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Michigan Deer Harvest Survey Report 2016 Seasons

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ABSTRACT

A survey of deer hunters was conducted following the 2016 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2016, an estimated 585,994 hunters spent 8.2 million days afield. Statewide, the number of people hunting decreased significantly by nearly 4% between 2015 and 2016. Hunters harvested about 348,000 deer. Harvest was not significantly different from 2015. Statewide, 44% of hunters harvested a deer in 2016. About 20% of hunters took an antlerless deer and 31% took an antlered buck in 2016. Approximately 13% of deer hunters harvested two or more deer of any type. About 4% of hunters statewide harvested two antlered bucks. Levels of satisfaction with numbers of deer seen, bucks seen, and overall experience increased significantly in 2016 from 2015, while satisfaction with the number of deer harvested was not significantly changed. Statewide, 48% of hunters were satisfied with their overall hunting experience in 2015, and satisfaction was highest in the Lower Peninsula. About 193,137 hunters used a crossbow during the 2016 archery season, and they harvested approximately 74,130 deer with the crossbow. About 14% fewer individuals purchased a deer hunting license in 2016 than ten years ago in 2006. Although the overall number of license buyers declined from 2006, an increased number of people younger than 12 years of age and people older than 53 purchased a license in 2016. About 11% of the license buyers in 2016 were younger than 17 years old. Most hunters (71%) approved or strongly approved of people hunting deer with bait. Statewide, most deer hunters (59%) supported regional antler-point restrictions. In addition, most hunters (56%) supported allowing hunters to take two bucks in any combination of seasons if one of those bucks has at least four antler points on one antler. Most deer hunters (85%) supported maintaining the November 15 opening date for the regular firearm season.

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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 as well as 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. This survey also provided an opportunity to collect information about management issues. Questions were added to the questionnaire to investigate hunter satisfaction with the 2016 hunting season and deer numbers. Deer hunters were also asked their opinions about hunting deer with bait, the opening date of the regular firearm season, and antler point restrictions.

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 (Table 1). During 2016, deer could be harvested primarily during the following hunting seasons: Liberty, archery, regular firearm, muzzleloader, early antlerless, late antlerless, and Independence.

In order to harvest a deer, hunters had to possess a hunting license (deer, combination, antlerless, or mentored youth license) (Table 1). 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 nineteen DMUs (007, 017, 021, 022, 027, 031, 036, 042, 048, 066, 117, 121, 127, 131, 152, 249, 252, 255, 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 A). 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.

Hunters could purchase two antlerless deer licenses each day until the quota had been met, except for licenses valid in DMUs 333, 419, 452, and 487. For DMUs 333 and 419, an individual could purchase an unlimited number of antlerless deer licenses per calendar day. For DMUs 452 and 487, an individual could purchase a maximum of five antlerless deer licenses per calendar day until the quota had been met.

For DMUs 333 and 419, an individual could purchase an unlimited number of antlerless deer licenses for the entire year. For DMU 487, an individual could purchase a maximum of ten private land antlerless deer licenses for all seasons combined until the quota has been met. For all other DMUs, an individual could purchase up to a season limit of five private land antlerless deer licenses until the quota has been met. In addition, there was no seasonal limit for public land antlerless licenses in any DMU where licenses were available.

Deer Management Unit 487 included private land in DMUs 001, 004, 035, 060, 068, 071, 135 and 452. A private land antlerless deer license for DMU 487 was valid on private land within any of the eight subunits.

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 17-18 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 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, 2016, through January 1, 2017). 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 13-16, 2016. 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 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 2-11 in the UP and Northern LP, and December 2-18 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 17-18. 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). Two more counties were open in 2016 than 2015.

The late antlerless firearm season occurred from December 19, 2016, through January 1, 2017. 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.

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 (141,552). Hunters reported whether they hunted, the days spent afield, and whether they harvested a deer. Deer hunters were also asked their opinions about hunting deer with bait, the opening date of the regular firearm season, and antler point restrictions. Following the 2016 deer hunting seasons, a questionnaire was sent to 60,622 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 = 400,027). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 175,713). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and Liberty seasons (N = 45,138). The fourth stratum consisted of 7,612 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 5,531 people that had voluntarily reported information about their hunting activity via the Internet before the random sample was selected. The random sample consisted of 29,416 people from the first stratum; 12,613 from the second stratum; 11,267 from the third stratum; and 7,326 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 B). 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 2017, 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 60,622 people were sent the questionnaire, 1,368 surveys were undeliverable resulting in an adjusted sample size of 59,254. Questionnaires were returned by 29,693 people (50% 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 2016 estimates to make them comparable to the adjusted 2015 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 6.5%, 4.8%, and 1.9%, respectively, to make estimates comparable to 2015. These reductions reflected the average decline noted between estimates calculated when 50% and 74% of the responses were used in 2000 and 2001 surveys.

RESULTS AND DISCUSSION

In 2016, 634,021 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2016 decreased by 3.1% from 2015 (654,579 people purchased a license in 2015). Most of the people buying a license were male (89%), and the average age of license buyers was 43 years (Figure 3). About 11% (68,300) of the license buyers were younger than 17 years old. About 4% (22,456) of the license buyers were younger than 12 years old.

The number of people buying a license in 2016 was about 14% less than the number of people who purchased a license ten years ago in 2006 (734,307 people purchased a license in 2006). There were fewer license buyers for all age classes between 12 and 53 years of age in 2016, compared to 2006 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2016. 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 2006.

The number of 2016 deer harvest tags sold for all license types combined decreased by 2.3% from 2015 (Table 2). License buyers were issued an average of 2.1 harvest tags. About 93% 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 (252,014 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 increased slightly from 435,400 in 2015 to 436,400 licenses in 2016 (Appendix A). The quota for public land antlerless licenses decreased slightly, declining from 58,700 to 58,000 between 2015 and 2016. Overall, the antlerless license quota for private and public lands combined was nearly unchanged, but the number of antlerless licenses sold declined by about 4% in 2016 (Table 2).

About 92.4 $\pm$ 0.3% (585,994 hunters) of the people buying a license in 2016 actually spent time hunting deer (Table 3). Statewide, the number of people hunting deer during all seasons combined declined significantly by 4% from 2015. Most hunters (504,287) pursued deer during the regular firearm season (Figure 8).

Significantly fewer people hunted during the regular firearm (-7%), muzzleloader (-7%), and early antlerless (-16%) seasons during 2016 (Table 3). The numbers of people hunting in the archery, late antlerless, Liberty and Independence seasons were not significantly different between 2015 and 2016 (Figure 9).

About 50% of the days hunters spent pursuing deer throughout the state occurred in the archery season (Figure 10). About 38% of the hunting effort occurred during the regular firearm season. Nearly 12% 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 4). Archers had the greatest number of days available to hunt deer (77 days) and devoted the greatest number of days afield ($\bar{x}$ = 13.4 days/hunter) (Figure 11, Table 4). Statewide, the number of days hunting deer during all seasons combined declined significantly by 6% from 2015. Significantly fewer days were devoted to hunting during the regular firearm (-8%), muzzleloader (-10%), and early antlerless (-17%) seasons during 2016 (Table 3).

About 347,219 deer were harvested statewide in 2016, which was not significantly different than in 2015 (Figures 12-13, Tables 5-6). Although statewide harvest was similar between years, harvest in the NLP increased significantly by 10% in 2016. Statewide harvest of antlerless and antlered deer in 2016 for all seasons combined was not significantly different from 2015. However, harvest of antlerless deer increased by 12% in the NLP and harvest of antlered deer increased by 17% and 9% in the UP and NLP, respectively (Table 5). Between 2015 and 2016, harvest of antlered deer increased significantly during the archery (10%) and muzzleloader (38%) seasons, but decreased in the Liberty (-20%) season. Statewide harvest of antlerless deer increased significantly in the archery (18%) and late antlerless (47%) seasons but declined by 11% in the regular firearm season.

About 48% of the deer harvested (sexes combined) in 2016 were taken during the regular firearm season (Figure 14). Nearly 40% of the antlerless deer and 55% of the antlered bucks were harvested in the regular firearm season. Hunters took 37% of the harvested deer (sexes combined) during archery season. These archers took 35% of the antlerless deer and 38% 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 14% of the antlerless deer harvested.

About 87% of the animals harvested (sexes combined) in 2016 were taken on private lands (Table 7). Statewide, most of the antlerless deer (89%) and antlered bucks (85%) were harvested on private lands.

Statewide, 44% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2016 (Figure 15, Table 8), compared to the 41% successful in 2015. About 20% of hunters took an antlerless deer, and 31% took an antlered buck in 2015. About 13% of deer hunters harvested two or more deer.

Hunters were most successful in taking a deer during the archery (33%), Liberty (31%), and regular firearm (30%) seasons (Figure 16, Table 9). Hunter success was lowest in the muzzleloader (15%) season. Nearly 21% of hunters took an antlered buck and 11% 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, ≤48% of hunters were satisfied with numbers of deer seen, bucks seen, size of antlers seen, deer taken, and their overall hunting experience in 2016 (Tables 10-12). Statewide levels of satisfaction increased significantly for all measures except number of deer harvested between 2015 and 2016. People hunting deer only on private lands were generally more satisfied than people hunting only on public lands (Tables 13-15).

Most hunters (71%) approved or strongly approved of people hunting deer with bait; however, 19% of the hunters disapproved or strongly disapproved of baiting (Table 16). Highest rates of approval were among hunters in the Upper Peninsula. Approval of baiting in Michigan has increased since the 1980s (Table 17). Although most hunters approve of hunting deer with bait in 2016, most hunters also support restrictions on baiting to protect the health of the deer herd (Table 18), which was similar to opinions reported in 1999 (Frawley 2000).

Deer hunters were presented three management options designed to reduce harvest of antlered deer and asked whether they supported these options in the region where they most often hunted (Table 19). Statewide, most deer hunters (59%) supported regional antler-point restrictions. In addition, most hunters (56%) supported allowing hunters to take two bucks in any combination of seasons if one of those bucks has at least four antler points on one antler.

Michigan deer hunters have been periodically asked whether they supported buck harvest restrictions (e.g., Frawley and Rudolph 2014). Support for a statewide APR (i.e., 4 points) on the second harvested buck declined since first reported in 2006, while support for regional APRs on a second harvested buck increased between 2012 and 2016 (Table 20). A plurality of Michigan deer hunters statewide in all years except in 2001 did not support restricting hunters to a taking one buck per year (Table 20).

Statewide, most deer hunters (85%) supported maintaining the November 15 opening date for the regular firearm season (Table 21). In contrast, only 10% of deer hunters opposed maintaining this date. About 36% of deer hunters statewide supported opening the regular

firearm season on the Saturday nearest to November 15 each year; while 56% opposed opening on this Saturday. Moreover, 19% of deer hunters statewide supported opening the regular firearm season on the Saturday before Thanksgiving each year; while 72% were opposed to opening the season on this Saturday.

Since 1925, the firearm deer hunting season in Michigan has usually begun on November 15. The only exceptions were during 1962-1967, when the seasons were altered so they began on a Saturday in mid-November (Ryel 1983). There have been periodic suggestions for making a Saturday opening day, although assessments have shown the traditional November 15 opening date has consistently been the preferred choice (Frawley and Rudolph 2008), including results of this survey (Table 22).

About 193,137 hunters used a crossbow during the archery season, and they harvested about 74,130 deer with the crossbow (Tables 23-25). The number of archers using a crossbow increased significantly by 4% from 2015 (185,632 archers in 2015). Harvest of deer by archers using a crossbow increased significantly by 12% from last year (65,988 deer taken in 2015). About 34% of these archers using a crossbow in 2016 harvested a deer with a crossbow in the archery season.

An estimated 125,694 ± 3,030 hunters took 150,684 ± 4,234 deer to a commercial meat processor in 2016. Thus, about 46% of the deer harvested in all seasons (150,684 of 328,681 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

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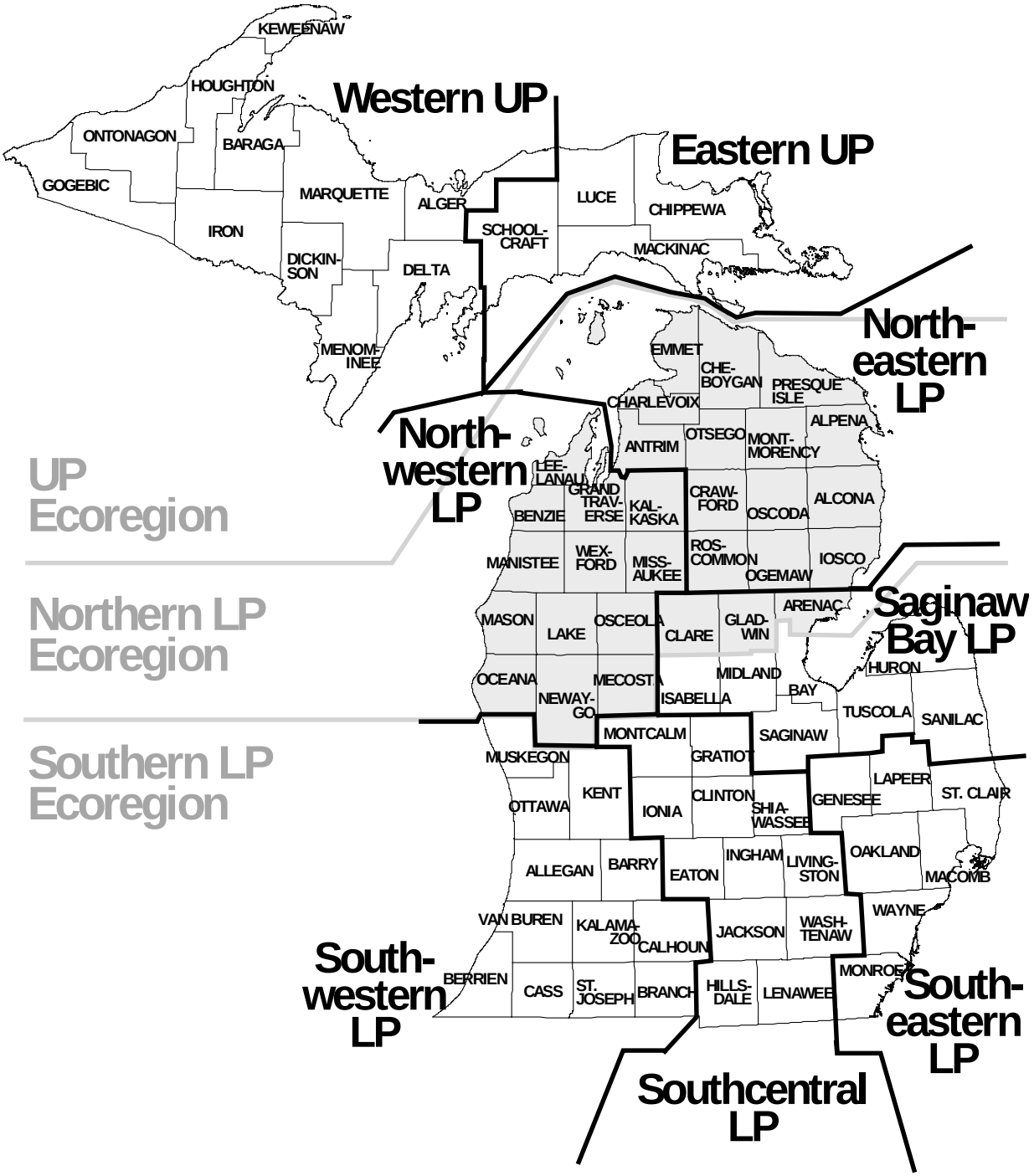

Figure 1. Areas used to summarize deer harvest in Michigan for the 2016 hunting seasons.

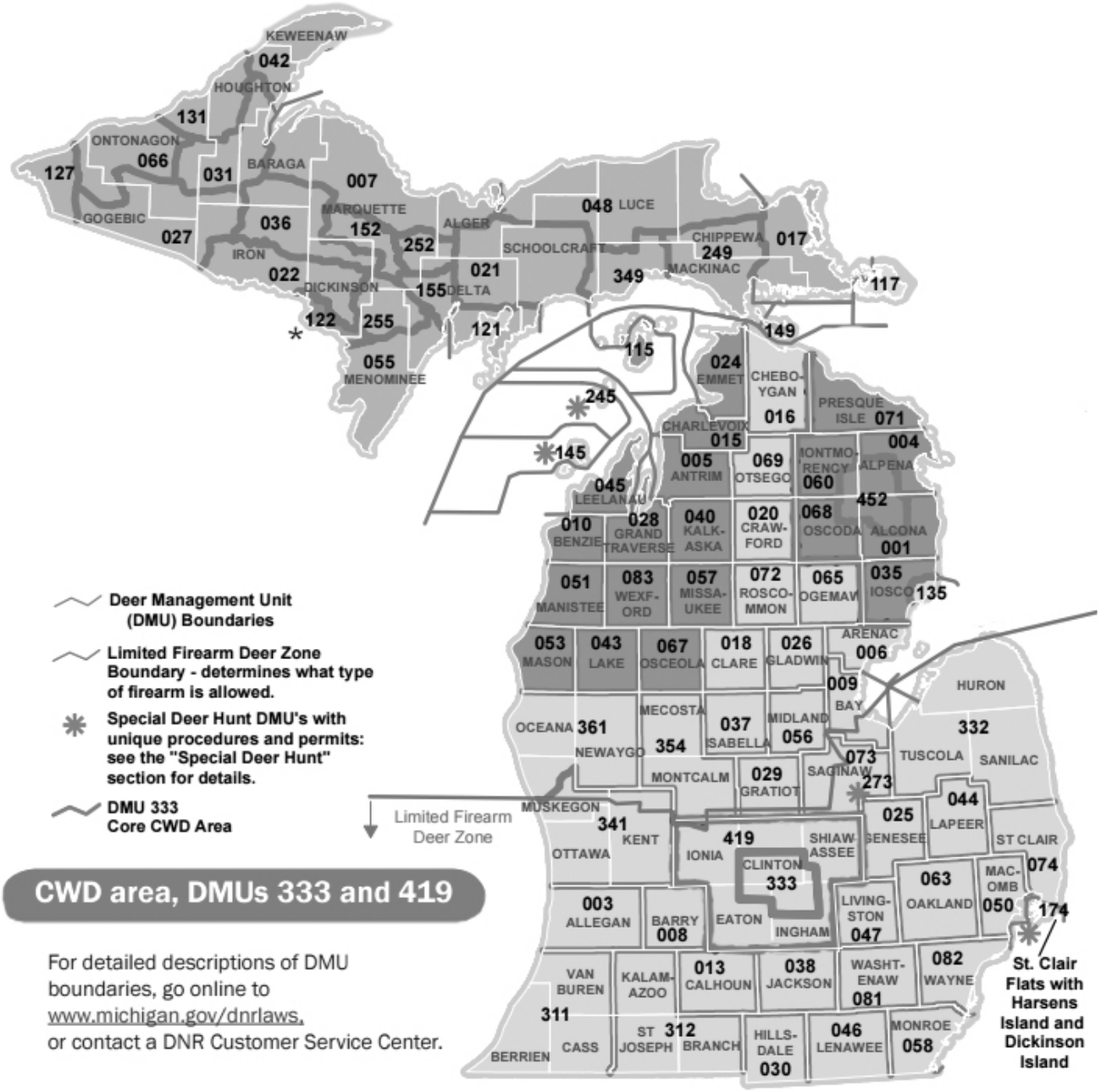

Figure 2. Deer management units in Michigan for the 2016 hunting seasons.

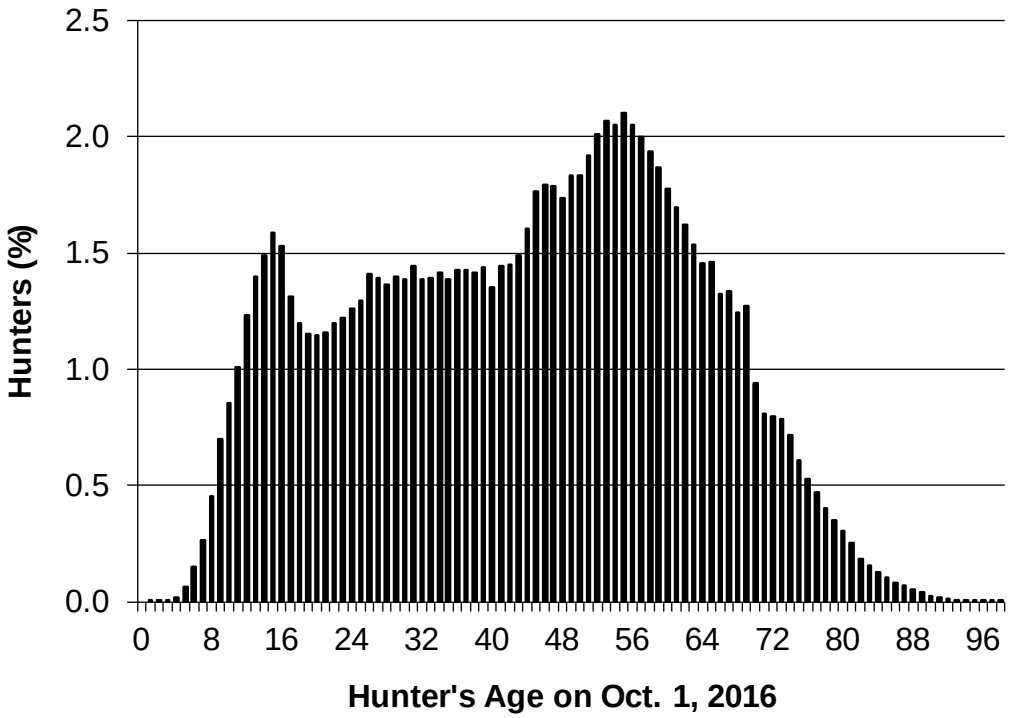

Figure 3. Age of people that purchased a deer hunting license in Michigan for the 2016 hunting seasons (mean = 43 years).

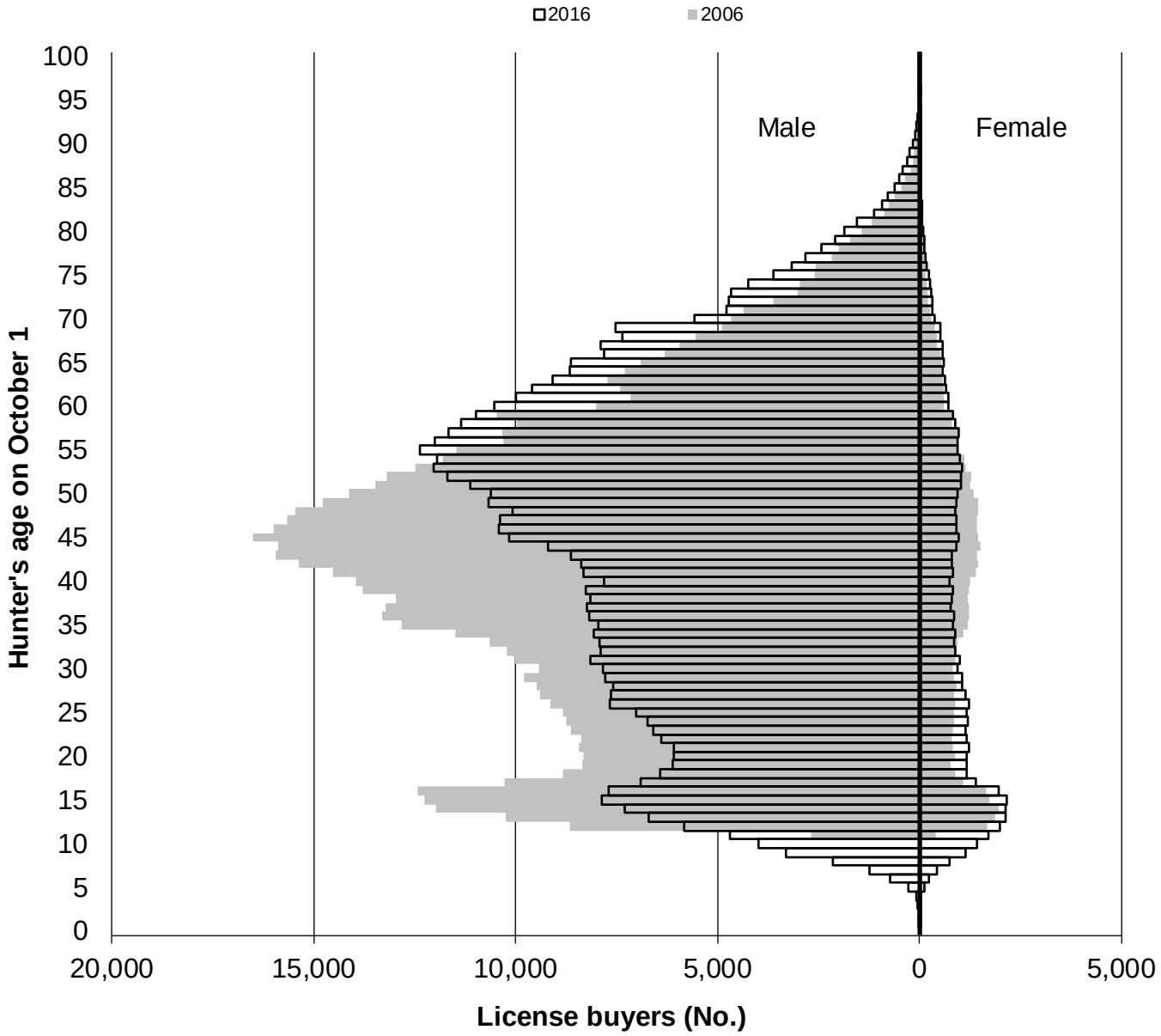

Figure 4. Number of deer hunting license buyers in Michigan by age and sex during 2006 and 2016 hunting seasons. Deer hunting licenses were purchased by 734,307 people in 2006 and 634,021 people in 2016.

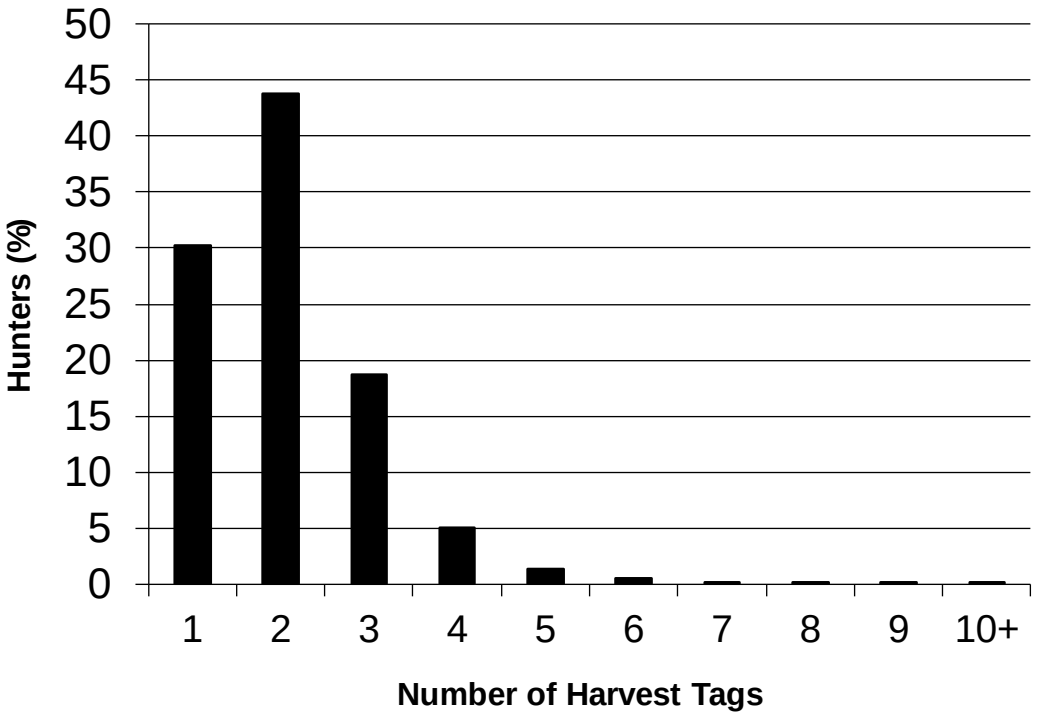

Figure 5. Number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2016 hunting seasons (mean = 2.1 tags). Licenses were purchased by 634,021 people.

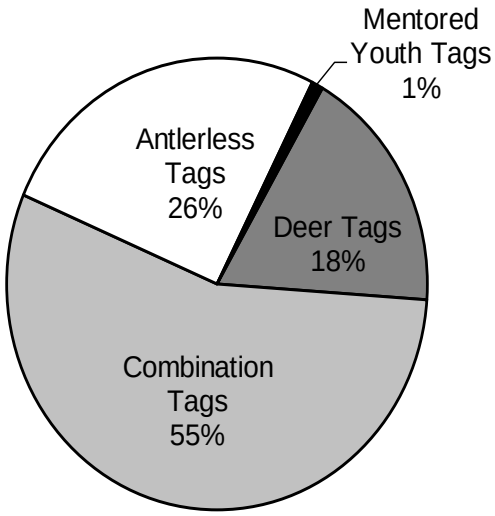

Figure 6. Types of harvest tags issued for deer hunting in Michigan during the 2016 hunting seasons.

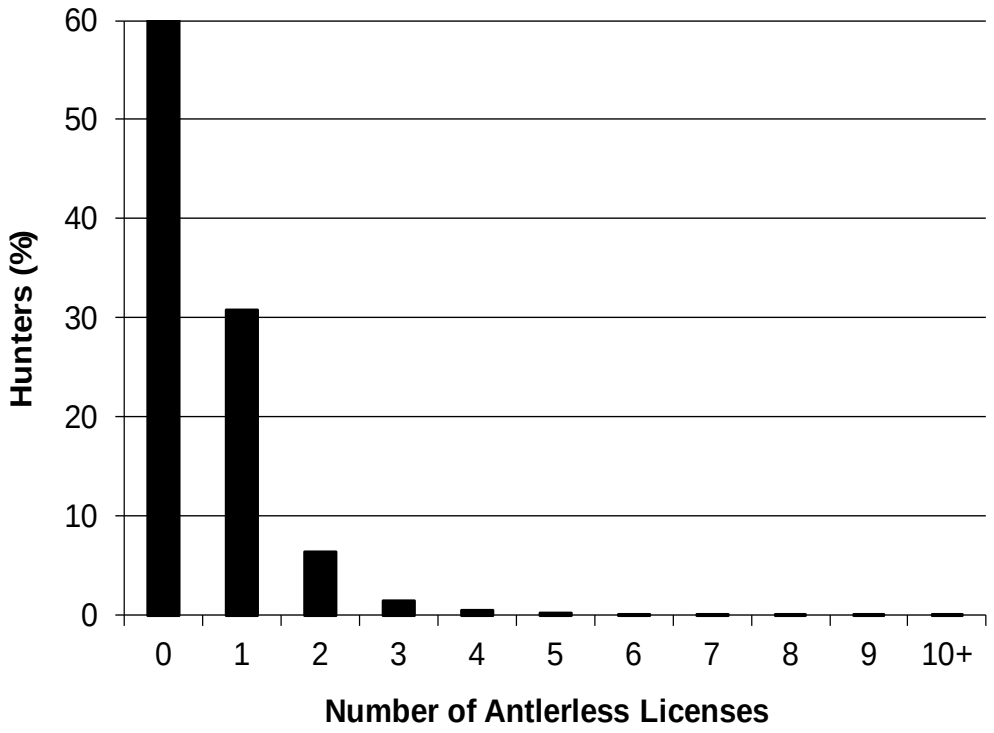

Figure 7. Percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2016. Antlerless licenses were purchased by 252,014 of 634,021 people (40%) buying deer hunting licenses.

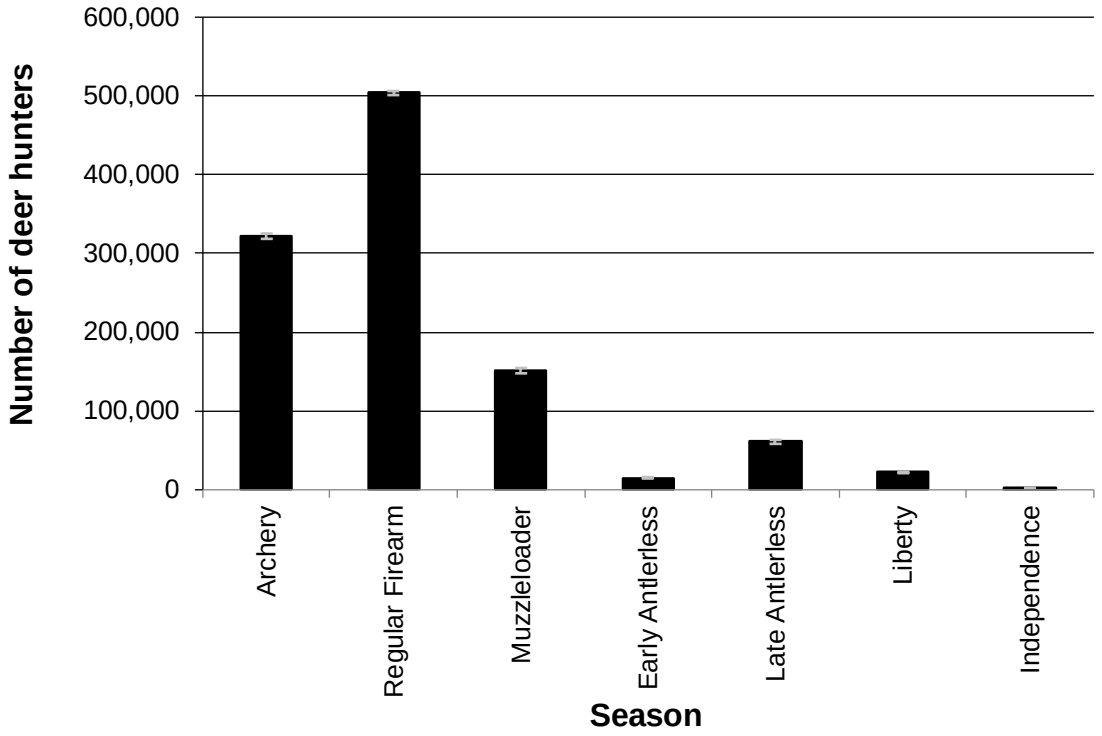

Figure 8. Number of people hunting deer in Michigan during the 2016 hunting seasons. Error bars represent the 95% CLs.

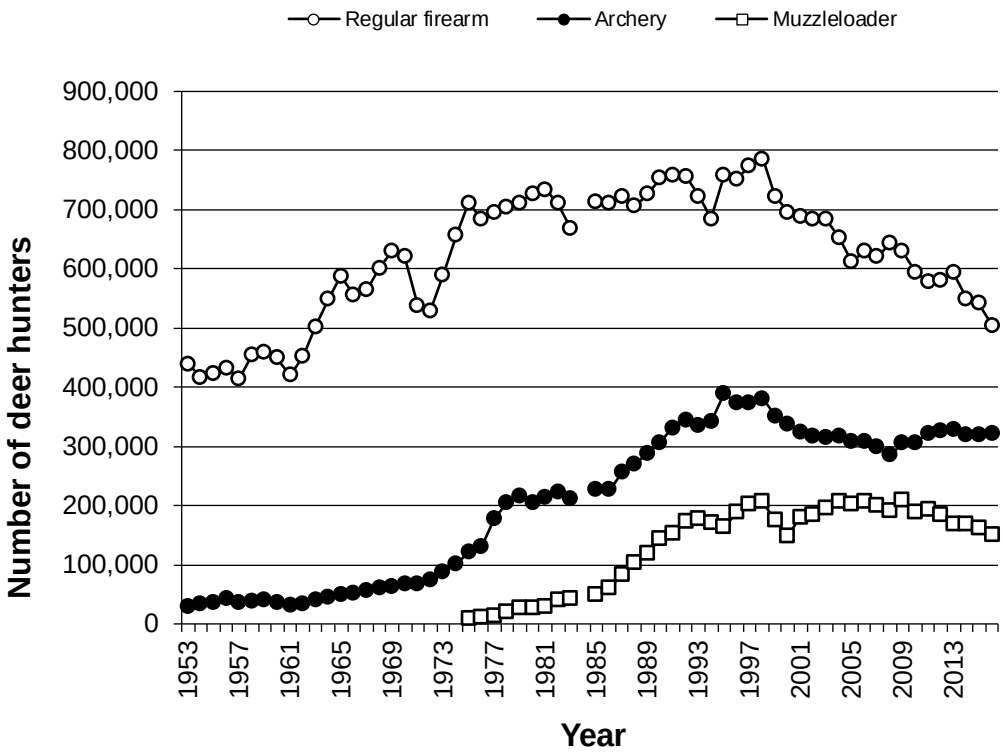

Figure 9. Number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2016.

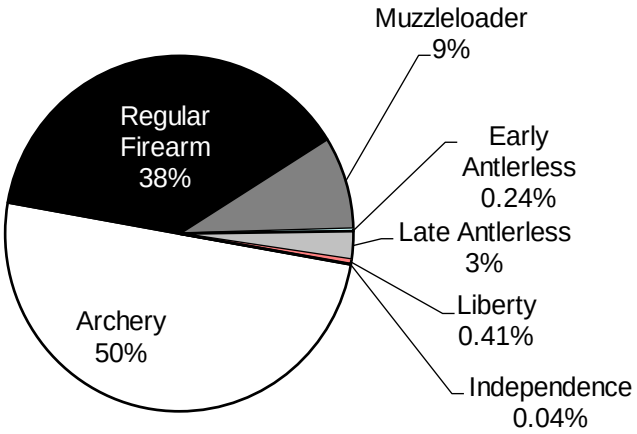

Figure 10. Distribution of hunting effort among deer hunting seasons in Michigan, 2016.

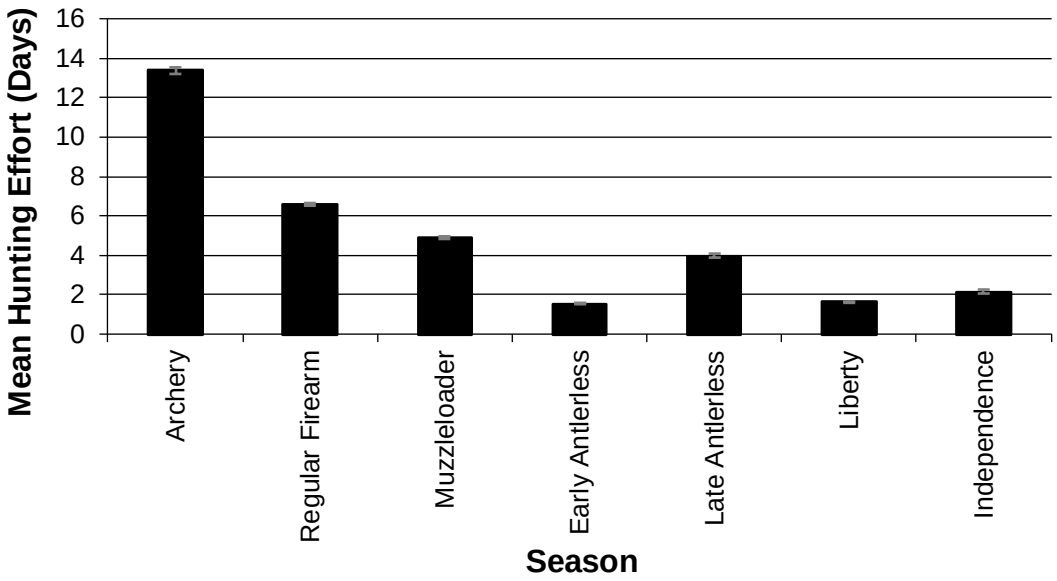

Figure 11. Mean number of days per hunter spent hunting deer in Michigan during the 2016 hunting seasons. Error bars represent the 95% CLs.

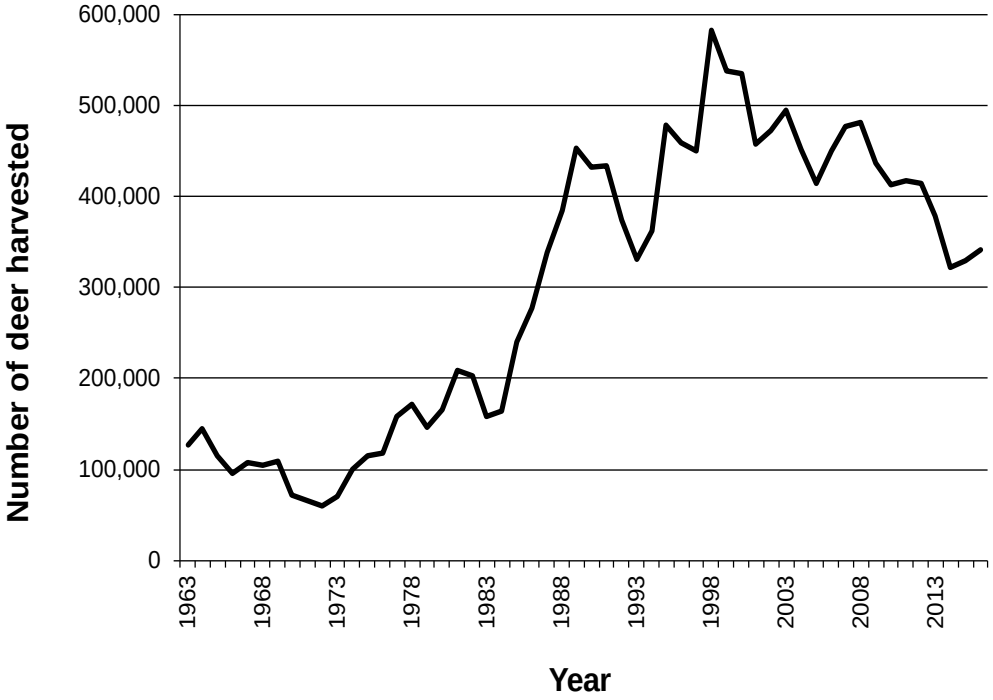

Figure 12. Number of deer harvested in Michigan's hunting seasons, 1963-2016. Harvest from all seasons and for all deer sexes was combined.

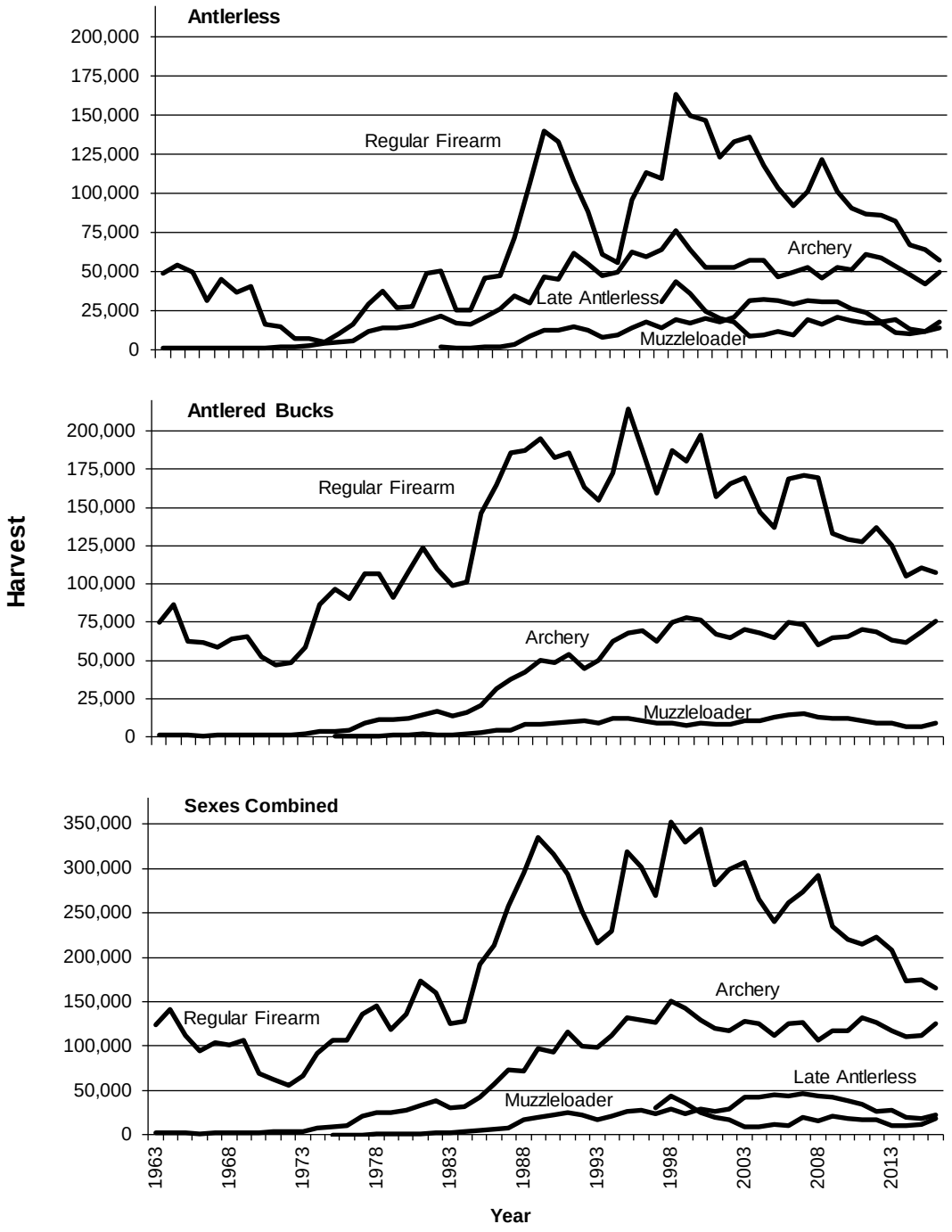

Figure 13. Number of deer harvested in Michigan's hunting seasons, 1963-2016. Harvests for early antlerless, youth, and special disabled hunter seasons were not shown.

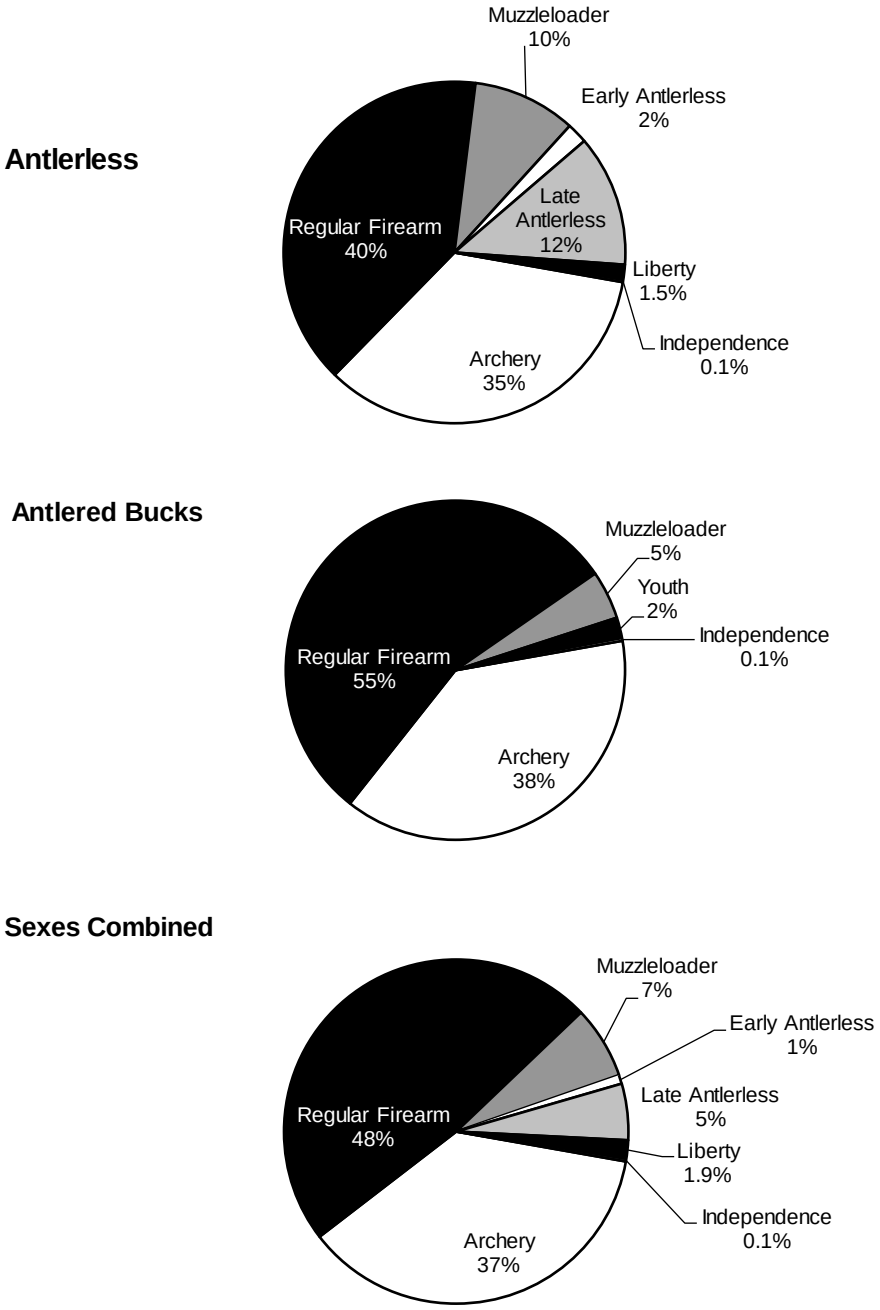

Figure 14. Distribution of harvest among deer hunting seasons in Michigan, 2016. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

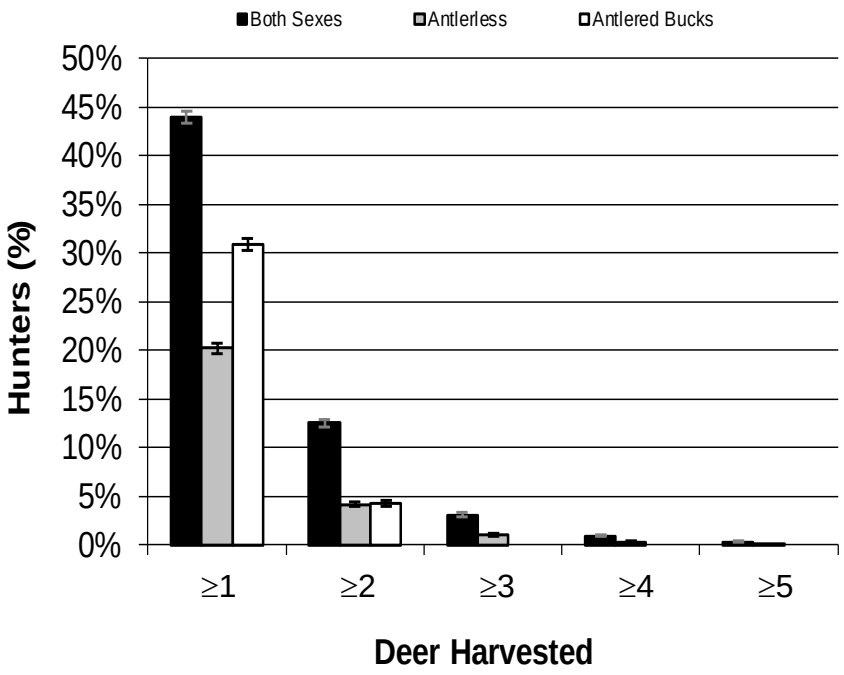

Figure 15. Percentage of hunters harvesting a deer in Michigan, 2016. Error bars represent the 95% CLs.

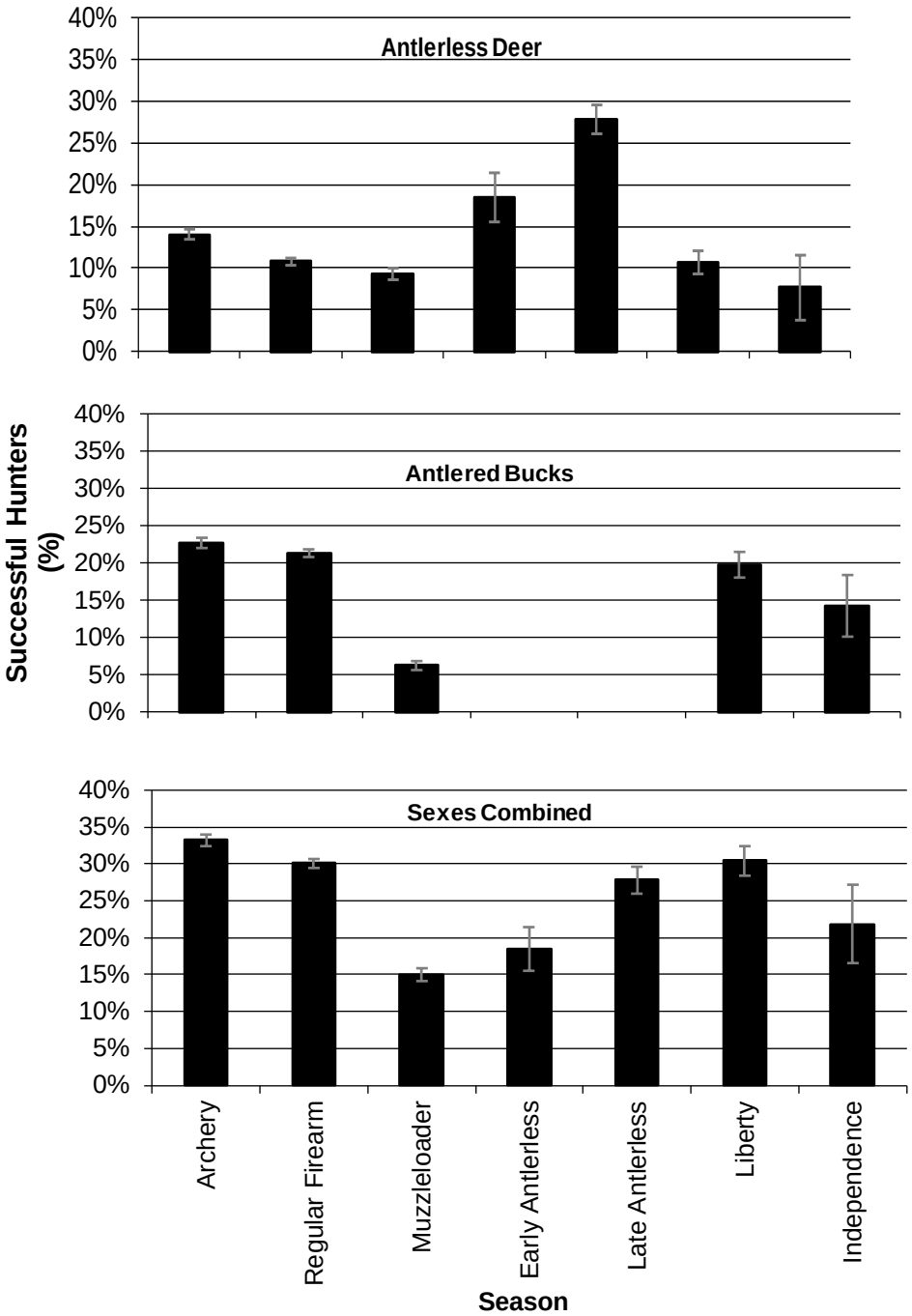

Figure 16. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2016. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

Table 1. Type of deer that could be taken during the 2016 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 or 487
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
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 or 487
Combination License[d] (Restricted harvest tag)	Liberty and Independence seasons[c]	Antlerless or antlered deer statewide

[a]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. Hunters could harvest a maximum of 2 antlered deer per year (all seasons combined).

[b]If 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.

[c]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. Hunters could harvest only 1 deer in the Liberty and Independence seasons.

[d]Combination licenses included two harvest tags (i.e., regular and restricted harvest tags).

Table 1 (Continued). Type of deer that could be taken during the 2016 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

[a]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. Hunters could harvest a maximum of 2 antlered deer per year (all seasons combined).

[b]If 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.

[c]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. Hunters could harvest only 1 deer in the Liberty and Independence seasons.

[d]Combination licenses included two harvest tags (i.e., regular and restricted harvest tags).

[e]Although 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).

[f]Permits 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.

[g]Permits 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 2. Michigan deer licenses purchased and harvest tags issued, 2014-2016.

Licenses or Harvest Tags	Number Purchased or Issued 2014	2015	2016	Change Between 2015 and 2016 (%)
Deer Licenses				
Resident	164,670	164,680	149,954	-8.9
Non-resident	13,611	13,414	13,345	-0.5
Junior	37,801	36,224	32,775	-9.5
Senior	35,569	37,198	37,564	1.0
Lifetime	509	444	436	-1.8
Active Military	570	533	455	-14.6
Disabled Veteran	381	425	478	12.5
Subtotal	253,111	252,918	235,007	-7.1
Combination Licenses[a]				
Resident	286,400	283,366	282,707	-0.2
Non-resident	3,510	3,547	3,658	3.1
Junior	27,845	23,957	22,116	-7.7
Senior	41,130	41,896	44,388	5.9
Lifetime	1,085	125	134	7.2
Active Military	5,389	5,565	5,494	-1.3
Disabled Veteran	5,385	6,272	6,784	8.2
Subtotal	370,744	364,728	365,281	0.2
Antlerless Licenses				
Resident	278,180	272,271	259,661	-4.6
Non-resident	3,414	3,807	4,207	10.5
Junior	23,096	21,529	18,960	-11.9
Senior	40,417	40,903	41,371	1.1
Lifetime	182	177	162	-8.5
Active Military	4,536	4,445	4,238	-4.7
Pure Michigan Hunt	3	3	3	0.0
Disabled Veteran	4,023	4,775	5,273	10.4
Deer Management Assistance	9,797	9,040	9,250	2.3
Managed Deer Hunt	629	558	786	40.9
Subtotal	364,277	357,508	343,911	-3.8
Mentored Youth Licenses	12,959	11,935	11,399	-4.5
Total Licenses Sold	1,001,091	987,089	955,598	-3.2

[a]Combination licenses included two harvest tags. Other license types had one harvest tag.

Table 2 (Continued). Michigan deer licenses purchased and harvest tags issued, 2014-2016.

Licenses or Harvest Tags	Number Purchased or Issued 2014	2015	2016	Change Between 2015 and 2016 (%)
Harvest Tags Issued				
Deer[a]	253,111	252,918	235,007	-7.1
Combination[b]	741,488	729,456	730,562	0.2
Antlerless	364,277	357,508	343,911	-3.8
Mentored Youth[b]	12,959	11,935	11,399	-4.5
Total Harvest Tags	1,371,835	1,351,817	1,320,879	-2.3

[a]Combination licenses included two harvest tags. Other license types had one harvest tag.

Table 3. Number of deer hunters and hunting effort in Michigan by hunting season, 2015-2016.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)
Archery								
West UP	19,559	19,250	1,316	-1.6	242,522	211,450	19,169	-12.8
East UP	5,766	5,623	723	-2.5	57,304	63,018	12,064	10.0
NE LP	49,350	50,967	2,085	3.3	548,135	540,447	31,435	-1.4
NW LP	63,266	67,340	2,349	6.4	788,893	795,385	38,317	0.8
Sag. Bay	53,832	56,699	2,177	5.3	646,497	685,160	36,091	6.0
SW LP	53,278	52,390	2,095	-1.7	699,514	651,367	35,130	-6.9
SC LP	64,006	60,353	2,227	-5.7	836,935	755,184	37,888	-9.8*
SE LP	36,299	35,326	1,754	-2.7	465,962	423,176	28,713	-9.2
UP	25,213	24,843	2,359	-1.5	299,826	274,468	22,649	-8.5
NLP	128,249	134,515	3,581	4.9	1,551,987	1,548,903	53,489	-0.2
SLP	183,504	180,590	3,467	-1.6	2,433,949	2,301,816	66,271	-5.4
Statewide[c]	319,849	322,353	3,763	0.8	4,285,762	4,125,187	88,445	-3.7
Regular Firearm								
West UP	59,840	53,466	2,107	-10.7*	443,230	378,345	18,102	-14.6*
East UP	16,475	16,339	1,225	-0.8	111,088	113,748	10,068	2.4
NE LP	100,291	95,388	2,739	-4.9	584,895	557,499	20,433	-4.7
NW LP	105,307	99,254	2,769	-5.7*	609,648	574,479	20,612	-5.8
Sag. Bay	82,139	78,370	2,514	-4.6	468,204	466,405	18,985	-0.4
SW LP	74,231	66,556	2,326	-10.3*	450,179	392,485	17,199	-12.8*
SC LP	90,953	81,700	2,520	-10.2*	538,799	473,470	19,059	-12.1*
SE LP	37,532	35,403	1,759	-5.7	214,590	199,483	12,189	-7.0
UP	76,058	69,532	1,486	-8.6*	554,318	492,093	20,714	-11.2*
NLP	230,163	217,502	3,107	-5.5*	1,351,415	1,277,196	30,844	-5.5*
SLP	250,539	232,165	3,359	-7.3*	1,514,899	1,386,625	32,543	-8.5*
Statewide[c]	541,874	504,287	2,865	-6.9*	3,420,633	3,155,914	49,606	-7.7*

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2016 estimate. *P<0.005.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2015-2016.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)
Muzzleloader								
West UP	13,668	11,589	1,032	-15.2	69,958	56,658	5,736	-19.0*
East UP	3,975	3,767	597	-5.2	19,893	19,198	3,446	-3.5
NE LP	19,071	17,530	1,267	-8.1	75,860	74,248	6,223	-2.1
NW LP	21,009	20,837	1,374	-0.8	85,759	83,141	6,478	-3.1
Sag. Bay	24,445	25,227	1,499	3.2	109,393	110,655	8,106	1.2
SW LP	30,921	27,639	1,566	-10.6*	157,206	134,758	9,476	-14.3*
SC LP	34,237	29,909	1,621	-12.6*	170,991	145,390	9,761	-15.0*
SE LP	16,712	16,015	1,211	-4.2	84,775	73,443	6,740	-13.4
UP	17,560	15,303	1,183	-12.9	89,851	75,856	6,692	-15.6
NLP	45,830	44,067	1,959	-3.8	186,946	178,393	9,478	-4.6
SLP	97,522	91,394	2,628	-6.3*	497,038	443,242	16,943	-10.8*
Statewide[c]	162,034	150,576	3,221	-7.1*	773,835	697,491	20,661	-9.9*
Early Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	2,645	2,612	458	-1.2	4,020	3,954	732	-1.6
NW LP	1,002	686	230	-31.5	1,645	888	311	-46.0
Sag. Bay	4,670	4,012	565	-14.1	7,184	6,021	903	-16.2
SW LP	0	0	0		0	0	0	
SC LP	4,257	3,609	531	-15.2	6,505	5,210	833	-19.9
SE LP	3,090	2,890	482	-6.5	4,761	3,979	702	-16.4
UP	0	0	0		0	0	0	
NLP	4,077	3,892	558	-4.5	6,289	5,809	880	-7.6
SLP	11,509	9,878	874	-14.2	17,826	14,243	1,364	-20.1*
Statewide[c]	17,397	14,621	558	-16.0*	24,115	20,052	1,652	-16.9*

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2016 estimate. *P<0.005.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2015-2016.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)
Late Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	5,223	5,618	721	7.6	17,396	19,229	3,193	10.5
NW LP	4,980	5,467	705	9.8	18,929	17,712	2,902	-6.4
Sag. Bay	9,217	10,994	993	19.3	34,200	40,829	4,717	19.4
SW LP	13,099	12,857	1,076	-1.8	45,810	45,000	4,789	-1.8
SC LP	17,341	16,196	1,197	-6.6	63,120	56,530	5,407	-10.4
SE LP	7,003	7,942	850	13.4	23,122	29,762	4,036	28.7
UP	0	0	0		0	0	0	
NLP	10,837	11,792	1,028	8.8	38,685	39,398	4,478	1.8
SLP	45,519	46,637	1,913	2.5	163,892	169,664	9,448	3.5
Statewide[c]	58,929	60,506	2,119	2.7	202,577	209,063	10,564	3.2
Liberty[d]								
West UP	1,335	1,340	244	0.4	2,014	2,007	392	-0.3
East UP	176	281	108	59.4	318	449	191	41.5
NE LP	2,397	2,835	338	18.3	3,845	4,533	581	17.9
NW LP	4,592	5,359	454	16.7	7,121	8,267	774	16.1
Sag. Bay	3,772	4,374	439	16.0	5,797	6,808	720	17.4
SW LP	2,416	2,812	338	16.4	3,691	4,271	549	15.7
SC LP	3,494	3,075	358	-12.0	5,095	4,768	594	-6.4
SE LP	1,815	1,545	254	-14.9	2,786	2,451	424	-12.0
UP	1,512	1,621	266	7.2	2,331	2,457	437	5.4
NLP	8,219	9,673	600	17.7*	12,735	15,225	1,063	19.6*
SLP	10,185	10,255	631	0.7	15,599	15,872	1,077	1.8
Statewide[c]	20,479	21,842	845	6.7	30,665	33,554	1,582	9.4

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2016 estimate. *P<0.005.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one area.
[d]Estimates included results of both youth and disabled hunters.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2015-2016.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)	2015	2016	95% CL[b]	Change from 2015 to 2016 (%)
Independence								
West UP	100	87	24	-12.9	160	214	56	33.8
East UP	29	59	52	100.6	95	173	152	82.7
NE LP	208	267	91	28.3	483	466	104	-3.5
NW LP	305	417	113	36.9	600	877	235	46.2
Sag. Bay	280	314	112	12.1	536	523	195	-2.5
SW LP	207	234	91	12.9	589	420	143	-28.6
SC LP	389	354	128	-9.0	777	605	205	-22.2
SE LP	105	95	30	-9.3	259	200	54	-22.5
UP	129	146	58	12.9	255	387	162	52.0
NLP	586	789	156	34.6	1,225	1,559	279	27.2
SLP	908	888	187	-2.3	2,019	1,533	304	-24.1
Statewide[c]	1,826	1,914	257	4.8	3,499	3,479	447	-0.6
All Seasons								
West UP	64,778	59,899	2,209	-7.5*	757,943	648,692	34,417	-14.4*
East UP	18,842	18,500	1,298	-1.8	188,685	196,579	20,583	4.2
NE LP	114,413	112,864	2,918	-1.4	1,234,877	1,200,483	49,397	-2.8
NW LP	123,276	121,766	2,983	-1.2	1,513,510	1,481,340	56,502	-2.1
Sag. Bay	98,252	97,985	2,743	-0.3	1,271,606	1,316,290	56,184	3.5
SW LP	89,634	84,850	2,570	-5.3	1,356,766	1,228,157	54,093	-9.5*
SC LP	110,826	102,231	2,755	-7.8*	1,621,555	1,440,836	59,497	-11.1*
SE LP	53,792	50,824	2,065	-5.5	796,145	732,364	42,807	-8.0
UP	83,174	77,905	2,468	-6.3*	946,628	845,271	40,102	-10.7*
NLP	263,892	260,602	3,686	-1.2	3,150,722	3,067,355	80,469	-2.6
SLP	306,625	293,541	3,556	-4.3*	4,643,737	4,332,114	103,017	-6.7*
Statewide[c]	607,113	585,994	1,714	-3.5*	8,741,086	8,244,739	137,251	-5.7*

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2016 estimate. *P<0.005.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 4. Mean number of days hunters spent hunting deer ($\bar{x}$ hunting effort) in Michigan by hunting season, 2016.[a]

	Season							
	Archery		Regular Firearm		Muzzleloader		Early Antlerless	
Area	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]
West UP	11.2	0.7	7.3	0.2	5.0	0.2	0.0	0.0
East UP	11.8	1.7	7.1	0.3	5.2	0.4	0.0	0.0
NE LP	10.8	0.4	6.0	0.1	4.3	0.2	1.7	0.1
NW LP	12.1	0.4	6.0	0.1	4.1	0.2	1.4	0.2
Sag. Bay	12.4	0.4	6.1	0.1	4.5	0.2	1.6	0.1
SW LP	12.9	0.4	6.1	0.1	5.1	0.2	0.0	0.0
SC LP	12.9	0.4	6.0	0.1	5.0	0.2	1.5	0.1
SE LP	12.5	0.6	5.9	0.2	4.7	0.2	1.5	0.1
UP	11.3	0.6	7.3	0.2	5.1	0.2	0.0	0.0
NLP	11.8	0.3	6.1	0.1	4.1	0.1	1.6	0.1
SLP	13.2	0.2	6.2	0.1	5.0	0.1	1.5	0.0
Statewide	13.4	0.2	6.6	0.1	4.9	0.1	1.6	0.0

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit.

Table 4 (Continued). Mean number of days hunters spent hunting deer ($\bar{x}$ hunting effort) in Michigan by hunting season, 2016.[a]

	Season							
	Late Antlerless		Liberty		Independence		All Seasons	
Area	$\bar{x}$ 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	1.6	0.1	2.6	0.2	11.2	0.4
East UP	0.0	0.0	1.7	0.1	2.8	0.2	10.9	0.9
NE LP	4.0	0.4	1.7	0.0	2.0	0.3	11.0	0.3
NW LP	3.5	0.3	1.6	0.0	2.3	0.2	12.5	0.3
Sag. Bay	4.0	0.3	1.6	0.0	1.9	0.3	13.7	0.4
SW LP	3.9	0.2	1.6	0.1	2.0	0.3	15.0	0.5
SC LP	3.9	0.2	1.6	0.1	2.1	0.3	14.6	0.4
SE LP	4.2	0.3	1.6	0.1	2.4	0.2	14.9	0.6
UP	0.0	0.0	1.6	0.1	2.7	0.2	11.2	0.4
NLP	3.7	0.2	1.6	0.0	2.2	0.2	12.1	0.2
SLP	4.0	0.1	1.6	0.0	2.0	0.2	15.3	0.3
Statewide	4.0	0.1	1.6	0.0	2.2	0.1	14.8	0.2

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit.

Table 5. Number of deer harvested in Michigan, 2014-2016.

Season or permit	Type of deer	2014	2015	2016	Change from 2015 to 2016 (%)
Season					
Archery	Antlerless	48,136	42,644	50,103	17.5*
	Antlered bucks	61,886	68,924	75,438	9.5*
	Sexes combined	110,022	111,568	125,541	12.5*
Regular firearm	Antlerless	67,503	64,553	57,513	-10.9*
	Antlered bucks	105,258	110,721	107,329	-3.1
	Sexes combined	172,761	175,274	164,843	-6.0*
Muzzleloader	Antlerless	13,404	11,959	14,195	18.7
	Antlered bucks	6,816	6,594	9,083	37.7*
	Sexes combined	20,220	18,553	23,278	25.5*
Early antlerless	Antlerless	3,086	3,428	2,840	-17.2
Late antlerless	Antlerless	10,264	12,266	18,035	47.0*
Liberty[a]	Antlerless	1,646	2,118	2,227	5.1
	Antlered bucks	4,079	5,163	4,113	-20.3*
	Sexes combined	5,725	7,281	6,339	-12.9
Independence[b]	Antlerless	100	105	142	35.2
	Antlered bucks	189	207	270	30.6
	Sexes combined	288	311	412	32.1
Special permits[c]	Antlerless	6,673	5,931	6,934	16.9
Grand Total	Antlerless	150,812	143,004	151,988	6.3
	Antlered bucks	178,228	191,608	196,233	2.4
	Sexes combined	329,040	334,612	348,222	4.1

[a]Estimates for Liberty hunt included results of both youth and disabled hunters.
[b]Estimates included only one disabled hunter season.
[c]Includes deer harvested with DMA permits. These permits could be used during any deer hunting season.
*P<0.005.

Table 6. Number of deer harvested in Michigan by hunting season, 2015-2016.[a]

Season and Area	Antlerless 2015 Harvest	Antlerless 2016 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2015 to 2016 (%)	Antlered Bucks 2015 Harvest	Antlered Bucks 2016 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2015 to 2016	Sexes Combined 2015 Harvest	Sexes Combined 2016 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2015 to 2016
Archery												
West UP	643	898	294	39.6	2,721	2,979	531	9.5	3,363	3,878	626	15.3
East UP	120	0	0	-100.0*	395	629	235	59.3	515	629	235	22.2
NE LP	6,785	7,561	941	11.4	7,623	8,589	922	12.7	14,411	16,148	1,398	12.0
NW LP	8,428	10,442	1,182	23.9	11,261	14,347	1,191	27.4*	19,690	24,788	1,806	25.9*
Sag. Bay	7,476	9,900	1,052	32.4*	12,375	14,512	1,202	17.3	19,850	24,412	1,735	23.0*
SW LP	5,929	8,388	941	41.5*	10,914	12,670	1,156	16.1	16,842	21,058	1,614	25.0*
SC LP	8,883	8,588	1,033	-3.3	15,680	14,901	1,211	-5.0	24,562	23,490	1,749	-4.4
SE LP	4,379	4,326	683	-1.2	7,955	6,811	824	-14.4	12,334	11,138	1,141	-9.7
UP	764	898	294	17.6	3,115	3,608	580	15.8	3,878	4,508	668	16.2
NLP	17,639	21,459	1,635	21.7*	22,468	27,263	1,647	21.3*	40,112	48,716	2,488	21.5*
SLP	24,242	27,747	1,771	14.5*	43,340	44,568	2,118	2.8	67,579	72,317	3,000	7.0
Statewide	42,644	50,103	2,440	17.5*	68,924	75,438	2,762	9.5*	111,568	125,541	3,977	12.5*
Regular Firearm												
West UP	1,472	1,165	370	-20.8	11,403	12,190	1,049	6.9	12,904	13,370	1,134	3.6
East UP	0	1	0		1,874	2,932	510	56.5*	1,880	2,938	510	56.3*
NE LP	12,214	10,474	1,060	-14.2	20,216	21,496	1,435	6.3	32,427	31,973	1,855	-1.4
NW LP	11,486	10,579	1,027	-7.9	18,209	18,637	1,346	2.3	29,690	29,214	1,790	-1.6
Sag. Bay	11,729	12,595	1,185	7.4	19,161	18,901	1,346	-1.4	30,887	31,489	1,928	2.0
SW LP	8,858	7,879	888	-11.1	13,605	11,465	1,047	-15.7	22,458	19,339	1,470	-13.9
SC LP	15,125	12,293	1,160	-18.7*	20,018	16,267	1,235	-18.7*	35,124	28,550	1,800	-18.7*
SE LP	3,669	2,528	469	-31.1*	6,235	5,441	722	-12.7	9,904	7,970	901	-19.5
UP	1,472	1,166	370	-20.8	13,276	15,123	1,167	13.9	14,784	16,308	1,243	10.3
NLP	27,180	25,436	1,628	-6.4	44,501	45,605	2,094	2.5	71,675	71,038	2,792	-0.9
SLP	35,901	30,911	1,813	-13.9*	52,943	46,602	2,108	-12.0*	88,815	77,496	2,963	-12.7*
Statewide	64,553	57,513	2,485	-10.9*	110,721	107,329	3,206	-3.1	175,274	164,843	4,283	-6.0*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]95% confidence limit for the 2016 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2015-2016.[a]

Season and Area	Antlerless 2015 Harvest	Antlerless 2016 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2015 to 2016 (%)	Antlered Bucks 2015 Harvest	Antlered Bucks 2016 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2015 to 2016	Sexes Combined 2015 Harvest	Sexes Combined 2016 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2015 to 2016
Muzzleloader												
West UP	404	346	201	-14.2	303	583	225	92.3	707	932	301	31.9
East UP	0	2	2		86	360	182	317.8*	86	365	182	323.5*
NE LP	997	1,639	397	64.5	535	791	264	48.0	1,531	2,428	482	58.6*
NW LP	1,081	1,536	381	42.1	434	672	244	55.0	1,515	2,206	463	45.6
Sag. Bay	2,324	3,278	622	41.0	1,296	2,166	442	67.1*	3,621	5,444	791	50.4*
SW LP	2,484	2,792	512	12.4	1,184	2,068	439	74.7*	3,667	4,862	708	32.6
SC LP	3,569	3,424	577	-4.1	1,900	1,710	385	-10.0	5,470	5,130	711	-6.2
SE LP	1,101	1,178	320	7.0	856	733	261	-14.4	1,957	1,911	424	-2.4
UP	404	348	201	-13.7	389	943	289	142.3*	793	1,297	352	63.6
NLP	2,484	3,932	612	58.3*	1,169	1,822	401	55.9	3,653	5,748	751	57.4*
SLP	9,071	9,915	1,006	9.3	5,036	6,318	757	25.5	14,108	16,233	1,301	15.1
Statewide	11,959	14,195	1,210	18.7	6,594	9,083	914	37.7*	18,553	23,278	1,561	25.5*
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	650	726	243	11.8	0	0	0	0	650	726	243	11.8
NW LP	179	114	90	-36.3	0	0	0	0	179	114	90	-36.3
Sag. Bay	1,047	1,029	338	-1.6	0	0	0	0	1,047	1,029	338	-1.6
SW LP	0	0	0		0	0	0	0	0	0	0	
SC LP	970	621	231	-36.0	0	0	0	0	970	621	231	-36.0
SE LP	583	349	180	-40.2	0	0	0	0	583	349	180	-40.2
UP	0	0	0		0	0	0	0	0	0	0	
NLP	932	946	294	1.5	0	0	0	0	932	946	294	1.5
SLP	2,496	1,893	426	-24.1	0	0	0	0	2,496	1,893	426	-24.1
Statewide	3,428	2,840	531	-17.2	0	0	0	0	3,428	2,840	531	-17.2

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]95% confidence limit for the 2016 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2015-2016.[a]

Season and Area	Antlerless 2015 Harvest	Antlerless 2016 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2015 to 2016 (%)	Antlered Bucks 2015 Harvest	Antlered Bucks 2016 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2015 to 2016	Sexes Combined 2015 Harvest	Sexes Combined 2016 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2015 to 2016
Late Antlerless												
West UP	0	0	0		0	0	0	0	0	0		
East UP	0	0	0		0	0	0	0	0	0		
NE LP	773	2,117	491	173.7*	0	0	0	0	2,117	491	173.7*	173.7
NW LP	1,247	2,034	430	63.1*	0	0	0	0	2,034	430	63.1*	63.1
Sag. Bay	2,848	4,447	727	56.1*	0	0	0	0	4,447	727	56.1*	56.1
SW LP	2,356	2,990	546	26.9	0	0	0	0	2,990	546	26.9	26.9
SC LP	3,368	4,646	767	37.9	0	0	0	0	4,646	767	37.9	37.9
SE LP	1,673	1,802	421	7.7	0	0	0	0	1,802	421	7.7	7.7
UP	0	0	0		0	0	0	0	0	0		
NLP	2,146	4,506	701	109.9*	0	0	0	0	4,506	701	109.9*	109.9
SLP	10,119	13,529	1,236	33.7*	0	0	0	0	13,529	1,236	33.7*	33.7
Statewide	12,266	18,035	1,465	47.0*	0	0	0	0	18,035	1,465	47.0*	47.0
Liberty[c]												
West UP	158	124	63	-21.4	262	253	89	-3.6	420	377	108	-10.3
East UP	20	19	25	-8.2	1	74	62	7325.8	21	93	67	335.8
NE LP	234	351	103	50.4	610	622	155	2.1	843	974	186	15.5
NW LP	563	745	162	32.3	1,377	963	181	-30.0*	1,940	1,709	243	-11.9
Sag. Bay	401	404	143	0.6	1,165	1,013	194	-13.0	1,566	1,416	241	-9.5
SW LP	197	238	111	20.7	454	354	112	-22.1	651	592	158	-9.2
SC LP	358	275	101	-23.2	840	465	126	-44.7*	1,199	741	162	-38.2*
SE LP	187	71	46	-62.0	453	368	115	-18.9	640	438	124	-31.6
UP	178	143	67	-19.9	263	327	108	24.3	442	470	127	6.4
NLP	1,014	1,315	213	29.8	2,354	1,863	258	-20.9	3,368	3,179	334	-5.6
SLP	926	768	191	-17.0	2,545	1,923	263	-24.5*	3,471	2,690	325	-22.5*
Statewide	2,118	2,227	294	5.1	5,163	4,113	386	-20.3*	7,281	6,339	485	-12.9

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]95% confidence limit for the 2016 estimate. *P<0.005.
[c]Estimates included results of both youth and disabled hunters.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2015-2016.[a]

Season and Area	Antlerless 2015 Harvest	Antlerless 2016 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2015 to 2016 (%)	Antlered Bucks 2015 Harvest	Antlered Bucks 2016 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2015 to 2016	Sexes Combined 2015 Harvest	Sexes Combined 2016 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2015 to 2016
Independence												
West UP	4	13	7	260.0	5	9	6	64.8	9	22	9	140.5
East UP	4	2	2	-48.6	0	4	3		4	6	4	50.3
NE LP	27	21	18	-23.5	16	18	18	11.6	44	39	26	-11.0
NW LP	25	17	18	-30.7	31	82	47	163.7	56	100	50	78.5
Sag. Bay	13	36	49	179.1	47	36	20	-22.5	60	72	53	19.9
SW LP	3	38	49	1226.5	10	39	31	282.4	13	76	58	485.2
SC LP	21	13	7	-37.9	79	67	55	-15.3	100	80	56	-19.6
SE LP	8	2	2	-77.4	18	15	18	-15.9	26	17	18	-35.1
UP	7	15	7	105.7	5	13	7	130.7	13	28	10	114.8
NLP	61	72	55	17.3	59	109	51	86.9	120	181	75	51.0
SLP	36	55	50	51.5	143	148	68	3.6	179	203	85	13.6
Statewide	105	142	75	35.2	207	270	85	30.6	311	412	114	32.1
All Seasons												
West UP	2,687	2,553	535	-5.0	14,701	16,018	1,221	9.0	17,425	18,611	1,382	6.8
East UP	146	24	25	-83.7	2,356	3,999	613	69.7*	2,509	4,035	614	60.8*
NE LP	21,669	22,905	1,728	5.7	29,011	31,524	1,791	8.7	50,676	54,431	2,698	7.4
NW LP	23,072	25,521	1,836	10.6	31,321	34,707	1,917	10.8	54,390	60,229	2,917	10.7*
Sag. Bay	25,786	31,660	2,119	22.8*	34,043	36,627	1,980	7.6	59,822	68,267	3,296	14.1*
SW LP	19,879	22,322	1,661	12.3	26,160	26,588	1,701	1.6	46,033	48,899	2,702	6.2
SC LP	32,262	29,831	2,091	-7.5	38,506	33,405	1,891	-13.2*	70,746	63,215	3,166	-10.6*
SE LP	11,572	10,237	1,082	-11.5	15,509	13,365	1,206	-13.8	27,079	23,601	1,779	-12.8
UP	2,833	2,577	536	-9.0	17,057	20,016	1,367	17.3*	19,935	22,647	1,512	13.6
NLP	51,521	57,757	2,765	12.1*	70,574	76,675	2,825	8.6*	122,091	134,427	4,345	10.1*
SLP	82,719	84,720	3,391	2.4	103,977	99,542	3,277	-4.3	186,656	184,214	5,316	-1.3
Statewide	137,073	145,054	4,459	5.8	191,608	196,233	4,562	2.4	328,681	341,288	7,091	3.8

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]95% confidence limit for the 2016 estimate. *P<0.005.

Table 7. Number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2015-2016.[a]

Season and Area	Antlerless 2015 Harvest	Antlerless 2016 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2015 to 2016 (%)	Antlered Bucks 2015 Harvest	Antlered Bucks 2016 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2015 to 2016	Sexes Combined 2015 Harvest	Sexes Combined 2016 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2015 to 2016
Public Lands												
West UP	64	55	57	-14.4	4,049	4,544	645	12.2	4,142	4,610	647	11.3
East UP	67	0	0	-100.0	823	1,489	382	80.9	895	1,493	382	66.7
NE LP	5,516	4,533	721	-17.8	6,984	7,335	844	5.0	12,487	11,866	1,173	-5.0
NW LP	3,420	3,282	578	-4.0	6,680	6,606	807	-1.1	10,109	9,889	1,042	-2.2
Sag. Bay	2,955	3,508	642	18.7	2,992	3,955	637	32.2	5,935	7,456	981	25.6
SW LP	975	1,411	378	44.7	1,561	1,882	444	20.6	2,535	3,291	637	29.8
SC LP	2,356	2,777	651	17.9	2,049	2,550	516	24.5	4,393	5,320	910	21.1
SE LP	1,087	760	262	-30.1	1,037	1,073	332	3.5	2,119	1,832	445	-13.5
UP	132	55	57	-58.1	4,872	6,032	750	23.8	5,037	6,103	752	21.2
NLP	9,931	9,122	989	-8.2	15,061	15,364	1,227	2.0	24,987	24,482	1,666	-2.0
SLP	6,378	7,149	961	12.1	6,242	8,037	914	28.8*	12,592	15,173	1,442	20.5
Statewide	16,440	16,326	1,389	-0.7	26,175	29,433	1,709	12.4	42,616	45,759	2,339	7.4
Private Lands												
West UP	2,619	2,499	532	-4.6	10,658	11,464	1,034	7.6	13,297	13,990	1,219	5.2
East UP	79	24	25	-70.1	1,534	2,506	475	63.3*	1,618	2,538	476	56.9*
NE LP	16,195	18,362	1,565	13.4	22,036	24,177	1,572	9.7	38,230	42,541	2,406	11.3
NW LP	19,661	22,237	1,733	13.1	24,648	28,095	1,728	14.0*	44,302	50,330	2,697	13.6*
Sag. Bay	22,829	28,153	2,001	23.3*	31,046	32,679	1,868	5.3	53,874	60,820	3,103	12.9*
SW LP	18,884	20,917	1,607	10.8	24,594	24,716	1,637	0.5	43,474	45,625	2,600	4.9
SC LP	29,885	27,057	1,974	-9.5	36,448	30,867	1,810	-15.3*	66,320	57,910	2,998	-12.7*
SE LP	10,481	9,479	1,045	-9.6	14,469	12,296	1,154	-15.0	24,950	21,776	1,705	-12.7
UP	2,698	2,523	533	-6.5	12,192	13,970	1,138	14.6	14,915	16,528	1,308	10.8
NLP	41,644	48,623	2,572	16.8*	55,528	61,294	2,529	10.4*	97,167	109,911	3,974	13.1*
SLP	76,290	77,582	3,227	1.7	97,713	91,537	3,136	-6.3	173,983	169,090	5,055	-2.8
Statewide	120,632	128,729	4,208	6.7	165,433	166,800	4,210	0.8	286,065	295,529	6,618	3.3

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]95% confidence limit for the 2016 estimate. *P<0.005.

Table 8. Percentage of deer hunters harvesting deer in Michigan during all seasons, 2016.[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	3.7	0.7	0.6	0.3	0.1	0.1	0.0	0.0	0.0	0.0
East UP	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE LP	16.7	1.1	3.1	0.5	0.8	0.3	0.3	0.1	0.1	0.1
NW LP	18.2	1.0	2.6	0.4	0.4	0.2	0.1	0.1	0.0	0.0
Sag. Bay	25.5	1.3	5.4	0.7	1.5	0.4	0.5	0.2	0.2	0.1
SW LP	21.8	1.3	4.3	0.7	0.8	0.3	0.2	0.1	0.0	0.1
SC LP	22.8	1.2	5.1	0.7	1.4	0.4	0.4	0.2	0.2	0.1
SE LP	17.7	1.6	2.6	0.7	0.3	0.2	0.1	0.1	0.1	0.1
UP	2.9	0.6	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0
NLP	18.6	0.7	3.1	0.3	0.7	0.2	0.2	0.1	0.1	0.1
SLP	23.0	0.7	4.9	0.4	1.2	0.2	0.4	0.1	0.1	0.1
Statewide[d]	20.2	0.5	4.2	0.2	1.0	0.1	0.3	0.1	0.1	0.0
Antlered bucks[c]										
West UP	26.8	1.7	1.0	0.4						
East UP	21.7	2.9	0.7	0.6						
NE LP	26.4	1.3	2.6	0.5						
NW LP	26.0	1.2	3.6	0.5						
Sag. Bay	33.7	1.4	5.1	0.7						
SW LP	28.4	1.5	4.2	0.7						
SC LP	29.7	1.4	4.2	0.6						
SE LP	23.8	1.8	3.5	0.8						
UP	25.7	1.5	1.0	0.3						
NLP	27.1	0.8	3.4	0.3						
SLP	30.7	0.8	4.5	0.4						
Statewide[d]	30.9	0.6	4.3	0.3						

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.
[c]The season bag limit for antlered deer was two.
[d]The 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 8 (continued). Percentage of deer hunters harvesting deer in Michigan during all seasons, 2016.[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	29.5	1.8	2.2	0.6	0.3	0.2	0.1	0.1	0.0	0.0
East UP	21.8	2.9	0.8	0.6	0.0	0.0	0.0	0.0	0.1	0.1
NE LP	38.9	1.4	8.6	0.8	1.4	0.3	0.6	0.2	0.1	0.1
NW LP	38.9	1.3	10.1	0.8	1.5	0.3	0.3	0.2	0.2	0.2
Sag. Bay	49.3	1.5	16.3	1.1	4.3	0.6	1.3	0.3	0.1	0.1
SW LP	42.4	1.6	12.4	1.1	3.9	0.6	0.7	0.3	0.2	0.2
SC LP	45.2	1.5	13.2	1.0	3.6	0.6	1.3	0.3	0.1	0.1
SE LP	37.3	2.1	8.4	1.2	1.8	0.6	0.4	0.3	0.4	0.4
UP	27.9	1.6	1.9	0.5	0.2	0.2	0.0	0.1	0.1	0.1
NLP	40.4	0.9	10.2	0.6	1.8	0.2	0.6	0.1	0.1	0.1
SLP	45.6	0.9	13.8	0.6	3.9	0.3	1.1	0.2	0.4	0.4
Statewide[d]	44.0	0.6	12.5	0.4	3.1	0.2	0.9	0.1	0.3	0.1

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.
[c]The season bag limit for antlered deer was two.
[d]The 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. Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2016.[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	4.5	1.4	1.9	0.6	2.6	1.4	0.0	0.0	0.0	0.0	9.7	4.7
East UP	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	7.0	8.9
NE LP	13.3	1.4	10.2	0.9	9.1	2.1	26.7	7.8	32.8	6.1	13.0	3.6
NW LP	14.1	1.3	10.3	0.9	7.2	1.7	16.6	12.5	36.6	6.3	14.6	3.0
Sag. Bay	15.7	1.5	14.5	1.2	11.6	2.0	21.7	6.1	36.2	4.4	9.7	3.2
SW LP	14.9	1.5	11.3	1.2	9.7	1.7	0.0	0.0	21.7	3.5	8.9	3.9
SC LP	12.3	1.3	14.0	1.2	11.1	1.8	16.2	5.6	24.9	3.3	9.4	3.3
SE LP	11.1	1.6	7.4	1.3	7.4	2.0	11.2	5.4	21.7	4.5	4.8	3.1
UP	3.5	1.1	1.5	0.4	2.0	1.1	0.0	0.0	0.0	0.0	9.2	4.2
NLP	14.4	0.9	11.0	0.6	8.7	1.3	22.2	6.0	34.8	4.2	14.3	2.2
SLP	13.8	0.8	12.4	0.6	10.2	1.0	17.5	3.5	26.3	2.0	7.9	1.9
Statewide	14.0	0.6	10.8	0.4	9.2	0.7	18.4	2.9	27.8	1.8	10.7	1.3
Antlered Bucks												
West UP	15.4	2.5	23.4	1.8	5.2	2.0	0.0	0.0	0.0	0.0	19.6	6.5
East UP	11.6	4.1	18.6	3.0	9.9	4.8	0.0	0.0	0.0	0.0	27.6	18.8
NE LP	16.4	1.6	22.3	1.3	4.7	1.5	0.0	0.0	0.0	0.0	22.9	5.1
NW LP	20.5	1.5	18.4	1.2	3.3	1.2	0.0	0.0	0.0	0.0	18.7	3.3
Sag. Bay	24.6	1.7	23.8	1.5	8.8	1.7	0.0	0.0	0.0	0.0	24.1	4.2
SW LP	22.6	1.8	17.1	1.4	7.5	1.5	0.0	0.0	0.0	0.0	13.1	3.9
SC LP	24.0	1.7	19.9	1.3	5.9	1.3	0.0	0.0	0.0	0.0	15.8	4.0
SE LP	18.7	2.0	15.4	1.9	4.6	1.6	0.0	0.0	0.0	0.0	24.8	6.9
UP	14.6	2.2	22.4	1.5	6.4	1.9	0.0	0.0	0.0	0.0	21.0	6.4
NLP	19.5	1.0	20.7	0.8	4.3	0.9	0.0	0.0	0.0	0.0	20.1	2.5
SLP	23.7	1.0	20.0	0.8	7.0	0.8	0.0	0.0	0.0	0.0	19.5	2.5
Statewide	22.6	0.7	21.3	0.6	6.2	0.6	0.0	0.0	0.0	0.0	19.8	1.7

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.

Table 9 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2016.[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	19.2	2.7	25.0	1.8	7.8	2.4	0.0	0.0	0.0	0.0	29.4	7.7
East UP	11.6	4.1	18.7	3.0	9.9	4.8	0.0	0.0	0.0	0.0	34.5	19.2
NE LP	27.6	1.9	31.1	1.4	13.6	2.5	26.7	7.8	32.8	6.1	35.9	5.7
NW LP	31.8	1.7	27.0	1.4	10.3	2.0	16.6	12.5	36.6	6.3	33.3	4.0
Sag. Bay	36.3	1.9	35.1	1.6	19.4	2.4	21.7	6.1	36.2	4.4	33.8	4.8
SW LP	33.9	2.0	26.1	1.6	16.2	2.2	0.0	0.0	21.7	3.5	22.0	5.2
SC LP	32.6	1.8	31.4	1.6	16.5	2.1	16.2	5.6	24.9	3.3	25.1	4.9
SE LP	28.0	2.3	21.6	2.1	11.6	2.4	11.2	5.4	21.7	4.5	29.6	7.3
UP	17.5	2.3	23.6	1.6	8.3	2.2	0.0	0.0	0.0	0.0	30.3	7.2
NLP	31.1	1.2	29.9	0.9	12.6	1.5	22.2	6.0	34.8	4.2	34.3	3.0
SLP	33.8	1.1	29.9	0.9	16.5	1.2	17.5	3.5	26.3	2.0	27.4	2.9
Statewide	33.2	0.8	30.1	0.6	14.9	0.9	18.4	2.9	27.8	1.8	30.5	2.0

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.

Table 9 (Continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2016.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Antlerless				
West UP	13.1	7.3	3.7	0.7
East UP	3.2	5.1	0.1	0.1
NE LP	7.9	7.1	16.7	1.1
NW LP	4.2	4.5	18.2	1.0
Sag. Bay	11.5	15.0	25.5	1.3
SW LP	16.2	19.2	21.8	1.3
SC LP	3.8	2.3	22.8	1.2
SE LP	2.0	2.8	17.7	1.6
UP	9.1	5.6	2.9	0.6
NLP	9.2	6.9	18.6	0.7
SLP	6.2	5.7	23.0	0.7
Statewide	7.7	3.9	20.2	0.5
Antlered Bucks				
West UP	10.9	6.7	26.8	1.7
East UP	6.5	8.2	21.7	2.9
NE LP	7.2	7.1	26.4	1.3
NW LP	18.3	8.8	26.0	1.2
Sag. Bay	12.2	7.2	33.7	1.4
SW LP	17.4	13.0	28.4	1.5
SC LP	19.8	14.6	29.7	1.4
SE LP	16.4	17.1	23.8	1.8
UP	9.1	5.6	25.7	1.5
NLP	13.3	5.4	27.1	0.8
SLP	17.5	7.5	30.7	0.8
Statewide	14.3	4.2	30.9	0.6

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.

Table 9 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2016.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Sexes combined				
West UP	24.1	9.8	29.5	1.8
East UP	9.7	11.0	21.8	2.9
NE LP	15.1	9.9	38.9	1.4
NW LP	22.4	9.7	38.9	1.3
Sag. Bay	23.1	15.4	49.3	1.5
SW LP	33.6	19.8	42.4	1.6
SC LP	23.5	14.7	45.2	1.5
SE LP	18.4	17.0	37.3	2.1
UP	18.3	9.0	27.9	1.6
NLP	22.6	8.1	40.4	0.9
SLP	23.5	8.8	45.6	0.9
Statewide	21.9	5.4	44.0	0.6

[a]Excluded people that did not hunt during the season and deer taken with DMA permits.
[b]95% confidence limit.

Table 10. Level of satisfaction and dissatisfaction with the number of deer seen and number of antlered deer (bucks) seen among Michigan deer hunters, 2015-2016.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)
Number of deer seen								
West UP	14	26	2	12*	77	60	2	-17*
East UP	12	23	3	12*	80	64	4	-16*
NE LP	32	38	2	6*	52	45	2	-7*
NW LP	35	38	1	3*	50	46	1	-4*
Sag. Bay	40	44	2	5*	45	40	2	-5*
SW LP	32	36	2	4*	51	46	2	-5*
SC LP	41	41	2	1	45	43	2	-2
SE LP	41	40	2	-1	40	40	2	0
UP	14	26	2	12*	77	61	2	-17*
NLP	33	39	1	5*	51	45	1	-6*
SLP	39	41	1	2*	45	42	1	-3*
Statewide	33	38	1	5*	52	46	1	-6*
Number of antlered deer (bucks) seen								
West UP	12	17	2	6*	78	68	2	-10*
East UP	7	18	3	12*	83	70	4	-13*
NE LP	23	27	1	4*	59	53	2	-6*
NW LP	26	28	1	2	57	54	1	-3
Sag. Bay	29	30	2	1	53	50	2	-3
SW LP	23	26	2	4*	59	55	2	-4*
SC LP	29	29	1	0	52	51	2	-1
SE LP	28	27	2	-1	52	52	2	0
UP	11	18	1	7*	79	68	2	-11*
NLP	25	27	1	2*	58	54	1	-4*
SLP	28	29	1	1	54	52	1	-2*
Statewide	24	27	1	3*	59	55	1	-4*

[a]Included hunters who were “very satisfied” or “somewhat satisfied.”
[b]Included hunters who were “somewhat dissatisfied” or “strongly dissatisfied.”
[c]95% confidence limit for the 2016 estimate.
*P<0.005.

Table 11. Level of satisfaction and dissatisfaction with the size of the antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters, 2015-2016.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)
Size of antlers								
West UP	NA	14	1		NA	61	2	
East UP	NA	12	3		NA	61	4	
NE LP	NA	24	1		NA	45	2	
NW LP	NA	27	1		NA	44	1	
Sag. Bay	NA	25	1		NA	47	2	
SW LP	NA	24	2		NA	47	2	
SC LP	NA	26	1		NA	45	2	
SE LP	NA	23	2		NA	47	2	
UP	NA	14	1		NA	61	2	
NLP	NA	25	1		NA	45	1	
SLP	NA	25	1		NA	46	1	
Statewide	NA	24	1		NA	48	1	
Overall deer hunting experience								
West UP	26	38	2	12*	56	41	2	-15*
East UP	22	36	4	14*	59	43	4	-16*
NE LP	47	52	2	4*	31	27	1	-4*
NW LP	46	48	1	2	32	30	1	-2
Sag. Bay	50	52	2	2	28	26	1	-2
SW LP	43	46	2	3	34	32	2	-2
SC LP	49	50	2	0	29	28	1	-1
SE LP	53	50	2	-3	25	26	2	1
UP	26	38	2	12*	56	41	2	-15*
NLP	46	50	1	4*	31	28	1	-3*
SLP	49	49	1	1	29	28	1	-1
Statewide	45	48	1	3*	34	30	1	-4*

[a]Included hunters who were “very satisfied” or “somewhat satisfied.”
[b]Included hunters who were “somewhat dissatisfied” or “strongly dissatisfied.”
[c]95% confidence limit for the 2016 estimate.
*P<0.005.

Table 12. Level of satisfaction and dissatisfaction with overall deer hunting experience and number of deer harvested among Michigan deer hunters, 2015-2016.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)	2015	2016	95% CL[c]	Difference from 2015 to 2016 (%)
Number of deer harvested								
West UP	19	24	2	5	48	38	2	-10
East UP	11	23	3	12	55	37	4	-18
NE LP	30	34	2	4	34	29	1	-5
NW LP	28	32	1	4	34	31	1	-3
Sag. Bay	37	41	2	4	31	26	1	-5
SW LP	28	31	2	2	35	33	2	-1
SC LP	34	34	2	1	32	31	2	-1
SE LP	33	32	2	-1	30	30	2	0
UP	17	24	2	7	49	38	2	-11
NLP	30	34	1	4	34	30	1	-4
SLP	33	35	1	2	32	30	1	-2
Statewide	30	33	1	3	35	31	1	-4

[a]Included hunters who were “very satisfied” or “somewhat satisfied.”
[b]Included hunters who were “somewhat dissatisfied” or “strongly dissatisfied.”
[c]95% confidence limit for the 2016 estimate.
*P<0.005.

Table 13. Level of satisfaction and dissatisfaction with the number of deer seen and number of antlered deer (bucks) seen among Michigan deer hunters in 2016. 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	32	3	19	4	-13*	53	3	65	5	12*
East UP	25	5	20	7	-5	63	5	66	8	2
NE LP	44	2	27	3	-18*	40	2	56	3	16*
NW LP	42	2	31	3	-11*	42	2	54	3	12*
Sag. Bay	47	2	29	4	-18*	38	2	54	5	16*
SW LP	37	2	22	6	-16*	45	2	58	7	14*
SC LP	43	2	24	5	-19*	42	2	55	6	13*
SE LP	43	3	24	7	-19*	37	3	60	8	23*
UP	30	2	19	3	-11*	55	2	65	4	10*
NLP	43	1	29	2	-15*	41	1	55	2	14*
SLP	43	1	25	3	-17*	41	1	56	3	15*
Statewide	42	1	26	1	-15*	42	1	57	2	15*
Number of antlered deer (bucks) seen										
West UP	20	2	14	3	-6*	64	3	70	4	6
East UP	17	4	20	7	4	71	5	65	8	-6
NE LP	32	2	19	2	-13*	49	2	61	3	12*
NW LP	29	2	24	3	-6*	52	2	57	3	5
Sag. Bay	32	2	22	4	-10*	49	2	58	5	10*
SW LP	28	2	17	5	-10*	55	2	54	7	0
SC LP	31	2	17	4	-14*	51	2	60	6	9*
SE LP	28	2	16	6	-12*	50	3	65	8	15*
UP	19	2	15	3	-4	66	2	69	4	3
NLP	30	1	21	2	-9*	51	1	60	2	8*
SLP	30	1	19	3	-11*	51	1	58	3	7*
Statewide	29	1	19	1	-10*	52	1	61	2	8*

[a]Included hunters who were "very satisfied" or "somewhat satisfied."
[b]Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."
*P<0.005.

Table 14. Level of satisfaction and dissatisfaction with the size of antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters in 2016. 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	15	2	16	3	1	60	3	58	5	-3
East UP	11	3	15	6	4	62	5	52	8	-10
NE LP	27	2	19	2	-9*	44	2	46	3	2
NW LP	28	2	24	3	-4	44	2	43	3	-1
Sag. Bay	25	2	19	4	-7*	47	2	49	5	1
SW LP	24	2	18	5	-6	48	2	41	7	-7
SC LP	27	2	18	5	-10*	45	2	43	6	-2
SE LP	25	2	15	6	-10*	47	3	52	8	6
UP	14	2	16	3	1	60	2	56	4	-4
NLP	27	1	21	2	-6*	45	1	45	2	0
SLP	26	1	17	3	-9*	46	1	46	3	-1
Statewide	25	1	19	1	-6*	47	1	47	2	0
Overall deer hunting experience										
West UP	41	3	42	5	0	38	3	39	5	2
East UP	34	5	40	8	6	43	5	40	8	-3
NE LP	55	2	45	3	-11*	24	2	32	3	7*
NW LP	50	2	43	3	-7*	27	2	34	3	7*
Sag. Bay	54	2	41	5	-13*	25	2	34	5	10*
SW LP	47	2	36	7	-11*	31	2	33	7	1
SC LP	51	2	40	6	-11*	28	2	35	6	8*
SE LP	52	3	38	8	-14*	24	2	37	8	12*
UP	40	2	41	4	2	39	2	39	4	1
NLP	53	1	44	2	-9*	26	1	33	2	7*
SLP	51	1	39	3	-12*	27	1	34	3	7*
Statewide	50	1	42	2	-8*	28	1	35	2	6*

[a]Included hunters who were "very satisfied" or "somewhat satisfied."
[b]Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."
*P<0.005.

Table 15. Level of satisfaction and dissatisfaction with the number of deer harvested among Michigan deer hunters in 2016. 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	28	3	25	4	-3	36	3	38	5	3
East UP	23	5	31	8	8	35	5	33	8	-1
NE LP	38	2	25	3	-14*	25	2	34	3	9*
NW LP	36	2	23	3	-12*	29	2	37	3	7*
Sag. Bay	43	2	29	5	-13*	25	2	34	5	9*
SW LP	32	2	19	6	-13*	33	2	40	7	7
SC LP	36	2	24	5	-11*	31	2	32	6	1
SE LP	34	3	23	7	-11*	29	2	36	8	7
UP	27	2	26	4	0	35	2	37	4	2
NLP	38	1	24	2	-13*	27	1	36	2	8*
SLP	36	1	24	3	-12*	30	1	34	3	5*
Statewide	36	1	24	1	-11*	29	1	36	2	6*

[a]Included hunters who were "very satisfied" or "somewhat satisfied."
[b]Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."
*P<0.005.

Table 16. Proportion of deer hunters statewide approving or disapproving of other people hunting deer with the aid of bait in Michigan, 2016.

	Level of support					
	Strongly approve or approve		Disapprove or strongly disapprove		Not sure	
Region	%	95% CL	%	95% CL	%	95% CL
UP	79	1	15	1	7	1
NLP	72	1	18	1	9	1
SLP	68	1	20	1	12	1
Statewide	71	1	19	<1	10	<1

Table 17. Comparison of the proportion of deer hunters statewide approving or disapproving of other people hunting deer with the aid of bait in Michigan in 1987, 1992, 1999, and 2016.

	Approve[a]		Disapprove[b]		Not sure	
Year[c]	%	95% CL	%	95% CL	%	95% CL
1987	38	NA[d]	26	NA	36	NA
1992	55	NA	28	NA	17	NA
1999	61	1	28	1	10	1
2016	71	1	19	<1	10	<1

[a]Included “strongly approve” and “approve” responses.
[b]Included “strongly disapprove” and “disapprove” responses.
[c]1987 and 1992 estimates from unpublished DNR data’ 1999 estimates from Frawley (2000); 2016 estimates from current survey.
[d]Not available.

Table 18. Proportion of deer hunters agreeing or disagreeing with various statements about regulating bait to hunt deer in their preferred county of hunt in Michigan, 2016.

Statement and region	Level of support: Strongly agree or agree %	Strongly agree or agree 95% CL	Disagree or strongly disagree %	Disagree or strongly disagree 95% CL	Not sure %	Not sure 95% CL
Baiting should never be restricted.						
UP	52	2	42	2	7	1
NLP	46	1	47	1	8	1
SLP	42	1	48	1	9	1
Statewide	45	1	47	1	8	<1
Baiting should be banned completely.						
UP	12	1	83	1	6	1
NLP	13	1	81	1	6	<1
SLP	15	1	78	1	8	1
Statewide	14	<1	79	1	7	<1
Baiting should be regulated only when the health of the deer herd is threatened by the use of bait.						
UP	65	2	26	2	8	1
NLP	69	1	24	1	8	1
SLP	70	1	21	1	9	1
Statewide	69	1	23	1	9	<1

Table 19. Proportion of deer hunters supporting or opposing various buck harvest restrictions in Michigan, 2016.

Statement and region	Level of support: Strongly support or support %	95% CL	Oppose or strongly oppose %	95% CL	Not sure %	95% CL
Allow hunters to take a total of two bucks in any combination of seasons if one of those bucks has at least 4 antler points on one side. No antler point restrictions on other buck.						
UP	47	2	48	2	4	1
NLP	55	1	40	1	5	<1
SLP	60	1	34	1	6	<1
Statewide	56	1	38	1	6	<1
Allow hunters to take a total of two bucks in any combination of seasons, but require the following regional minimum antler point restrictions. These restrictions are meant to protect over 50% of yearling bucks to promote their growth to older age classes. • *Upper Peninsula one buck 2 or more points on one side, the other 4 or more points on one side* • *Northern Lower Peninsula one buck 3 or more points on one side, the other 4 or more points on one side* • *Southern Lower Peninsula both bucks 4 or more points on one side*						
UP	56	2	39	2	5	1
NLP	62	1	29	1	9	1
SLP	57	1	32	1	11	1
Statewide	59	1	32	1	10	<1
Allow only one antlered buck (no antler restrictions) per hunter per year.						
UP	55	2	37	2	8	1
NLP	40	1	52	1	8	1
SLP	43	1	48	1	9	1
Statewide	43	1	48	1	9	<1

Table 20. Comparison of the proportion of deer hunters supporting or opposing various buck harvest restrictions in Michigan in 1993, 2001, 2006, 2012, and 2016.

		Support[a]		Oppose[b]		Not sure	
Option	Year[c]	%	95% CL	%	95% CL	%	95% CL
Allow two bucks in all seasons combined if one of the bucks has at least 4 antler points on one side.	2006	70	2	27	2	3	1
	2012	67	2	30	2	4	1
	2016	56	1	38	1	6	<1
Allow regional APRs when taking two bucks: (UP: 2 and 4 Points, NLP: 3 and 4 Points, SLP: 4 Points)	2012	46	2	45	2	9	1
	2016	59	1	32	1	10	<1
Allow only one antlered buck (no APRs) per hunter per year.	1993	44	NA[d]	49	NA	8	NA
	2001	58	NA	31	NA	9	NA
	2006	35	2	58	2	6	1
	2012	37	2	57	2	6	1
	2016	43	1	48	1	9	<1

[a]Included “strongly supported” and “supported” responses.
[b]Included “strongly opposed” and “opposed” responses.
[c]1993 (unpulished DNR data), 2001 (Peyton and Bull 2001), 2006 (Frawley and Rudolph 2008), 2012 (Frawley and Rudolph 2014), 2016 estimates from current survey.
[d]Not available.

Table 21. Proportion of deer hunters supporting or opposing various options regarding the opening date of the regular firearm season in Michigan, 2016.

Statement and region	Level of support: Strongly support or support %	95% CL	Oppose or strongly oppose %	95% CL	Not sure %	95% CL
Change the opening date of the regular firearm season if it would increase hunter participation.						
UP	24	2	65	2	11	1
NLP	31	1	59	1	10	1
SLP	34	1	55	1	12	1
Statewide	31	1	58	1	11	<1
Maintain the November 15 opening date.						
UP	89	1	6	1	4	1
NLP	85	1	9	1	6	<1
SLP	84	1	11	1	6	<1
Statewide	85	<1	10	<1	6	<1
Open on the Saturday nearest November 15 each year.						
UP	32	2	61	2	7	1
NLP	36	1	57	1	7	1
SLP	38	1	54	1	8	1
Statewide	36	1	56	1	8	<1
Open on the Saturday prior to Thanksgiving each year.						
UP	12	1	81	2	7	1
NLP	18	1	74	1	9	1
SLP	22	1	68	1	10	1
Statewide	19	1	72	1	9	<1

Table 22. Comparison of the proportion of deer hunters statewide supporting or opposing various options regarding the opening date of the regular firearm season in Michigan in 2006, 2009, and 2016.

		Support[a]		Oppose[b]		Not sure	
Option	Year[c]	%	95% CL	%	95% CL	%	95% CL
Change opening date if it would increase hunter participation	2016	31	1	58	1	11	<1
Maintain November 15 opening	2006	84	1	12	1	4	1
	2009	84	<1	10	<1	6	<1
	2016	85	<1	10	<1	6	<1
Open Saturday nearest November 15	2006	39	2	54	2	7	1
	2009	42	1	49	1	10	<1
	2016	36	1	56	1	8	<1
Open Saturday before Thanksgiving	2009	20	<1	69	1	11	<1
	2016	19	<1	72	1	9	<1

[a]Included “strongly supported” and “supported” responses.
[b]Included “strongly opposed” and “opposed” responses.
[c]2006 estimates from Frawley and Rudolph (2008); 2009 estimates from Frawley (2010); 2016 estimates from current survey.

Table 23. Estimated proportion and number of archers that used a crossbow during 2016 archery season in Michigan, summarized by region.

	Archers using a crossbow during archery season			
Region	%	95% CL	Total	95% CL
UP	56.7	3.3	12,259	1,059
NLP	65.2	1.4	74,484	2,452
SLP	57.2	1.2	91,229	2,640
Unknown[a]	56.2	2.9	15,164	1,168
Statewide	59.9	0.8	193,137	3,496

[a]Region could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.

Table 24. Estimated hunter success of archers hunting with a crossbow during 2016 archery season in Michigan, summarized by type of deer and region.

	Antlerless		Antlered Bucks		Sexes Combined	
Region	%[a]	95% CL	%[a]	95% CL	%[a]	95% CL
UP	3.5	1.6	14.3	3.0	17.1	3.3
NLP	16.3	1.3	20.6	1.4	34.1	1.7
SLP	13.9	1.1	25.2	1.4	35.7	1.5
Unknown[b]	17.4	3.0	19.0	3.1	32.4	3.7
Statewide	14.5	0.8	22.2	0.9	33.6	1.0

[a]Percentage of crossbow hunters harvesting at least one deer.
[b]Region could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.

Table 25. Estimated number of deer harvested by archers with a crossbow during 2016 archery season in Michigan, summarized by type of deer and region.

	Antlerless		Antlered Bucks		Sexes Combined	
Region	No.	95% CL	No.	95% CL	No.	95% CL
UP	411	190	1,699	392	2,111	451
NLP	12,949	1,169	15,734	1,250	28,683	1,816
SLP	13,949	1,258	23,598	1,520	37,547	2,120
Unknown[a]	2,834	562	2,955	552	5,789	867
Statewide	30,143	1,795	43,986	2,041	74,130	2,877

[a]Region could not be determined when hunter did not report where they hunted or when hunter reported hunting in more than one region.

Appendix A. Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2016, summarized by Deer Management Unit and license type (public and private lands).

		Public land			Private land		
DMU[a]	DMU name	License quota	Licenses sold[b]	License buyers[b]	License quota	Licenses sold[b]	License buyers[b]
001	Alcona County[c]	5,000	2,126	1,817	0	0	0
003	Allegan County	200	196	196	5,000	4,944	4,045
004	Alpena County[c]	2,000	449	385	0	0	0
005	Antrim County	200	164	164	5,200	4,280	3,369
006	Arenac County	500	401	401	7,000	3,543	2,871
007	Big Bay Unit	0	0	0	0	0	0
008	Barry County	1,000	860	752	7,500	5,108	4,368
009	Bay County	200	176	148	3,000	2,156	1,793
010	Benzie County	100	113	113	1,000	891	890
013	Calhoun County	100	92	82	7,500	6,042	4,960
015	Charlevoix County	200	174	174	3,600	3,213	2,472
016	Cheboygan County	100	108	108	100	120	120
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	900	729	726	8,000	7,300	5,735
020	Crawford County	700	657	657	900	763	762
021	Manistique Unit	0	0	0	0	0	0
022	Crystal Falls Unit	0	0	0	0	0	0
024	Emmet County	200	177	176	800	714	714
025	Genesee County	0	0	0	8,500	4,581	3,979
026	Gladwin County	1,200	992	992	8,000	6,173	4,889
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	100	117	117	1,200	1,067	1,067
029	Gratiot County	1,300	1,181	942	9,000	4,702	3,630
030	Hillsdale County	400	357	282	12,000	6,676	5,432
031	Nisula Unit	0	0	0	0	0	0
035	Iosco County[c]	700	583	583	0	0	0
036	Amasa/Michigamme Unit	0	0	0	0	0	0
037	Isabella County	100	81	74	11,000	6,947	5,439
038	Jackson County	1,600	1,464	1,317	17,000	8,178	6,718

[a]See Figure 2 for the locations of DMUs.
[b]Number 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.
[c]Also part of DMU 487.
[d]Special deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix A (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2016, summarized by Deer Management Unit and license type (public and private lands).

		Public land			Private land		
DMU[a]	DMU name	License quota	Licenses sold[b]	License buyers[b]	License quota	Licenses sold[b]	License buyers[b]
040	Kalkaska County	100	121	121	400	369	369
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	100	157	157	2,900	2,483	2,480
044	Lapeer County	2,000	1,271	1,150	15,000	7,755	6,369
045	Leelanau County	100	94	94	1,400	1,259	1,047
046	Lenawee County	400	353	299	9,000	5,039	4,262
047	Livingston County	2,000	1,517	1,372	15,000	5,247	4,430
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	183	168	4,000	2,222	1,929
051	Manistee County	100	128	127	3,000	2,621	2,616
053	Mason County	100	132	132	4,900	4,401	3,594
055	Menominee Unit	0	0	0	5,000	4,837	3,752
056	Midland County	1,500	1,308	1,135	7,500	4,807	3,955
057	Missaukee County	400	370	370	3,200	2,881	2,441
058	Monroe County	100	69	69	1,000	880	849
060	Montmorency County[c]	5,000	3,601	2,986	0	0	0
063	Oakland County	2,500	2,298	2,031	7,000	3,413	2,899
065	Ogemaw County	700	583	583	6,000	5,780	4,624
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	300	262	261	5,600	5,087	4,066
068	Oscoda County[c]	5,000	4,342	3,616	0	0	0
069	Otsego County	100	107	107	100	120	120
071	Presque Isle County[c]	3,000	1,803	1,499	0	0	0
072	Roscommon County	400	381	381	1,000	877	802
073	Saginaw County	200	160	160	6,500	6,069	4,795
074	St. Clair County	700	609	554	9,500	6,733	5,643
081	Washtenaw County	1,500	1,363	1,223	15,000	4,760	3,984
082	Wayne County	100	66	65	1,200	889	784
083	Wexford County	1,000	896	896	3,700	3,418	2,733

[a]See Figure 2 for the locations of DMUs.
[b]Number 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.
[c]Also part of DMU 487.
[d]Special deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix A (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2016, summarized by Deer Management Unit and license type (public and private lands).

		Public land			Private land		
DMU[a]	DMU name	License quota	Licenses sold[b]	License buyers[b]	License quota	Licenses sold[b]	License buyers[b]
115	Beaver Island	200	106	92	300	133	121
117	Drummond Island	0	0	0	0	0	0
121	Bay De Noc Unit	0	0	0	0	0	0
122	Norway Unit	0	0	0	500	449	361
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
135	Tawas Unit[c]	100	91	80	0	0	0
145	North Manitou Island[d]	0	0	0	0	0	0
149	Round/Bois Blanc Island	100	90	81	100	94	86
152	Gwinn Unit	0	0	0	0	0	0
155	Gladstone Unit	0	0	0	1,500	1,422	1,178
174	St. Clair Flats[d]	0	0	0	300	121	108
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	0	0	0	0	0	0
273	Shiawassee Unit[d]	0	0	0	0	0	0
311	Keeler Unit	700	625	533	10,000	9,911	7,736
312	Sherwood Unit	1,000	928	814	16,000	12,464	9,942
332	Greenleaf Unit	5,200	4,820	3,853	42,000	19,757	15,641
333	Core CWD Area	Unlimited	895	776	Unlimited	4,397	3,686
341	Sparta Unit	1,000	861	764	17,500	13,301	11,253
349	Engadine Unit	0	0	0	0	0	0
354	Lakeview Unit	1,200	1,039	944	26,000	16,074	12,609
361	Fremont Unit	100	195	195	8,000	7,313	7,285
419	CWD Management Zone	2,000	1,864	1,461	40,000	24,118	19,173
452	Core TB Area[c]	2,000	1,458	1,260	0	0	0
487	Northern Multi-County	0	0	0	30,000	18,629	14,707
NA	Deer Management Assistance Permits	NA	NA	NA	NA	846	9,250
NA	Managed Deer Hunt Permits[d]	NA	699	786	NA	NA	NA

[a]See Figure 2 for the locations of DMUs.
[b]Number 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.
[c]Also part of DMU 487.
[d]Special deer hunts on public land. Licenses for these DMUs were available on a local basis.

Appendix B. Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2016, summarized by Deer Management Unit.

					Deer harvested (all seasons combined)[a]					
	Hunters[b,c]		Hunting effort (days)[b]		Antlerless		Antlered bucks		Sexes combined	
DMU[d]	No.	95% CL[e]	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
001	6,822	796	62,175	10,270	1,234	373	1,939	465	3,173	656
003	10,839	983	159,228	20,534	2,288	513	2,941	579	5,229	890
004	4,888	679	55,074	10,984	1,545	489	1,384	360	2,929	650
005	6,686	779	73,088	11,821	1,567	460	1,675	392	3,242	682
006	7,341	809	96,419	14,805	1,937	511	2,708	531	4,645	819
007	6,953	802	74,221	11,684	2	2	1,561	369	1,563	369
008	10,154	962	122,433	16,284	2,024	496	2,298	473	4,322	768
009	5,029	666	69,741	12,737	1,792	533	1,873	451	3,665	778
010	4,665	658	53,381	11,078	758	273	1,176	335	1,934	494
013	8,962	901	125,465	17,361	2,524	531	3,282	592	5,806	899
015	4,691	655	60,294	13,151	1,434	431	1,401	373	2,835	642
016	7,378	822	82,260	14,376	557	221	2,293	482	2,850	556
017	4,490	650	49,936	10,628	9	17	1,235	328	1,244	328
018	12,831	1,072	144,552	17,320	3,835	753	4,122	669	7,957	1,148
020	7,718	841	72,754	10,968	893	285	1,636	402	2,529	521
021	5,200	692	54,578	9,953	0	0	1,102	322	1,102	322
022	6,681	785	70,539	11,636	55	39	1,672	376	1,727	378
024	4,964	675	59,112	11,953	836	305	1,413	396	2,249	537
025	8,983	900	130,789	18,485	1,642	396	2,496	516	4,138	709
026	12,844	1,074	150,133	17,985	3,615	681	3,777	610	7,392	1,049
027	2,132	446	17,775	4,721	10	17	372	190	382	191
028	6,376	758	82,519	13,758	1,050	314	1,845	446	2,895	596
029	8,128	858	96,835	14,454	3,358	860	2,882	549	6,240	1,133
030	8,281	871	110,582	15,933	2,363	549	3,081	585	5,444	938
031	2,568	489	25,324	6,768	2	2	769	262	771	262
035	8,135	867	99,416	15,943	1,689	476	2,053	454	3,742	682
036	2,855	519	23,555	5,845	0	0	453	196	453	196
037	10,258	956	130,484	16,963	3,822	709	4,130	657	7,952	1,112
038	13,197	1,098	194,268	22,120	3,136	648	3,765	628	6,901	1,038

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one DMU.
[d]See Figure 2 for the locations of DMUs.
[e]95% confidence limit.
[f]Estimates for DMU 273 were combined with estimates for DMU 073.

Appendix B (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2016, summarized by Deer Management Unit.

					Deer harvested (all seasons combined)[a]					
	Hunters[b,c]		Hunting effort (days)[b]		Antlerless		Antlered bucks		Sexes combined	
DMU[d]	No.	95% CL[e]	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
040	6,953	788	71,053	11,329	545	222	1,120	304	1,665	401
042	2,607	493	26,501	6,528	0	0	650	239	650	239
043	15,461	1,179	162,260	17,815	1,965	433	3,045	550	5,010	729
044	13,223	1,090	177,657	20,776	2,692	545	3,775	644	6,467	919
045	3,762	592	45,655	10,148	1,008	342	1,245	368	2,253	556
046	7,011	803	97,190	14,888	1,493	447	1,843	437	3,336	669
047	9,871	940	142,726	19,072	2,477	531	2,555	514	5,032	834
048	3,582	579	36,133	7,748	9	17	649	249	658	250
050	4,393	636	55,346	11,084	618	260	869	296	1,487	412
051	10,016	955	99,724	13,397	1,934	428	2,372	499	4,306	705
053	11,268	1,000	141,574	17,980	3,340	665	3,556	636	6,896	1,026
055	10,381	973	118,110	14,710	1,689	431	3,860	607	5,549	799
056	10,123	960	142,312	19,532	3,096	618	3,683	602	6,779	975
057	8,263	860	95,397	13,764	1,339	378	1,834	431	3,173	621
058	3,983	599	53,353	10,407	422	182	729	281	1,151	335
060	8,741	897	70,945	10,633	1,896	464	2,206	469	4,102	724
063	8,607	887	120,607	17,208	2,081	537	2,268	486	4,349	819
065	12,291	1,055	126,065	15,178	2,760	624	3,980	637	6,740	1,003
066	3,490	574	34,405	7,112	0	0	672	243	672	243
067	13,351	1,084	145,334	16,628	3,293	998	4,087	664	7,380	1,303
068	8,955	913	69,065	10,611	1,887	532	1,453	373	3,340	700
069	6,238	751	63,003	10,934	657	367	1,458	360	2,115	559
071	9,038	909	91,876	13,791	1,865	451	2,711	524	4,576	747
072	10,724	989	107,874	14,031	1,430	403	2,377	476	3,807	661
073[f]	7,976	846	120,951	18,716	2,078	464	2,877	538	4,955	841
074	11,749	1,024	177,410	21,643	2,630	556	2,913	557	5,543	887
081	8,770	892	125,567	17,858	1,766	442	2,479	498	4,245	759
082	1,613	391	19,370	6,564	114	99	401	224	515	245
083	10,365	965	105,576	14,205	1,487	381	1,721	418	3,208	603

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one DMU.
[d]See Figure 2 for the locations of DMUs.
[e]95% confidence limit.
[f]Estimates for DMU 273 were combined with estimates for DMU 073.

Appendix B (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2016, summarized by Deer Management Unit.

					Deer harvested (all seasons combined)[a]					
	Hunters[b,c]		Hunting effort (days)[b]		Antlerless		Antlered bucks		Sexes combined	
DMU[d]	No.	95% CL[e]	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
115	382	191	3,953	2,526	30	49	84	84	114	97
117	1,157	329	8,703	3,357	0	0	192	162	192	162
121	2,341	466	21,859	5,395	0	0	790	261	790	261
122	3,224	545	34,105	8,143	162	126	837	283	999	326
127	992	308	15,968	6,642	0	0	144	110	144	110
131	801	272	7,998	3,718	0	0	143	109	143	109
135	681	252	5,470	2,441	15	18	213	138	228	139
145	3	0	8	0	0	0	1	0	1	0
149	258	148	2,009	1,623	1	0	91	86	92	86
152	2,428	479	25,993	6,732	0	0	519	213	519	213
155	3,942	604	44,460	8,587	416	212	957	291	1,373	380
174	255	154	2,807	2,056	1	0	55	69	56	69
245	0	0	0	0	0	0	0	0	0	0
249	3,449	572	38,766	9,163	0	0	597	239	597	239
252	1,974	434	20,703	5,654	51	97	400	189	451	212
255	1,826	413	17,850	4,924	27	49	700	258	727	262
273[f]	1,776	397	22,344	7,111	319	164	557	240	876	323
311	15,198	1,176	232,170	23,637	3,657	688	4,889	722	8,546	1,141
312	16,876	1,231	232,256	23,084	5,536	822	5,557	786	11,093	1,293
332	34,429	1,718	454,564	32,653	11,552	1,383	13,443	1,207	24,995	2,063
333	9,203	912	121,084	16,713	2,380	586	2,956	565	5,336	894
341	25,348	1,480	346,573	27,964	6,043	887	7,593	891	13,636	1,424
349	1,923	423	20,353	7,030	0	0	535	214	535	214
354	25,444	1,482	307,982	26,239	7,744	1,062	10,103	1,046	17,847	1,657
361	30,554	1,619	409,633	31,433	6,655	816	9,181	961	15,836	1,406
419	26,144	1,510	373,895	30,820	7,785	1,065	8,206	923	15,991	1,589
452	8,436	875	83,262	11,723	2,144	515	2,786	528	4,930	787

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,934 deer were taken with these permits.
[b]Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.
[c]Number of hunters does not add up to statewide total because hunters can hunt in more than one DMU.
[d]See Figure 2 for the locations of DMUs.
[e]95% confidence limit.
[f]Estimates for DMU 273 were combined with estimates for DMU 073.