
Sag. Bay	NA	0	0		NA	0	0	
SW LP	NA	0	0		NA	0	0	
SC LP	NA	0	0		NA	0	0	
SE LP	NA	3,252	576		NA	15,138	3,537	
UP	NA	0	0		NA	0	0	
NLP	NA	0	0		NA	0	0	
SLP	NA	3,252	576		NA	15,138	3,537	
Statewide ^c	NA	3,252	576		NA	15,138	3,537	

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 4 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2016-2017.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)	2016	2017	95% CL ^b	Change from 2016 to 2017 (%)
Disease Hunt								
West UP	NA	0	0		NA	0	0	
East UP	NA	0	0		NA	0	0	
NE LP	NA	211	144		NA	454	371	
NW LP	NA	0	0		NA	0	0	
Sag. Bay	NA	0	0		NA	0	0	
SW LP	NA	0	0		NA	0	0	
SC LP	NA	1,471	377		NA	4,106	1,271	
SE LP	NA	0	0		NA	0	0	
UP	NA	0	0		NA	0	0	
NLP	NA	211	144		NA	454	371	
SLP	NA	1,471	377		NA	4,106	1,271	
Statewide ^c	NA	1,711	407		NA	4,560	1,326	
All Seasons								
West UP	59,899	61,030	2,314	1.9	648,692	682,106	37,443	5.2
East UP	18,500	19,452	1,381	5.1	196,579	194,136	18,919	-1.2
NE LP	112,864	111,813	3,012	-0.9	1,200,483	1,285,095	52,021	7.0
NW LP	121,766	122,320	3,091	0.5	1,481,340	1,577,481	60,551	6.5
Sag. Bay	97,985	95,635	2,803	-2.4	1,316,290	1,311,491	56,228	-0.4
SW LP	84,850	83,442	2,641	-1.7	1,228,157	1,325,456	59,652	7.9
SC LP	102,231	102,777	2,839	0.5	1,440,836	1,551,720	64,567	7.7
SE LP	50,824	47,069	2,064	-7.4	732,364	745,941	45,864	1.9
UP	77,905	79,936	2,593	2.6	845,271	876,241	41,952	3.7
NLP	260,602	259,459	3,786	-0.4	3,067,355	3,277,544	85,575	6.9*
SLP	293,541	286,781	3,636	-2.3	4,332,114	4,519,641	109,736	4.3
Statewide ^c	585,994	574,127	1,688	-2.0*	8,244,739	8,673,426	145,571	5.2*

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 5. Mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2017.^a

Area	Season							
	Archery		Regular Firearm		Muzzleloader		Early Antlerless	
	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b
West UP	11.4	0.7	7.1	0.2	5.0	0.2	0.0	0.0
East UP	9.6	1.1	6.7	0.3	4.9	0.4	0.0	0.0
NE LP	10.7	0.4	6.2	0.1	4.4	0.2	1.6	0.1
NW LP	12.4	0.4	6.1	0.1	4.0	0.2	1.6	0.1
Sag. Bay	12.4	0.4	6.0	0.1	4.6	0.2	1.6	0.1
SW LP	13.4	0.5	6.5	0.1	5.0	0.2	0.0	0.0
SC LP	13.0	0.4	6.3	0.1	5.1	0.2	1.4	0.1
SE LP	12.9	0.6	6.2	0.2	4.9	0.3	1.5	0.1
UP	11.0	0.6	7.0	0.1	5.0	0.2	0.0	0.0
NLP	11.8	0.3	6.2	0.1	4.2	0.1	1.6	0.1
SLP	13.4	0.3	6.4	0.1	5.0	0.1	1.5	0.0
Statewide	13.5	0.2	6.7	0.1	4.9	0.1	1.5	<0.1

^aExcluded people that did not hunt during the season.

^b95% confidence limit.

Table 5 (Continued). Mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2017.^a

Area	Season							
	Late Antlerless		Liberty		Independence		Urban Archery	
	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b
West UP	0.0	0.0	1.5	0.1	2.3	0.2	0.0	0.0
East UP	0.0	0.0	1.6	0.1	2.4	0.3	0.0	0.0
NE LP	3.9	0.4	1.6	0.1	2.3	0.3	0.0	0.0
NW LP	3.8	0.4	1.6	<0.1	2.5	0.2	0.0	0.0
Sag. Bay	4.2	0.3	1.6	<0.1	2.2	0.3	0.0	0.0
SW LP	4.2	0.3	1.5	0.1	2.2	0.2	0.0	0.0
SC LP	4.2	0.2	1.6	0.1	2.1	0.2	0.0	0.0
SE LP	4.3	0.4	1.6	0.1	2.1	0.5	4.6	0.7
UP	0.0	0.0	1.5	0.1	2.4	0.1	0.0	0.0
NLP	3.9	0.3	1.6	<0.1	2.4	0.2	0.0	0.0
SLP	4.2	0.1	1.6	<0.1	2.2	0.2	4.6	0.7
Statewide	4.2	0.1	1.6	<0.1	2.3	0.1	4.6	0.7

^aExcluded people that did not hunt during the season.

^b95% confidence limit.

Table 5 (Continued). Mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2017.^a

Area	Season			
	Disease Hunt		All Seasons	
	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b
West UP	0.0	0.0	10.9	0.4
East UP	0.0	0.0	9.7	0.7
NE LP	2.1	0.9	11.2	0.3
NW LP	0.0	0.0	12.6	0.3
Sag. Bay	0.0	0.0	13.4	0.4
SW LP	0.0	0.0	15.5	0.5
SC LP	2.7	0.5	14.7	0.4
SE LP	0.0	0.0	15.4	0.7
UP	0.0	0.0	10.7	0.4
NLP	2.1	0.9	12.3	0.2
SLP	2.7	0.5	15.4	0.3
Statewide	2.6	0.4	14.8	0.2

^aExcluded people that did not hunt during the season.

^b95% confidence limit.

Table 6. Number of deer harvested in Michigan, 2014-2017.

Season or permit	Type of deer	2014	2016	2017	Change from 2016 to 2017 (%)
Season					
Archery	Antlerless	42,644	50,103	53,404	6.6
	Antlered bucks	68,924	75,438	83,655	10.9*
	Sexes combined	111,568	125,541	137,059	9.2*
Regular firearm	Antlerless	64,553	57,513	63,898	11.1*
	Antlered bucks	110,721	107,329	126,167	17.6*
	Sexes combined	175,274	164,843	190,065	15.3*
Muzzleloader	Antlerless	11,959	14,195	13,427	-5.4
	Antlered bucks	6,594	9,083	10,632	17.0
	Sexes combined	18,553	23,278	24,058	3.3
Early antlerless	Antlerless	3,428	2,840	2,231	-21.4
Late antlerless	Antlerless	12,266	18,035	14,340	-20.5*
Liberty ^{a,b}	Antlerless	2,118	2,227	2,282	2.5
	Antlered bucks	5,163	4,113	4,911	19.4
	Sexes combined	7,281	6,339	7,193	13.5
Independence ^b	Antlerless	105	142	248	75.3
	Antlered bucks	207	270	236	-12.4
	Sexes combined	311	412	485	17.8
Urban Archery	Antlerless	NA	NA	477	NA
	Antlered bucks	NA	NA	52	NA
	Sexes combined	NA	NA	530	NA
Disease Hunt	Antlerless	NA	NA	401	NA
	Antlered bucks	NA	NA	2	NA
	Sexes combined	NA	NA	403	NA
Special permits ^c	Antlerless	5,931	6,934	9,189	32.5
Grand Total	Antlerless	143,004	151,988	159,898	5.2
	Antlered bucks	191,608	196,233	225,656	15.0*
	Sexes combined	334,612	348,222	385,554	10.7*

^aEstimates for Liberty hunt included results of both youth and disabled hunters.

^bDisabled hunters could hunt in both the Liberty and Independence seasons.

^cIncludes deer harvested with DMA permits. These permits could be used during any deer hunting season.

*P<0.005.

Table 7. Number of deer harvested in Michigan by hunting season, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Archery												
West UP	898	1,022	381	13.9	2,979	4,798	711	61.1*	3,878	5,819	830	50.0*
East UP	0	30	52		629	1,456	395	131.7*	629	1,486	398	136.1*
NE LP	7,561	8,840	1,018	16.9	8,589	10,344	1,055	20.4	16,148	19,186	1,558	18.8*
NW LP	10,442	14,278	1,298	36.7*	14,347	15,180	1,284	5.8	24,788	29,461	1,967	18.9*
Sag. Bay	9,900	9,543	1,109	-3.6	14,512	15,243	1,280	5.0	24,412	24,786	1,866	1.5
SW LP	8,388	6,606	870	-21.2	12,670	14,178	1,247	11.9	21,058	20,782	1,650	-1.3
SC LP	8,588	8,771	1,088	2.1	14,901	15,605	1,304	4.7	23,490	24,374	1,849	3.8
SE LP	4,326	4,314	713	-0.3	6,811	6,851	855	0.6	11,138	11,165	1,185	0.2
UP	898	1,052	384	17.2	3,608	6,255	813	73.4*	4,508	7,305	920	62.1*
NLP	21,459	27,318	1,810	27.3*	27,263	29,856	1,799	9.5	48,716	57,180	2,749	17.4*
SLP	27,747	25,034	1,768	-9.8	44,568	47,544	2,269	6.7	72,317	72,574	3,125	0.4
Statewide	50,103	53,404	2,560	6.6	75,438	83,655	3,011	10.9*	125,541	137,059	4,266	9.2*
Regular Firearm												
West UP	1,165	2,682	544	130.2*	12,190	18,219	1,351	49.5*	13,370	20,905	1,506	56.4*
East UP	1	192	156	18882.4*	2,932	4,614	680	57.4*	2,938	4,808	705	63.7*
NE LP	10,474	14,102	1,321	34.6*	21,496	23,594	1,564	9.8	31,973	37,695	2,187	17.9*
NW LP	10,579	12,546	1,133	18.6	18,637	20,189	1,435	8.3	29,214	32,733	1,945	12.0
Sag. Bay	12,595	11,808	1,136	-6.2	18,901	20,134	1,442	6.5	31,489	31,941	2,008	1.4
SW LP	7,879	7,390	900	-6.2	11,465	14,118	1,184	23.1*	19,339	21,508	1,595	11.2
SC LP	12,293	11,758	1,176	-4.4	16,267	19,671	1,430	20.9*	28,550	31,428	1,970	10.1
SE LP	2,528	3,420	640	35.3	5,441	5,628	770	3.4	7,970	9,047	1,075	13.5
UP	1,166	2,874	566	146.4*	15,123	22,833	1,512	51.0*	16,308	25,713	1,663	57.7*
NLP	25,436	31,016	1,875	21.9*	45,605	49,712	2,263	9.0	71,038	80,724	3,138	13.6*
SLP	30,911	30,008	1,846	-2.9	46,602	53,623	2,347	15.1*	77,496	83,628	3,214	7.9
Statewide	57,513	63,898	2,698	11.1*	107,329	126,167	3,598	17.6*	164,843	190,065	4,799	15.3*

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

Table 7 (continued). Number of deer harvested in Michigan by hunting season, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Muzzleloader												
West UP	346	637	290	83.8	583	614	240	5.3	932	1,250	391	34.1
East UP	2	1	0	-46.4	360	219	148	-39.1	365	220	148	-39.8
NE LP	1,639	1,709	420	4.3	791	951	303	20.2	2,428	2,661	527	9.6
NW LP	1,536	1,444	374	-6.0	672	1,096	334	63.0	2,206	2,540	516	15.2
Sag. Bay	3,278	2,860	570	-12.7	2,166	1,829	419	-15.6	5,444	4,689	714	-13.9
SW LP	2,792	3,080	583	10.3	2,068	2,187	451	5.7	4,862	5,267	764	8.3
SC LP	3,424	2,708	571	-20.9	1,710	2,530	519	48.0	5,130	5,238	784	2.1
SE LP	1,178	988	313	-16.1	733	1,206	346	64.5	1,911	2,193	483	14.8
UP	348	638	290	83.1	943	833	282	-11.6	1,297	1,470	418	13.3
NLP	3,932	3,886	622	-1.2	1,822	2,411	486	32.3	5,748	6,298	809	9.6
SLP	9,915	8,903	1,009	-10.2	6,318	7,388	857	16.9	16,233	16,290	1,354	0.4
Statewide	14,195	13,427	1,220	-5.4	9,083	10,632	1,026	17.0	23,278	24,058	1,632	3.3
Early Antlerless												
West UP	0	0	0		0	0	0	0	0	0	0	
East UP	0	0	0		0	0	0	0	0	0	0	
NE LP	726	546	253	-24.8	0	0	0	0	726	546	253	-24.8
NW LP	114	96	80	-15.9	0	0	0	0	114	96	80	-15.9
Sag. Bay	1,029	429	188	-58.3*	0	0	0	0	1,029	429	188	-58.3*
SW LP	0	0	0		0	0	0	0	0	0	0	
SC LP	621	879	312	41.4	0	0	0	0	621	879	312	41.4
SE LP	349	281	154	-19.4	0	0	0	0	349	281	154	-19.4
UP	0	0	0		0	0	0	0	0	0	0	
NLP	946	787	289	-16.9	0	0	0	0	946	787	289	-16.9
SLP	1,893	1,444	378	-23.7	0	0	0	0	1,893	1,444	378	-23.7
Statewide	2,840	2,231	479	-21.4	0	0	0	0	2,840	2,231	479	-21.4

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

Table 7 (continued). Number of deer harvested in Michigan by hunting season, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Late Antlerless												
West UP	0	0	0		0	0	0	0	0	0	0	
East UP	0	0	0		0	0	0	0	0	0	0	
NE LP	2,117	2,045	481	-3.4	0	0	0	0	491	2,045	481	-3.4
NW LP	2,034	1,571	385	-22.8	0	0	0	0	430	1,571	385	-22.8
Sag. Bay	4,447	3,142	596	-29.3	0	0	0	0	727	3,142	596	-29.3
SW LP	2,990	2,737	551	-8.5	0	0	0	0	546	2,737	551	-8.5
SC LP	4,646	3,930	703	-15.4	0	0	0	0	767	3,930	703	-15.4
SE LP	1,802	915	297	-49.2*	0	0	0	0	421	915	297	-49.2*
UP	0	0	0		0	0	0	0	0	0	0	
NLP	4,506	3,779	632	-16.1*	0	0	0	0	701	3,779	632	-16.1
SLP	13,529	10,562	1,105	-21.9*	0	0	0	0	1,236	10,562	1,105	-21.9*
Statewide	18,035	14,340	1,281	-20.5*	0	0	0	0	1,465	14,340	1,281	-20.5*
Liberty^c												
West UP	124	166	75	33.9	253	482	147	90.6	377	648	165	72.0
East UP	19	12	19	-35.3	74	84	53	13.6	93	97	56	4.0
NE LP	351	287	103	-18.3	622	554	141	-11.0	974	841	175	-13.7
NW LP	745	703	157	-5.7	963	1,338	220	38.9	1,709	2,040	270	19.4
Sag. Bay	404	406	129	0.5	1,013	971	182	-4.1	1,416	1,377	223	-2.8
SW LP	238	274	96	15.1	354	461	131	30.2	592	734	162	24.1
SC LP	275	340	122	23.3	465	685	158	47.3	741	1,025	199	38.4
SE LP	71	95	68	34.2	368	336	106	-8.6	438	431	126	-1.5
UP	143	178	77	24.8	327	566	156	73.1	470	745	174	58.6
NLP	1,315	1,244	213	-5.4	1,863	2,169	279	16.4	3,179	3,411	351	7.3
SLP	768	860	187	11.9	1,923	2,176	277	13.2	2,690	3,037	335	12.9
Statewide	2,227	2,282	298	2.5	4,113	4,911	424	19.4	6,339	7,193	518	13.5

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

^cEstimates included results of both youth and disabled hunters.

Table 7 (continued). Number of deer harvested in Michigan by hunting season, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Independence												
West UP	13	13	7	1.7	9	31	11	238.4*	22	44	13	100.0*
East UP	2	4	4	103.4	4	4	4	5.8	6	8	5	39.2
NE LP	21	63	55	199.7	18	49	29	165.4	39	112	62	185.8
NW LP	17	84	62	387.5	82	45	13	-45.1	100	129	64	29.1
Sag. Bay	36	31	21	-13.0	36	51	29	39.0	72	82	35	13.9
SW LP	38	30	21	-19.8	39	11	6	-72.8	76	41	21	-46.4
SC LP	13	15	8	16.2	67	27	20	-59.1	80	43	22	-47.1
SE LP	2	8	5	306.9	15	20	20	32.8	17	27	20	62.4
UP	15	17	8	14.4	13	34	11	172.0*	28	52	14	87.9*
NLP	72	158	83	119.7	109	113	37	3.6	181	272	91	50.0
SLP	55	73	30	33.3	148	89	36	-40.1	203	161	47	-20.5
Statewide	142	248	89	75.3	270	236	53	-12.4	412	485	103	17.8
Urban Archery												
West UP	NA	0	0		NA	0	0		NA	0	0	
East UP	NA	0	0		NA	0	0		NA	0	0	
NE LP	NA	0	0		NA	0	0		NA	0	0	
NW LP	NA	0	0		NA	0	0		NA	0	0	
Sag. Bay	NA	0	0		NA	0	0		NA	0	0	
SW LP	NA	0	0		NA	0	0		NA	0	0	
SC LP	NA	0	0		NA	0	0		NA	0	0	
SE LP	NA	477	258		NA	52	71		NA	530	277	
UP	NA	0	0		NA	0	0		NA	0	0	
NLP	NA	0	0		NA	0	0		NA	0	0	
SLP	NA	477	258		NA	52	71		NA	530	277	
Statewide	NA	477	258		NA	52	71		NA	530	277	

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

Table 7 (continued). Number of deer harvested in Michigan by hunting season, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Disease Hunt												
West UP	NA	0	0		NA	0	0		NA	0	0	
East UP	NA	0	0		NA	0	0		NA	0	0	
NE LP	NA	107	124		NA	0	0		NA	107	124	
NW LP	NA	0	0		NA	0	0		NA	0	0	
Sag. Bay	NA	0	0		NA	0	0		NA	0	0	
SW LP	NA	0	0		NA	0	0		NA	0	0	
SC LP	NA	294	177		NA	2	3		NA	296	178	
SE LP	NA	0	0		NA	0	0		NA	0	0	
UP	NA	0	0		NA	0	0		NA	0	0	
NLP	NA	107	124		NA	0	0		NA	107	124	
SLP	NA	294	177		NA	2	3		NA	296	178	
Statewide	NA	401	216		NA	2	3		NA	403	216	
All Seasons												
West UP	2,553	4,523	771	77.1*	16,018	24,141	1,595	50.7*	18,611	28,670	1,862	54.0*
East UP	24	239	181	909.9*	3,999	6,378	821	59.5*	4,035	6,619	847	64.0*
NE LP	22,905	27,698	2,034	20.9*	31,524	35,491	1,994	12.6*	54,431	63,187	3,137	16.1*
NW LP	25,521	30,738	1,935	20.4*	34,707	37,849	2,079	9.1	60,229	68,584	3,146	13.9*
Sag. Bay	31,660	28,215	2,025	-10.9	36,627	38,228	2,101	4.4	68,267	66,442	3,302	-2.7
SW LP	22,322	20,118	1,662	-9.9	26,588	30,955	1,910	16.4*	48,899	51,073	2,859	4.4
SC LP	29,831	28,677	2,120	-3.9	33,405	38,521	2,155	15.3*	63,215	67,197	3,411	6.3
SE LP	10,237	10,502	1,219	2.6	13,365	14,092	1,275	5.4	23,601	24,594	1,948	4.2
UP	2,577	4,762	792	84.8*	20,016	30,519	1,794	52.5*	22,647	35,289	2,045	55.8*
NLP	57,757	68,316	3,046	18.3*	76,675	84,260	3,092	9.9*	134,427	152,570	4,806	13.5*
SLP	84,720	77,631	3,383	-8.4	99,542	110,876	3,614	11.4*	184,214	188,505	5,582	2.3
Statewide	145,054	150,709	4,629	3.9	196,233	225,656	5,089	15.0*	341,288	376,365	7,656	10.3*

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

Table 8. Number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2016-2017.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017 (%)	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017	2016 Harvest	2017 Harvest	95% CL ^b	Change from 2016 to 2017
Public Lands												
West UP	55	556	258	910.4*	4,544	6,396	827	40.8*	4,610	6,957	882	50.9*
East UP	0	83	117		1,489	2,068	465	38.9	1,493	2,153	479	44.2
NE LP	4,533	6,691	926	47.6*	7,335	8,100	943	10.4	11,866	14,789	1,399	24.6*
NW LP	3,282	4,842	709	47.6*	6,606	6,799	869	2.9	9,889	11,641	1,200	17.7
Sag. Bay	3,508	3,674	686	4.7	3,955	3,123	578	-21.0	7,456	6,794	999	-8.9
SW LP	1,411	1,393	399	-1.3	1,882	1,870	471	-0.6	3,291	3,263	688	-0.9
SC LP	2,777	2,157	590	-22.3	2,550	2,012	485	-21.1	5,320	4,167	871	-21.7
SE LP	760	943	393	24.1	1,073	1,089	330	1.4	1,832	2,031	582	10.8
UP	55	639	283	1060.4*	6,032	8,464	948	40.3*	6,103	9,110	1,004	49.3*
NLP	9,122	13,397	1,249	46.9*	15,364	16,435	1,342	7.0	24,482	29,828	1,950	21.8*
SLP	7,149	6,302	965	-11.8	8,037	6,558	862	-18.4	15,173	12,857	1,471	-15.3
Statewide	16,326	20,338	1,608	24.6*	29,433	31,458	1,857	6.9	45,759	51,795	2,644	13.2*
Private Lands												
West UP	2,499	3,966	723	58.7*	11,464	17,742	1,361	54.8*	13,990	21,711	1,624	55.2*
East UP	24	157	117	561.0	2,506	4,308	670	71.9*	2,538	4,466	687	76.0*
NE LP	18,362	21,009	1,784	14.4	24,177	27,387	1,740	13.3	42,541	48,395	2,756	13.8*
NW LP	22,237	25,896	1,791	16.5*	28,095	31,047	1,880	10.5	50,330	56,942	2,872	13.1
Sag. Bay	28,153	24,541	1,888	-12.8	32,679	35,108	2,011	7.4	60,820	59,649	3,120	-1.9
SW LP	20,917	18,724	1,606	-10.5	24,716	29,087	1,844	17.7*	45,625	47,812	2,750	4.8
SC LP	27,057	26,519	2,027	-2.0	30,867	36,513	2,096	18.3*	57,910	63,032	3,276	8.8
SE LP	9,479	9,559	1,143	0.8	12,296	13,005	1,228	5.8	21,776	22,563	1,842	3.6
UP	2,523	4,123	733	63.4*	13,970	22,050	1,517	57.8*	16,528	26,176	1,763	58.4*
NLP	48,623	54,922	2,745	13.0*	61,294	67,819	2,766	10.6*	109,911	122,738	4,322	11.7*
SLP	77,582	71,326	3,227	-8.1	91,537	104,329	3,501	14.0*	169,090	175,655	5,347	3.9
Statewide	128,729	130,371	4,307	1.3	166,800	194,198	4,718	16.4*	295,529	324,569	7,109	9.8*

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^b95% confidence limit for the 2017 estimate. *P<0.005.

Table 9. Percentage of deer hunters harvesting deer in Michigan during all seasons, 2017.^a

Sex and Area	Number of deer harvested									
	≥1 deer		≥2 deer		≥3 deer		≥4 deer		≥5 deer	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Antlerless										
West UP	6.5	1.0	1.0	0.4	0.2	0.2	0.1	0.1	0.0	0.0
East UP	1.0	0.7	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
NE LP	20.7	1.2	3.9	0.6	1.0	0.3	0.3	0.2	0.2	0.1
NW LP	22.4	1.2	3.5	0.5	0.5	0.2	0.1	0.1	0.0	0.0
Sag. Bay	24.5	1.4	4.8	0.7	1.1	0.3	0.4	0.2	0.2	0.1
SW LP	20.3	1.4	3.8	0.7	1.0	0.3	0.3	0.2	0.1	0.1
SC LP	22.1	1.3	5.3	0.7	1.4	0.4	0.5	0.2	0.2	0.1
SE LP	18.3	1.8	3.9	0.9	1.0	0.5	0.3	0.3	0.1	0.2
UP	5.2	0.8	0.9	0.3	0.2	0.2	0.0	0.1	0.0	0.0
NLP	22.6	0.8	4.0	0.4	0.8	0.2	0.2	0.1	0.1	0.1
SLP	21.9	0.7	4.8	0.4	1.3	0.2	0.4	0.1	0.2	0.1
Statewide ^d	21.7	0.5	4.5	0.3	1.1	0.1	0.4	0.1	0.1	0.1
Antlered bucks^c										
West UP	39.1	2.0	2.7	0.7						
East UP	32.7	3.4	2.0	1.0						
NE LP	30.2	1.4	3.4	0.5						
NW LP	28.5	1.3	4.2	0.6						
Sag. Bay	36.5	1.5	5.8	0.8						
SW LP	33.6	1.6	5.7	0.8						
SC LP	33.3	1.5	6.4	0.8						
SE LP	27.6	2.0	4.1	0.9						
UP	37.9	1.7	2.6	0.6						
NLP	30.2	0.9	4.1	0.4						
SLP	34.8	0.9	6.1	0.4						
Statewide ^d	36.1	0.6	5.6	0.3						

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

^cThe season bag limit for antlered deer was two.

^dThe statewide estimate was derived from all hunters, including hunters that had failed to report where they hunted. In contrast, regional estimates were derived from only hunters that had reported hunting in the area.

Table 9 (continued). Percentage of deer hunters harvesting deer in Michigan during all seasons, 2017.^a

Sex and Area	Number of deer harvested									
	≥1 deer		≥2 deer		≥3 deer		≥4 deer		≥5 deer	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Sexes Combined										
West UP	43.3	2.0	5.3	0.9	0.7	0.3	0.2	0.2	0.0	0.0
East UP	33.4	3.4	2.6	1.2	0.0	0.0	0.0	0.0	0.2	0.2
NE LP	44.5	1.5	11.5	1.0	2.5	0.5	0.7	0.2	0.1	0.1
NW LP	44.4	1.4	12.1	0.9	2.3	0.4	0.4	0.2	0.2	0.2
Sag. Bay	52.0	1.6	15.7	1.2	3.7	0.6	1.2	0.4	0.2	0.2
SW LP	45.6	1.7	14.4	1.2	3.5	0.6	0.9	0.3	0.2	0.2
SC LP	47.3	1.5	15.3	1.1	4.3	0.6	1.5	0.4	0.2	0.2
SE LP	40.1	2.2	11.4	1.5	2.9	0.8	0.5	0.3	0.0	0.0
UP	41.2	1.8	4.7	0.8	0.6	0.3	0.2	0.1	0.1	0.1
NLP	45.9	1.0	12.7	0.6	2.6	0.3	0.6	0.2	0.1	0.1
SLP	48.2	0.9	15.3	0.7	4.1	0.4	1.2	0.2	0.0	0.0
Statewide ^d	49.6	0.6	14.7	0.5	3.6	0.2	1.0	0.1	0.4	0.1

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

^cThe season bag limit for antlered deer was two.

^dThe statewide estimate was derived from all hunters, including hunters that had failed to report where they hunted. In contrast, regional estimates were derived from only hunters that had reported hunting in the area.

Table 10. Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2017.^a

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Liberty	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Antlerless												
West UP	4.7	1.5	4.7	0.9	4.9	2.1	0.0	0.0	0.0	0.0	11.1	4.8
East UP	0.5	0.9	1.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	3.9	6.1
NE LP	15.9	1.6	13.5	1.1	10.2	2.4	22.7	8.6	44.8	7.6	13.0	4.4
NW LP	19.9	1.5	12.5	1.0	7.8	1.9	14.2	11.4	38.2	7.4	13.5	2.9
Sag. Bay	15.8	1.6	14.7	1.3	12.6	2.2	15.7	6.4	33.0	5.0	11.4	3.4
SW LP	12.5	1.4	10.8	1.2	11.2	1.9	0.0	0.0	24.7	4.2	11.1	3.7
SC LP	13.1	1.4	13.2	1.2	8.5	1.6	23.6	6.9	24.3	3.5	13.0	4.4
SE LP	12.3	1.8	10.2	1.7	7.5	2.3	14.6	7.5	17.4	5.1	7.0	4.9
UP	3.7	1.2	3.9	0.7	3.8	1.6	0.0	0.0	0.0	0.0	9.9	4.2
NLP	18.7	1.1	13.5	0.7	9.6	1.5	22.8	7.0	41.2	5.2	14.2	2.3
SLP	13.2	0.8	12.5	0.7	10.1	1.0	17.9	4.1	25.4	2.2	9.9	2.1
Statewide	15.6	0.6	12.2	0.5	9.5	0.8	19.4	3.5	28.5	2.1	12.0	1.5
Antlered Bucks												
West UP	25.6	3.2	34.3	2.0	5.7	2.2	0.0	0.0	0.0	0.0	32.4	8.0
East UP	24.6	5.6	28.2	3.5	6.5	4.2	0.0	0.0	0.0	0.0	27.3	15.0
NE LP	19.5	1.7	24.9	1.4	6.1	1.9	0.0	0.0	0.0	0.0	25.2	5.7
NW LP	22.0	1.6	20.5	1.3	5.9	1.7	0.0	0.0	0.0	0.0	25.9	3.7
Sag. Bay	27.7	1.9	26.1	1.6	8.5	1.9	0.0	0.0	0.0	0.0	27.5	4.5
SW LP	26.8	2.0	22.0	1.6	8.5	1.7	0.0	0.0	0.0	0.0	18.8	4.8
SC LP	25.5	1.8	23.6	1.5	8.7	1.7	0.0	0.0	0.0	0.0	26.5	5.4
SE LP	20.7	2.2	17.5	2.1	9.2	2.5	0.0	0.0	0.0	0.0	25.0	7.1
UP	25.4	2.8	32.9	1.8	5.9	2.0	0.0	0.0	0.0	0.0	31.6	7.1
NLP	21.5	1.1	23.0	0.9	6.1	1.2	0.0	0.0	0.0	0.0	25.0	2.8
SLP	26.7	1.1	23.6	0.9	9.0	1.0	0.0	0.0	0.0	0.0	25.4	2.9
Statewide	26.1	0.8	25.8	0.6	8.0	0.7	0.0	0.0	0.0	0.0	25.9	1.9

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

Table 10 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2017.^a

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Liberty	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Sexes combined												
West UP	29.3	3.3	37.6	2.1	10.2	2.9	0.0	0.0	0.0	0.0	43.6	8.2
East UP	25.1	5.7	28.9	3.5	6.5	4.2	0.0	0.0	0.0	0.0	31.2	15.6
NE LP	32.7	2.1	35.2	1.6	15.9	2.9	22.7	8.6	44.8	7.6	38.2	6.5
NW LP	37.8	1.9	30.9	1.5	13.3	2.5	14.2	11.4	38.2	7.4	39.5	4.2
Sag. Bay	39.0	2.1	37.0	1.7	20.8	2.7	15.7	6.4	33.0	5.0	38.9	5.0
SW LP	35.2	2.1	30.0	1.8	18.9	2.4	0.0	0.0	24.7	4.2	29.8	5.6
SC LP	35.0	2.0	34.2	1.6	16.9	2.2	23.6	6.9	24.3	3.5	39.5	6.2
SE LP	30.4	2.5	25.5	2.4	16.1	3.2	14.6	7.5	17.4	5.1	32.1	8.0
UP	28.4	2.9	35.7	1.8	9.3	2.4	0.0	0.0	0.0	0.0	41.4	7.4
NLP	36.5	1.3	33.8	1.0	15.3	1.8	22.8	7.0	41.2	5.2	39.3	3.2
SLP	35.9	1.1	33.1	1.0	18.5	1.3	17.9	4.1	25.4	2.2	35.3	3.2
Statewide	37.6	0.9	35.2	0.7	17.0	1.0	19.4	3.5	28.5	2.1	37.9	2.2

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

Table 10 (Continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2017.^a

Sex and Area	Season							
	Independence		Urban Archery		Disease Hunt		All Seasons	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Antlerless								
West UP	10.2	5.5	0.0	0.0	0.0	0.0	6.5	1.0
East UP	9.1	8.7	0.0	0.0	0.0	0.0	1.0	0.7
NE LP	19.2	14.5	0.0	0.0	40.9	33.8	20.7	1.2
NW LP	19.3	11.9	0.0	0.0	0.0	0.0	22.4	1.2
Sag. Bay	9.7	6.5	0.0	0.0	0.0	0.0	24.5	1.4
SW LP	19.6	11.8	0.0	0.0	0.0	0.0	20.3	1.4
SC LP	4.6	2.6	0.0	0.0	19.3	10.1	22.1	1.3
SE LP	4.6	3.8	6.0	6.0	0.0	0.0	18.3	1.8
UP	13.1	4.7	0.0	0.0	0.0	0.0	5.2	0.8
NLP	18.3	8.3	0.0	0.0	40.9	33.8	22.6	0.8
SLP	8.5	3.6	6.0	6.0	19.3	10.1	21.9	0.7
Statewide	13.1	4.3	6.0	6.0	21.7	9.8	21.7	0.5
Antlered Bucks								
West UP	23.4	8.5	0.0	0.0	0.0	0.0	39.1	2.0
East UP	9.1	8.7	0.0	0.0	0.0	0.0	32.7	3.4
NE LP	14.9	8.8	0.0	0.0	0.0	0.0	30.2	1.4
NW LP	10.3	3.4	0.0	0.0	0.0	0.0	28.5	1.3
Sag. Bay	15.8	8.8	0.0	0.0	0.0	0.0	36.5	1.5
SW LP	6.8	4.1	0.0	0.0	0.0	0.0	33.6	1.6
SC LP	8.1	6.2	0.0	0.0	0.1	0.2	33.3	1.5
SE LP	11.8	11.8	2.3	2.3	0.0	0.0	27.6	2.0
UP	19.9	6.6	0.0	0.0	0.0	0.0	37.9	1.7
NLP	13.1	4.3	0.0	0.0	0.0	0.0	30.2	0.9
SLP	10.3	4.2	2.3	2.3	0.1	0.2	34.8	0.9
Statewide	12.5	2.8	2.3	2.3	0.1	0.2	36.1	0.6

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

Table 10 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2017.^a

Sex and Area	Season							
	Independence		Urban Archery		Disease Hunt		All Seasons	
	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b	Success	95% CL ^b
Sexes combined								
West UP	33.6	10.3	0.0	0.0	0.0	0.0	43.3	2.0
East UP	18.2	11.6	0.0	0.0	0.0	0.0	33.4	3.4
NE LP	33.5	15.5	0.0	0.0	40.9	33.8	44.5	1.5
NW LP	29.2	11.2	0.0	0.0	0.0	0.0	44.4	1.4
Sag. Bay	25.5	10.8	0.0	0.0	0.0	0.0	52.0	1.6
SW LP	26.4	12.1	0.0	0.0	0.0	0.0	45.6	1.7
SC LP	12.7	7.0	0.0	0.0	19.5	10.1	47.3	1.5
SE LP	16.4	12.8	6.2	6.2	0.0	0.0	40.1	2.2
UP	29.9	8.0	0.0	0.0	0.0	0.0	41.2	1.8
NLP	31.0	8.3	0.0	0.0	40.9	33.8	45.9	1.0
SLP	18.8	5.6	6.2	6.2	19.5	10.1	48.2	0.9
Statewide	25.4	4.9	6.2	6.2	21.8	9.8	49.6	0.6

^aExcluded people that did not hunt during the season and deer taken with DMA permits.

^b95% confidence limit.

Table 11. Level of satisfaction and dissatisfaction with the number of deer seen and number of antlered deer (bucks) seen among Michigan deer hunters, 2016-2017.

Criteria and area	Satisfied hunters (%) ^a				Dissatisfied hunters (%) ^b			
	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)
Number of deer seen								
West UP	26	49	2	22*	60	35	2	-25*
East UP	23	46	4	23*	64	37	4	-28*
NE LP	38	44	2	5*	45	40	2	-5*
NW LP	38	44	1	5*	46	39	1	-7*
Sag. Bay	44	49	2	4*	40	34	2	-6*
SW LP	36	43	2	7*	46	40	2	-6*
SC LP	41	47	2	5*	43	36	2	-7*
SE LP	40	43	3	3	40	36	2	-4
UP	26	48	2	22*	61	35	2	-25*
NLP	39	44	1	5*	45	39	1	-6*
SLP	41	46	1	5*	42	36	1	-6*
Statewide	38	45	1	8*	46	37	1	-8*
Number of antlered deer (bucks) seen								
West UP	17	32	2	15*	68	51	2	-16*
East UP	18	32	4	14*	70	50	4	-19*
NE LP	27	29	1	1	53	52	2	-2
NW LP	28	30	1	2	54	50	2	-4*
Sag. Bay	30	33	2	3	50	46	2	-4*
SW LP	26	31	2	4*	55	49	2	-6*
SC LP	29	35	2	5*	51	46	2	-6*
SE LP	27	28	2	1	52	51	3	-1
UP	18	32	2	14*	68	51	2	-17*
NLP	27	29	1	2*	54	51	1	-3*
SLP	29	33	1	4*	52	47	1	-5*
Statewide	27	31	1	5*	55	49	1	-6*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

^c95% confidence limit for the 2017 estimate.

*P<0.005.

Table 12. Level of satisfaction and dissatisfaction with the size of the antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters, 2016-2017.

Criteria and area	Satisfied hunters (%) ^a				Dissatisfied hunters (%) ^b			
	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)
Size of antlers								
West UP	14	20	2	6*	61	54	2	-7*
East UP	12	21	3	9*	61	50	4	-11*
NE LP	24	25	1	0	45	45	2	0
NW LP	27	29	1	2	44	43	1	-1
Sag. Bay	25	27	2	3	47	45	2	-2
SW LP	24	27	2	3	47	43	2	-4*
SC LP	26	29	1	3	45	42	2	-3*
SE LP	23	24	2	0	47	46	3	-1
UP	14	20	2	7*	61	53	2	-8*
NLP	25	26	1	1	45	44	1	-1
SLP	25	28	1	3*	46	43	1	-3*
Statewide	24	26	1	3*	48	45	1	-3*
Overall deer hunting experience								
West UP	38	53	2	15*	41	25	2	-16*
East UP	36	53	4	17*	43	26	3	-17*
NE LP	52	53	2	1	27	25	1	-1
NW LP	48	53	2	5*	30	26	1	-3*
Sag. Bay	52	55	2	3	26	22	1	-4*
SW LP	46	51	2	6*	32	27	2	-5*
SC LP	50	55	2	5*	28	24	1	-4*
SE LP	50	52	3	2	26	24	2	-2
UP	38	53	2	15*	41	25	2	-16*
NLP	50	53	1	3*	28	26	1	-3*
SLP	49	53	1	4*	28	24	1	-4*
Statewide	48	53	1	5*	30	25	1	-5*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

^c95% confidence limit for the 2017 estimate.

*P<0.005.

Table 13. Level of satisfaction and dissatisfaction with overall deer hunting experience and number of deer harvested among Michigan deer hunters, 2016-2017.

Criteria and area	Satisfied hunters (%) ^a				Dissatisfied hunters (%) ^b			
	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)	2016	2017	95% CL ^c	Difference from 2016 to 2017 (%)
Number of deer harvested								
West UP	24	35	2	11*	38	25	2	-13*
East UP	23	31	4	8*	37	29	4	-7
NE LP	34	35	2	1	29	26	1	-2
NW LP	32	35	1	3*	31	27	1	-4*
Sag. Bay	41	41	2	0	26	24	1	-2
SW LP	31	34	2	4*	33	28	2	-5*
SC LP	34	37	2	2	31	28	2	-2
SE LP	32	34	3	2	30	27	2	-3
UP	24	34	2	11*	38	26	2	-12*
NLP	34	36	1	2*	30	27	1	-3*
SLP	35	37	1	2*	30	27	1	-3*
Statewide	33	36	1	3*	31	27	1	-4*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

^c95% confidence limit for the 2017 estimate.

*P<0.005.

Table 14. Level of satisfaction and dissatisfaction with the number of deer seen and number of antlered deer (bucks) seen among Michigan deer hunters in 2017. Estimates provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) ^a					Dissatisfied hunters (%) ^b				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
Number of deer seen										
West UP	53	3	40	5	-13*	29	3	46	5	17*
East UP	47	5	37	8	-10	35	5	44	8	9
NE LP	49	2	32	3	-17*	35	2	51	3	17*
NW LP	49	2	29	3	-20*	33	2	56	4	23*
Sag. Bay	51	2	33	5	-19*	31	2	52	5	21*
SW LP	45	2	29	7	-15*	39	2	57	7	19*
SC LP	49	2	25	6	-24*	34	2	55	6	21*
SE LP	46	3	24	8	-23*	34	3	50	9	16*
UP	52	2	39	4	-13*	31	2	46	4	15*
NLP	49	1	31	2	-18*	33	1	53	2	20*
SLP	48	1	28	3	-20*	35	1	54	4	20*
Statewide	49	1	32	2	-17*	34	1	52	2	18*
Number of antlered deer (bucks) seen										
West UP	35	3	24	4	-10*	48	3	58	5	11*
East UP	33	5	28	7	-5	51	5	55	8	5
NE LP	34	2	19	3	-15*	48	2	59	3	11*
NW LP	34	2	20	3	-14*	46	2	62	3	17*
Sag. Bay	36	2	21	4	-15*	43	2	62	5	19*
SW LP	32	2	18	6	-15*	48	2	58	7	11*
SC LP	36	2	22	5	-15*	45	2	57	6	12*
SE LP	29	3	21	7	-8	51	3	56	9	5
UP	34	2	25	4	-9*	48	2	57	4	9*
NLP	34	1	20	2	-14*	47	1	60	2	14*
SLP	34	1	20	3	-15*	46	1	59	4	13*
Statewide	34	1	21	1	-13*	46	1	59	2	13*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

*P<0.005.

Table 15. Level of satisfaction and dissatisfaction with the size of antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters in 2017. Estimates provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) ^a					Dissatisfied hunters (%) ^b				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
Size of antlers										
West UP	22	2	19	4	-3	52	3	52	5	0
East UP	21	4	20	6	-1	50	5	55	8	5
NE LP	27	2	20	3	-7*	45	2	43	3	-2
NW LP	32	2	21	3	-10*	40	2	48	4	8*
Sag. Bay	29	2	18	4	-12*	45	2	45	5	1
SW LP	28	2	15	5	-13*	42	2	47	8	4
SC LP	30	2	18	5	-12*	42	2	44	7	2
SE LP	25	2	19	7	-6	46	3	44	9	-2
UP	22	2	19	3	-2	52	3	53	4	1
NLP	29	1	20	2	-9*	43	1	45	2	2
SLP	29	1	18	3	-11*	43	1	45	4	2
Statewide	28	1	20	1	-9*	44	1	47	2	3*
Overall deer hunting experience										
West UP	57	3	51	5	-6	21	2	31	5	10*
East UP	53	5	46	8	-7	26	5	29	7	3
NE LP	55	2	47	3	-8*	22	2	33	3	10*
NW LP	58	2	42	4	-15*	23	2	36	3	13*
Sag. Bay	57	2	47	5	-10*	20	2	32	5	12*
SW LP	53	2	35	7	-19*	25	2	39	7	14*
SC LP	56	2	46	6	-10*	23	1	36	6	13*
SE LP	54	3	40	9	-14*	23	2	29	8	5
UP	56	2	50	4	-7*	22	2	30	4	8*
NLP	57	1	45	2	-11*	22	1	34	2	11*
SLP	55	1	42	4	-14*	23	1	35	4	12*
Statewide	56	1	45	2	-10*	23	1	33	2	11*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

*P<0.005.

Table 16. Level of satisfaction and dissatisfaction with the number of deer harvested among Michigan deer hunters in 2017. Estimates provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) ^a					Dissatisfied hunters (%) ^b				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
Number of deer harvested										
West UP	41	3	27	4	-14*	23	2	29	4	6
East UP	32	5	30	7	-2	31	5	30	7	-2
NE LP	39	2	25	3	-14*	23	2	32	3	9*
NW LP	40	2	25	3	-15*	25	2	34	3	10*
Sag. Bay	44	2	27	5	-17*	23	2	31	5	8*
SW LP	37	2	21	6	-16*	27	2	37	7	9*
SC LP	38	2	20	5	-18*	27	2	37	6	9*
SE LP	36	3	22	8	-14*	26	3	31	9	5
UP	39	2	28	4	-11*	25	2	29	4	4
NLP	40	1	25	2	-15*	24	1	33	2	9*
SLP	39	1	23	3	-16*	26	1	35	4	9*
Statewide	39	1	25	2	-14*	25	1	32	2	7*

^aIncluded hunters who were "very satisfied" or "somewhat satisfied."

^bIncluded hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

*P<0.005.

Table 17. The status of the deer population and deer harvest in a hunter's preferred county in Michigan compared to 5 years ago.

Statement and region	Status selected by hunters					
	Decreased		No change		Increased	
	%	95% CL	%	95% CL	%	95% CL
<i>The size of the deer population.</i>						
West UP	50	2	42	2	8	1
East UP	46	4	43	4	11	3
NE LP	46	2	48	2	6	1
NW LP	43	2	49	2	8	1
Sag. Bay	49	2	46	2	5	1
SW LP	56	2	39	2	5	1
SC LP	56	2	40	2	4	1
SE LP	47	3	47	3	5	1
UP	49	2	42	2	9	1
NLP	45	1	48	1	6	1
SLP	53	1	42	1	5	<1
Statewide	49	1	45	1	6	<1
<i>The number of deer they had harvested.</i>						
West UP	51	2	45	2	4	1
East UP	47	4	48	4	5	2
NE LP	45	2	52	2	4	1
NW LP	44	2	52	2	4	1
Sag. Bay	47	2	51	2	3	1
SW LP	53	2	44	2	3	1
SC LP	53	2	45	2	3	1
SE LP	46	3	50	3	4	1
UP	50	2	46	2	4	1
NLP	45	1	51	1	4	<1
SLP	50	1	47	1	3	<1
Statewide	48	1	49	1	3	<1
<i>The total deer harvest by all hunters.</i>						
West UP	57	2	40	2	4	1
East UP	50	4	45	4	5	2
NE LP	46	2	50	2	4	1
NW LP	46	2	49	2	6	1
Sag. Bay	48	2	48	2	4	1
SW LP	56	2	41	2	3	1
SC LP	55	2	41	2	3	1
SE LP	45	3	50	3	5	1
UP	55	2	41	2	4	1
NLP	46	1	49	1	5	<1
SLP	53	1	44	1	3	<1
Statewide	50	1	46	1	4	<1

Table 18. The proportion of deer hunters desiring an increase or decrease in the deer population during the next five years in their preferred hunting area in Michigan.

Region	Desired population change					
	Decrease		No change		Increase	
	%	95% CL	%	95% CL	%	95% CL
West UP	2	1	45	2	53	2
East UP	2	1	39	4	59	4
NE LP	4	1	56	2	40	2
NW LP	4	1	55	1	40	1
Sag. Bay	5	1	63	2	31	2
SW LP	3	1	57	2	40	2
SC LP	6	1	59	2	35	2
SE LP	5	1	61	3	33	2
UP	2	1	44	2	54	2
NLP	4	<1	56	1	40	1
SLP	5	<1	60	1	35	1
Statewide	4	<1	56	1	39	1

Table 19. The proportion of hunters agreeing or disagreeing with various statements related to the existence of chronic wasting disease (CWD) in Michigan.

Statement and region	Status selected by hunters					
	Agree		Disagree		Not sure	
	%	95% CL	%	95% CL	%	95% CL
<i>The threat of CWD has been exaggerated.</i>						
UP	25	2	45	2	30	2
NLP	26	1	41	1	33	1
SLP	24	1	44	1	33	1
Statewide	25	1	43	1	32	1
<i>Because of CWD, members of my family have concerns about eating deer meat.</i>						
UP	25	2	56	2	19	1
NLP	29	1	53	1	18	1
SLP	32	1	51	1	17	1
Statewide	30	1	52	1	18	1
<i>CWD poses a risk to deer, but not to humans.</i>						
UP	28	2	27	2	45	2
NLP	26	1	28	1	46	1
SLP	28	1	27	1	45	1
Statewide	27	1	27	1	45	1
<i>CWD may pose a risk to humans, but not enough is currently known to be sure.</i>						
UP	48	2	15	1	37	2
NLP	47	1	14	1	39	1
SLP	48	1	15	1	37	1
Statewide	47	1	15	<1	38	1
<i>CWD may cause disease in humans if they eat meat from animals infected with CWD.</i>						
UP	22	2	21	2	57	2
NLP	23	1	18	1	58	1
SLP	24	1	21	1	55	1
Statewide	24	1	20	1	57	1
<i>Because of CWD, I have concerns about eating deer meat.</i>						
UP	27	2	55	2	19	1
NLP	28	1	53	1	19	1
SLP	30	1	52	1	18	1
Statewide	29	1	53	1	19	1
<i>If left unchecked, CWD could spread throughout the Michigan deer herd.</i>						
UP	73	2	10	1	17	1
NLP	72	1	8	1	19	1
SLP	75	1	8	1	17	1
Statewide	74	1	8	<1	18	1

Table 19 (continued). The proportion of hunters agreeing or disagreeing with various statements related to the existence of chronic wasting disease (CWD) in Michigan.

Statement and region	Status selected by hunters					
	Agree		Disagree		Not sure	
	%	95% CL	%	95% CL	%	95% CL
<i>If left unchecked, CWD could wipe out the deer herd across Michigan.</i>						
UP	46	2	27	2	27	2
NLP	48	1	24	1	28	1
SLP	51	1	24	1	25	1
Statewide	49	1	24	1	26	1
<i>We should reduce the deer population in areas where CWD is found in Michigan as much as needed to control CWD.</i>						
UP	60	2	16	1	24	2
NLP	60	1	15	1	24	1
SLP	59	1	17	1	24	1
Statewide	59	1	17	<1	24	1
<i>CWD is natural and we should let it take its course in deer.</i>						
UP	13	1	59	2	28	2
NLP	13	1	58	1	30	1
SLP	14	1	58	1	29	1
Statewide	13	<1	58	1	29	1
<i>I plan to discontinue deer hunting if CWD has infected deer where I hunt.</i>						
UP	24	2	52	2	24	2
NLP	18	1	58	1	24	1
SLP	19	1	58	1	23	1
Statewide	19	1	57	1	24	1
<i>I plan to locate a different hunting area in Michigan if CWD has infected deer where I hunt.</i>						
UP	21	2	53	2	26	2
NLP	21	1	53	1	26	1
SLP	22	1	52	1	26	1
Statewide	22	1	53	1	26	1
<i>The Michigan DNR has taken the right steps to control the spread of CWD in Michigan.</i>						
UP	40	2	11	1	49	2
NLP	44	1	11	1	45	1
SLP	45	1	10	1	45	1
Statewide	44	1	10	<1	46	1

Table 20. Estimated proportion and number of archers that used a crossbow during 2017 archery season in Michigan, summarized by region.

Region	Archers using a crossbow during archery season			
	%	95% CL	Total	95% CL
UP	64.0	3.3	13,560	1,152
NLP	70.7	1.3	81,437	2,636
SLP	64.2	1.2	97,077	2,789
Unknown ^a	59.4	3.2	13,884	1,163
Statewide	66.2	0.8	205,958	3,660

^aRegion could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.

Table 21. Estimated hunter success of archers hunting with a crossbow during 2017 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless		Antlered Bucks		Sexes Combined	
	% ^a	95% CL	% ^a	95% CL	% ^a	95% CL
UP	4.5	1.8	27.6	3.9	31.2	4.0
NLP	20.8	1.4	22.8	1.5	39.8	1.7
SLP	14.4	1.1	28.8	1.4	38.7	1.5
Unknown ^b	21.5	3.5	26.2	3.7	42.4	4.2
Statewide	16.8	0.8	26.2	1.0	38.9	1.1

^aPercentage of crossbow hunters harvesting at least one deer.

^bRegion could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.

Table 22. Estimated number of deer harvested by archers with a crossbow during 2017 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless		Antlered Bucks		Sexes Combined	
	No.	95% CL	No.	95% CL	No.	95% CL
UP	743	327	3,800	643	4,542	739
NLP	18,641	1,524	18,818	1,407	37,458	2,217
SLP	15,223	1,362	28,740	1,728	43,963	2,379
Unknown ^a	3,221	632	3,728	639	6,949	995
Statewide	37,827	2,132	55,086	2,345	92,913	3,358

^aRegion could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.



Michigan Department of Natural Resources – Wildlife Division
 PO Box 30030 Lansing MI 48909-7530

2017 MICHIGAN DEER HARVEST STUDY

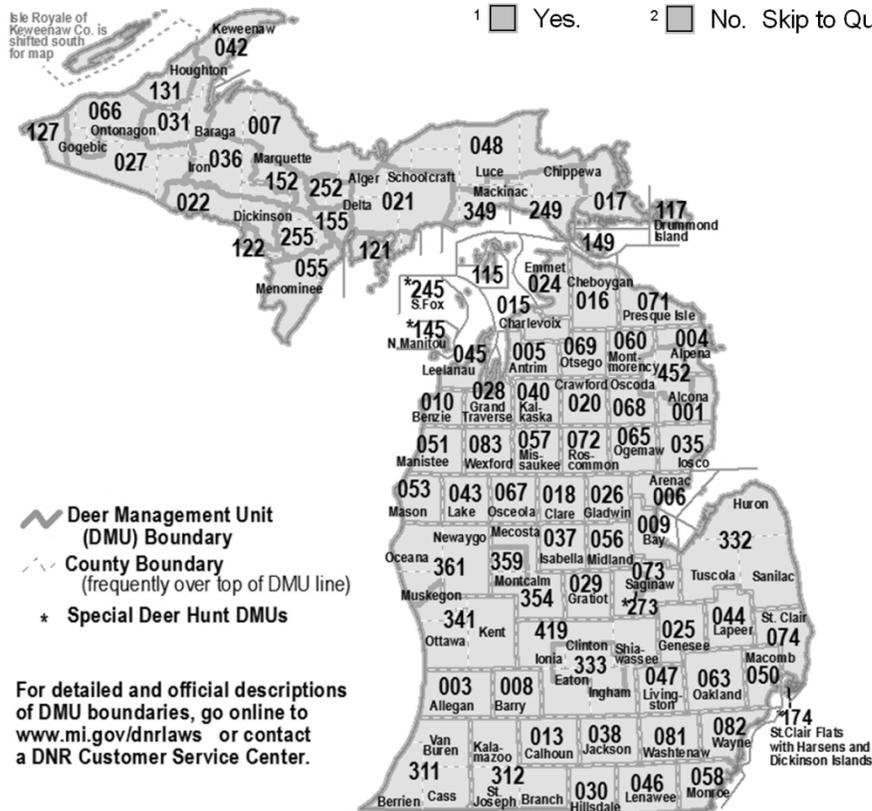
This information is requested under the authority of Part 435, 1994 PA 451, M.C.L. 324.43539.



It is important that you return this questionnaire even if you did not hunt or harvest a deer. Please report only your hunting activities, and only report taking a deer if your kill tag was attached to it. If you want to provide your answers via the internet, visit our website at www.michigan.gov/deer.

1. Did you hunt deer in Michigan during the 2017 seasons?

1 Yes. 2 No. Skip to Question #9.



2. In the following table, please report only your hunting activities and the deer that were tagged with your deer license. Report harvest and days hunted in different counties on separate rows. For each deer harvested, indicate the type of deer tagged (antlered buck or antlerless), and whether it was taken on public or private land. Antlered bucks have antlers at least 3 inches in length; antlerless deer include deer without antlers and deer with antlers less than 3 inches in length. Do not report hunting effort and harvest associated with Deer Management Assistance Permits.

SEASON HUNTED (Check box if you hunted during the season.)	LOCATION HUNTED (For each season hunted, list the management unit and county hunted on separate lines. See map on first page.)		NUMBER OF DAYS HUNTED	NUMBER OF DEER HARVESTED (Record by type of deer and land ownership type where each deer was taken.)			
	Deer Management Unit	County		Antlered Bucks		Antlerless	
				Public Land	Private Land	Public Land	Private Land
<input checked="" type="checkbox"/> Example	1 341	Kent	12	0	1	0	0
<input type="checkbox"/> Archery Oct 1-Nov 14 and Dec 1-Jan 1 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Regular Firearm Nov 15-30 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Muzzleloader Dec 1-10 (UP & NLP) Dec 1-17 (SLP)	1						
	2						
	3						
<input type="checkbox"/> Early Firearm Sept 16-17 (Portions of the Lower Peninsula)	1			Only antlerless deer could be taken on private land during the early firearm season			
	2						
	3						
<input type="checkbox"/> Late Firearm Dec 18-Jan 1 (Portions of the Lower Peninsula)	1			Only antlerless deer could be taken on private land during the late firearm season			
	2						
	3						
<input type="checkbox"/> Liberty Hunt Sept 16-17 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Independence Hunt Oct 19-22 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Late Urban Archery Hunt Jan 2-31 (Macomb, Oakland, & Wayne counties only)	1						
	2						
	3						
<input type="checkbox"/> January Disease Hunt Jan 4-7 & Jan 11-14 (Portions of Alpena, Ionia & Montcalm counties)	1						
	2						
	3						

3. Did you use a crossbow to hunt deer during the archery season (Oct 1- Nov. 14 and Dec. 1 - Jan. 1)?

¹ Yes ² No. Skip to Question #5.

4. If you used a crossbow to hunt deer during the archery season, how many deer did you take using the crossbow?

_____ Report the number of antlerless deer you took with a crossbow.

_____ Report the number of antlered deer (bucks) you took with a crossbow.

5. If you harvested a deer, how many of your deer were taken to a commercial meat processor for processing?

_____ Report the number of deer taken to a meat processor.

6. What is your preferred county to hunt deer in Michigan? Please select one county from the counties you reported hunting during the 2017 seasons in Question #2.

Please write county name

7. On what type of land did you hunt deer in your preferred county?

¹ Private ² Public ³ Both private and public lands

8. Please indicate how satisfied or dissatisfied you were with the following for the 2017 deer hunting seasons in your preferred county:

(Select one choice per item.)

	Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Strongly Dissatisfied	Not Applicable
a. Number of deer you saw.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
b. Number of antlered deer (bucks) you saw.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
c. The size of the antlers on the bucks you saw.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
d. Your overall deer hunting experience.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
e. Number of deer you harvested.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

9. Please indicate how deer numbers and harvest in your preferred county has changed over the last 5 years.

(Select one choice per item. Select "Not Applicable" if you didn't hunt deer 5 years ago.)

	Decreased Considerably	Decreased Slightly	No Change	Increased Slightly	Increased Considerably	Not Applicable
a. How does the <u>size of the deer population</u> in your preferred hunt county in 2017 compare to 5 years ago?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
b. How does the number of <u>deer you harvested</u> in your preferred county in 2017 compare to 5 years ago?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
c. How does the total deer <u>harvest by all hunters</u> in your preferred county in 2017 compare to 5 years ago?	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

10. How would you like to see the size of the deer population change during the next 5 years in your preferred hunt county?

- 1 Decrease Moderately 2 Decrease Slightly 3 No Change 4 Increase Slightly 5 Increase Moderately

11. The remaining questions ask about Chronic Wasting Disease. Chronic Wasting Disease (CWD) is a disease of deer, elk, and moose that causes degeneration of the brain. How much do you disagree or agree with each of the following statements related to CWD in Michigan?
(Select one choice per item.)

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure
a. The threat of CWD has been exaggerated.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
b. Because of CWD, members of my family have concerns about eating deer meat.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
c. CWD poses a risk to deer, but not to humans.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
d. CWD may pose a risk to humans, but not enough is currently known to be sure.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
e. CWD may cause disease in humans if they eat meat from animals infected with CWD.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
f. Because of CWD, I have concerns about eating deer meat.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
g. If left unchecked, CWD could spread throughout the Michigan deer herd.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
h. If left unchecked, CWD could wipe out the deer herd across Michigan.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
i. We should reduce the deer population in areas where CWD is found in Michigan as much as needed to control CWD.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
j. CWD is natural and we should let it take its course in deer.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
k. I plan to discontinue deer hunting if CWD has infected deer where I hunt.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
l. I plan to locate a different hunting area in Michigan if CWD has infected deer where I hunt.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
m. The Michigan DNR has taken the right steps to control the spread of CWD in Michigan.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Please return questionnaire in the enclosed postage-paid envelope.

Thank you for your help!

www.michigan.gov/dnr

Appendix B. Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2017, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^b	License quota	Licenses sold ^b	License buyers ^b
003	Allegan County	50	61	61	4,000	3,921	3,133
005	Antrim County	800	726	618	7,000	3,857	3,102
006	Arenac County	500	393	393	7,000	3,496	2,787
007	Big Bay Unit	0	0	0	0	0	0
008	Barry County	1,000	869	754	7,500	4,976	4,196
009	Bay County	200	175	145	3,000	2,129	1,746
010	Benzie County	400	373	373	1,600	1,457	1,241
013	Calhoun County	100	93	83	7,500	6,136	4,975
015	Charlevoix County	900	843	728	6,000	2,640	2,074
016	Cheboygan County	800	705	661	1,000	915	825
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	900	721	721	8,000	7,011	5,535
020	Crawford County	1,000	898	897	1,100	919	918
021	Manistique Unit	0	0	0	0	0	0
022	Crystal Falls Unit	0	0	0	0	0	0
024	Emmet County	600	522	471	2,200	1,989	1,648
025	Genesee County	0	0	0	7,000	4,450	3,900
026	Gladwin County	1,200	1,011	1,011	8,000	6,089	4,759
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	400	357	357	1,600	1,390	1,230
029	Gratiot County	1,300	1,159	894	9,000	4,644	3,526
030	Hillsdale County	400	353	293	12,000	6,386	5,170
031	Nisula Unit	0	0	0	0	0	0
036	Amasa/Michigamme Unit	0	0	0	0	0	0
037	Isabella County	100	81	72	11,000	6,688	5,175
038	Jackson County	1,600	1,461	1,328	16,000	7,872	6,454

^aSee Figure 2 for the locations of DMUs.

^bNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU. Number of licenses sold could exceed the quota because junior licenses sold don't count against the quota.

^cAlso part of DMU 487.

^dSpecial deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix B (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2017, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^b	License quota	Licenses sold ^b	License buyers ^b
040	Kalkaska County	400	382	381	600	544	543
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	100	141	141	2,900	2,491	2,488
044	Lapeer County	2,000	1,206	1,099	12,000	7,430	6,091
045	Leelanau County	200	171	171	1,600	1,430	1,093
046	Lenawee County	400	371	312	7,500	4,850	4,021
047	Livingston County	2,000	1,481	1,322	10,000	5,155	4,352
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	185	171	4,000	2,266	1,899
051	Manistee County	500	449	449	3,500	3,022	2,855
053	Mason County	100	110	109	5,200	4,674	3,660
055	Menominee Unit	700	593	528	6,000	5,902	4,554
056	Midland County	1,500	1,302	1,097	7,500	4,672	3,763
057	Missaukee County	400	354	354	3,200	2,844	2,373
058	Monroe County	100	82	82	1,000	877	852
063	Oakland County	2,500	2,308	2,018	6,000	3,486	2,850
065	Ogemaw County	700	619	619	6,000	5,743	4,466
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	300	263	263	5,600	5,070	3,920
069	Otsego County	800	703	657	1,000	881	804
072	Roscommon County	600	562	562	1,000	853	799
073	Saginaw County	200	158	158	6,500	5,786	4,614
074	St. Clair County	700	619	569	9,500	6,543	5,413
081	Washtenaw County	1,500	1,200	1,076	15,000	4,577	3,782
082	Wayne County	100	77	72	1,200	867	754
083	Wexford County	1,000	876	875	3,700	3,403	2,721

^aSee Figure 2 for the locations of DMUs.

^bNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU. Number of licenses sold could exceed the quota because junior licenses sold don't count against the quota.

^cAlso part of DMU 487.

^dSpecial deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix B (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2017, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^b	License quota	Licenses sold ^b	License buyers ^b
115	Beaver Island	200	80	74	300	137	124
117	Drummond Island	0	0	0	0	0	0
121	Bay De Noc Unit	200	184	182	400	367	339
122	Norway Unit	0	0	0	700	659	512
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
145	North Manitou Island ^d	0	0	0	0	0	0
149	Round/Bois Blanc Island	100	94	76	100	96	81
152	Gwinn Unit	0	0	0	0	0	0
155	Gladstone Unit	200	166	158	1,500	1,461	1,168
174	St. Clair Flats ^d	0	0	0	300	103	96
245	South Fox Island ^d	0	0	0	0	0	0
249	Trout Lake Unit	0	0	0	0	0	0
252	Rock Unit	0	0	0	0	0	0
255	LaBranche Unit	250	227	210	500	462	392
273	Shiawassee Unit ^d	0	0	0	0	0	0
311	Keeler Unit	560	471	420	8,000	7,915	5,874
312	Sherwood Unit	1,000	933	813	16,000	12,592	9,934
332	Greenleaf Unit	5,200	4,587	3,749	35,000	19,103	15,128
333	Core CWD Area	Unlimited	934	812	Unlimited	5,315	4,416
341	Sparta Unit	1,000	869	785	17,000	12,604	10,573
349	Engadine Unit	0	0	0	0	0	0
354	Lakeview Unit	1,200	1,004	852	26,000	10,422	8,264
359	Core CWD Area	200	158	146	8,000	3,950	3,344
361	Fremont Unit	100	207	207	8,000	7,302	7,273
419	CWD Management Zone	2,000	1,874	1,426	40,000	22,307	17,360
452	Core TB Area ^c	2,000	1,936	1,713	0	0	0
487	Northern Multi-County	21,000	11,726	9,448	30,000	17,944	13,924
NA	Deer Management Assistance Permits	NA	NA	NA	NA	982	10,967
NA	Managed Deer Hunt Permits ^d	NA	675	743	NA	NA	NA

^aSee Figure 2 for the locations of DMUs.

^bNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU. Number of licenses sold could exceed the quota because junior licenses sold don't count against the quota.

^cAlso part of DMU 487.

^dSpecial deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix C. Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2017, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
	No.	95% CL ^e	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
001	7,136	844	69,351	11,381	2,419	630	2,268	494	4,687	908
003	10,110	986	154,466	20,746	1,719	427	3,010	570	4,729	774
004	4,898	702	51,326	10,196	764	294	2,129	509	2,893	625
005	6,867	819	78,554	12,835	1,802	474	1,518	403	3,320	673
006	7,208	835	99,158	15,781	2,164	612	2,665	549	4,829	912
007	6,932	835	69,448	11,888	10	19	2,161	464	2,171	465
008	10,340	1,007	146,988	19,490	1,665	416	3,275	626	4,940	827
009	4,171	627	62,574	12,673	1,055	373	1,692	459	2,747	651
010	5,091	711	68,891	13,712	1,066	373	1,263	378	2,329	586
013	9,224	943	139,000	19,120	2,328	572	3,828	679	6,156	1,004
015	4,835	694	67,419	12,854	1,354	437	1,488	440	2,842	738
016	7,179	843	86,494	14,513	1,048	338	2,020	475	3,068	618
017	4,457	667	50,859	9,973	16	19	1,675	418	1,691	418
018	12,797	1,114	158,898	19,200	3,889	714	4,201	698	8,090	1,125
020	7,566	869	85,092	13,333	1,133	350	2,225	521	3,358	657
021	6,028	777	62,356	11,479	0	0	2,094	448	2,094	448
022	6,080	782	54,877	9,448	43	38	2,753	526	2,796	528
024	4,916	700	59,783	11,185	1,115	412	1,518	431	2,633	649
025	8,489	910	137,094	20,181	1,201	358	2,648	541	3,849	703
026	13,483	1,137	161,858	18,240	3,903	717	4,181	692	8,084	1,121
027	2,174	468	18,654	5,323	0	0	636	245	636	245
028	7,891	871	103,536	16,167	1,674	486	2,064	491	3,738	732
029	6,768	805	94,645	15,831	2,695	732	3,110	603	5,805	1,123
030	8,700	916	127,411	17,813	2,383	592	3,117	609	5,500	959
031	3,372	579	30,880	7,012	16	20	1,201	352	1,217	353
035	9,303	961	108,893	14,869	2,386	574	3,529	627	5,915	941
036	4,270	660	38,860	8,016	2	3	1,418	396	1,420	396
037	9,408	946	125,678	17,395	2,806	667	4,751	750	7,557	1,168
038	11,462	1,052	184,759	22,016	2,550	647	3,682	678	6,232	1,048

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^bColumn totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one DMU.

^dSee Figure 2 for the locations of DMUs.

^e95% confidence limit.

Appendix C (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2017, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
	No.	95% CL ^e	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
040	7,882	884	87,095	14,208	1,462	412	1,798	434	3,260	633
042	1,315	359	12,642	4,267	22	27	364	197	386	199
043	14,754	1,194	167,004	18,192	2,933	575	3,150	598	6,083	907
044	11,640	1,062	163,047	20,558	2,970	618	3,449	623	6,419	985
045	4,224	644	49,041	10,184	732	305	1,112	366	1,844	497
046	7,021	828	114,383	18,059	1,953	539	2,446	541	4,399	880
047	10,531	1,013	152,290	19,598	2,091	508	3,359	617	5,450	877
048	3,829	620	38,347	8,474	0	0	1,120	339	1,120	339
050	4,148	643	58,893	11,728	884	392	1,058	352	1,942	561
051	9,988	985	127,041	18,182	2,717	543	2,445	517	5,162	833
053	11,724	1,062	145,009	19,134	4,094	758	3,825	674	7,919	1,172
055	12,186	1,100	158,274	20,079	2,794	621	6,111	826	8,905	1,143
056	9,496	955	131,581	18,468	2,822	605	3,347	590	6,169	949
057	9,016	932	99,680	14,284	1,694	450	1,961	444	3,655	711
058	4,099	636	53,682	10,645	406	193	916	334	1,322	405
060	8,513	924	76,558	11,442	2,038	587	2,259	483	4,297	837
063	8,929	932	138,961	20,811	2,011	557	2,705	566	4,716	875
065	12,985	1,131	146,924	17,619	3,171	610	4,989	759	8,160	1,077
066	4,003	637	35,855	7,433	10	19	1,187	348	1,197	349
067	12,384	1,089	151,637	18,165	3,328	655	4,596	736	7,924	1,094
068	8,273	906	74,102	11,059	2,189	623	1,346	366	3,535	799
069	6,108	773	64,159	11,777	991	347	1,614	393	2,605	560
071	8,119	896	79,964	12,365	2,433	656	2,567	494	5,000	912
072	10,372	1,009	119,029	16,341	1,774	431	2,603	527	4,377	744
073	9,261	942	139,493	18,938	2,303	505	3,536	652	5,839	955
074	10,631	1,005	173,434	21,945	2,466	558	3,304	612	5,770	941
081	8,522	908	123,841	18,271	2,199	612	2,433	517	4,632	884
082	1,170	335	20,198	8,156	189	153	110	103	299	223
083	9,364	951	94,866	13,709	1,737	481	1,722	429	3,459	707

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^bColumn totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one DMU.

^dSee Figure 2 for the locations of DMUs.

^e95% confidence limit.

Appendix C (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2017, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
	No.	95% CL ^e	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
115	213	146	2,461	2,109	30	50	62	74	92	89
117	1,223	355	9,389	3,665	0	0	314	173	314	173
121	2,611	509	29,710	8,163	474	223	1,002	318	1,476	417
122	2,043	448	23,755	7,515	284	175	802	297	1,086	345
127	1,396	381	12,751	5,260	0	0	380	203	380	203
131	3,070	553	29,936	7,726	12	19	792	266	804	267
145	4	3	27	22	2	3	0	0	2	3
149	660	263	4,846	2,186	84	116	219	163	303	212
152	2,930	545	33,517	8,216	0	0	939	303	939	303
155	3,569	596	39,537	8,569	583	294	1,600	418	2,183	566
174	300	174	5,267	4,273	245	282	57	74	302	309
245	2	0	10	0	0	0	0	0	0	0
249	2,493	502	19,921	5,067	0	0	846	301	846	301
252	1,996	449	17,867	4,980	2	3	473	205	475	205
255	2,970	551	30,997	7,037	403	233	918	295	1,321	403
273	1,615	393	17,981	6,144	410	238	531	241	941	413
311	15,881	1,242	268,660	27,726	3,360	663	5,839	837	9,199	1,224
312	15,918	1,235	250,567	25,834	5,320	929	6,249	857	11,569	1,427
332	33,677	1,757	433,579	31,913	9,243	1,193	13,807	1,234	23,050	1,932
333	19,887	1,375	300,650	29,366	4,877	842	6,774	895	11,651	1,351
341	23,863	1,488	333,448	28,815	5,343	849	8,082	948	13,425	1,450
349	2,468	501	25,435	7,431	0	0	803	283	803	283
354	13,221	1,120	172,236	20,577	4,271	816	5,658	818	9,929	1,277
359	10,270	1,001	121,956	16,208	2,486	548	3,539	620	6,025	913
361	30,383	1,676	414,881	31,384	7,145	849	11,532	1,153	18,677	1,601
419	18,586	1,322	261,598	25,710	5,624	945	7,432	958	13,056	1,536
452	10,923	1,036	117,608	15,979	2,885	645	3,456	617	6,341	984

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.

^bColumn totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one DMU.

^dSee Figure 2 for the locations of DMUs.

^e95% confidence limit.