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MICHIGAN DEER HARVEST SURVEY REPORT 2015 SEASONS

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ABSTRACT

A survey of deer hunters was conducted following the 2015 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2015, an estimated 607,113 hunters spent 8.7 million days afield. Statewide, the number of people hunting decreased significantly by 1% between 2014 and 2015. Hunters harvested about 335,000 deer. Harvest was not significantly different from 2014. Statewide, 42% of hunters harvested a deer in 2015. About 19% of the hunters took an antlerless deer and 29% took an antlered buck in 2015. Approximately 12% of deer hunters harvested two or more deer of any type. Less than 4% of hunters statewide harvested two antlered bucks. Levels of satisfaction with numbers of deer seen, bucks seen, and number of deer taken statewide increased significantly in 2015 from 2014, while satisfaction with overall deer hunting experience was not significantly changed. Statewide, 45% of hunters were satisfied with their overall hunting experience in 2014, and satisfaction was highest in the Lower Peninsula. About 185,632 hunters used a crossbow during the 2015 archery season, and they harvested approximately 65,988 deer with the crossbow. About 8% fewer individuals purchased a deer hunting license in 2015 than ten years ago in 2005. Although the overall number of license buyers declined from 2005, an increased number of people younger than 14 years of age and people older than 50 purchased a license in 2015. Over 11% of the license buyers in 2015 were younger than 17 years old.

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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, deer pellet group surveys, 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 2014 hunting season and deer numbers. Deer hunters were also asked whether they supported the antler point restrictions that were enacted in the Upper Peninsula (UP) and Deer Management Unit (DMU) 487 (northeast Lower Peninsula).

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 2015, 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, mentored youth license, or antlerless) (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. 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.

Antler point restrictions were adopted in 2008 for the taking of antlered deer (bucks) in the UP. Under this regulation, the regular buck tag of a combination deer license could only be used to tag a buck with at least three antler points on one side. The restricted tag could only be

placed on a buck with a minimum of four points on one side. Hunters who chose to purchase only a deer license were restricted to one buck only (without any antler point restrictions) in the UP, all seasons combined.

The same antler point restrictions that were adopted in the UP in 2008 were implemented in DMU 487 in the northeast Lower Peninsula (LP) in 2010. In addition, hunters in DMU 487 could use any deer hunting license (including the combination license) to take an antlerless deer during the firearm or muzzleloader seasons. Deer Management Unit 487 included Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties.

Antler point restrictions were implemented in the 12-county area in the northwest Lower Peninsula. This area included Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Lake, Manistee, Mason, Missaukee, Osceola, or Wexford counties. All antlered deer taken in these counties had to have at least three points on one antler.

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, 149, 152, 249, 252, and 349) in the UP. A limited number of antlerless licenses were issued specifically for either public or private lands. Public land antlerless licenses were not available in all DMUs that had private land licenses. A public-land antlerless deer license was required to hunt antlerless deer on Commercial Forest land. The number of licenses available in DMUs open to antlerless deer hunting was established by the NRC (Appendix 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, except for licenses valid in DMUs 333, 452, and 487. Hunters could purchase five antlerless licenses each day for private land in DMU 487 and could purchase five public land antlerless licenses each day in DMU 452. An unlimited number of antlerless licenses could be purchased per day for DMU 333. Furthermore, hunters were limited to a maximum of five private land antlerless deer licenses for the entire year, except for DMUs 019, 033, 078, 333, and 487. Hunters were limited to ten private land licenses in DMU 487. There was no seasonal limit for the

number of private lands licenses that could be purchased in DMU 019, 033, 078, and 333. 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 disease, crop damage, or deer abundance). 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 19-20 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,

2015, through January 1, 2016). 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 15-18, 2015. 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 4-13 in the UP and Northern LP, and December 4-20 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 19-20. 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 35 counties in the LP (Alcona, Alpena, Antrim, Arenac, Bay, Benzie, Charlevoix, Clinton, Genesee, Grand Traverse, Hillsdale, Huron, Iosco, Ingham, Isabella, Jackson, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Manistee, Midland, Monroe, Montmorency, Oakland, Oscoda, Presque Isle, St. Clair, Saginaw, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne). Three more counties were open in 2015 than 2014.

The late antlerless firearm season occurred from December 21, 2015, through January 1, 2016. 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 19 additional counties: Allegan, Barry, Berrien, Branch, Calhoun, Cass, Eaton, Gratiot, Ionia, Kalamazoo, Kent, Mecosta, Montcalm, 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 (132,905). Hunters reported whether they hunted, the days spent afield, and whether they harvested a deer. Deer hunters were also asked whether they supported the antler point restrictions in the UP and DMU 487. Following the 2015 deer hunting seasons, a questionnaire was sent to 59,966 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 = 408,700). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 185,414). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and Liberty seasons (N = 48,915). The fourth stratum consisted of 6,920 people that were eligible to participate in the special disabled hunts. Beginning in 2013, disabled veterans could obtain a free deer hunting license (i.e., Disabled Veteran license type). A unique type of hunting license was not available for non-veteran hunters with disabilities; however, disabled hunters younger than 65 years were sold a discounted hunting license (i.e., sold a senior hunting license). The fifth stratum consisted of 4,630 people that had voluntarily reported information about their hunting activity via the Internet before the random sample was selected. The random sample consisted of 29,239 people from the first stratum; 12,727 from the second stratum; 11,399 from the third stratum; and 6,601 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 2016, 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 59,966 people were sent the questionnaire, 1,458 surveys were undeliverable resulting in an adjusted sample size of 58,508. Questionnaires were returned by 28,826 people (49% 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 2015 estimates to make them comparable to the adjusted 2014 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 6.7%, 5.0%, and 2.0%, respectively, to make estimates comparable to 2014. These reductions reflected the average decline noted between estimates calculated when 51% and 74% of the responses were used in 2000 and 2001 surveys.

RESULTS

In 2015, 654,579 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2015 decreased by 1.5% from 2014 (664,762 people purchased a license in 2014). Most of the people buying a license were male (89%), and the average age of license buyers was 43 years (Figure 3). Over 11% (74,600) of the license buyers were younger than 17 years old. About 4% (23,942) of the license buyers were younger than 12 years old.

The number of people buying a license in 2015 was about 8% less than the number of people who purchased a license ten years ago in 2004 (712,466 people purchased a license in

2005). There were fewer license buyers for all age classes between 14 and 52 years of age in 2015, compared to 2005 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2015. 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 2005.

The number of 2015 deer harvest tags sold for all license types combined decreased by 1.5% from 2014 (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 (263,419 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 434,000 in 2014 to 435,400 licenses in 2015 (Appendix A). The quota for public land antlerless licenses also increased slightly from 58,500 to 58,700 between 2014 and 2015. Although the antlerless license quota was nearly the same in both 2014 and 2015, the number of antlerless licenses sold declined by nearly 2% in 2015 (Table 2).

About 92.7 $\pm$ 0.3% (607,113 hunters) of the people buying a license in 2015 actually spent time hunting deer (Table 3). Statewide, the number of people hunting deer during all seasons combined was about 1% lower than hunter numbers in 2014. Most hunters (541,874) pursued deer during the regular firearm season (Figure 8).

Significantly fewer people hunted during the regular firearm season (-1%) during 2015 (Table 3). The numbers of people hunting in the archery, muzzleloader, early antlerless, late antlerless, Liberty and Independence seasons were not significantly different between 2014 and 2015 (Figure 9).

About 49% of the days hunters spent pursuing deer throughout the state occurred in the archery season (Figure 10). About 40% of the hunting effort occurred during the regular firearm season. Nearly 11% of the hunting effort occurred in the muzzleloader and late antlerless seasons combined. Statewide, hunters devoted an average of 15.1 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 ($\bar{x}$ = 14.0 days/hunter) (Figure 11, Table 4). For every season, and for all seasons combined, there was no significant difference between hunting effort in 2014 and 2015.

About 334,612 deer were harvested statewide in 2015, which was not significantly different than in 2014 (Figures 12-13, Tables 5-6). Although statewide harvest was similar between

years, harvest in the UP declined by 23% in 2015. Statewide harvest of antlerless deer in 2015 was not significantly different from 2014, while harvest of antlered deer increased by nearly 8% from 2014 (Table 5). Between 2014 and 2015, harvest of antlered deer increased significantly during the archery (11%) and Liberty (27%) seasons, but was unchanged in other seasons. Statewide harvest of antlerless deer decreased significantly in the archery (11%) season but was unchanged in other seasons.

About 54% of the deer harvested (sexes combined) in 2015 were taken during the regular firearm season (Figure 14). Nearly 45% of the antlerless deer and 62% of the antlered bucks were harvested in the regular firearm season. Hunters took 34% of the harvested deer (sexes combined) during archery season. These archers took 31% of the antlerless deer and 36% of the antlered bucks harvested. Few antlered bucks (3%) were taken in the muzzleloader season. The early and late antlerless and muzzleloader seasons combined accounted for about 11% of the antlerless deer harvested.

About 87% of the animals harvested (sexes combined) in 2015 were taken on private lands (Table 7). Statewide, most of the antlerless deer (88%) and antlered bucks (86%) were harvested on private lands.

Statewide, 42% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2015 (Figure 15, Table 8), compared to the 41% successful in 2014. About 19% of hunters took an antlerless deer, and 29% took an antlered buck in 2014. About 12% of deer hunters harvested two or more deer.

Hunters were most successful in taking a deer during the Liberty (37%), archery (30%), and regular firearm (29%) seasons (Figure 16, Table 9). Hunter success was lowest in the muzzleloader (11%) 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) number of deer taken, and (4) their overall hunting experience. Statewide, ≤45% of hunters were satisfied with numbers of deer seen, bucks seen, deer taken, and their overall hunting experience in 2015 (Tables 10-11). Statewide levels of satisfaction increased significantly for all measures except number of deer harvested between 2014 and 2015. People hunting deer only on private lands were generally less satisfied than people hunting only on public lands (Tables 12-13).

Statewide, about 62% of hunters supported the antler point restrictions on buck harvest implemented for the UP (Table 14), and about 64% of the hunters that preferred to hunt in the UP supported the antler point restrictions. Statewide support for the restrictions significantly increased between 2014 and 2015.

Statewide, about 50% of hunters supported the antler point restrictions on buck harvest implemented for the DMU 487 (Table 15), and about 58% of the hunters that preferred to hunt in the northeast LP supported the restrictions. Statewide support for the restrictions in

DMU 487 was significantly increased, and opposition decreased significantly between 2014 and 2015 (decreased from 19% to 15%).

Satisfaction levels among people hunting deer in the 12-county area in the northwest Lower Peninsula where antler point restrictions were implemented in 2013 were similar to hunters throughout the NLP (Tables 16).

About 185,632 hunters used a crossbow during the archery season, and they harvested about 65,988 deer with the crossbow (Tables 17-19). The number of archers using a crossbow increased significantly by 6% from 2014 (174,558 archers in 2014). Harvest of deer by archers using a crossbow increased significantly by 11% from last year (59,266 deer taken in 2014). About 32% of these archers using a crossbow in 2015 harvested a deer with a crossbow in the archery season.

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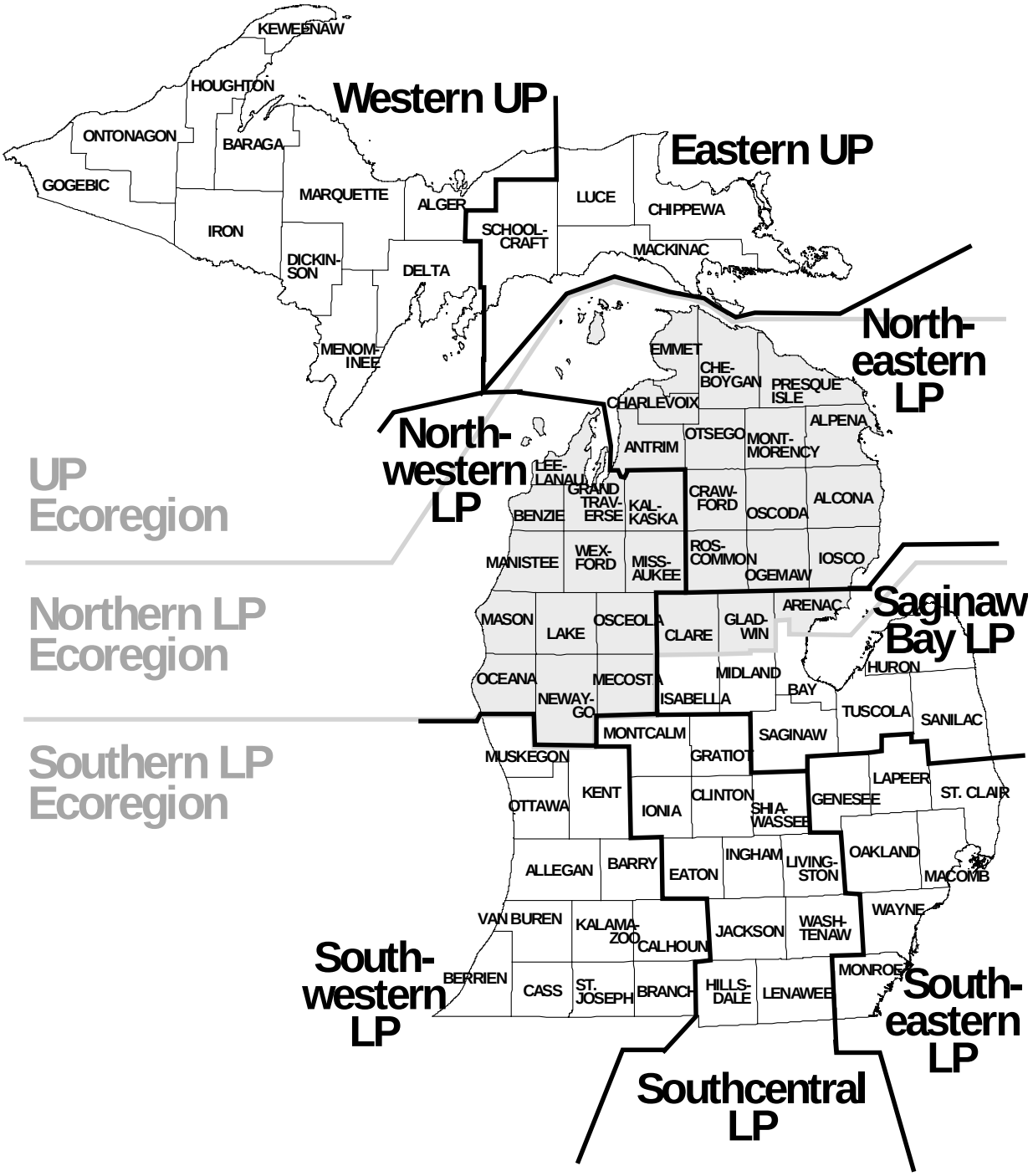


Figure 1. Areas used to summarize deer harvest in Michigan for the 2015 hunting seasons.

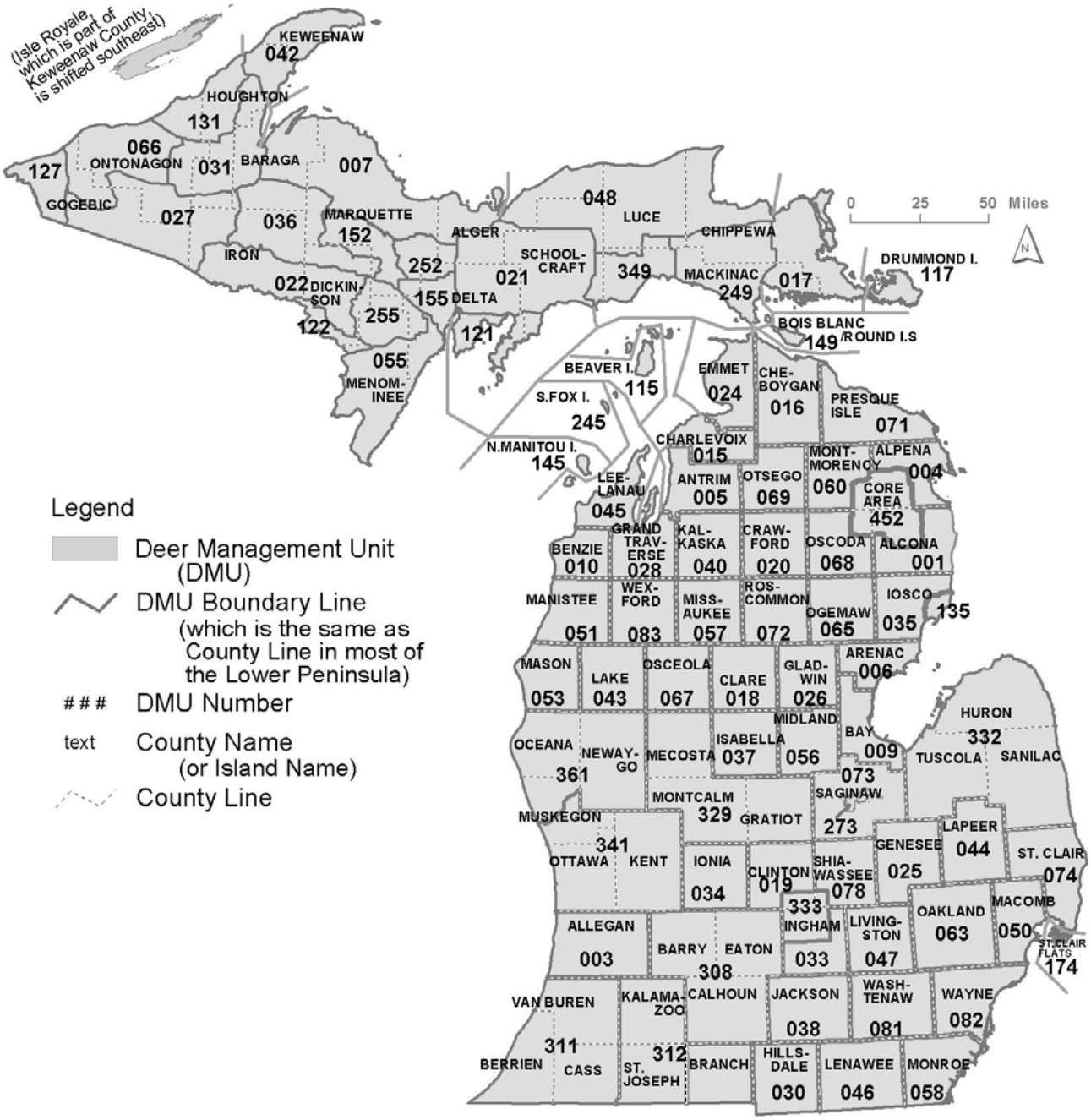


Figure 2. Deer Management Units in Michigan for the 2015 hunting seasons.

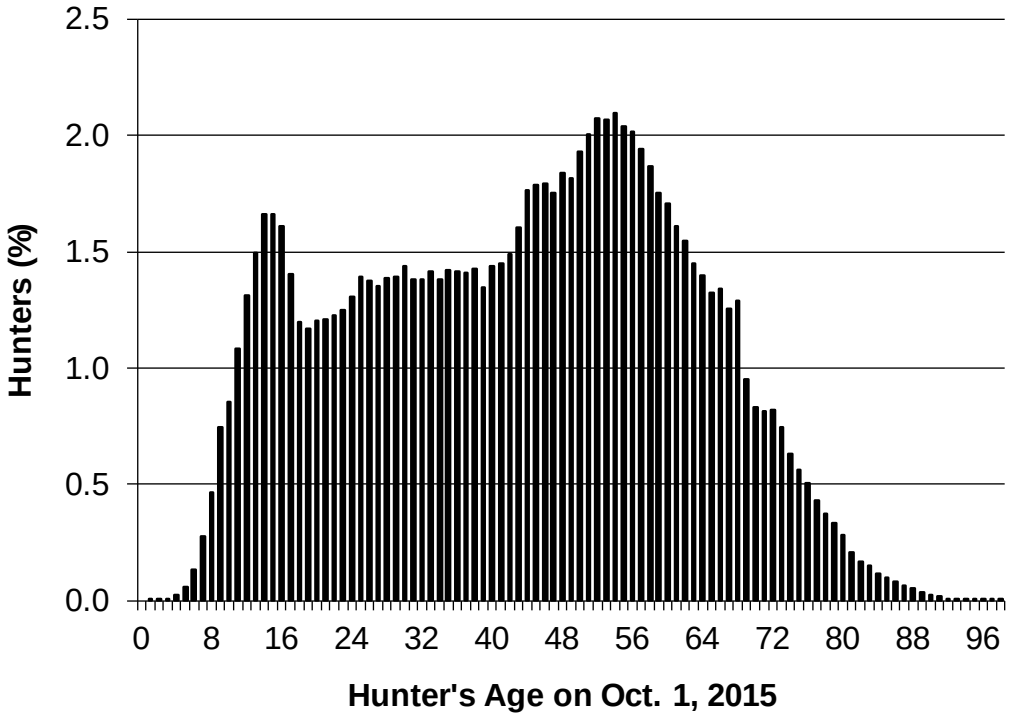


Figure 3. Age of people that purchased a deer hunting license in Michigan for the 2015 hunting seasons ($\bar{x}$ = 43 years).

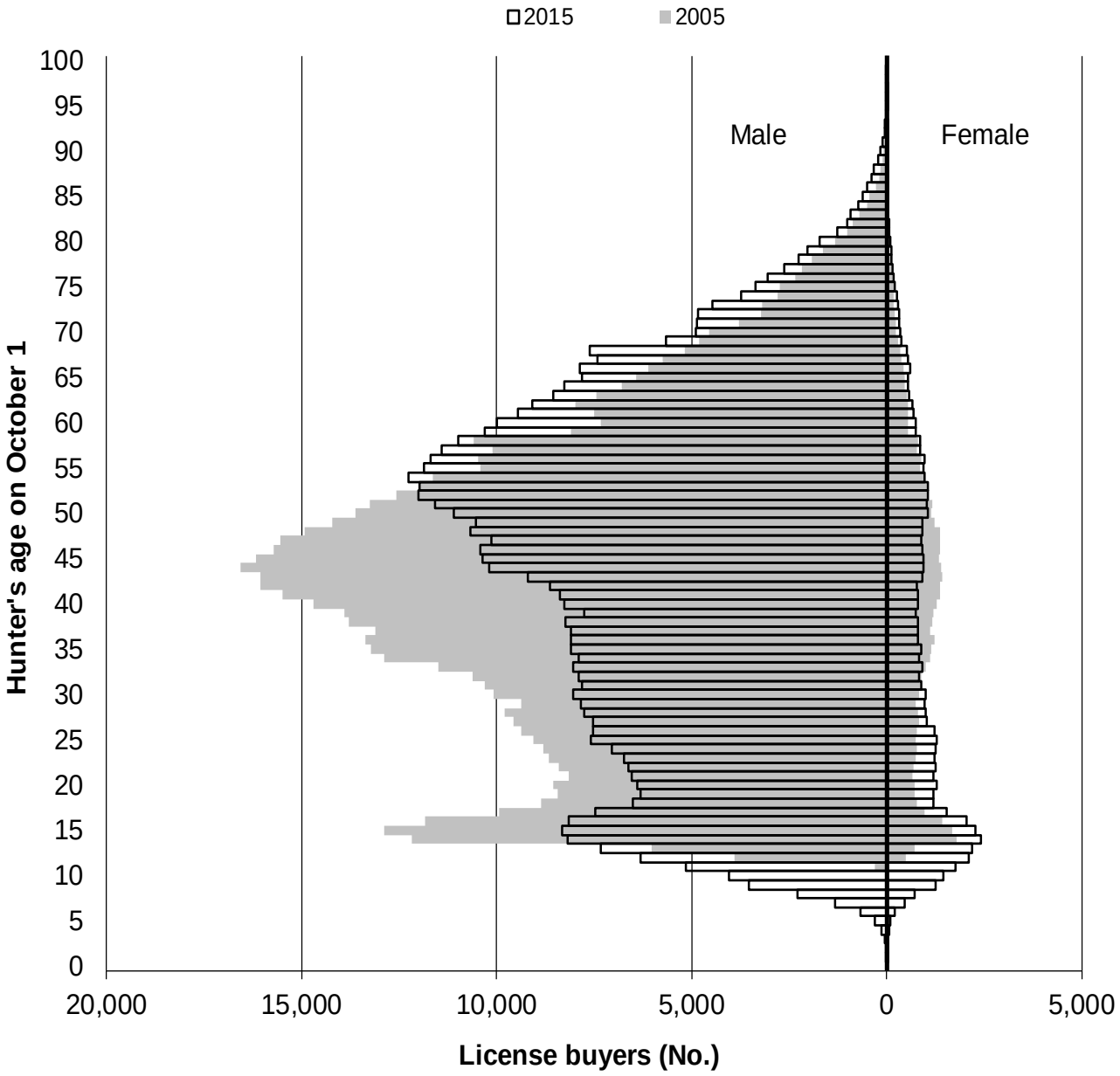


Figure 4. Number of deer hunting license buyers in Michigan by age and sex during 2005 and 2015 hunting seasons. Deer hunting licenses were purchased by 712,466 people in 2005 and 654,579 people in 2015.

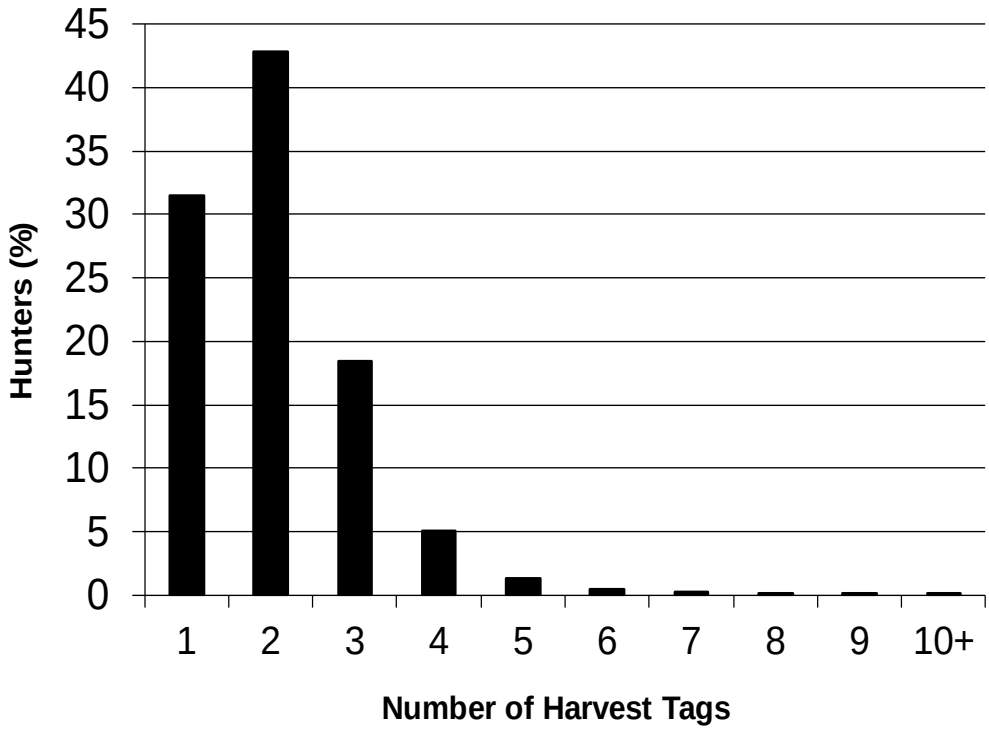


Figure 5. Number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2015 hunting seasons ($\bar{x}$ = 2.1 tags). Licenses were purchased by 654,579 people.

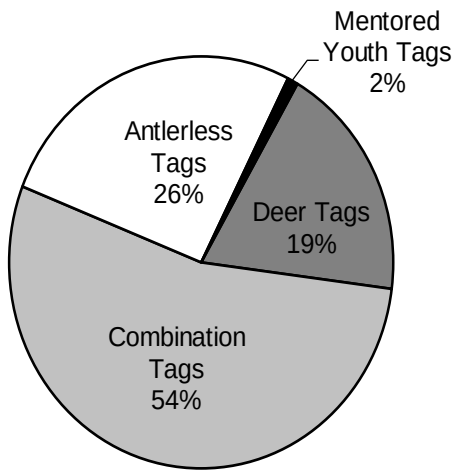


Figure 6. Types of harvest tags issued for deer hunting in Michigan during the 2015 hunting seasons.

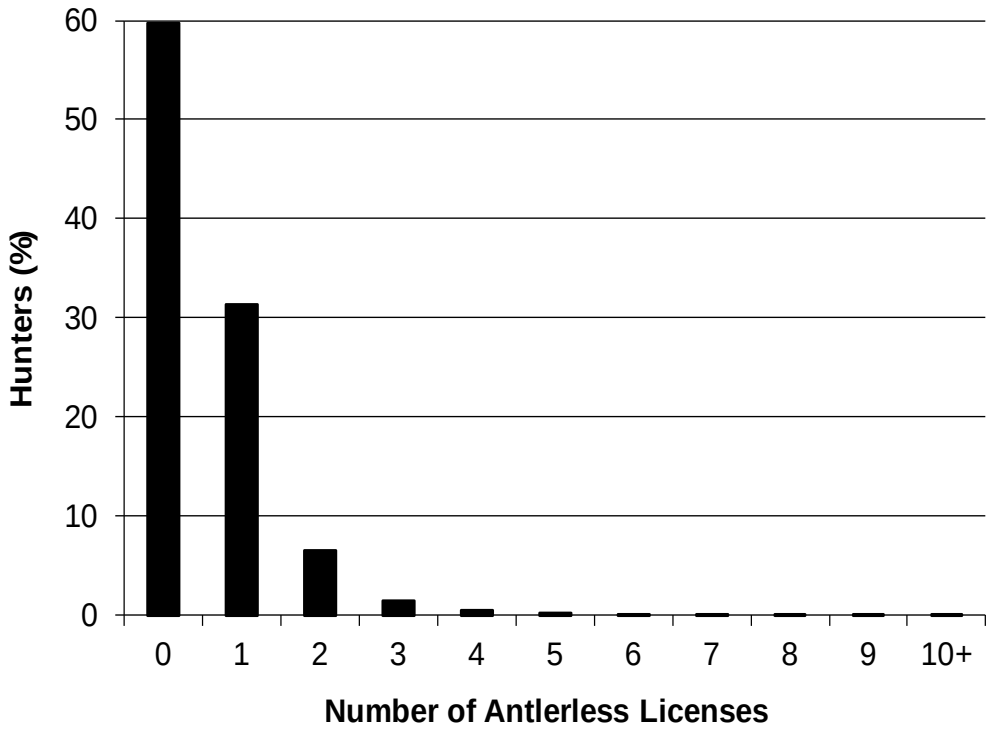


Figure 7. Percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2015. Antlerless licenses were purchased by 263,419 of 654,579 people (40%) buying deer hunting licenses.

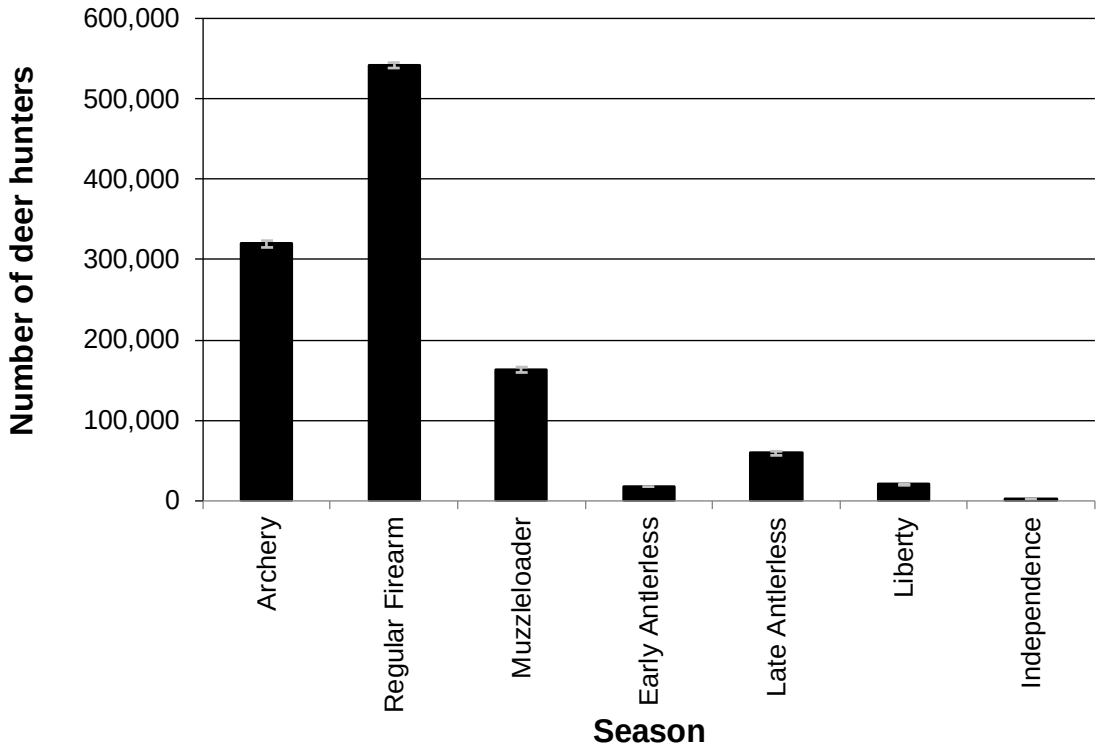


Figure 8. Number of people hunting deer in Michigan during the 2015 hunting seasons. Error bars represent the 95% CLs.

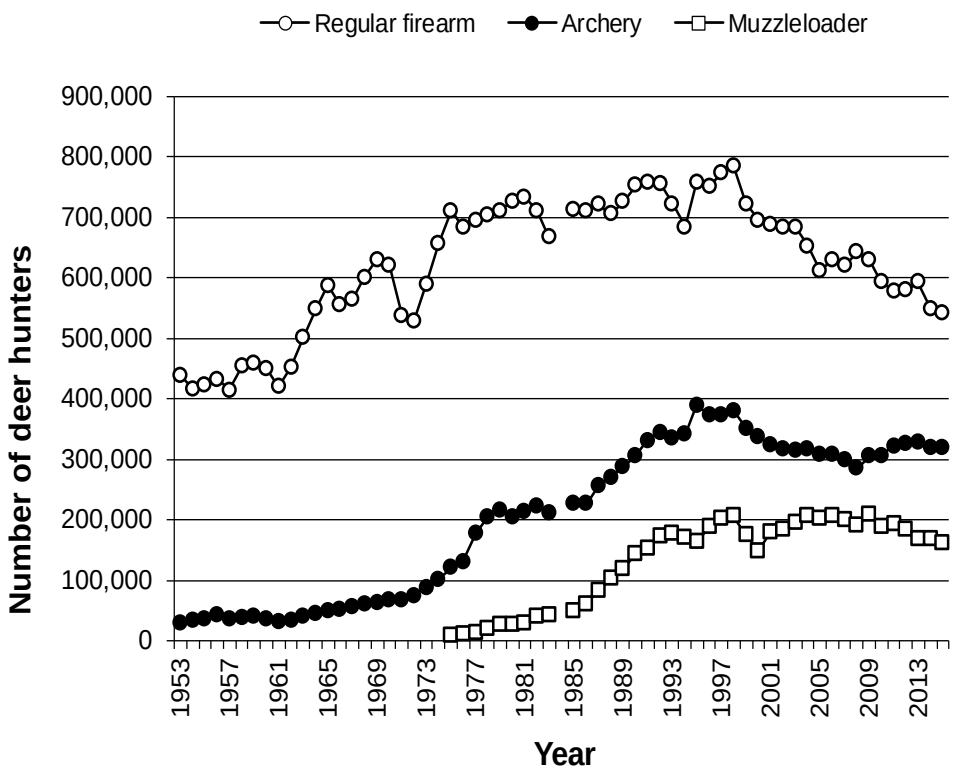


Figure 9. Number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2015.

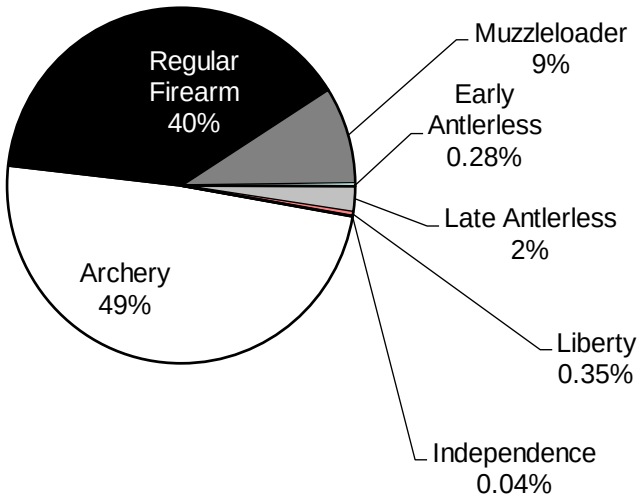


Figure 10. Distribution of hunting effort among deer hunting seasons in Michigan, 2015.

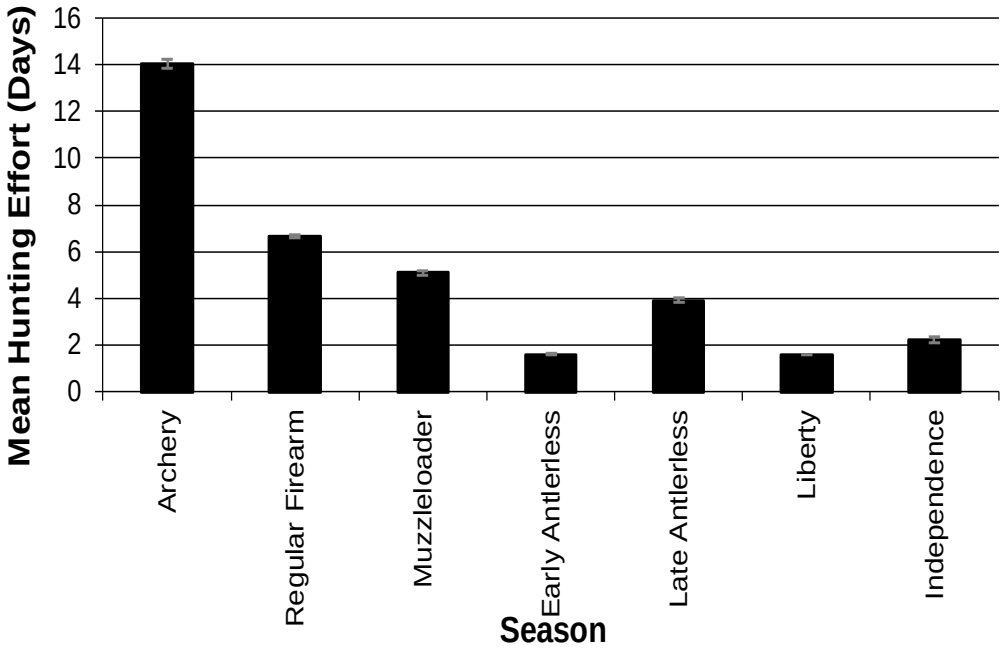


Figure 11. Mean number of days per hunter spent hunting deer in Michigan during the 2015 hunting seasons. Error bars represent the 95% CLs.

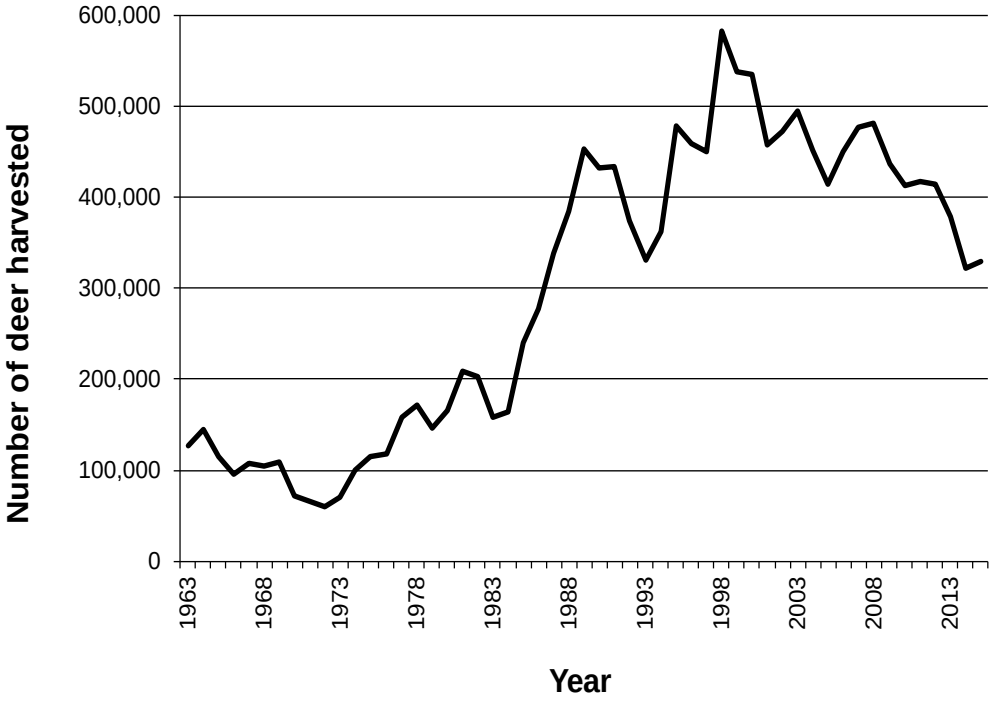


Figure 12. Number of deer harvested in Michigan's hunting seasons, 1963-2015. Harvest from all seasons and for all deer sexes was combined.

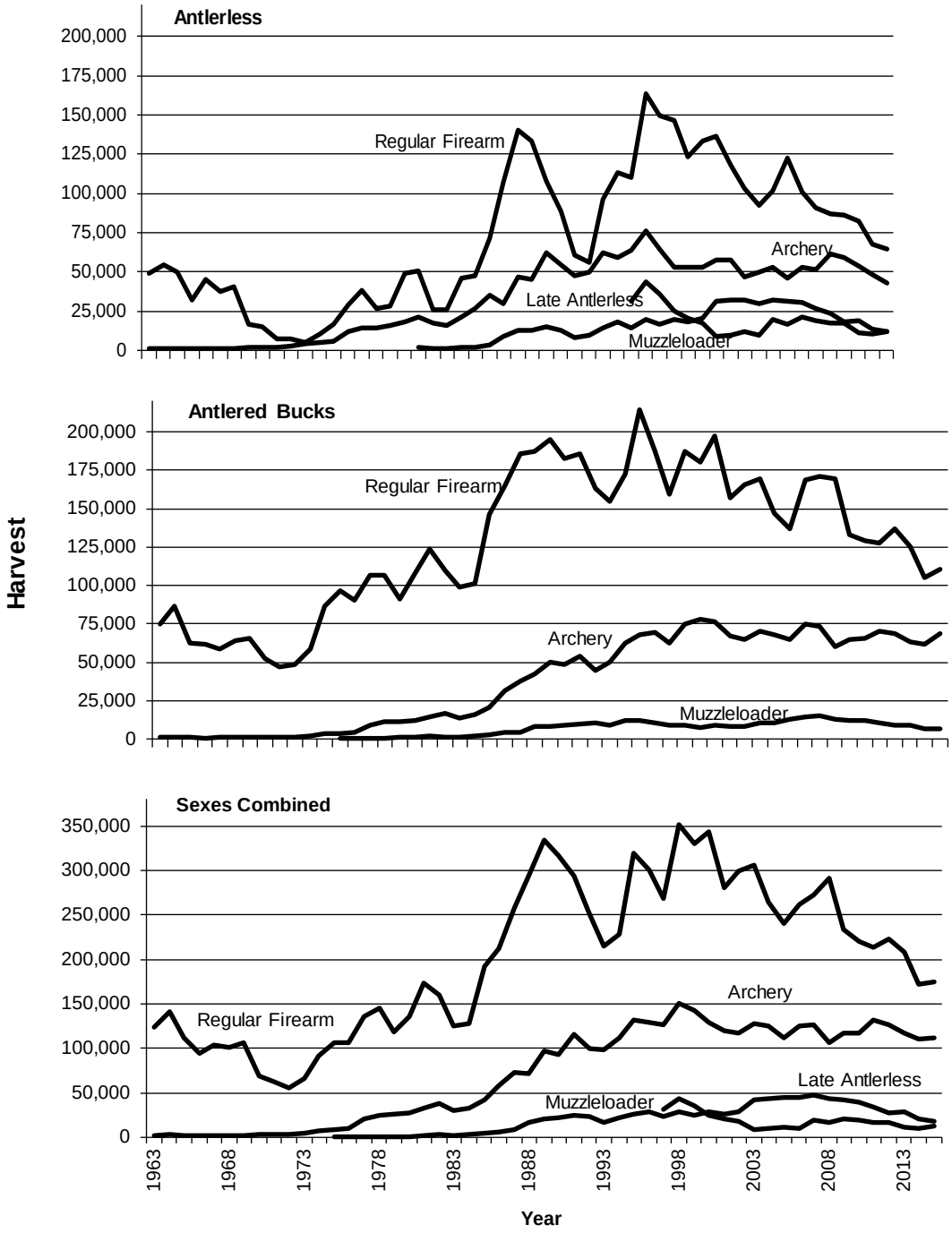


Figure 13. Number of deer harvested in Michigan's hunting seasons, 1963-2015. Harvests for early antlerless, youth, and special disabled hunter seasons were not shown.

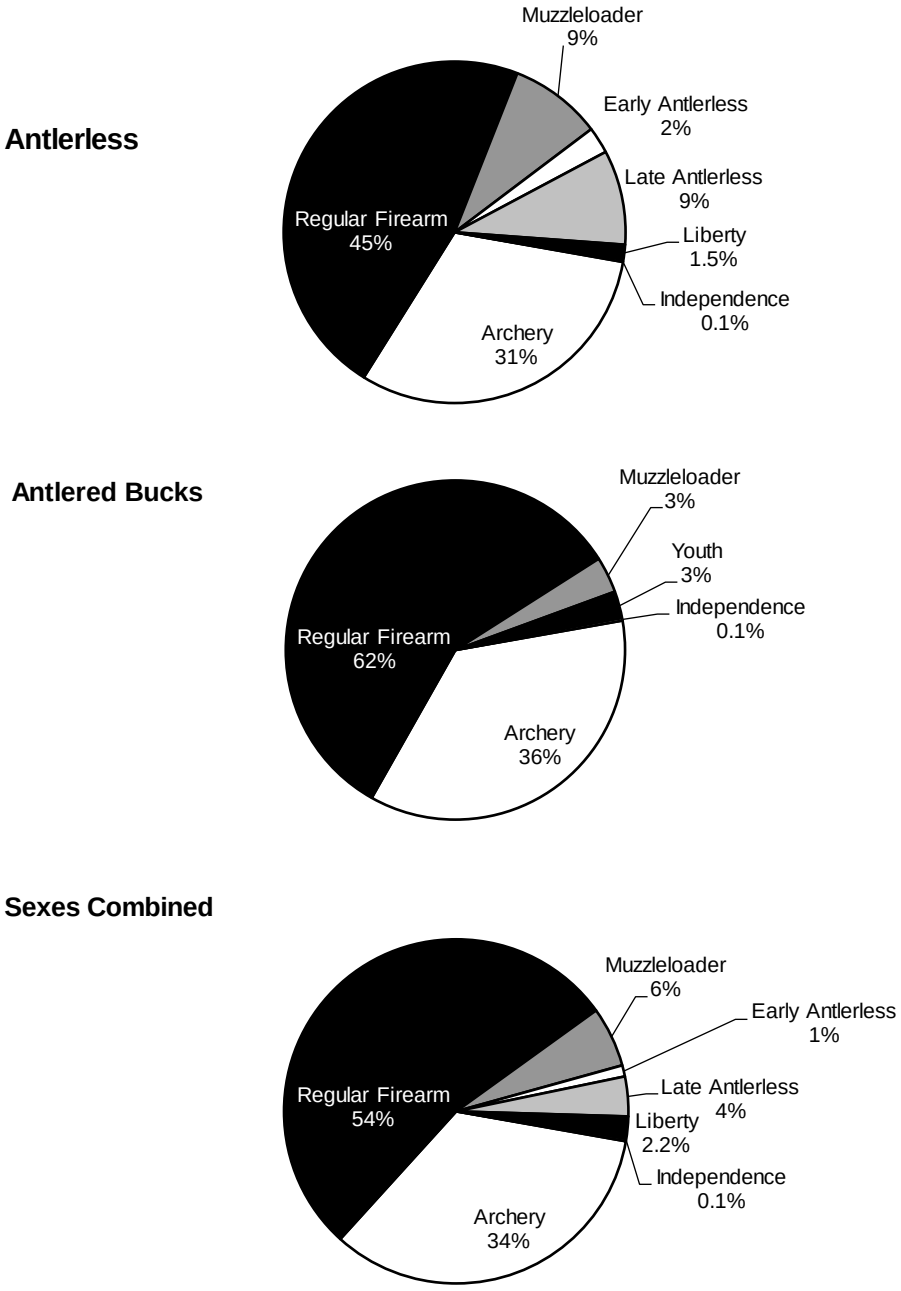


Figure 14. Distribution of harvest among deer hunting seasons in Michigan, 2015. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

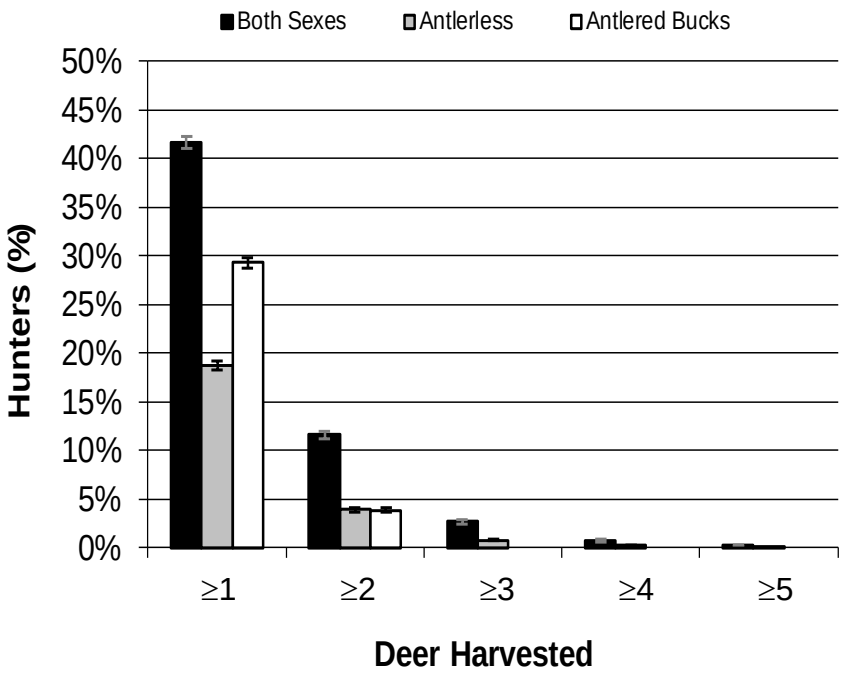


Figure 15. Percentage of hunters harvesting a deer in Michigan, 2015. Error bars represent the 95% CLs.

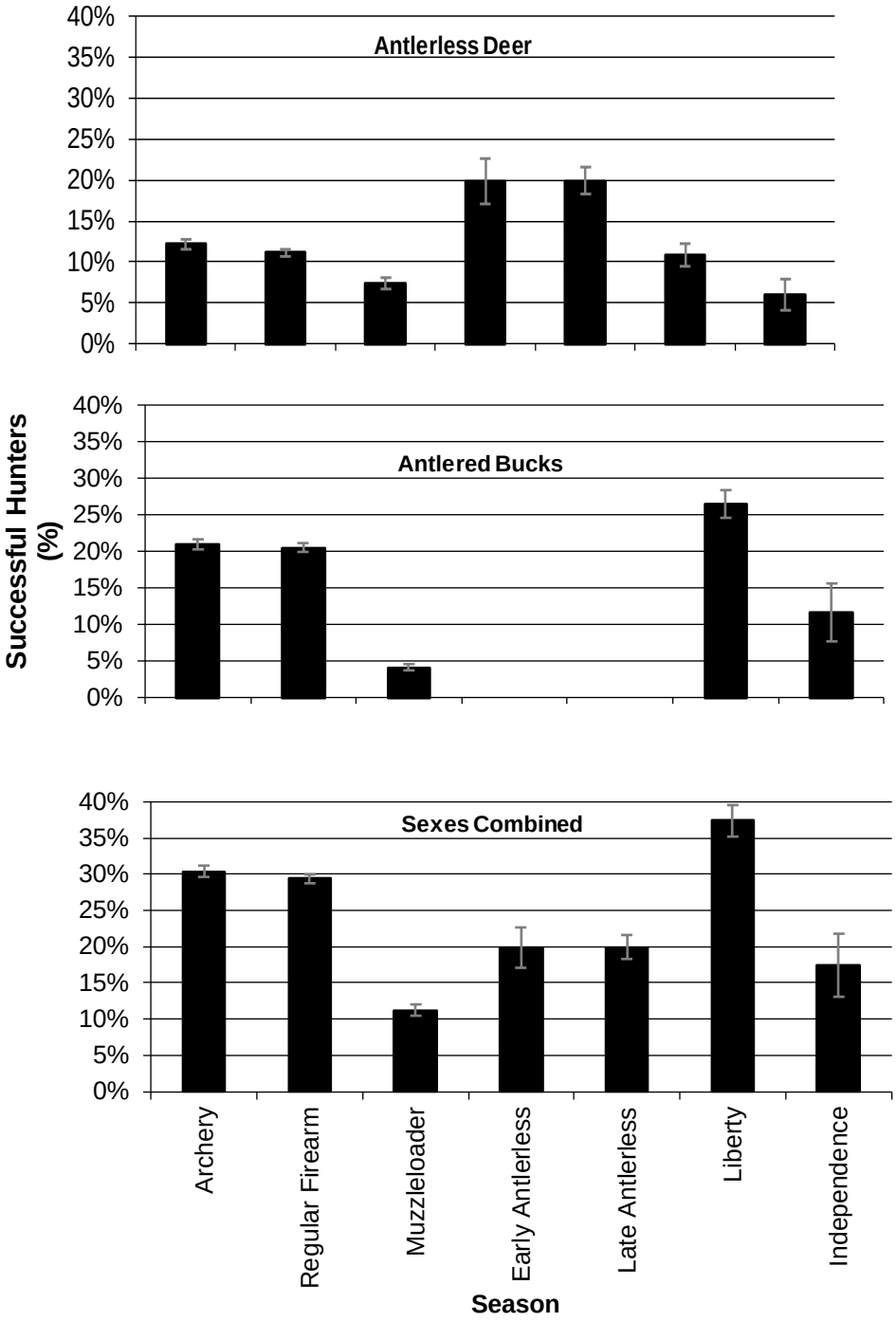


Figure 16. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2015. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

Table 1. Type of deer that could be taken during the 2015 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 2015 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 (firearm, archery 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, 2013-2015.

Licenses or Harvest Tags	Number Purchased or Issued 2013	2014	2015	Change Between 2014 and 2015 (%)
Firearm Licenses[a]				
Resident	187,757	0	0	NA
Non-resident	13,452	0	0	NA
Senior	36,411	0	0	NA
Junior	23,964	0	0	NA
Active Military	1,568	0	0	NA
Disabled Veteran	753	0	0	NA
Subtotal	263,905	0	0	NA
Archery Licenses[a]				
Resident	40,146	0	0	NA
Non-resident	3,365	0	0	NA
Junior	3,584	0	0	NA
Senior	6,916	0	0	NA
Active Military	494	0	0	NA
Disabled Veteran	283	0	0	NA
Subtotal	54,788	0	0	NA
Deer Licenses[a]				
Resident	0	164,670	164,680	0.0%
Non-resident	0	13,611	13,414	-1.4%
Junior	0	37,801	36,224	-4.2%
Senior	0	35,569	37,198	4.6%
Lifetime	0	509	444	-12.8%
Active Military	0	570	533	-6.5%
Disabled Veteran	0	381	425	11.5%
Subtotal	0	253,111	252,918	-0.1%
Combination Licenses[b]				
Resident	282,328	286,400	283,366	-1.1%
Non-resident	2,289	3,510	3,547	1.1%
Junior	46,622	27,845	23,957	-14.0%
Senior	43,440	41,130	41,896	1.9%
Lifetime	NA	1,085	125	-88.5%
Active Military	3,498	5,389	5,565	3.3%
Disabled Veteran	2,910	5,385	6,272	16.5%
Subtotal	381,087	370,744	364,728	-1.6%
Antlerless Licenses				
Resident	405,313	278,180	272,271	-2.1%
Non-resident	2,134	3,414	3,807	11.5%
Junior	4,354	23,096	21,529	-6.8%
Senior	0	40,417	40,903	1.2%
Lifetime	NA	182	177	-2.7%
Active Military	4,295	4,536	4,445	-2.0%
Pure Michigan Hunt	3	3	3	0.0%
Disabled Veteran	1,954	4,023	4,775	18.7%
Deer Management Assistance	8,981	9,797	9,040	-7.7%
Managed Deer Hunt	185	629	558	-11.3%
Subtotal	427,219	364,277	357,508	-1.9%
Mentored Youth Licenses[b]	12,384	12,959	11,935	-7.9%
Total Licenses Sold	1,139,383	1,001,091	987,089	-1.4%

[a]The separate firearm and archery deer licenses available in 2013 were replaced by the single deer license in 2014.
[b]Combination and Mentored Youth (prior to 2014) licenses included two harvest tags. Other license types had one harvest tag.

Table 2 (Continued). Michigan deer licenses purchased and harvest tags issued, 2013-2015.

Licenses or Harvest Tags	Number Purchased or Issued 2013	2014	2015	Change Between 2014 and 2015 (%)
Harvest Tags Issued				
Firearm[a]	263,905	0	0	NA
Archery[a]	54,788	0	0	NA
Deer[a]	0	253,111	252,918	-0.1%
Combination[b]	762,174	741,488	729,456	-1.6%
Antlerless	427,219	364,277	357,508	-1.9%
Mentored Youth[b]	24,768	12,959	11,935	-7.9%
Total Harvest Tags	1,532,854	1,371,835	1,351,817	-1.5%

[a]Firearm and Archery license types were replaced in 2014 with a Deer license.
[b]Combination and Mentored Youth (prior to 2014) 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, 2014-2015.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)
Archery								
West UP	21,480	19,559	1,362	-8.9	239,815	242,522	22,748	1.1
East UP	7,319	5,766	754	-21.2	76,690	57,304	10,527	-25.3
NE LP	48,510	49,350	2,120	1.7	485,824	548,135	34,107	12.8
NW LP	62,660	63,266	2,359	1.0	780,213	788,893	40,653	1.1
Sag. Bay	53,569	53,832	2,198	0.5	695,319	646,497	36,137	-7.0
SW LP	54,061	53,278	2,188	-1.4	714,355	699,514	38,190	-2.1
SC LP	63,045	64,006	2,369	1.5	837,619	836,935	41,518	-0.1
SE LP	36,029	36,299	1,834	0.7	456,767	465,962	31,802	2.0
UP	28,543	25,213	2,517	-11.7	316,505	299,826	25,066	-5.3
NLP	126,662	128,249	3,767	1.3	1,480,503	1,551,987	57,223	4.8
SLP	182,557	183,504	3,640	0.5	2,489,593	2,433,949	71,001	-2.2
Statewide[c]	320,243	319,849	3,939	-0.1	4,286,602	4,285,762	95,307	0.0
Regular Firearm								
West UP	54,946	59,840	2,274	8.9*	381,453	443,230	20,289	16.2*
East UP	18,731	16,475	1,262	-12.0	115,150	111,088	9,891	-3.5
NE LP	102,036	100,291	2,890	-1.7	591,885	584,895	21,511	-1.2
NW LP	107,380	105,307	2,922	-1.9	615,696	609,648	21,785	-1.0
Sag. Bay	84,222	82,139	2,649	-2.5	502,746	468,204	19,135	-6.9
SW LP	75,247	74,231	2,522	-1.3	471,190	450,179	19,364	-4.5
SC LP	91,532	90,953	2,726	-0.6	553,207	538,799	21,072	-2.6
SE LP	39,786	37,532	1,869	-5.7	233,417	214,590	13,259	-8.1
UP	73,181	76,058	1,540	3.9	496,603	554,318	22,572	11.6*
NLP	233,981	230,163	3,160	-1.6	1,374,449	1,351,415	32,531	-1.7
SLP	256,673	250,539	3,500	-2.4	1,593,691	1,514,899	35,213	-4.9*
Statewide[c]	549,222	541,874	2,754	-1.3*	3,464,744	3,420,633	53,405	-1.3

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2015 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, 2014-2015.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)
Muzzleloader								
West UP	11,735	13,668	1,147	16.5	57,527	69,958	6,568	21.6
East UP	3,650	3,975	628	8.9	17,893	19,893	3,502	11.2
NE LP	18,521	19,071	1,363	3.0	74,927	75,860	6,247	1.2
NW LP	22,729	21,009	1,420	-7.6	96,225	85,759	6,892	-10.9
Sag. Bay	28,330	24,445	1,530	-13.7*	130,226	109,393	8,325	-16.0*
SW LP	31,675	30,921	1,712	-2.4	166,193	157,206	10,784	-5.4
SC LP	36,180	34,237	1,792	-5.4	184,962	170,991	10,992	-7.6
SE LP	16,943	16,712	1,280	-1.4	84,516	84,775	7,856	0.3
UP	15,328	17,560	1,296	14.6	75,420	89,851	7,444	19.1*
NLP	48,679	45,830	2,058	-5.9	202,903	186,946	9,982	-7.9
SLP	102,570	97,522	2,799	-4.9	534,147	497,038	18,843	-6.9
Statewide[c]	167,765	162,034	3,428	-3.4	812,469	773,835	22,823	-4.8
Early Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	2,999	2,645	491	-11.8	4,919	4,020	773	-18.3
NW LP	655	1,002	289	53.0	964	1,645	465	70.6%
Sag. Bay	5,713	4,670	615	-18.3	9,118	7,184	979	-21.2
SW LP	0	0	0		0	0	0	
SC LP	3,179	4,257	612	33.9	4,518	6,505	944	44.0*
SE LP	4,670	3,090	522	-33.8*	6,874	4,761	811	-30.7*
UP	0	0	0		0	0	0	
NLP	4,046	4,077	599	0.8	6,487	6,289	948	-3.0
SLP	13,106	11,509	978	-12.2	19,906	17,826	1,556	-10.4
Statewide[c]	18,503	17,397	599	-6.0	26,393	24,115	1,875	-8.6

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2015 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, 2014-2015.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)
Late Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	5,070	5,223	725	3.0	16,241	17,396	2,926	7.1
NW LP	4,607	4,980	694	8.1	15,216	18,929	3,279	24.4
Sag. Bay	9,785	9,217	945	-5.8	33,558	34,200	4,251	1.9
SW LP	14,404	13,099	1,123	-9.1	51,719	45,810	4,852	-11.4
SC LP	18,147	17,341	1,285	-4.4	62,854	63,120	5,750	0.4
SE LP	8,949	7,003	839	-21.7*	31,038	23,122	3,419	-25.5*
UP	0	0	0		0	0	0	
NLP	10,186	10,837	1,024	6.4	33,338	38,685	4,508	16.0
SLP	49,988	45,519	1,972	-8.9*	177,289	163,892	9,239	-7.6
Statewide[c]	63,251	58,929	2,186	-6.8	210,627	202,577	10,520	-3.8
Liberty[d]								
West UP	1,350	1,335	257	-1.1	2,186	2,014	408	-7.9
East UP	336	176	74	-47.5	482	318	132	-34.0
NE LP	2,606	2,397	318	-8.0	4,196	3,845	545	-8.4
NW LP	4,949	4,592	425	-7.2	7,757	7,121	724	-8.2
Sag. Bay	3,607	3,772	387	4.6	5,576	5,797	638	3.9
SW LP	2,331	2,416	317	3.7	3,640	3,691	531	1.4
SC LP	3,129	3,494	375	11.7	4,785	5,095	598	6.5
SE LP	1,717	1,815	310	5.7	2,688	2,786	499	3.7
UP	1,686	1,512	267	-10.3	2,667	2,331	429	-12.6
NLP	8,793	8,219	557	-6.5	13,941	12,735	965	-8.7
SLP	9,522	10,185	630	7.0	14,702	15,599	1,089	6.1
Statewide[c]	20,516	20,479	828	-0.2	31,310	30,665	1,528	-2.1

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2015 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, 2014-2015.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)	2014	2015	95% CL[b]	Change from 2014 to 2015 (%)
Independence								
West UP	121	100	56	-17.4	301	160	38	-46.8
East UP	62	29	10	-52.3	163	95	31	-42.0
NE LP	183	208	83	13.8	510	483	169	-5.2
NW LP	387	305	80	-21.3	651	600	122	-7.8
Sag. Bay	521	280	74	-46.2	919	536	135	-41.7
SW LP	300	207	115	-30.9	635	589	333	-7.3
SC LP	357	389	144	8.9	779	777	301	-0.2
SE LP	186	105	38	-43.7	355	259	98	-27.1
UP	182	129	57	-29.2	464	255	49	-45.1
NLP	772	586	118	-24.1	1,617	1,225	211	-24.2
SLP	1,161	908	200	-21.8	2,232	2,019	477	-9.5
Statewide[c]	2,309	1,826	265	-20.9	4,313	3,499	528	-18.9
All Seasons								
West UP	62,495	64,778	2,348	3.7	681,151	757,943	40,155	11.3
East UP	22,320	18,842	1,345	-15.6*	210,346	188,685	19,116	-10.3
NE LP	117,165	114,413	3,035	-2.3	1,178,480	1,234,877	52,084	4.8
NW LP	125,088	123,276	3,094	-1.4	1,517,580	1,513,510	60,119	-0.3
Sag. Bay	100,478	98,252	2,841	-2.2	1,377,485	1,271,606	56,265	-7.7
SW LP	91,512	89,634	2,728	-2.1	1,407,424	1,356,766	60,469	-3.6
SC LP	111,700	110,826	2,939	-0.8	1,648,342	1,621,555	65,563	-1.6
SE LP	54,613	53,792	2,191	-1.5	815,650	796,145	47,148	-2.4
UP	84,099	83,174	2,607	-1.1	891,497	946,628	44,473	6.2
NLP	268,548	263,892	3,848	-1.7	3,114,296	3,150,722	85,446	1.2
SLP	311,748	306,625	3,707	-1.6	4,830,665	4,643,737	111,219	-3.9
Statewide[c]	614,593	607,113	1,730	-1.2*	8,836,458	8,741,086	148,324	-1.1

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2015 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, 2015.[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	12.7	0.8	7.6	0.2	5.2	0.2	0.0	0.0
East UP	9.9	1.3	6.8	0.3	5.1	0.4	0.0	0.0
NE LP	11.3	0.5	6.0	0.1	4.1	0.2	1.7	0.1
NW LP	12.7	0.4	5.9	0.1	4.2	0.2	1.6	0.1
Sag. Bay	12.2	0.5	5.8	0.1	4.6	0.2	1.6	0.1
SW LP	13.4	0.5	6.2	0.1	5.3	0.2	0.0	0.0
SC LP	13.5	0.4	6.1	0.1	5.2	0.2	1.5	0.1
SE LP	13.2	0.6	6.0	0.2	5.3	0.3	1.6	0.1
UP	12.1	0.7	7.4	0.1	5.2	0.2	0.0	0.0
NLP	12.3	0.3	6.0	0.1	4.2	0.1	1.6	0.1
SLP	13.6	0.3	6.2	0.1	5.3	0.1	1.6	0.0
Statewide	14.0	0.2	6.7	0.1	5.1	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, 2015.[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	2.2	0.2	11.9	0.5
East UP	0.0	0.0	1.7	0.2	3.1	0.3	10.0	0.7
NE LP	3.7	0.3	1.7	0.1	2.3	0.2	11.0	0.4
NW LP	3.9	0.4	1.6	0.0	2.0	0.3	12.4	0.4
Sag. Bay	3.9	0.3	1.6	0.0	2.1	0.2	13.1	0.4
SW LP	3.8	0.2	1.6	0.1	2.7	0.5	15.4	0.5
SC LP	3.8	0.2	1.5	0.1	2.0	0.3	15.1	0.4
SE LP	3.8	0.3	1.5	0.1	2.4	0.4	15.2	0.6
UP	0.0	0.0	1.6	0.1	2.4	0.2	11.5	0.4
NLP	3.8	0.2	1.6	0.0	2.2	0.2	12.2	0.2
SLP	3.9	0.1	1.6	0.0	2.2	0.2	15.5	0.3
Statewide	3.9	0.1	1.6	0.0	2.2	0.1	15.1	0.2

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

Table 5. Number of deer harvested in Michigan, 2013-2015.

Season or permit	Type of deer	2013	2014	2015	Change from 2014 to 2015 (%)
Season					
Archery	Antlerless	53,890	48,136	42,644	-11.4*
	Antlered bucks	62,933	61,886	68,924	11.4*
	Sexes combined	116,823	110,022	111,568	1.4
Regular firearm	Antlerless	82,693	67,503	64,553	-4.4
	Antlered bucks	125,625	105,258	110,721	5.2
	Sexes combined	208,317	172,761	175,274	1.5
Muzzleloader	Antlerless	19,311	13,404	11,959	-10.8
	Antlered bucks	9,020	6,816	6,594	-3.2
	Sexes combined	28,331	20,220	18,553	-8.2
Early antlerless	Antlerless	5,820	3,086	3,428	11.1
Late antlerless	Antlerless	11,228	10,264	12,266	19.5
Liberty[a]	Antlerless	2,696	1,646	2,118	28.7
	Antlered bucks	5,285	4,079	5,163	26.6*
	Sexes combined	7,981	5,725	7,281	27.2*
Independence[b]	Antlerless	97	100	105	5.1
	Antlered bucks	195	189	207	9.6
	Sexes combined	292	288	311	8.0
Special permits[c]	Antlerless	6,508	6,673	5,931	-11.1
Grand Total	Antlerless	182,245	150,812	143,004	-5.2
	Antlered bucks	203,057	178,228	191,608	7.5*
	Sexes combined	385,302	329,040	334,612	1.7

[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, 2014-2015.[a]

Season and Area	Antlerless 2014 Harvest	Antlerless 2015 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2014 to 2015 (%)	Antlered Bucks 2014 Harvest	Antlered Bucks 2015 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2014 to 2015	Sexes Combined 2014 Harvest	Sexes Combined 2015 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2014 to 2015
Archery												
West UP	3,214	643	271	-80.0*	2,642	2,721	514	3.0	5,852	3,363	616	-42.5*
East UP	1,078	120	105	-88.8*	682	395	192	-42.1	1,758	515	232	-70.7*
NE LP	5,868	6,785	875	15.6	5,724	7,623	882	33.2*	11,589	14,411	1,316	24.4*
NW LP	9,266	8,428	958	-9.0	10,405	11,261	1,072	8.2	19,668	19,690	1,510	0.1
Sag. Bay	7,687	7,476	956	-2.8	10,282	12,375	1,138	20.4	17,970	19,850	1,622	10.5
SW LP	7,899	5,929	857	-24.9*	11,275	10,914	1,088	-3.2	19,177	16,842	1,478	-12.2
SC LP	8,554	8,883	1,045	3.9	14,051	15,680	1,310	11.6	22,611	24,562	1,807	8.6
SE LP	4,570	4,379	698	-4.2	6,825	7,955	919	16.6	11,397	12,334	1,251	8.2
UP	4,291	764	290	-82.2*	3,323	3,115	549	-6.3	7,610	3,878	658	-49.0*
NLP	17,747	17,639	1,396	-0.6	19,000	22,468	1,516	18.3*	36,740	40,112	2,187	9.2
SLP	26,098	24,242	1,722	-7.1	39,562	43,340	2,161	9.5	65,672	67,579	2,979	2.9
Statewide	48,136	42,644	2,248	-11.4*	61,886	68,924	2,714	11.4*	110,022	111,568	3,779	1.4
Regular Firearm												
West UP	1,531	1,472	380	-3.9	12,320	11,403	1,058	-7.4	13,876	12,904	1,154	-7.0
East UP	42	0	0	-100.0	2,413	1,874	424	-22.4	2,462	1,880	424	-23.6
NE LP	12,833	12,214	1,189	-4.8	19,318	20,216	1,422	4.7	32,149	32,427	1,952	0.9
NW LP	12,229	11,486	1,087	-6.1	17,629	18,209	1,359	3.3	29,854	29,690	1,832	-0.5
Sag. Bay	12,389	11,729	1,164	-5.3	16,033	19,161	1,375	19.5*	28,414	30,887	1,931	8.7
SW LP	9,453	8,858	1,015	-6.3	13,145	13,605	1,189	3.5	22,594	22,458	1,670	-0.6
SC LP	15,117	15,125	1,353	0.1	17,942	20,018	1,436	11.6	33,046	35,124	2,121	6.3
SE LP	3,907	3,669	659	-6.1	6,458	6,235	793	-3.4	10,366	9,904	1,073	-4.5
UP	1,574	1,472	380	-6.5	14,734	13,276	1,140	-9.9	16,338	14,784	1,229	-9.5
NLP	29,001	27,180	1,722	-6.3	41,415	44,501	2,112	7.5	70,407	71,675	2,876	1.8
SLP	36,928	35,901	2,068	-2.8	49,110	52,943	2,325	7.8	86,016	88,815	3,326	3.3
Statewide	67,503	64,553	2,747	-4.4	105,258	110,721	3,364	5.2	172,761	175,274	4,605	1.5

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 deer were taken with these permits.
[b]95% confidence limit for the 2015 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2014-2015.[a]

Season and Area	Antlerless 2014 Harvest	Antlerless 2015 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2014 to 2015 (%)	Antlered Bucks 2014 Harvest	Antlered Bucks 2015 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2014 to 2015	Sexes Combined 2014 Harvest	Sexes Combined 2015 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2014 to 2015
Muzzleloader												
West UP	399	404	207	1.3	933	303	164	-67.5*	1,329	707	264	-46.8
East UP	0	0	0		251	86	89	-65.7	250	86	89	-65.5
NE LP	1,472	997	307	-32.3	618	535	221	-13.5	2,091	1,531	378	-26.8
NW LP	1,625	1,081	316	-33.5	454	434	197	-4.4	2,081	1,515	380	-27.2
Sag. Bay	2,796	2,324	477	-16.9	1,127	1,296	355	15.0	3,925	3,621	604	-7.7
SW LP	2,530	2,484	509	-1.8	1,342	1,184	343	-11.8	3,872	3,667	631	-5.3
SC LP	3,599	3,569	607	-0.8	1,551	1,900	437	22.5	5,151	5,470	781	6.2
SE LP	983	1,101	341	12.0	539	856	294	59.0	1,521	1,957	450	28.6
UP	399	404	207	1.3	1,185	389	186	-67.2*	1,579	793	278	-49.8*
NLP	3,541	2,484	481	-29.8	1,213	1,169	334	-3.7	4,756	3,653	590	-23.2
SLP	9,465	9,071	966	-4.2	4,418	5,036	705	14.0	13,884	14,108	1,231	1.6
Statewide	13,404	11,959	1,115	-10.8	6,816	6,594	812	-3.2	20,220	18,553	1,411	-8.2
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	614	650	248	5.7	0	0	0	0	614	650	248	5.7
NW LP	103	179	112	72.9	0	0	0	0	103	179	112	72.9
Sag. Bay	1,001	1,047	290	4.5	0	0	0	0	1,001	1,047	290	4.5
SW LP	0	0	0		0	0	0	0	0	0	0	
SC LP	697	970	281	39.2	0	0	0	0	697	970	281	39.2
SE LP	670	583	216	-13.0	0	0	0	0	670	583	216	-13.0
UP	0	0	0		0	0	0	0	0	0	0	
NLP	791	932	284	17.8	0	0	0	0	791	932	284	17.8
SLP	2,295	2,496	450	8.8	0	0	0	0	2,295	2,496	450	8.8
Statewide	3,086	3,428	550	11.1	0	0	0	0	3,086	3,428	550	11.1

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 deer were taken with these permits.
[b]95% confidence limit for the 2015 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2014-2015.[a]

Season and Area	Antlerless 2014 Harvest	Antlerless 2015 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2014 to 2015 (%)	Antlered Bucks 2014 Harvest	Antlered Bucks 2015 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2014 to 2015	Sexes Combined 2014 Harvest	Sexes Combined 2015 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2014 to 2015
Late Antlerless												
West UP	0	0	0		0	0	0	0	0	0	0	
East UP	0	0	0		0	0	0	0	0	0	0	
NE LP	1,095	773	269	-29.4	0	0	0	0	1,095	773	269	-29.4
NW LP	734	1,247	350	70.0	0	0	0	0	734	1,247	350	70.0
Sag. Bay	2,143	2,848	567	32.9	0	0	0	0	2,143	2,848	567	32.9
SW LP	1,859	2,356	501	26.7	0	0	0	0	1,859	2,356	501	26.7
SC LP	3,016	3,368	654	11.7	0	0	0	0	3,016	3,368	654	11.7
SE LP	1,417	1,673	437	18.0	0	0	0	0	1,417	1,673	437	18.0
UP	0	0	0		0	0	0	0	0	0	0	
NLP	2,092	2,146	454	2.6	0	0	0	0	2,092	2,146	454	2.6
SLP	8,173	10,119	1,086	23.8	0	0	0	0	8,173	10,119	1,086	23.8
Statewide	10,264	12,266	1,192	19.5	0	0	0	0	10,264	12,266	1,192	19.5
Liberty[c]												
West UP	160	158	73	-1.5	204	262	94	28.4	365	420	119	15.3
East UP	35	20	27	-41.2	11	1	0	-90.9	46	21	27	-53.2
NE LP	217	234	98	7.5	541	610	155	12.7	758	843	183	11.2
NW LP	603	563	137	-6.7	1,046	1,377	220	31.6	1,649	1,940	259	17.6
Sag. Bay	214	401	116	87.5	828	1,165	203	40.6	1,042	1,566	234	50.2*
SW LP	96	197	82	105.9	343	454	125	32.4	439	651	149	48.4
SC LP	197	358	110	82.3	728	840	170	15.4	925	1,199	202	29.7
SE LP	124	187	116	50.4	377	453	143	20.1	501	640	184	27.6
UP	195	178	78	-8.5	215	263	94	22.4	410	442	122	7.7
NLP	928	1,014	189	9.2	1,892	2,354	294	24.4	2,820	3,368	349	19.4
SLP	523	926	195	77.0*	1,972	2,545	303	29.1	2,495	3,471	361	39.1*
Statewide	1,646	2,118	284	28.7	4,079	5,163	435	26.6*	5,725	7,281	519	27.2*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 deer were taken with these permits.
[b]95% confidence limit for the 2015 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, 2014-2015.[a]

Season and Area	Antlerless 2014 Harvest	Antlerless 2015 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2014 to 2015 (%)	Antlered Bucks 2014 Harvest	Antlered Bucks 2015 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2014 to 2015	Sexes Combined 2014 Harvest	Sexes Combined 2015 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2014 to 2015
Independence												
West UP	7	4	3	-47.5	3	5	5	58.8	10	9	6	-12.0
East UP	2	4	3	110.0	2	0	0	-100.0	3	4	3	5.6
NE LP	12	27	9	125.0	12	16	7	36.1	24	44	12	81.0
NW LP	9	25	20	185.4	48	31	11	-35.0	57	56	23	-1.2
Sag. Bay	40	13	7	-67.9	85	47	28	-44.5	125	60	29	-52.0
SW LP	7	3	2	-59.3	9	10	5	17.5	16	13	6	-16.7
SC LP	20	21	20	7.2	27	79	61	197.0	46	100	64	116.1
SE LP	3	8	5	138.9	3	18	19	407.7	7	26	20	273.2
UP	9	7	5	-16.0	5	5	5	5.9	14	13	7	-7.6
NLP	26	61	23	132.6*	96	59	14	-39.2	123	120	27	-2.3
SLP	65	36	21	-44.2	87	143	70	63.7	152	179	73	17.8
Statewide	100	105	31	5.1	189	207	72	9.6	288	311	78	8.0
All Seasons												
West UP	5,332	2,687	540	-49.6*	16,078	14,701	1,227	-8.6	21,438	17,425	1,406	-18.7*
East UP	1,164	146	109	-87.5*	3,354	2,356	479	-29.7	4,524	2,509	497	-44.5*
NE LP	22,106	21,669	1,679	-2.0	26,195	29,011	1,752	10.8	48,298	50,676	2,636	4.9
NW LP	24,604	23,072	1,616	-6.2	29,595	31,321	1,842	5.8	54,196	54,390	2,650	0.4
Sag. Bay	26,252	25,786	1,896	-1.8	28,360	34,043	1,949	20.0*	54,600	59,822	3,061	9.6
SW LP	21,845	19,879	1,666	-9.0	26,122	26,160	1,738	0.1	47,964	46,033	2,697	-4.0
SC LP	31,168	32,262	2,196	3.5	34,310	38,506	2,109	12.2*	65,465	70,746	3,438	8.1
SE LP	11,668	11,572	1,231	-0.8	14,215	15,509	1,325	9.1	25,882	27,079	2,003	4.6
UP	6,496	2,833	551	-56.4*	19,431	17,057	1,317	-12.2	25,961	19,935	1,491	-23.2*
NLP	54,161	51,521	2,493	-4.9	63,616	70,574	2,754	10.9*	117,767	122,091	4,042	3.7
SLP	83,482	82,719	3,453	-0.9	95,180	103,977	3,450	9.2*	178,638	186,656	5,487	4.5
Statewide	144,139	137,073	4,339	-4.9	178,228	191,608	4,638	7.5*	322,367	328,681	7,038	2.0

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 deer were taken with these permits.
[b]95% confidence limit for the 2015 estimate. *P<0.005.

Table 7. Number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2014-2015.[a]

Season and Area	Antlerless 2014 Harvest	Antlerless 2015 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2014 to 2015 (%)	Antlered Bucks 2014 Harvest	Antlered Bucks 2015 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2014 to 2015	Sexes Combined 2014 Harvest	Sexes Combined 2015 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2014 to 2015
Public Lands												
West UP	722	64	61	-91.1*	3,680	4,049	636	10.0	4,421	4,142	643	-6.3
East UP	340	67	76	-80.2	1,117	823	286	-26.3	1,462	895	296	-38.7
NE LP	5,123	5,516	826	7.7	7,238	6,984	847	-3.5	12,358	12,487	1,255	1.0
NW LP	3,323	3,420	579	2.9	5,458	6,680	848	22.4	8,784	10,109	1,060	15.1
Sag. Bay	2,774	2,955	545	6.5	2,983	2,992	572	0.3	5,749	5,935	863	3.2
SW LP	1,437	975	341	-32.1	1,442	1,561	409	8.2	2,873	2,535	553	-11.8
SC LP	2,121	2,356	556	11.1	2,138	2,049	453	-4.2	4,250	4,393	796	3.4
SE LP	882	1,087	355	23.2	1,014	1,037	324	2.3	1,894	2,119	517	11.9
UP	1,062	132	97	-87.6*	4,797	4,872	698	1.6	5,882	5,037	708	-14.4
NLP	9,233	9,931	1,054	7.6	14,048	15,061	1,262	7.2	23,282	24,987	1,735	7.3
SLP	6,427	6,378	869	-0.8	6,224	6,242	807	0.3	12,626	12,592	1,280	-0.3
Statewide	16,722	16,440	1,399	-1.7	25,069	26,175	1,666	4.4	41,791	42,616	2,305	2.0
Private Lands												
West UP	4,612	2,619	537	-43.2*	12,400	10,658	1,043	-14.1	17,028	13,297	1,235	-21.9*
East UP	827	79	78	-90.4*	2,238	1,534	385	-31.4	3,068	1,618	400	-47.3*
NE LP	17,021	16,195	1,453	-4.9	18,963	22,036	1,531	16.2*	35,981	38,230	2,290	6.3
NW LP	21,288	19,661	1,500	-7.6	24,140	24,648	1,628	2.1	45,424	44,302	2,406	-2.5
Sag. Bay	23,474	22,829	1,811	-2.7	25,375	31,046	1,859	22.3*	48,842	53,874	2,921	10.3
SW LP	20,392	18,884	1,613	-7.4	24,676	24,594	1,688	-0.3	45,068	43,474	2,615	-3.5
SC LP	29,025	29,885	2,117	3.0	32,168	36,448	2,051	13.3*	61,187	66,320	3,324	8.4
SE LP	10,779	10,481	1,169	-2.8	13,199	14,469	1,278	9.6	23,979	24,950	1,922	4.1
UP	5,439	2,698	542	-50.4*	14,638	12,192	1,111	-16.7*	20,096	14,915	1,298	-25.8*
NLP	44,972	41,644	2,245	-7.4	49,576	55,528	2,440	12.0*	94,538	97,167	3,611	2.8
SLP	77,007	76,290	3,325	-0.9	88,945	97,713	3,344	9.9*	165,943	173,983	5,302	4.8
Statewide	127,417	120,632	4,085	-5.3	153,159	165,433	4,315	8.0*	280,576	286,065	6,598	2.0

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 deer were taken with these permits.
[b]95% confidence limit for the 2015 estimate. *P<0.005.

Table 8. Percentage of deer hunters harvesting deer in Michigan during all seasons, 2015.[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	3.8	0.7	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0
East UP	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE LP	16.0	1.1	2.7	0.5	0.4	0.2	0.2	0.1	0.1	0.1
NW LP	16.6	1.0	2.2	0.4	0.3	0.2	0.0	0.0	0.0	0.0
Sag. Bay	21.3	1.3	4.3	0.6	0.9	0.3	0.3	0.2	0.1	0.1
SW LP	18.1	1.3	3.7	0.6	0.7	0.3	0.2	0.1	0.0	0.1
SC LP	22.8	1.2	5.3	0.7	1.2	0.3	0.5	0.2	0.1	0.1
SE LP	18.0	1.6	3.6	0.8	0.3	0.3	0.1	0.1	0.0	0.0
UP	3.1	0.6	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0
NLP	17.0	0.7	2.6	0.3	0.4	0.1	0.1	0.1	0.0	0.0
SLP	21.4	0.7	4.9	0.4	1.0	0.2	0.3	0.1	0.1	0.1
Statewide[d]	18.7	0.5	3.9	0.2	0.8	0.1	0.3	0.1	0.1	0.0
Antlered bucks[c]										
West UP	22.1	1.6	1.4	0.5						
East UP	12.6	2.4	0.3	0.4						
NE LP	24.1	1.3	2.2	0.4						
NW LP	23.5	1.2	2.8	0.5						
Sag. Bay	31.6	1.5	4.2	0.6						
SW LP	26.4	1.5	3.8	0.6						
SC LP	31.3	1.4	4.6	0.6						
SE LP	26.3	1.9	3.5	0.8						
UP	20.0	1.4	1.2	0.4						
NLP	25.0	0.8	2.7	0.3						
SLP	30.6	0.8	4.5	0.4						
Statewide[d]	29.3	0.6	3.9	0.2						

[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, 2015.[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	24.7	1.7	2.5	0.6	0.4	0.2	0.1	0.1	0.0	0.0
East UP	13.3	2.5	0.5	0.5	0.0	0.0	0.0	0.0	0.1	0.1
NE LP	36.0	1.4	7.9	0.8	1.3	0.3	0.4	0.2	0.0	0.0
NW LP	36.3	1.3	7.5	0.7	1.4	0.3	0.2	0.1	0.1	0.1
Sag. Bay	45.6	1.6	12.7	1.1	3.2	0.6	0.8	0.3	0.1	0.1
SW LP	38.1	1.6	11.4	1.1	2.7	0.5	0.6	0.3	0.2	0.2
SC LP	46.1	1.5	14.5	1.1	3.5	0.6	1.2	0.3	0.0	0.0
SE LP	38.6	2.1	10.6	1.3	2.4	0.7	0.3	0.3	0.0	0.0
UP	22.3	1.4	2.0	0.5	0.3	0.2	0.1	0.1	0.1	0.1
NLP	37.5	0.9	8.3	0.5	1.5	0.2	0.3	0.1	0.1	0.1
SLP	44.3	0.9	13.7	0.6	3.5	0.3	1.0	0.2	0.0	0.0
Statewide[d]	41.6	0.6	11.6	0.4	2.7	0.2	0.7	0.1	0.2	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, 2015.[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	2.9	1.2	2.4	0.6	2.6	1.3	0.0	0.0	0.0	0.0	12.3	5.5
East UP	2.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	14.7
NE LP	12.6	1.5	11.2	1.0	5.3	1.6	20.1	7.5	15.0	5.0	10.1	4.1
NW LP	12.6	1.3	10.4	0.9	5.3	1.5	16.2	10.7	25.0	6.1	12.7	3.0
Sag. Bay	12.3	1.4	12.9	1.2	9.4	1.9	19.7	5.5	29.0	4.8	11.1	3.1
SW LP	9.8	1.3	10.8	1.1	7.8	1.5	0.0	0.0	17.2	3.3	8.5	3.4
SC LP	12.5	1.3	14.8	1.2	10.2	1.7	19.8	5.8	17.2	2.9	10.7	3.2
SE LP	11.4	1.7	8.9	1.5	6.4	1.9	16.2	6.5	22.5	5.1	10.7	6.2
UP	2.8	1.0	1.9	0.5	2.0	1.0	0.0	0.0	0.0	0.0	12.3	5.2
NLP	12.8	0.9	11.0	0.6	5.5	1.1	19.3	5.8	19.9	3.9	12.8	2.3
SLP	11.8	0.7	12.8	0.7	9.1	0.9	18.8	3.5	20.5	1.9	9.4	1.9
Statewide	12.2	0.6	11.1	0.4	7.3	0.7	19.8	2.8	19.9	1.7	10.9	1.4
Antlered Bucks												
West UP	14.1	2.5	19.2	1.6	2.3	1.2	0.0	0.0	0.0	0.0	20.4	6.9
East UP	7.1	3.4	11.6	2.5	2.2	2.3	0.0	0.0	0.0	0.0	0.6	0.2
NE LP	15.1	1.6	20.1	1.3	2.9	1.2	0.0	0.0	0.0	0.0	26.4	5.9
NW LP	17.3	1.5	17.0	1.1	2.1	1.0	0.0	0.0	0.0	0.0	31.2	4.3
Sag. Bay	22.2	1.8	23.3	1.5	5.3	1.4	0.0	0.0	0.0	0.0	32.1	4.8
SW LP	19.5	1.7	18.0	1.4	3.8	1.1	0.0	0.0	0.0	0.0	19.6	5.0
SC LP	23.2	1.7	21.6	1.4	5.5	1.2	0.0	0.0	0.0	0.0	25.0	4.5
SE LP	21.1	2.1	16.6	1.9	5.1	1.7	0.0	0.0	0.0	0.0	26.0	7.3
UP	12.5	2.1	17.6	1.4	2.3	1.1	0.0	0.0	0.0	0.0	18.1	6.1
NLP	17.1	1.0	19.2	0.8	2.5	0.7	0.0	0.0	0.0	0.0	29.8	3.2
SLP	22.5	1.0	20.9	0.8	5.1	0.7	0.0	0.0	0.0	0.0	26.0	2.8
Statewide	21.0	0.7	20.5	0.5	4.2	0.5	0.0	0.0	0.0	0.0	26.5	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, 2015.[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	16.4	2.6	21.0	1.7	4.6	1.7	0.0	0.0	0.0	0.0	32.7	8.4
East UP	8.7	3.7	11.6	2.5	2.2	2.3	0.0	0.0	0.0	0.0	12.5	14.7
NE LP	25.9	2.0	29.2	1.4	8.2	2.0	20.1	7.5	15.0	5.0	36.6	6.5
NW LP	28.0	1.8	26.0	1.3	7.2	1.8	16.2	10.7	25.0	6.1	43.9	4.7
Sag. Bay	31.3	2.0	33.5	1.6	14.4	2.3	19.7	5.5	29.0	4.8	43.2	5.1
SW LP	27.2	1.9	26.6	1.6	11.3	1.8	0.0	0.0	17.2	3.3	28.0	5.7
SC LP	32.8	1.9	33.3	1.6	15.0	2.0	19.8	5.8	17.2	2.9	35.7	5.1
SE LP	29.7	2.4	24.3	2.2	11.5	2.5	16.2	6.5	22.5	5.1	36.7	8.4
UP	14.7	2.2	19.1	1.4	4.1	1.5	0.0	0.0	0.0	0.0	30.4	7.6
NLP	27.8	1.2	28.3	0.9	8.0	1.3	19.3	5.8	19.9	3.9	42.6	3.5
SLP	31.4	1.1	31.1	0.9	13.8	1.1	18.8	3.5	20.5	1.9	35.4	3.1
Statewide	30.3	0.8	29.4	0.6	11.2	0.8	19.8	2.8	19.9	1.7	37.4	2.2

[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, 2015.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Antlerless				
West UP	3.8	4.1	3.8	0.7
East UP	12.9	11.5	0.8	0.6
NE LP	13.6	6.8	16.0	1.1
NW LP	8.4	6.7	16.6	1.0
Sag. Bay	4.0	2.4	21.3	1.3
SW LP	1.4	1.4	18.1	1.3
SC LP	5.6	5.4	22.8	1.2
SE LP	8.2	5.4	18.0	1.6
UP	5.9	4.5	3.1	0.6
NLP	10.5	4.2	17.0	0.7
SLP	4.1	2.5	21.4	0.7
Statewide	5.9	1.9	18.7	0.5
Antlered Bucks				
West UP	3.8	4.1	22.1	1.6
East UP	0.0	0.0	12.6	2.4
NE LP	8.2	4.7	24.1	1.3
NW LP	9.9	4.0	23.5	1.2
Sag. Bay	17.3	9.7	31.6	1.5
SW LP	5.0	3.8	26.4	1.5
SC LP	20.9	14.8	31.3	1.4
SE LP	17.3	17.0	26.3	1.9
UP	2.9	3.0	20.0	1.4
NLP	10.0	3.0	25.0	0.8
SLP	16.2	7.6	30.6	0.8
Statewide	11.7	4.0	29.3	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, 2015.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Sexes combined				
West UP	7.6	6.4	24.7	1.7
East UP	12.9	11.5	13.3	2.5
NE LP	21.8	9.8	36.0	1.4
NW LP	18.4	7.8	36.3	1.3
Sag. Bay	20.7	9.9	45.6	1.6
SW LP	6.4	4.5	38.1	1.6
SC LP	26.1	15.4	46.1	1.5
SE LP	25.5	16.8	38.6	2.1
UP	8.8	5.9	22.3	1.4
NLP	20.2	5.5	37.5	0.9
SLP	20.1	7.9	44.3	0.9
Statewide	17.4	4.4	41.6	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, 2014-2015.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)
Number of deer seen								
West UP	21	14	1	-7*	67	77	2	9*
East UP	19	12	3	-8*	68	80	3	12*
NE LP	27	32	1	4*	58	52	2	-6*
NW LP	29	35	1	6*	58	50	1	-8*
Sag. Bay	26	40	2	14*	60	45	2	-15*
SW LP	28	32	2	4*	58	51	2	-7*
SC LP	31	41	2	10*	55	45	2	-10*
SE LP	33	41	2	8*	51	40	2	-11*
UP	21	14	1	-7*	67	77	2	10*
NLP	27	33	1	6*	59	51	1	-8*
SLP	30	39	1	9*	56	45	1	-11*
Statewide	27	33	1	6*	58	52	1	-7*
Number of antlered deer (bucks) seen								
West UP	14	12	1	-2	75	78	2	3
East UP	11	7	2	-4	78	83	3	5
NE LP	18	23	1	6*	65	59	2	-6*
NW LP	20	26	1	6*	65	57	1	-8*
Sag. Bay	18	29	2	11*	67	53	2	-13*
SW LP	19	23	1	4*	64	59	2	-6*
SC LP	22	29	1	7*	61	52	2	-9*
SE LP	22	28	2	5*	58	52	2	-6*
UP	13	11	1	-3*	76	79	1	3*
NLP	18	25	1	6*	66	58	1	-8*
SLP	21	28	1	7*	62	54	1	-8*
Statewide	19	24	1	5*	65	59	1	-6*

[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 2015 estimate.
*P<0.005.

Table 11. Level of satisfaction and dissatisfaction with overall deer hunting experience and number of deer harvested among Michigan deer hunters, 2014-2015.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)
Overall deer hunting experience								
West UP	32	26	2	-6*	49	56	2	7*
East UP	30	22	3	-8*	50	59	4	9*
NE LP	41	47	2	6*	37	31	1	-6*
NW LP	39	46	1	7*	38	32	1	-6*
Sag. Bay	37	50	2	14*	42	28	2	-14*
SW LP	37	43	2	6*	40	34	2	-6*
SC LP	42	49	2	7*	37	29	1	-7*
SE LP	46	53	2	7*	31	25	2	-6*
UP	32	26	2	-6*	49	56	2	7*
NLP	39	46	1	7*	38	31	1	-7*
SLP	40	49	1	8*	38	29	1	-8*
Statewide	39	45	1	6*	39	34	1	-6*
Number of deer harvested								
West UP	23	19	2	-4*	43	48	2	5*
East UP	17	11	3	-7*	48	55	4	6
NE LP	27	30	1	3	38	34	2	-5*
NW LP	26	28	1	3	39	34	1	-5*
Sag. Bay	26	37	2	10*	39	31	2	-8*
SW LP	26	28	2	2	39	35	2	-4*
SC LP	28	34	2	6*	38	32	2	-6*
SE LP	31	33	2	2	36	30	2	-6*
UP	22	17	1	-4*	44	49	2	5*
NLP	26	30	1	4*	39	34	1	-5*
SLP	28	33	1	5*	38	32	1	-5*
Statewide	26	30	1	3	39	35	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 2015 estimate.
*P<0.005.

Table 12. Level of satisfaction and dissatisfaction with the number of deer seen and number of antlered deer (bucks) seen among Michigan deer hunters in 2015. 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	18	2	13	3	-5	73	3	78	4	5
East UP	13	4	12	6	-1	77	5	85	6	8
NE LP	37	2	23	3	-13*	46	2	63	3	17*
NW LP	39	2	28	3	-11*	45	2	59	3	13*
Sag. Bay	43	2	27	5	-15*	42	2	57	5	15*
SW LP	34	2	19	6	-15*	49	2	62	7	13*
SC LP	42	2	26	6	-16*	43	2	59	6	16*
SE LP	44	3	25	7	-19*	37	3	55	8	18*
UP	17	2	13	3	-4	74	2	80	3	6*
NLP	38	1	25	2	-13*	46	1	61	2	15*
SLP	41	1	25	3	-15*	43	1	58	4	15*
Statewide	37	1	23	1	-15*	47	1	64	2	17*
Number of antlered deer (bucks) seen										
West UP	15	2	12	3	-2	75	3	77	4	2
East UP	7	3	7	4	0	80	5	84	6	4
NE LP	27	2	16	2	-12*	54	2	68	3	14*
NW LP	29	2	22	3	-6*	54	2	61	3	7*
Sag. Bay	32	2	18	4	-14*	52	2	61	5	9*
SW LP	24	2	13	5	-11*	57	2	68	7	11*
SC LP	30	2	21	5	-9*	52	2	59	7	8
SE LP	29	3	23	7	-6	51	3	62	8	11*
UP	13	2	11	3	-2	76	2	79	3	3
NLP	28	1	18	2	-10*	55	1	65	2	10*
SLP	29	1	19	3	-9*	53	1	62	4	9*
Statewide	27	1	17	1	-10*	55	1	67	2	11*

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

Table 13. Level of satisfaction and dissatisfaction with overall deer hunting experience and number of deer harvested among Michigan deer hunters in 2015. 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 (%)
Overall deer hunting experience										
West UP	29	3	28	4	-1	54	3	53	5	-1
East UP	20	5	29	8	9	59	6	57	9	-2
NE LP	51	2	41	3	-10*	28	2	35	3	7*
NW LP	49	2	40	3	-9*	29	2	38	3	9*
Sag. Bay	52	2	42	5	-9*	27	2	34	5	7*
SW LP	45	2	36	7	-8	32	2	40	7	7
SC LP	50	2	43	7	-7	28	2	34	6	5
SE LP	54	3	47	8	-7	24	2	27	7	3
UP	27	2	28	4	1	55	3	54	4	-2
NLP	50	1	40	2	-9*	29	1	36	2	8*
SLP	50	1	43	4	-7*	28	1	33	3	5*
Statewide	48	1	38	2	-9*	31	1	39	2	8*
Number of deer harvested										
West UP	23	3	17	4	-6*	44	3	46	5	2
East UP	12	4	11	5	-2	54	6	56	9	2
NE LP	36	2	20	3	-15*	29	2	40	3	11*
NW LP	32	2	20	3	-12*	32	2	36	3	5
Sag. Bay	39	2	21	4	-19*	29	2	40	5	10*
SW LP	30	2	15	5	-15*	33	2	45	8	12*
SC LP	35	2	21	6	-14*	31	2	40	7	9*
SE LP	35	3	21	7	-14*	29	3	35	8	6
UP	21	2	15	3	-6*	46	3	48	4	2
NLP	35	1	20	2	-15*	31	1	38	2	8*
SLP	35	1	21	3	-14*	31	1	40	4	9*
Statewide	33	1	19	1	-14*	32	1	40	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 support and opposition for the antler point restrictions in the Upper Peninsula among Michigan deer hunters, 2014-2015.

Preferred hunt area	Hunters supporting (%)[a]				Hunters opposing (%)[b]			
	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)	2014	2015	95% CL[c]	Difference from 2014 to 2015 (%)
West UP	64	64	2	0	27	27	2	0
East UP	60	63	4	2	31	27	4	-4
NE LP	54	61	2	7*	22	16	1	-6*
NW LP	57	62	1	4*	20	15	1	-5*
Sag. Bay	55	62	2	8*	19	14	1	-5*
SW LP	60	62	2	2	15	12	1	-3*
SC LP	56	62	2	6*	16	12	1	-5*
SE LP	60	65	2	5*	17	11	2	-6*
UP	63	64	2	1	28	27	2	-1
NLP	56	61	1	6*	21	16	1	-5*
SLP	58	63	1	5*	17	12	1	-5*
Statewide	57	62	1	5*	20	15	0	-4*

[a]Included hunters who “strongly supported” or “supported” antler point restrictions in the UP.
[b]Included hunters who “opposed” or “strongly opposed” antler point restrictions in the UP.
[c]95% confidence limit for the 2015 estimate.
*P<0.005.

Table 15. Level of support and opposition for the antler point restrictions in DMU 487 among Michigan deer hunters, 2014-2015.[a]

Preferred hunt area	Hunters supporting (%)[b]				Hunters opposing (%)[c]			
	2014	2015	95% CL[d]	Difference from 2014 to 2015 (%)	2014	2015	95% CL[d]	Difference from 2014 to 2015 (%)
West UP	36	33	2	-3	16	17	2	1
East UP	42	37	4	-6	20	18	3	-2
NE LP	52	58	2	5*	26	20	1	-6*
NW LP	48	51	2	3*	19	15	1	-4*
Sag. Bay	46	51	2	4*	22	16	1	-6*
SW LP	47	50	2	3	13	12	1	-2
SC LP	47	51	2	4*	16	12	1	-4*
SE LP	51	55	2	4	17	13	2	-4*
UP	37	34	2	-3	17	17	1	0
NLP	49	54	1	4*	22	17	1	-5*
SLP	48	51	1	3*	17	13	1	-4*
Statewide	47	50	1	3*	19	15	0	-4*

[a]New antler point restrictions were adopted in 2010 for the taking of antlered deer (bucks) in DMU 487. Under this new regulation, the regular buck tag of a combination deer license could only be used to tag a buck with at least three antler points on one side. The restricted tag could only be used on a buck with at least four points on one side. Hunters who chose not to purchase the combination tag were restricted to one buck (with no additional point restrictions) in the UP, all seasons combined, even if they purchased an archery and firearms license. In addition, hunters in DMU 487 could use a firearm license or one or both combination license tags for antlerless deer during the firearm or muzzleloader seasons. DMU 487 included Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties.
[b]Group supporting restrictions included hunters reporting they “strongly supported” or “supported.”
[c]Group opposing restrictions included hunters reporting they “opposed” or “strongly opposed.”
[d]95% confidence limit. Excluded people that did not hunt.
*P<0.005.

Table 16. Proportion of deer hunters satisfied with number of deer seen, number of antlered deer seen, overall hunting experience, and number of deer harvested during the 2015 deer hunting seasons in the 12-county area in northwest Lower Peninsula where antler point restrictions (APRs) were implemented in 2013.[a]

	Level of satisfaction							
	Satisfied[b]		Neutral		Dissatisfied[c]		Not applicable	
Satisfaction index	%	95% CL[d]	%	95% CL[d]	%	95% CL[d]	%	95% CL[d]
Number of deer seen	34	2	14	1	50	2	1	0
Number of antlered deer seen	26	1	13	1	57	2	4	1
Overall deer hunting experience	46	2	21	1	31	2	1	0
Number of deer harvested	28	2	12	1	34	2	26	2

[a]The APRs required all antlered deer taken in the APR area have at least three points on one antler. This area included Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Lake, Manistee, Mason, Missaukee, Osceola, or Wexford counties.
[b]Satisfied group included hunters reporting they were “very satisfied” or “somewhat satisfied.”
[c]Dissatisfied group included hunters reporting they were “somewhat dissatisfied” or “strongly dissatisfied.”
[d]95% confidence limit.

Table 17. Estimated proportion and number of archers that used a crossbow during 2015 archery season in Michigan, summarized by region.

	Archers using a crossbow during archery season			
Region	%	95% CL	Total	95% CL
UP	59.4	3.3	12,810	1,108
NLP	63.7	1.5	67,034	2,413
SLP	54.8	1.2	87,702	2,690
Unknown[a]	55.1	2.7	18,086	1,318
Statewide	58.0	0.9	185,632	3,588

[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 18. Estimated hunter success of archers hunting with a crossbow during 2015 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	2.2	1.3	14.6	3.1	16.6	3.3
NLP	15.7	1.4	17.8	1.5	31.1	1.8
SLP	12.7	1.1	24.8	1.5	34.8	1.6
Unknown[b]	12.2	2.4	20.2	3.0	28.2	3.3
Statewide	13.0	0.8	21.1	0.9	31.5	1.1

[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 19. Estimated number of deer harvested by archers with a crossbow during 2015 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	299	179	1,820	423	2,112	469
NLP	11,136	1,121	12,038	1,112	23,133	1,673
SLP	12,190	1,217	22,298	1,528	34,410	2,075
Unknown[a]	2,590	593	3,728	633	6,306	963
Statewide	26,242	1,749	39,884	2,003	65,988	2,803

[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 2015, 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[c]	License quota	Licenses sold[b,c]	License buyers[c]
001	Alcona County[d]	5,000	2,311	1,992	0	0	0
003	Allegan County	200	190	189	5,000	4,953	4,146
004	Alpena County[d]	2,000	463	392	0	0	0
005	Antrim County	200	176	176	5,200	4,590	3,552
006	Arenac County	500	400	400	7,000	3,773	3,064
007	Big Bay Unit	0	0	0	0	0	0
009	Bay County	200	171	145	3,000	2,215	1,834
010	Benzie County	100	122	122	1,000	918	885
015	Charlevoix County	200	165	165	3,600	3,506	2,706
016	Cheboygan County	100	105	103	100	116	116
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	900	733	728	8,000	7,650	6,128
019	Clinton County	1,200	1,138	939	10,000	5,963	4,839
020	Crawford County	700	679	678	900	769	769
021	Manistique Unit	0	0	0	0	0	0
022	Crystal Falls Unit	0	0	0	0	0	0
024	Emmet County	200	194	194	800	734	734
025	Genesee County	0	0	0	8,500	4,773	4,202
026	Gladwin County	1,200	1,018	1,018	8,000	6,488	5,088
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	100	128	128	1,200	1,109	1,055
030	Hillsdale County	400	356	294	12,000	7,113	5,683
031	Nisula Unit	0	0	0	0	0	0
033	Ingham County	600	548	465	10,000	5,649	4,454
034	Ionia County	400	356	319	6,000	5,943	4,900
035	Iosco County[d]	700	566	566	0	0	0
036	Amasa/Michigamme Unit	0	0	0	0	0	0
037	Isabella County	100	90	81	11,000	6,998	5,553
038	Jackson County	1,600	1,407	1,262	17,000	8,987	7,393

[a]See Figure 2 for the locations of DMUs.
[b]Number of licenses sold could exceed the quota because junior licenses do not count towards the quota.
[c]Number of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.
[d]Also part of DMU 487.
[e]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 2015, 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[c]	License quota	Licenses sold[b,c]	License buyers[c]
040	Kalkaska County	100	147	147	400	374	374
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	100	171	171	2,900	2,544	2,523
044	Lapeer County	2,000	1,479	1,337	15,000	8,258	6,856
045	Leelanau County	100	91	91	1,400	1,282	1,081
046	Lenawee County	400	366	317	9,000	5,347	4,465
047	Livingston County	2,000	1,788	1,602	15,000	5,840	4,955
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	179	169	4,000	2,458	2,124
051	Manistee County	100	134	134	3,000	2,659	2,651
053	Mason County	100	138	137	4,900	4,497	3,685
055	Menominee Unit	0	0	0	5,000	4,782	3,670
056	Midland County	1,500	1,287	1,092	7,500	4,773	3,978
057	Missaukee County	400	384	383	3,200	2,888	2,448
058	Monroe County	100	85	85	1,000	931	843
060	Montmorency County[d]	5,000	3,723	3,086	0	0	0
063	Oakland County	2,500	2,288	1,970	7,000	3,844	3,237
065	Ogemaw County	700	630	630	6,000	5,836	4,670
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	300	262	261	5,600	5,177	4,167
068	Oscoda County[d]	5,000	4,600	3,813	0	0	0
069	Otsego County	100	112	112	100	124	124
071	Presque Isle County[d]	3,000	1,928	1,614	0	0	0
072	Roscommon County	400	403	403	1,000	895	811
073	Saginaw County	200	161	158	6,500	6,347	5,018
074	St. Clair County	700	600	542	9,500	7,125	5,984
078	Shiawassee County	200	190	176	10,000	6,169	4,874
081	Washtenaw County	1,500	1,376	1,238	15,000	5,266	4,372
082	Wayne County	100	83	77	1,200	937	839

[a]See Figure 2 for the locations of DMUs.
[b]Number of licenses sold could exceed the quota because junior licenses do not count towards the quota.
[c]Number of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.
[d]Also part of DMU 487.
[e]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 2015, 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[c]	License quota	Licenses sold[b,c]	License buyers[c]
083	Wexford County	1,000	936	935	3,700	3,436	2,715
115	Beaver Island	200	105	101	300	137	127
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	464	369
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
135	Tawas Unit[d]	100	96	77	0	0	0
145	North Manitou Island[e]	0	0	0	0	0	0
149	Round/Bois Blanc Island	100	96	73	100	76	68
152	Gwinn Unit	0	0	0	0	0	0
155	Gladstone Unit	0	0	0	1,500	1,398	1,131
174	St. Clair Flats	0	0	0	300	104	98
245	South Fox Island[e]	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[e]	0	0	0	0	0	0
308	Bellevue Unit	1,100	951	846	25,000	17,379	14,457
311	Keeler Unit	700	651	556	10,000	9,927	8,006
312	Sherwood Unit	1,000	956	817	16,000	13,093	10,433
329	Stanton Unit	2,800	2,499	2,144	28,000	21,521	17,071
332	Greenleaf Unit	5,200	4,772	3,880	42,000	21,295	17,105
333	Core CWD Area	Unlimited	236	206	Unlimited	672	545
341	Sparta Unit	1,000	862	773	17,500	14,123	11,901
349	Engadine Unit	0	0	0	0	0	0
361	Fremont Unit	100	219	219	8,000	7,412	7,383
452	Core TB Area[d]	2,000	1,511	1,308	0	0	0
487	Northern Multi-County	0			30,000	18,455	14,948
NA	Deer Management Assistance Permits	NA	NA	NA	NA	9,040	863
NA	Managed Deer Hunt Permits[e]		558	522	NA	NA	NA

[a]See Figure 2 for the locations of DMUs.
[b]Number of licenses sold could exceed the quota because junior licenses do not count towards the quota.
[c]Number of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.
[d]Also part of DMU 487.
[e]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 2015, 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	6,251	786	50,885	9,560	1,311	383	2,303	505	3,614	684
003	10,907	1,023	170,406	22,780	1,940	492	2,812	574	4,752	848
004	5,540	741	60,276	11,773	932	323	1,570	393	2,502	530
005	6,226	779	74,509	14,021	1,721	570	1,262	367	2,983	772
006	7,889	868	101,903	15,201	1,540	388	2,940	565	4,480	752
007	6,132	779	70,855	12,561	55	72	938	286	993	304
009	4,489	655	52,169	10,207	926	327	1,391	396	2,317	586
010	4,967	701	57,507	11,739	727	294	1,029	363	1,756	485
015	5,039	702	61,756	12,737	1,264	453	1,315	383	2,579	672
016	6,705	806	82,062	14,853	360	188	1,353	352	1,713	431
017	4,587	673	48,750	9,782	15	19	783	276	798	277
018	13,189	1,114	155,067	18,875	2,598	565	3,536	620	6,134	931
019	8,849	926	117,162	17,243	3,250	747	3,498	637	6,748	1,117
020	8,788	923	94,304	14,994	1,125	324	1,573	395	2,698	554
021	6,312	789	63,857	11,186	11	19	889	282	900	283
022	9,003	934	105,526	14,750	61	61	1,867	420	1,928	431
024	4,958	687	54,952	10,674	720	270	1,046	314	1,766	451
025	9,129	939	141,541	20,118	2,070	527	2,433	504	4,503	822
026	13,304	1,127	153,913	19,662	2,723	559	3,955	646	6,678	967
027	2,777	522	23,195	5,769	0	0	466	205	466	205
028	6,308	774	75,405	13,613	1,130	349	1,274	349	2,404	530
030	9,212	951	120,570	16,761	2,925	694	2,899	576	5,824	1,021
031	4,234	649	39,695	8,023	2	2	841	306	843	306
033	3,652	599	60,888	13,271	1,132	440	1,358	432	2,490	712
034	10,284	993	136,070	18,746	2,342	600	2,946	581	5,288	916
035	7,174	834	70,794	11,747	1,387	457	1,466	381	2,853	622
036	2,815	526	31,573	8,848	12	19	454	205	466	206
037	9,828	972	128,524	17,381	3,350	747	4,066	698	7,416	1,155
038	13,376	1,141	190,277	22,282	3,268	670	3,922	670	7,190	1,083

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 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 2015, 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	7,808	869	82,022	13,165	642	231	1,490	406	2,132	472
042	1,794	416	18,435	6,448	13	19	310	184	323	185
043	16,247	1,239	171,298	19,363	2,011	444	2,251	492	4,262	693
044	14,423	1,174	209,293	24,685	3,321	658	4,986	753	8,307	1,106
045	3,618	595	43,300	10,096	628	285	866	316	1,494	457
046	7,682	860	108,313	16,345	1,883	491	2,799	571	4,682	860
047	10,756	1,022	173,196	21,978	2,717	606	3,277	593	5,994	962
048	3,850	618	38,210	8,617	0	0	401	193	401	193
050	4,560	669	56,933	11,111	1,059	391	1,188	362	2,247	605
051	9,386	945	109,660	17,060	1,908	460	2,255	487	4,163	717
053	10,412	984	125,424	16,964	2,663	583	3,137	579	5,800	929
055	11,719	1,061	140,285	17,725	1,686	430	4,016	657	5,702	867
056	10,055	985	132,551	18,217	2,597	568	3,295	607	5,892	933
057	9,892	970	100,358	13,689	1,489	388	2,385	517	3,874	689
058	4,205	636	60,419	12,036	501	225	938	326	1,439	428
060	7,992	886	71,952	11,229	1,542	409	1,663	422	3,205	649
063	10,666	1,015	148,017	19,986	2,096	499	2,275	489	4,371	765
065	13,352	1,133	153,651	18,566	3,087	590	3,994	661	7,081	979
066	3,833	616	35,473	7,268	0	0	591	235	591	235
067	11,785	1,046	136,887	17,235	2,914	576	3,183	543	6,097	858
068	7,820	876	64,987	10,790	1,215	383	1,421	396	2,636	570
069	5,751	740	53,983	9,882	377	178	1,380	362	1,757	429
071	9,140	948	94,248	14,101	1,920	492	2,523	526	4,443	788
072	11,089	1,036	111,041	14,754	1,527	401	1,963	426	3,490	620
073[f]	8,675	968	110,021	17,224	2,551	583	2,912	612	5,463	978
074	10,759	1,019	163,342	21,318	2,332	544	3,338	617	5,670	904
078	7,465	856	114,080	17,919	1,968	545	2,214	484	4,182	812
081	9,961	986	134,404	18,708	2,583	625	3,015	605	5,598	968
082	1,385	364	20,553	7,669	133	107	277	173	410	216

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 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 2015, 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
083	11,646	1,052	133,502	17,652	1,997	477	1,917	445	3,914	691
115	371	194	2,865	2,147	4	0	59	102	63	102
117	945	307	7,543	2,631	0	0	115	125	115	125
121	2,049	449	22,959	6,604	11	19	658	266	669	267
122	1,687	405	21,945	7,200	405	238	580	239	985	378
127	1,343	361	16,392	5,491	2	2	59	72	61	72
131	2,286	469	25,935	7,091	11	19	268	154	279	155
135	765	274	8,346	3,902	90	91	250	166	340	204
145	1	0	4	0	0	0	1	0	1	0
149	269	163	2,832	2,321	65	75	0	0	65	75
152	2,658	516	24,681	6,067	0	0	450	216	450	216
155	3,634	595	47,813	10,737	269	154	1,024	320	1,293	362
174	190	134	2,008	1,863	0	0	37	54	37	54
245	0	0	0	0	0	0	0	0	0	0
249	3,381	576	31,503	8,072	29	53	366	184	395	191
252	1,644	400	14,852	4,701	21	27	279	161	300	163
255	2,282	470	36,520	11,011	11	19	684	261	695	261
273[f]	0	0	0	0	0	0	0	0	0	0
308	28,984	1,653	434,427	33,749	6,111	916	8,740	990	14,851	1,487
311	16,413	1,258	261,886	26,584	3,378	679	5,749	831	9,127	1,196
312	17,654	1,307	257,335	25,945	5,750	896	5,949	805	11,699	1,395
329	35,007	1,786	439,931	32,835	10,149	1,202	13,470	1,204	23,619	1,909
332	35,210	1,790	458,119	34,168	9,944	1,214	12,480	1,140	22,424	1,861
333	3,365	569	41,279	9,538	706	278	980	336	1,686	477
341	25,857	1,550	363,491	30,594	4,577	791	6,095	831	10,672	1,274
349	1,054	323	8,921	3,347	0	0	95	90	95	90
361	30,415	1,669	416,966	32,920	5,204	758	8,065	914	13,269	1,292
452	8,756	928	82,306	11,956	2,075	584	2,706	534	4,781	851

[a]Harvest estimates do not include deer taken with DMA permits. An additional 5,931 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.

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

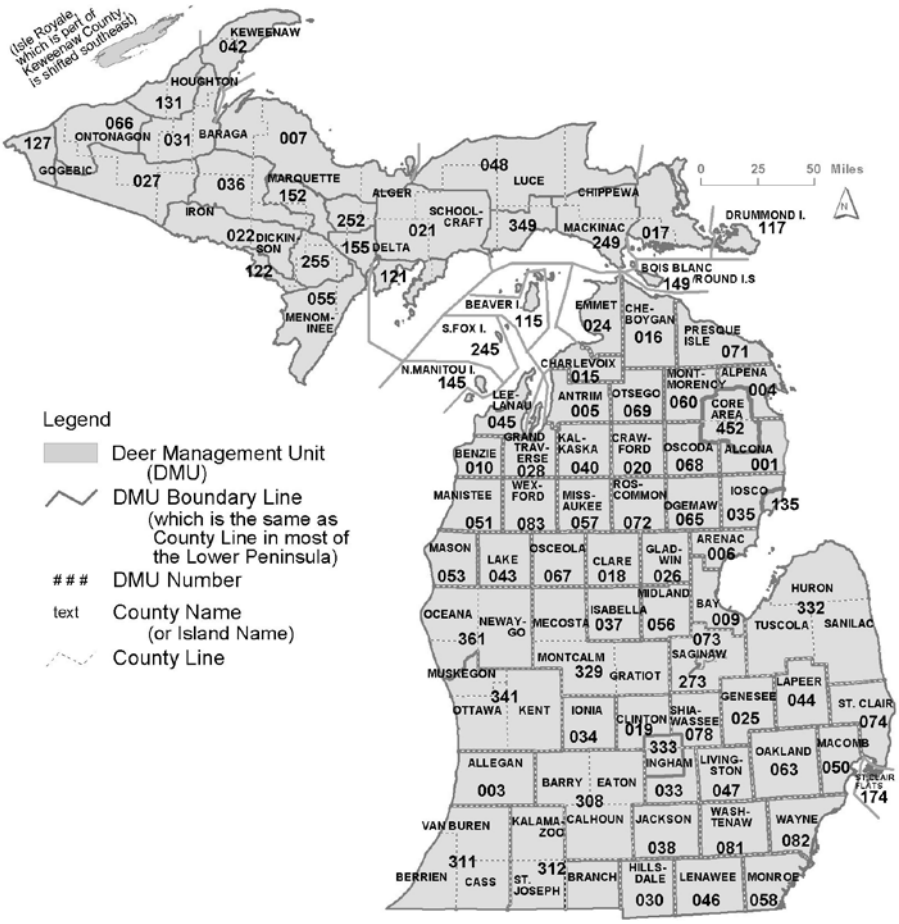
2015 MICHIGAN DEER HARVEST STUDY

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

It is important that you return this questionnaire even if you did not hunt or harvest a deer. Please report only your hunting activities, and only report taking a deer if your kill tag was attached to it. If you want to provide your answers via the internet, visit our website at https://secure1.state.mi.us/deersurvey.

1. Did you hunt deer in Michigan during the 2015 seasons?

[1] ☐ Yes. [2] ☐ No. If you did not hunt deer, skip to Question #10.



Questions continued on next page.

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

SEASON HUNTED (Check box if you hunted during the season.)	LOCATION HUNTED (For each season you hunted, list the management unit and county hunted on separate lines. See map on first page.)		NUMBER OF DAYS HUNTED	NUMBER OF DEER HARVESTED (Record by type of deer and land ownership type where each deer was taken.)			
				Antlered Bucks		Antlerless	
	Deer Management Unit	County		Public Land	Private Land	Public Land	Private Land
0 [X] **Example**	1 341	Kent	12	0	1	0	0
1 [ ] **Archery** Oct 1-Nov 14 and Dec 1-Jan 1 (Statewide)	1						
	2						
	3						
2 [ ] **Regular Firearm** Nov 15-30 (Statewide)	1						
	2						
	3						
3 [ ] **Muzzleloader** Dec 4-13 (UP & NLP) Dec 4-20 (SLP)	1						
	2						
	3						
4 [ ] **Early Firearm** Sept 19-20 (Portions of the Lower Peninsula)	1			Only antlerless deer could be taken on private land during the early firearm season			
	2						
	3						
5 [ ] **Late Firearm** Dec 21-Jan 1 (Portions of the Lower Peninsula)	1			Only antlerless deer could be taken on private land during the late firearm season			
	2						
	3						
6 [ ] **Liberty Hunt** Sept 19-20 (Statewide)	1						
	2						
	3						
7 [ ] **Independence Hunt** Oct 15-18 (Statewide)	1						
	2						
	3						

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

1 ☐ Yes 2 ☐ No.

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

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

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

5. The DNR collects biological information such as age and sex from deer that hunters take to DNR check stations. Were any of the deer you harvested in 2015 taken to a DNR check station? *(Only count deer tagged with one of your kill tags.)*

1 ☐ Yes 2 ☐ No. Skip to question #7.

6. How many of your deer were taken to a DNR check station?
(Only count deer tagged with one of your kill tags.)

_____ Report the number of deer taken to a DNR check station.

7. What is your preferred county to hunt deer in Michigan? Please select one county from the counties you reported hunting during the 2015 seasons in Question #2.

Please write county name

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

1 ☐ Private 2 ☐ Public 3 ☐ Both private and public lands

9. Please indicate how satisfied or dissatisfied you were with the following for the 2015 deer hunting seasons in your preferred county:
(Select one choice per item.)

	Very Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Strongly Dissatisfied	Not Applicable
a. Number of deer you saw.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
b. Number of antlered deer (bucks) you saw.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
c. Your overall deer hunting experience.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
d. Number of deer you harvested.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐

10. Antler point restrictions were adopted in 2008 for taking antlered deer (bucks) in the Upper Peninsula (UP). The regular buck tag of a combination deer license could only be used to tag a buck with at least three antler points on one side. The restricted tag could only be used on a buck with at least four points on one side. Hunters who chose not to purchase the combination tag were restricted to one buck (with no additional point restrictions) in the UP, all seasons combined. How strongly do you support or oppose these restrictions for the UP?

1 ☐ Strongly Support 2 ☐ Support 3 ☐ Oppose 4 ☐ Strongly Oppose 5 ☐ Not Sure

11. Please describe how the antler point restrictions for the Upper Peninsula affected your deer hunting participation, harvest, and satisfaction in 2015. *(Select one choice per item.)*	Increased	No change	Decreased	Not Applicable
a. Number of days you hunted deer in the Upper Peninsula (UP).	1 ☐	2 ☐	3 ☐	4 ☐
b. Number of days you hunted deer in the Lower Peninsula (LP).	1 ☐	2 ☐	3 ☐	4 ☐
c. Number of antlerless deer you harvested in the UP.	1 ☐	2 ☐	3 ☐	4 ☐
d. Number of antlerless deer you harvested in the LP.	1 ☐	2 ☐	3 ☐	4 ☐
e. Total number of deer you harvested in the UP.	1 ☐	2 ☐	3 ☐	4 ☐
f. Total number of deer you harvested in the LP.	1 ☐	2 ☐	3 ☐	4 ☐
g. Overall satisfaction with your deer hunting experience in the UP.	1 ☐	2 ☐	3 ☐	4 ☐
h. Overall satisfaction with your deer hunting experience in the LP.	1 ☐	2 ☐	3 ☐	4 ☐

12. The same antler point restrictions that were adopted in the Upper Peninsula as described above were implemented in DMU 487 in the northeast Lower Peninsula in 2010. In addition, hunters in DMU 487 could use any deer hunting license for antlerless deer during the firearm or muzzleloader seasons. DMU 487 included Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle counties. How strongly do you support or oppose these regulations for DMU 487?

1 ☐ Strongly Support 2 ☐ Support 3 ☐ Oppose 4 ☐ Strongly Oppose 5 ☐ Not Sure

13. Please describe how the antler point restrictions for DMU 487 affected your deer hunting participation, harvest, and satisfaction in 2015. *(Select one choice per item.)*	Increased	No change	Decreased	Not Applicable
a. Number of days you hunted deer in DMU 487.	1 ☐	2 ☐	3 ☐	4 ☐
b. Number of days you hunted deer outside DMU 487.	1 ☐	2 ☐	3 ☐	4 ☐
c. Number of antlerless deer you harvested in DMU 487.	1 ☐	2 ☐	3 ☐	4 ☐
d. Number of antlerless deer you harvested outside DMU 487.	1 ☐	2 ☐	3 ☐	4 ☐
e. Overall satisfaction with your deer hunting experience in DMU 487.	1 ☐	2 ☐	3 ☐	4 ☐

Please return questionnaire in the enclosed postage-paid envelope.

Thank you for your help!

www.michigan.gov/dnr