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MICHIGAN DEER HARVEST SURVEY REPORT 2013 SEASONS

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ABSTRACT

A survey of deer hunters was conducted following the 2013 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2013, an estimated 661,788 hunters spent 9.2 million days afield. Statewide, the number of people hunting increased significantly by 1% between 2012 and 2013. Hunters harvested about 385,000 deer. Harvest declined significantly by 8% from 2012. Statewide, 43% of hunters harvested a deer in 2013. About 22% of the hunters took an antlerless deer and 29% took an antlered buck in 2013. Approximately 13% of deer hunters harvested two or more deer of any type (two antlerless deer, two antlered bucks, or one of each). Less than 4% of hunters statewide harvested two antlered bucks. Levels of satisfaction with numbers of deer seen, bucks seen, deer taken, and overall deer hunting experience statewide declined significantly in 2013 from 2012. Statewide, 45% of hunters were satisfied with their overall hunting experience in 2013, and satisfaction was highest in the Lower Peninsula. About 162,728 hunters used a crossbow during the 2013 archery season, and they harvested approximately 58,772 deer with the crossbow. About 10% fewer individuals purchased a deer hunting license in 2013 than ten years ago in 2003. Although the overall number of license buyers declined from 2003, an increased number of people younger than 14 years of age and people older than 50 purchased a license in 2013. Nearly 12% of the license buyers in 2013 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 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 2013 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).

During 2013, white-tailed deer (*Odocoileus virginianus*) 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 (firearm, archery, combination, antlerless, or mentored youth license) (Table 1).

A harvest tag was issued as part of the hunting license. Hunters could purchase a maximum of two licenses for taking antlered deer (one mentored youth, one combination license, or both a firearm and an archery license). Archery and firearm licenses included one harvest tag, while the mentored youth and combination licenses had two harvest tags. A firearm license allowed a person to take one deer with at least one antler three inches or longer, except in DMU 487 where it could also be used to take an antlerless deer in the firearm and muzzleloader seasons (Table 1). An archery license allowed an individual to take one deer of either sex. A person with a combination license could take two deer of either sex during the archery season, two antlered deer during the firearm season, or one antlered deer during each season, except in DMU 487 where it could also be used to take two antlerless deer in the firearm and muzzleloader seasons (Table 1). A person with a mentored youth license could use their two harvest tags to take two deer of either sex during the archery, firearm, or muzzleloader seasons. In addition, hunters with a mentored youth license could use one of their harvest tags to take one deer of either sex in the Liberty Season. If two antlered deer were taken, 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.

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 not to

purchase the combination tag were restricted to one buck only (without any antler point restrictions) in the UP, all seasons combined, even if they purchased both archery and firearms licenses.

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 a firearm license or one or both combination license tags 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.

Antlerless licenses could be purchased in addition to archery, firearm, mentored youth, or combination licenses. Antlerless deer licenses allowed hunters to take deer without antlers or with antlers shorter than three inches 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 fifteen DMUs (017, 021, 027, 031, 036, 042, 048, 066, 117, 127, 131, 152, 249, 252, and 349) in the UP. A limited number of antlerless licenses were issued specifically for either public or private lands. Public land antlerless licenses were not available in all DMUs that had private land licenses. 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). Hunters were limited to a maximum of five private land antlerless deer licenses, except for DMU 487 where hunters were limited to ten private land licenses. In addition, there was no seasonal limit for the number of public land antlerless licenses that could be purchased. Furthermore, hunters could purchase two private land antlerless deer licenses each day, except for private land antlerless licenses for DMU 487 and public land antlerless licenses for DMU 452 where hunters could purchase five licenses each day.

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.

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.

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 21-22 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 firearm, mentored youth, or combination license. Only an antlerless deer could be taken with an antlerless license or DMA permit. Archery and junior archery deer licenses were not valid for this hunt. 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. A public-land antlerless deer license was required to hunt antlerless deer on Commercial Forest land. All hunters under age 17 had to be accompanied by a parent, guardian or someone designated by their parent or guardian.

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, 2013, through January 1, 2014). Archery licenses, antlerless 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 17-20, 2014. Hunters could take one deer of either sex on private lands or public lands requiring an access 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 6-15 in the UP, December 13-22 in the Northern LP, and December 6-22 in the Southern LP. Hunters were allowed to take deer on both public and private lands with mentored youth, firearm and combination deer 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 21-22. 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 50 counties in the LP (Alcona, Allegan, Alpena, Antrim, Arenac, Barry, Bay, Berrien, Branch, Calhoun, Cass, Charlevoix, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Huron, Ingham, Ionia, Iosco, Isabella, Jackson, Kalamazoo, Kent, Lapeer, Lenawee, Livingston, Macomb, Mecosta, Midland, Monroe, Montcalm, Montmorency, Muskegon, Newaygo, Oakland, Oceana, Oscoda, Ottawa, Presque Isle, Saginaw, St. Clair, St. Joseph, Sanilac, Shiawassee, Tuscola, Van Buren, Washtenaw, and Wayne). The counties open in 2013 were the same as in 2012.

The late antlerless firearm season occurred from December 23, 2013, through January 1, 2014. 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. The same counties open to hunting during the 2013 late antlerless season were open in 2012.

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. Hunters using a crossbow were required to obtain a free crossbow stamp, except hunters with a disability already hunting under a DNR-issued crossbow permit, did not need the stamp.

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 (98,143). 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 2013 deer hunting seasons, a questionnaire was sent to 55,537 randomly selected individuals who had purchased a hunting license (firearm, archery, 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 = 439,173). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 208,866). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and Liberty seasons (N = 56,931). The fourth stratum consisted of 3,662 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 3,772 people that had voluntarily reported information about their hunting activity via the Internet before the random sample was selected. The random sample consisted of 28,591 people from the first stratum; 13,469 from the second stratum; 11,714 from the third stratum; and 3,658 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 2014, 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 55,537 people were sent the questionnaire, 1,260 surveys were undeliverable resulting in an adjusted sample size of 54,277. Questionnaires were returned by 27,834 people (51% 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 2013 estimates to make them comparable to the adjusted 2012 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 6.2%, 4.5%, and 1.8%, respectively, to make estimates comparable to 2012. 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 2013, 712,404 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2013 increased by nearly 2% from 2012 (701,001 people purchased a license in 2012). Most of the people buying a license were male (89%), and the average age of license buyers was 42 years (Figure 3). Nearly 12% (87,716) of the license buyers were younger than 17 years old. About 4% (26,821) of the license buyers were younger than 12 years old.

The number of people buying a license in 2013 was nearly 10% less than the number of people who purchased a license ten years ago in 2003 (787,951 people purchased a license in 2003). There were fewer license buyers for most age classes between 14 and 50 years of age in 2013, compared to 2003 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2013. 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 2003.

The minimum age requirement to hunt deer has been lowered three times during recent years. In 2006, the minimum age for hunting deer with a firearm on private land was lowered

from age 14 to 12, and the minimum age for hunting deer with archery equipment on any land type was lowered from age 12 to 10. This change resulted in approximately 15,000 additional youth purchasing a deer hunting license per year starting in 2006 (Figure 5). In 2011, it was legal for 10 and 11 year olds to hunt deer on private land with either a firearm deer license or junior combination deer license. This change resulted in approximately 5,000 additional youth purchasing a deer hunting license per year starting in 2011. In 2012, 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. This change resulted in approximately 13,500 additional youth purchasing a deer hunting license in 2013. The cumulative effect of these 2006-2013 changes resulted in approximately 33,500 additional youth purchasing a deer hunting license in 2013.

The number of 2013 deer harvest tags sold for all license types combined increased slightly (0.7%) from 2012 (Table 2). License buyers were issued an average of 2.1 harvest tags. About 90% of the license buyers obtained three or fewer harvest tags, and about 99% had five or fewer harvest tags (Figure 6). Hunters most frequently obtained antlerless and combination harvest tags (Figure 7). About 42% of the license buyers purchased at least one antlerless license (302,050 people), and greater than 99% of antlerless license buyers purchased three or fewer antlerless licenses, public and private licenses combined (Figure 8).

The antlerless license quota on private lands decreased 24% from 637,900 in 2012 to 483,400 licenses in 2013 (Appendix A). The quota for public land antlerless licenses increased 2% from 69,350 to 70,574 between 2012 and 2013. The number of antlerless licenses sold declined nearly 2% between 2012 and 2013 (Table 2).

About 93.1 $\pm$ 0.3% (661,788 hunters) of the people buying a license in 2013 actually spent time hunting deer (Table 3). Most hunters (593,079) pursued deer during the regular firearm season (Figure 9). Statewide, the number of people hunting deer during all seasons combined was nearly 1% greater than hunter numbers in 2012.

A significantly greater number of people hunted during the early firearm (15%), regular firearm (2%), and archery (1%) seasons during 2013 (Table 3). Significantly fewer people hunted during the muzzleloader (-9%), late antlerless (-20%), and Liberty (-42%) seasons. The numbers of people hunting in the Independence season were nearly unchanged between 2012 and 2013 (Figure 10).

About 48% of the days hunters spent pursuing deer throughout the state occurred in the archery season (Figure 11). 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 15.2 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 ($\bar{x}$ = 14.5 days/hunter) (Figure 12, Table 4). For all seasons combined, hunting effort statewide was nearly unchanged between 2012 and 2013 (Table 3). Hunting effort increased significantly during the early firearm season (14%) but decreased significantly during the muzzleloader (-10%), late antlerless (-36%), and Liberty (-44%) seasons. Hunting effort was

unchanged during the archery, regular firearm, and Independence seasons between 2012 and 2013.

About 385,302 deer were harvested statewide in 2013, which was significantly lower (-8%) than in 2012 (Figures 13-14, Tables 5-6). Regional declines in harvest were greatest in the UP, where overall harvest declined by nearly 19%. Statewide harvest of antlerless deer declined nearly 8% in 2013, while harvest of antlered deer declined by nearly 9% from 2012 (Table 5). Between 2012 and 2013, harvest of antlered deer decreased significantly during the archery (8%), regular firearm (9%), and Liberty (33%) seasons, but was unchanged in other seasons. Harvest of antlerless deer decreased significantly in the late antlerless (36%) and Liberty (44%) seasons but was unchanged in other seasons.

About 54% of the deer harvested (sexes combined) in 2013 were taken during the regular firearm season (Figure 15). Nearly 45% of the antlerless deer and 62% of the antlered bucks were harvested in the regular firearm season. Hunters took 31% of the harvested deer (sexes combined) during archery season. These archers took 31% of the antlerless deer and 31% of the antlered bucks harvested. Few antlered bucks (4%) were taken in the muzzleloader season. The early and late antlerless and muzzleloader seasons combined accounted for about 20% of the antlerless deer harvested.

About 86% of the animals harvested (sexes combined) in 2013 were taken on private lands (Table 7). Statewide, most of the antlerless deer (87%) and antlered bucks (85%) were harvested on private lands. Some noteworthy changes between 2012 and 2013 included decreased harvest of deer on both public and private lands in the UP and decreased take of antlered deer in the northwest Lower Peninsula (NWLP). New antler-point restrictions were adopted in 2013 for harvest of antlered deer the NWLP (Frawley 2012), and these restrictions likely contributed to reduced take of antlered deer in the NWLP.

Statewide, 43% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2013 (Figure 16, Table 8), compared to the 46% successful in 2012. About 22% of hunters took an antlerless deer, and 29% took an antlered buck in 2013. About 13% of deer hunters harvested two or more deer.

Hunters were most successful in taking a deer during the Liberty (40% successful), regular firearm (32%), and archery (31%) seasons (Figure 17, Table 9). Hunter success was lowest in the Independence (15%) and muzzleloader (16%) seasons. Nearly 21% of hunters took an antlered buck and 13% 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, $\leq$45% of hunters were satisfied with numbers of deer seen, bucks seen, deer taken, and their overall hunting experience in 2013 (Tables 10-11). Statewide levels of satisfaction decreased for all measures between 2012 and 2013.

Statewide, about 53% of hunters supported the antler point restrictions on buck harvest implemented for the UP (Table 12), and about 59% of the hunters that preferred to hunt in the

UP supported the antler point restrictions. Statewide support for the restrictions did not change significantly between 2012 and 2013.

Statewide, about 45% of hunters supported the antler point restrictions on buck harvest implemented for the DMU 487 (Table 13), and about 51% of the hunters that preferred to hunt in the northeast LP supported the restrictions. Statewide support for the restrictions in DMU 487 was not significantly different; however, opposition increased significantly between 2012 and 2013 (increased from 18% to 20%).

About 162,728 hunters used a crossbow during the archery season, and they harvested about 58,772 deer with the crossbow (Tables 14-16). The number of archers using a crossbow increased 14% from 2012 (142,548 archers in 2012); however, harvest of deer by archers using a crossbow decreased 2% (59,771 deer taken in 2012). About 32% of these archers using a crossbow in 2013 harvested a deer with a crossbow. Hunters using a crossbow to hunt deer were required to obtain a crossbow stamp, and 58 ± 1% of the archers using a crossbow during the archery season had obtained this stamp in 2013. However, 76 ± 1% of the archers using a crossbow during the archery season in 2013 had obtained a crossbow stamp during at least one year during 2009-2013.

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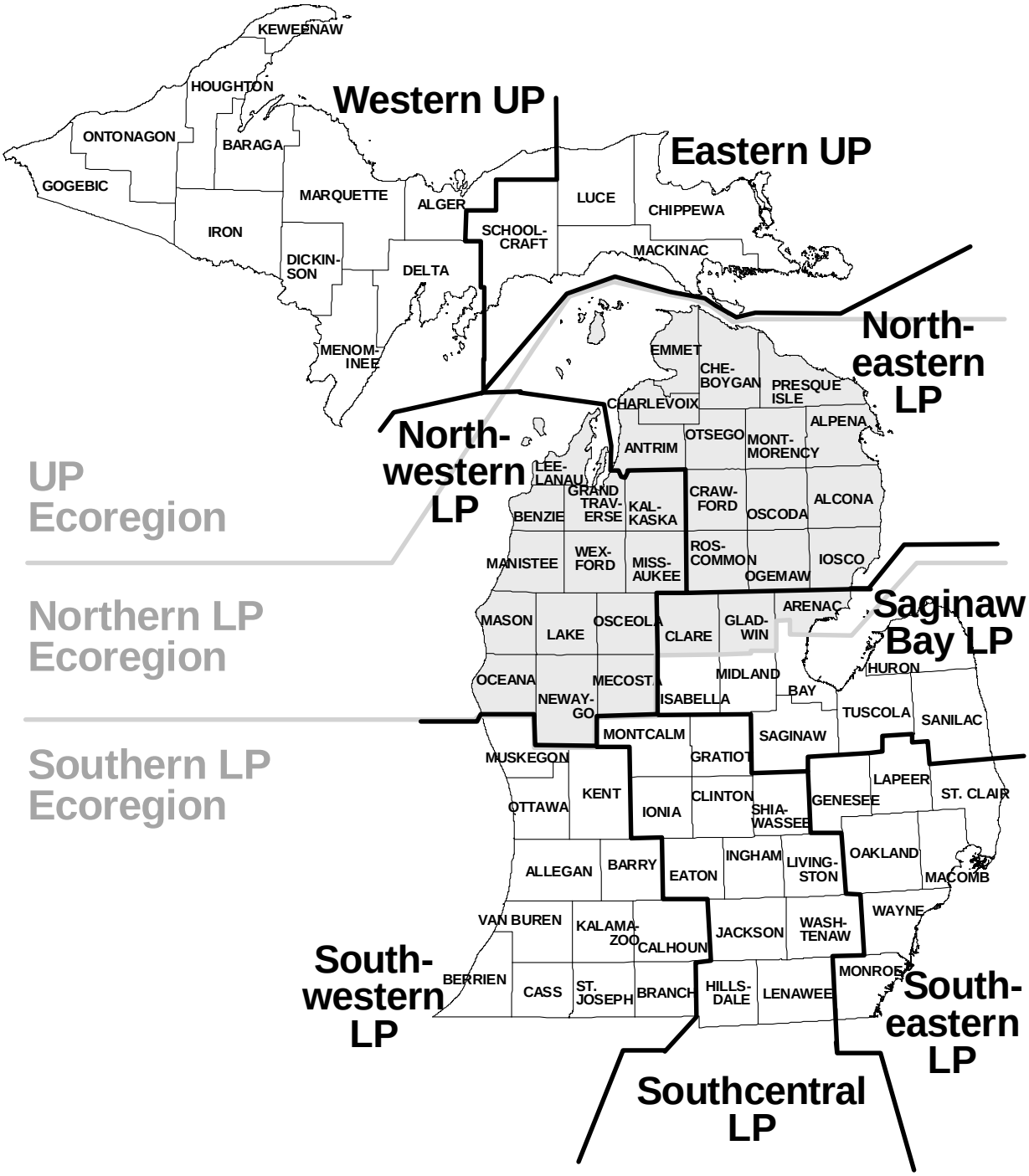

Figure 1. Areas used to summarize deer harvest in Michigan for the 2013 hunting seasons.

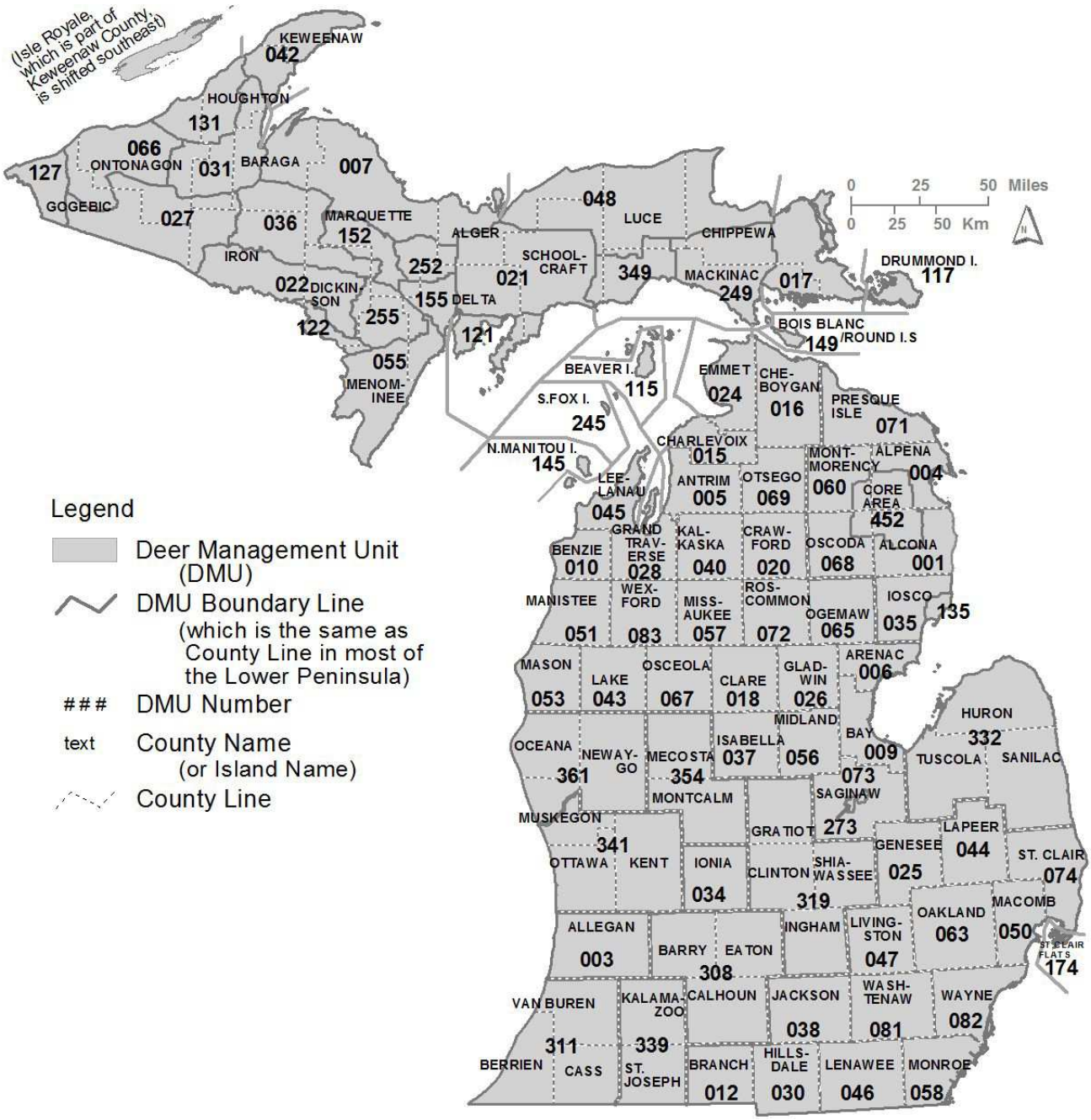

Figure 2. Deer Management Units in Michigan for the 2013 hunting seasons.

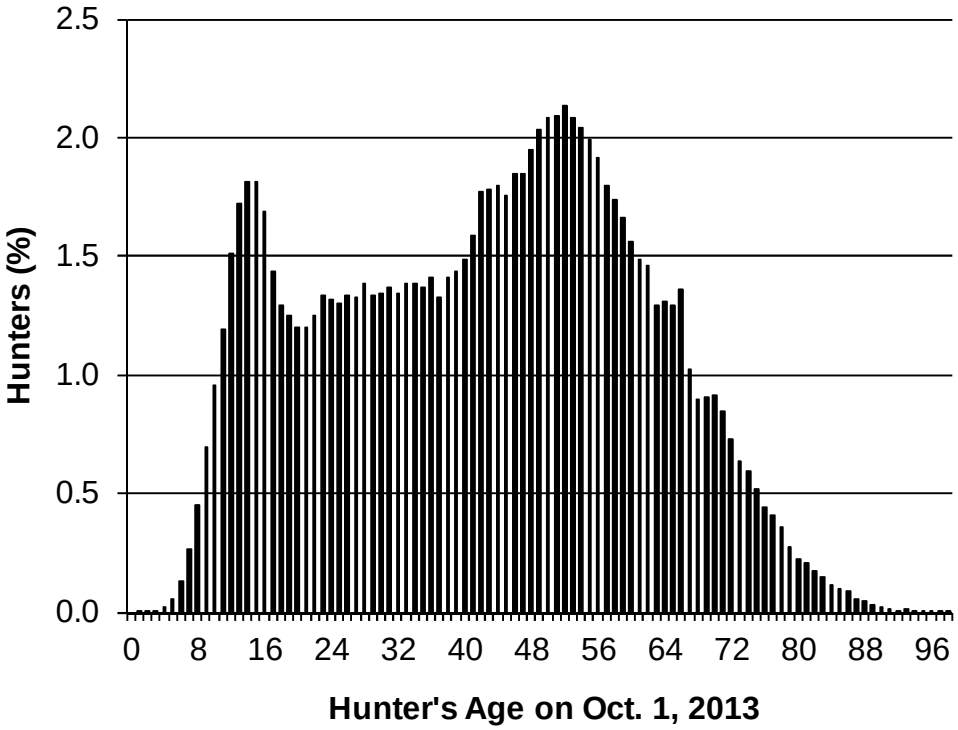

Figure 3. Age of people that purchased a deer hunting license in Michigan for the 2013 hunting seasons ($\bar{x}$ = 42 years).

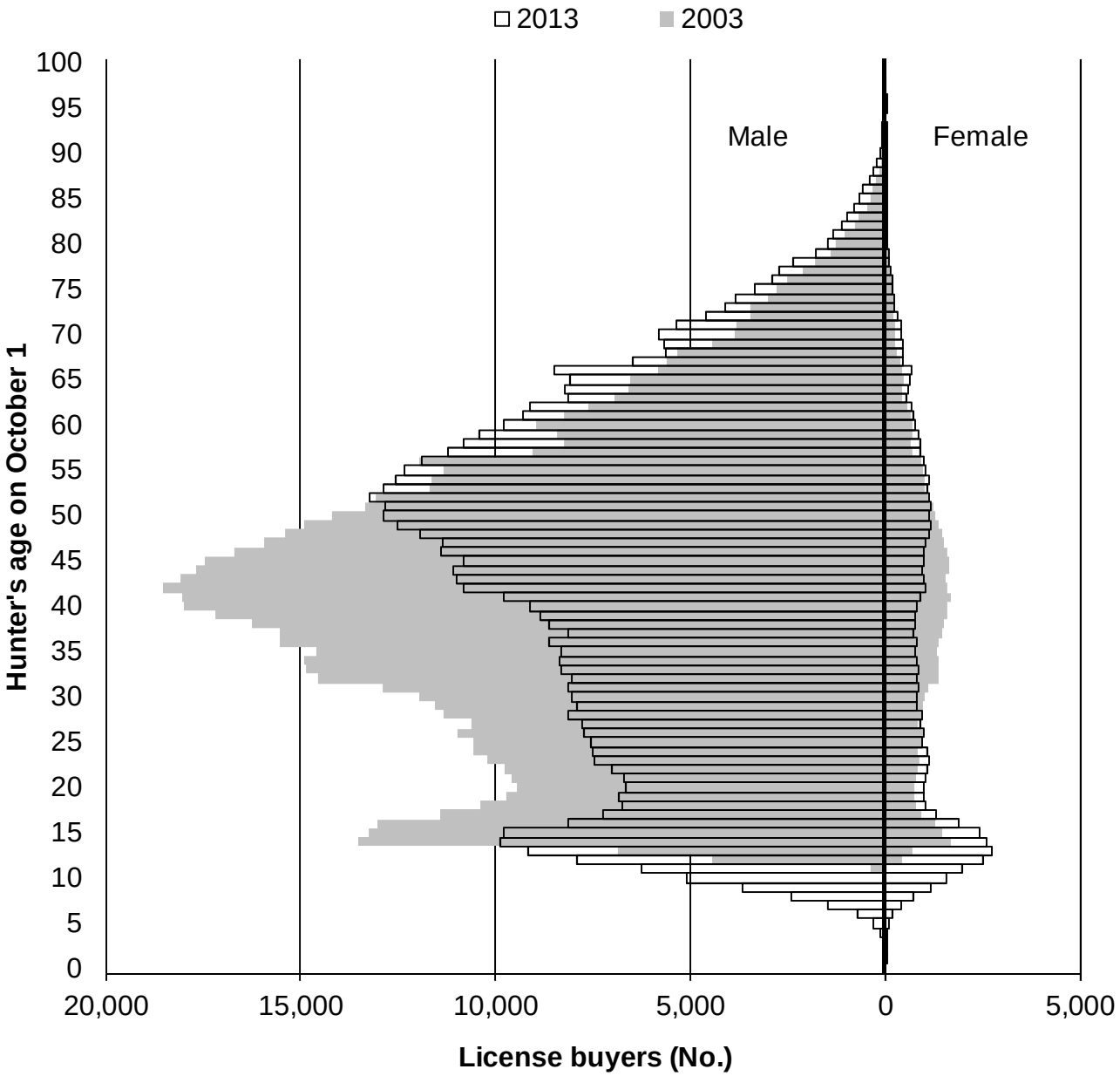

Figure 4. Number of deer hunting license buyers in Michigan by age and sex during 2003 and 2013 hunting seasons. Deer hunting licenses were purchased by 787,951 people in 2003 and 712,404 people in 2013.

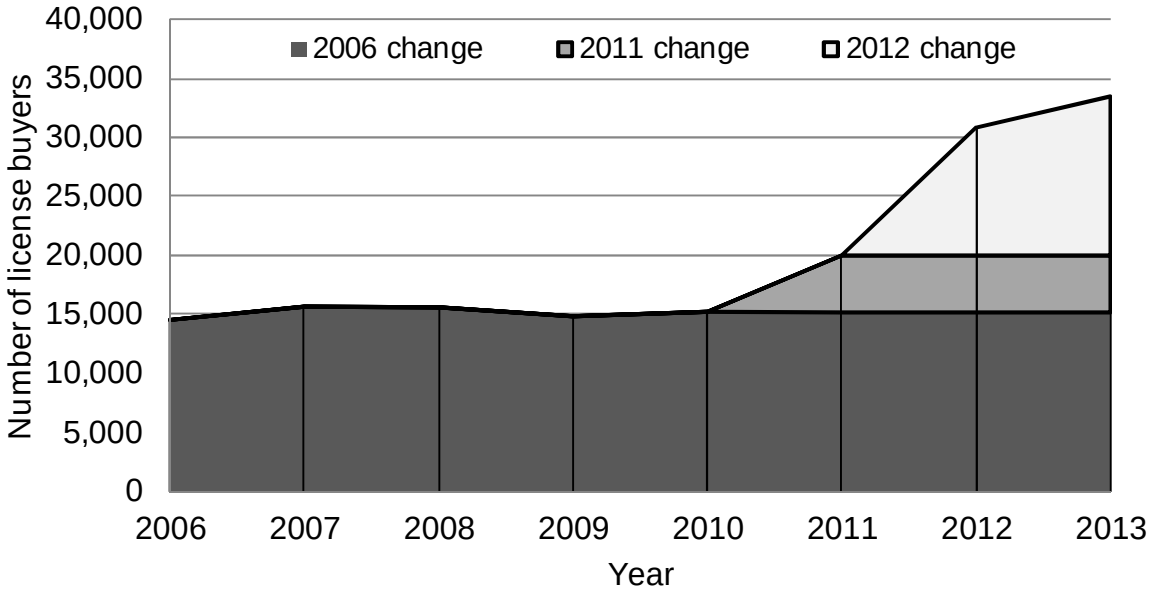

Figure 5. The number of youth deer hunting license buyers by year during 2006-2013, showing annual differences attributed to lowering the minimum age requirement.

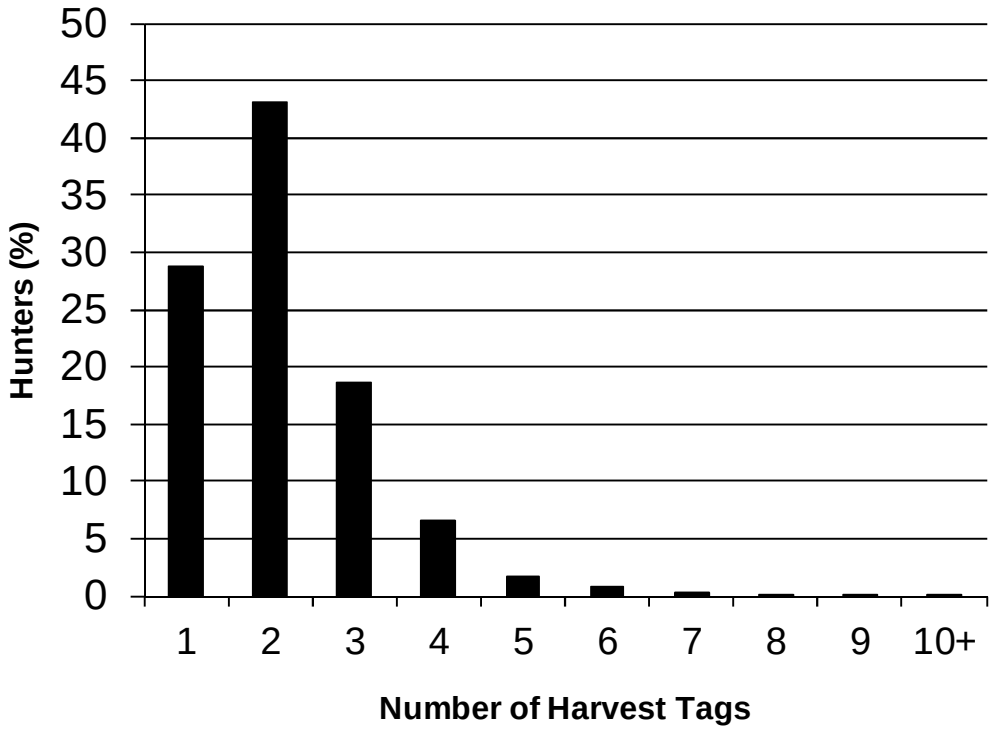

Figure 6. Number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2013 hunting seasons ($\bar{x}$ = 2.2 tags). Licenses were purchased by 701,001 people.

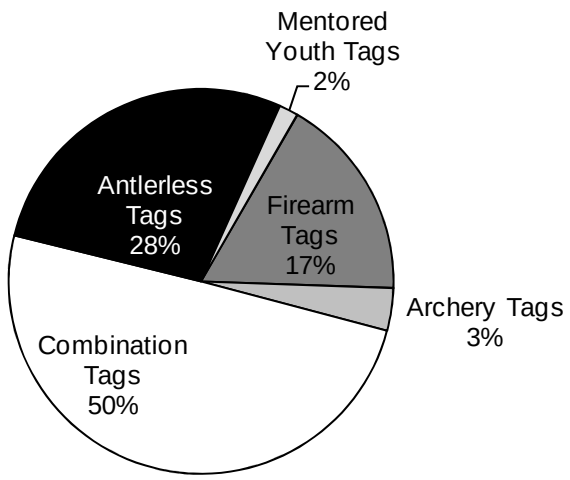

Figure 7. Types of harvest tags issued for deer hunting in Michigan during the 2013 hunting seasons.

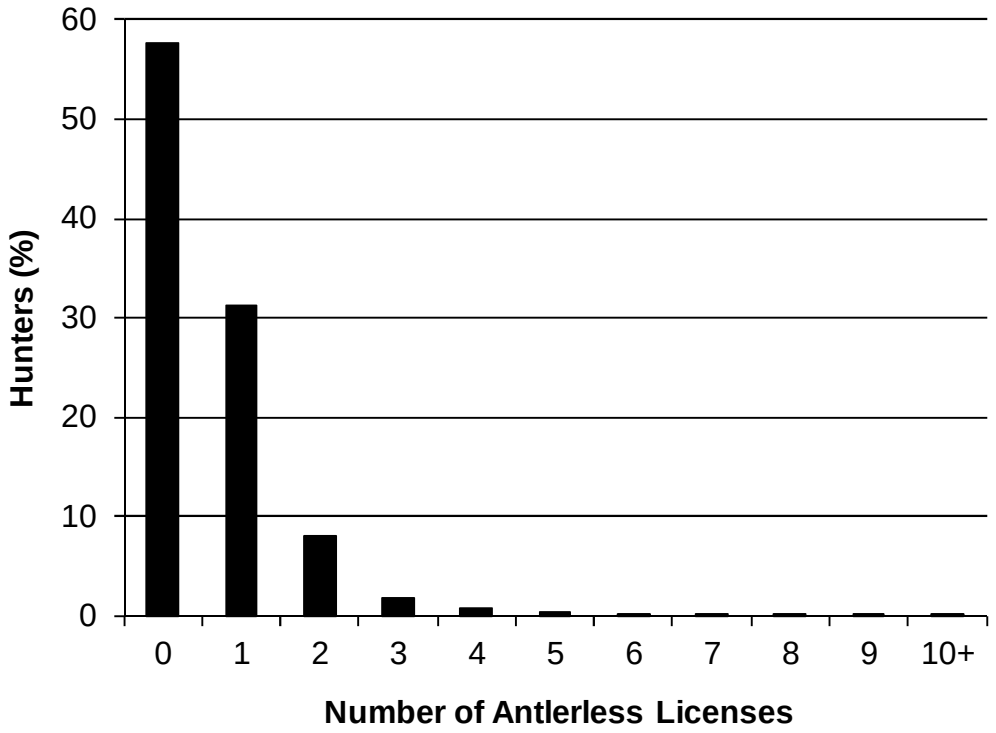

Figure 8. Percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2013. Antlerless licenses were purchased by 302,050 of 712,404 people (42%) buying deer hunting licenses.

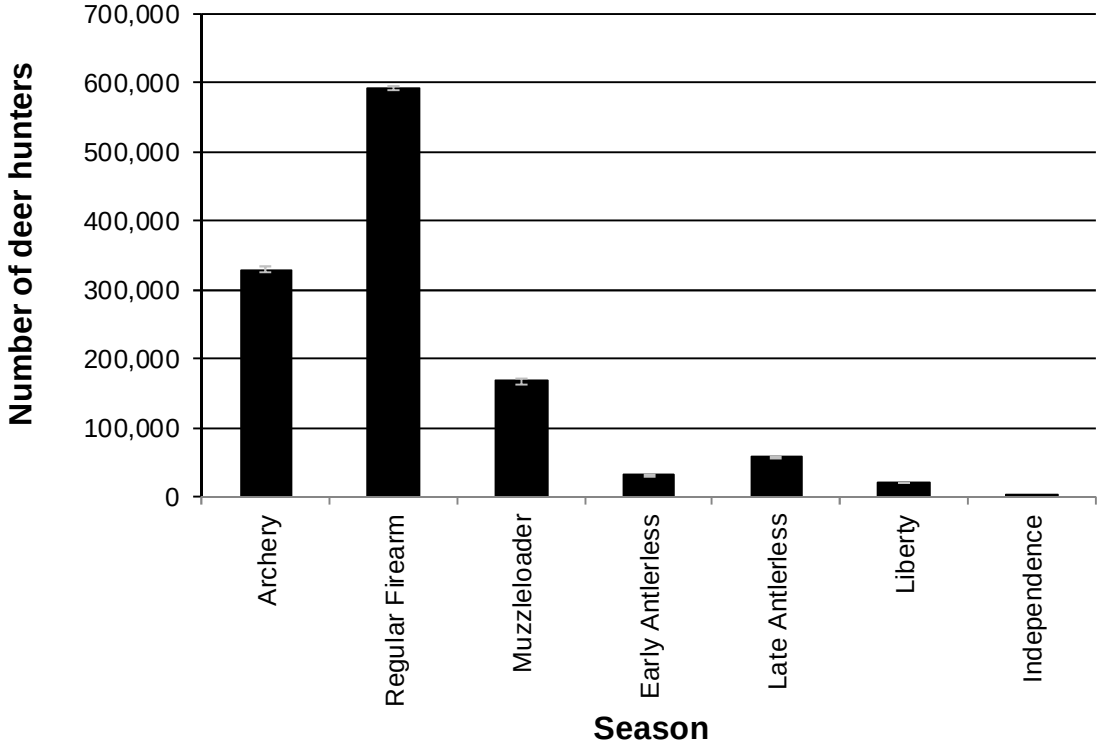

Figure 9. Number of people hunting deer in Michigan during the 2013 hunting seasons. Error bars represent the 95% CLs.

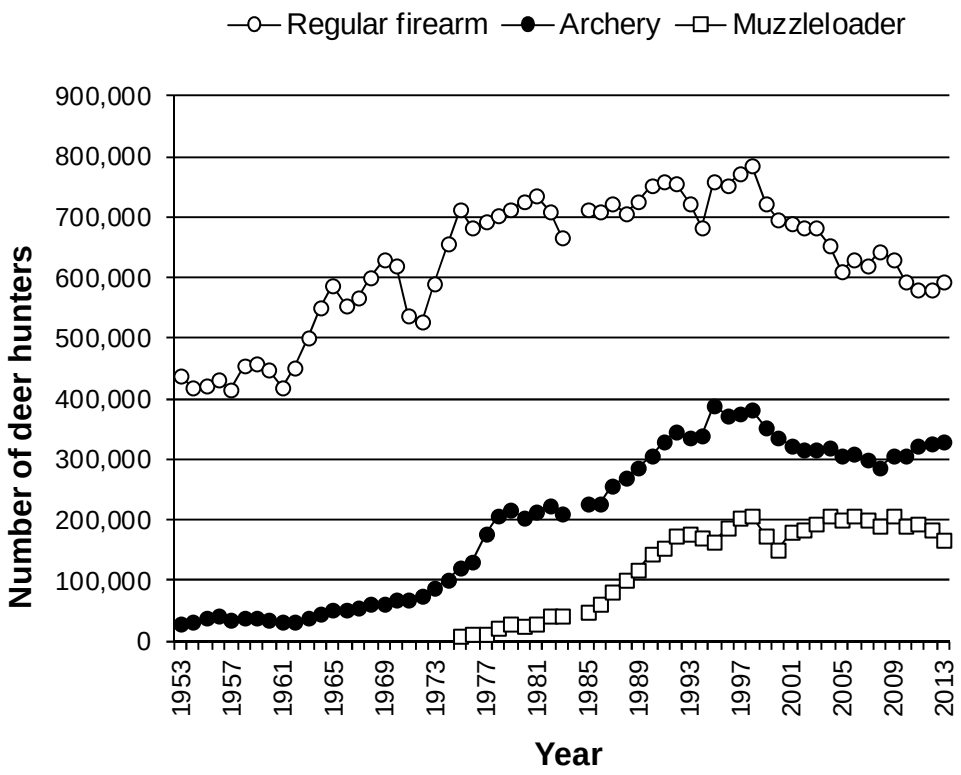

Figure 10. Number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2013.

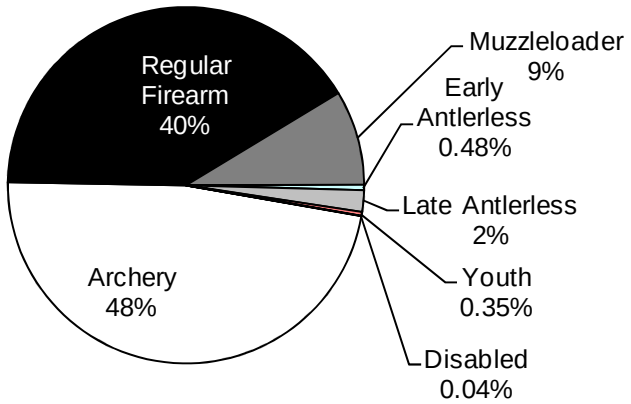

Figure 11. Distribution of hunting effort among deer hunting seasons in Michigan, 2013.

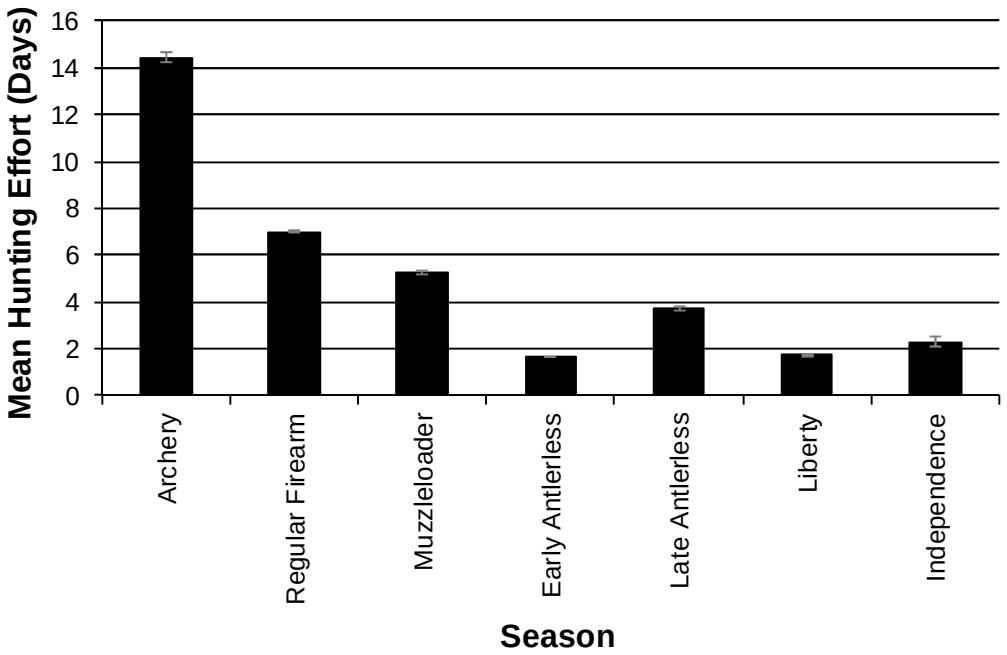

Figure 12. Mean number of days per hunter spent hunting deer in Michigan during the 2013 hunting seasons. Error bars represent the 95% CLs.

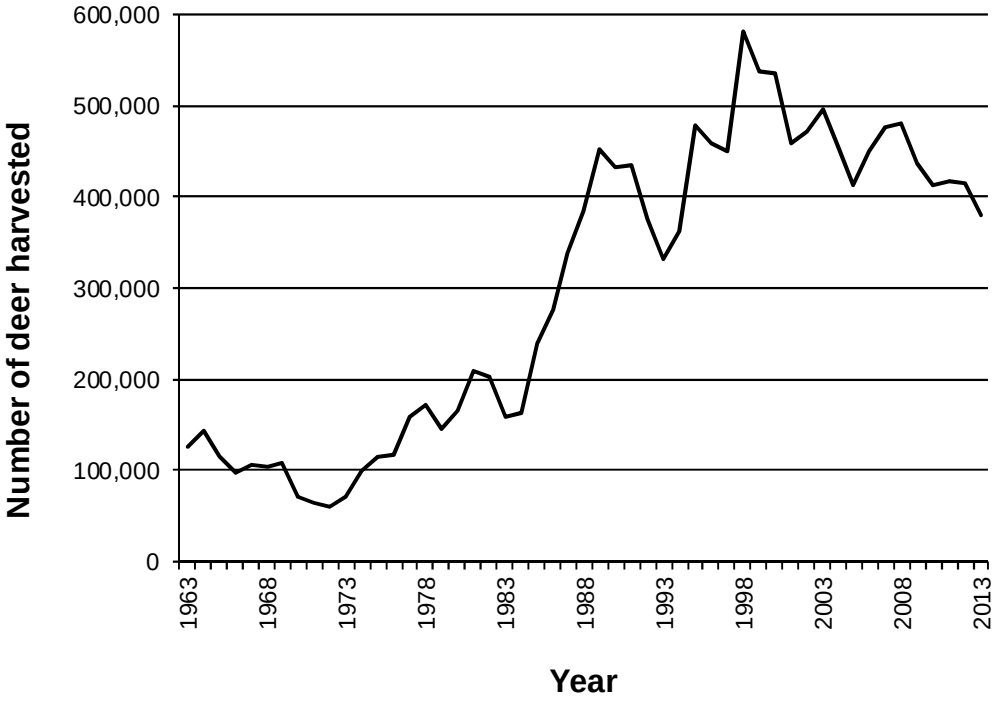

Figure 13. Number of deer harvested in Michigan's hunting seasons, 1963-2013. Harvest from all seasons and for all deer sexes was combined.

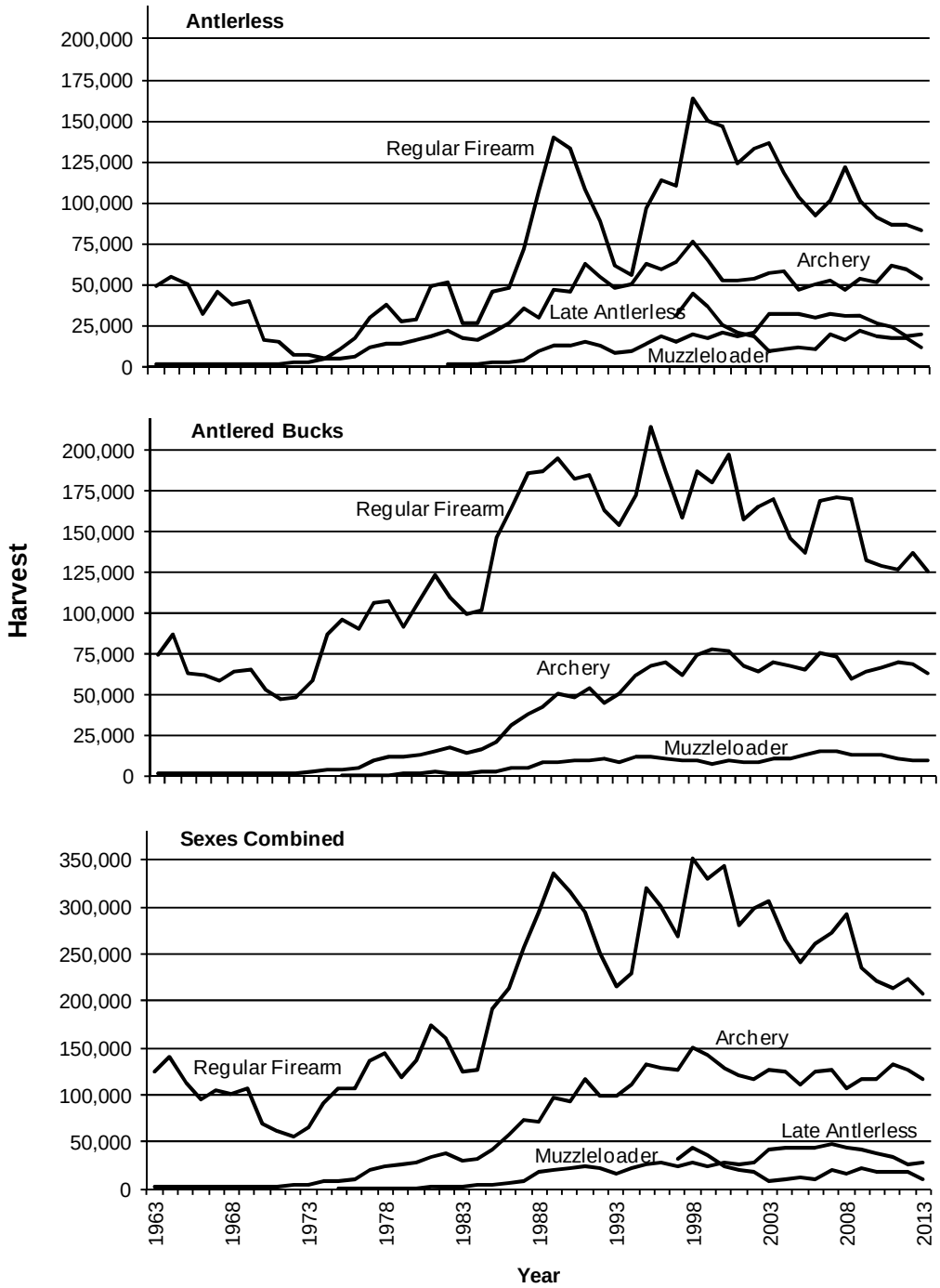

Figure 14. Number of deer harvested in Michigan's hunting seasons, 1963-2013. Harvests for early antlerless, youth, and special disabled hunter seasons were not shown.

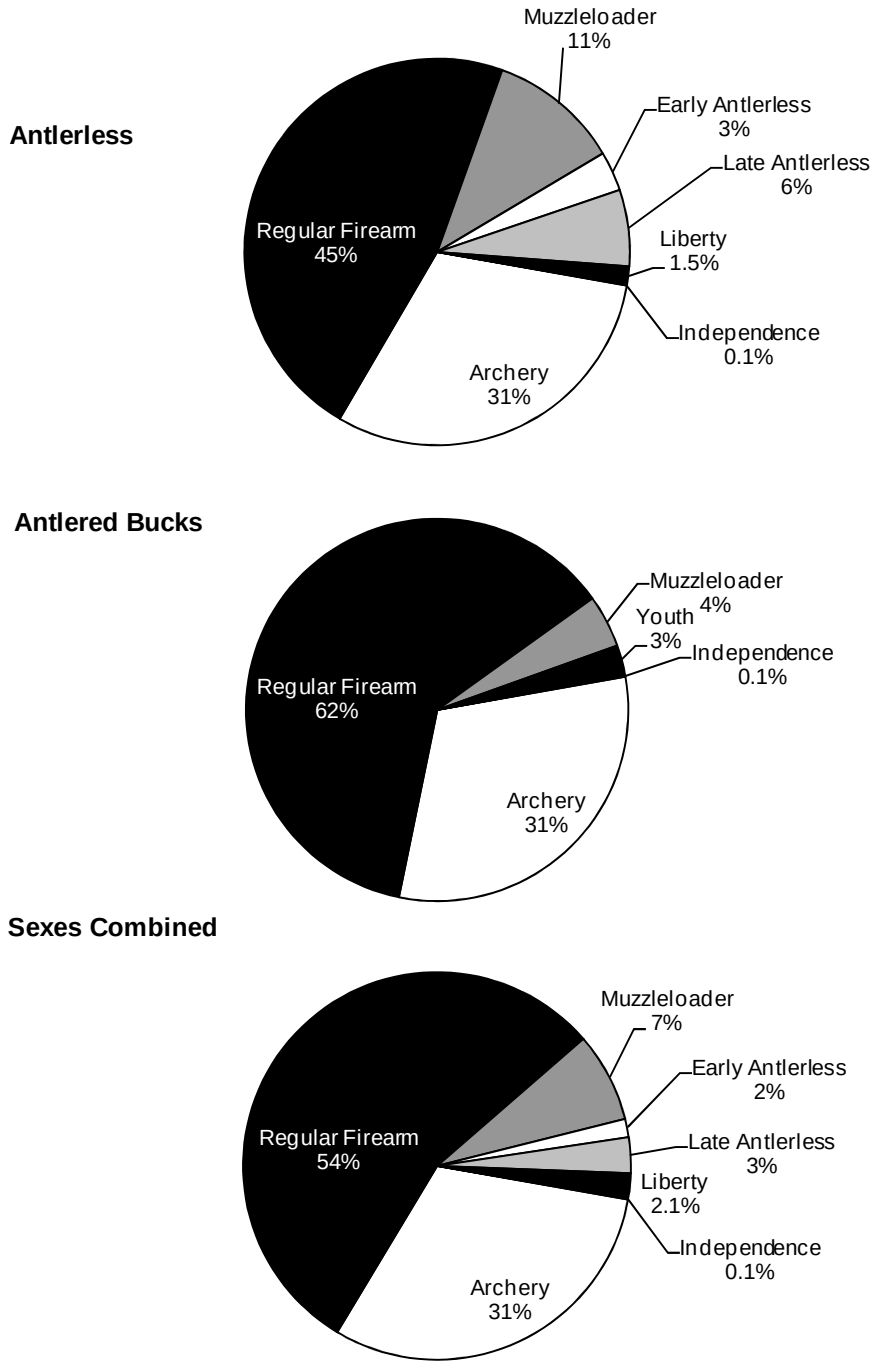

Figure 15. Distribution of harvest among deer hunting seasons in Michigan, 2013. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

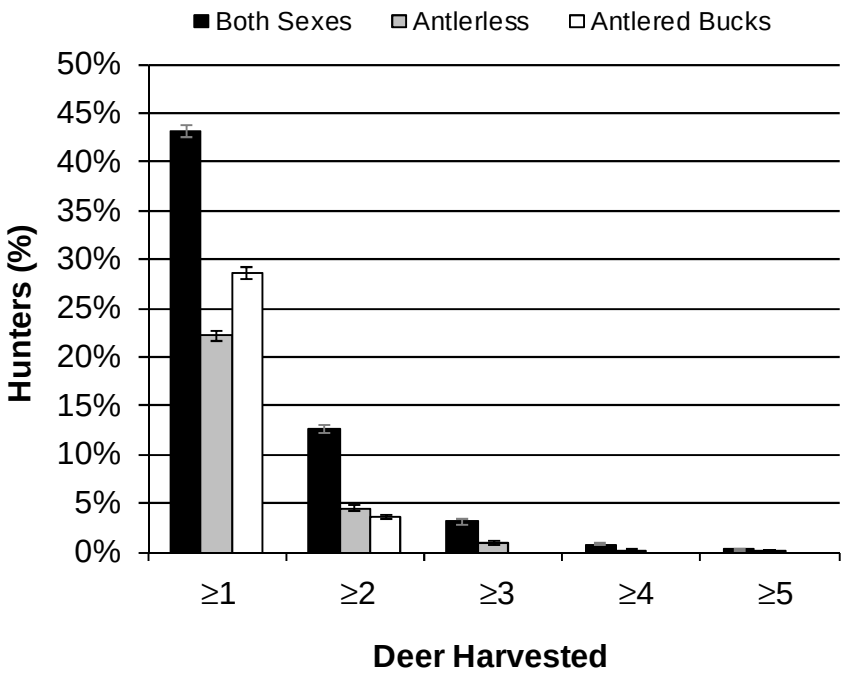

Figure 16. Percentage of hunters harvesting a deer in Michigan, 2013. Error bars represent the 95% CLs.

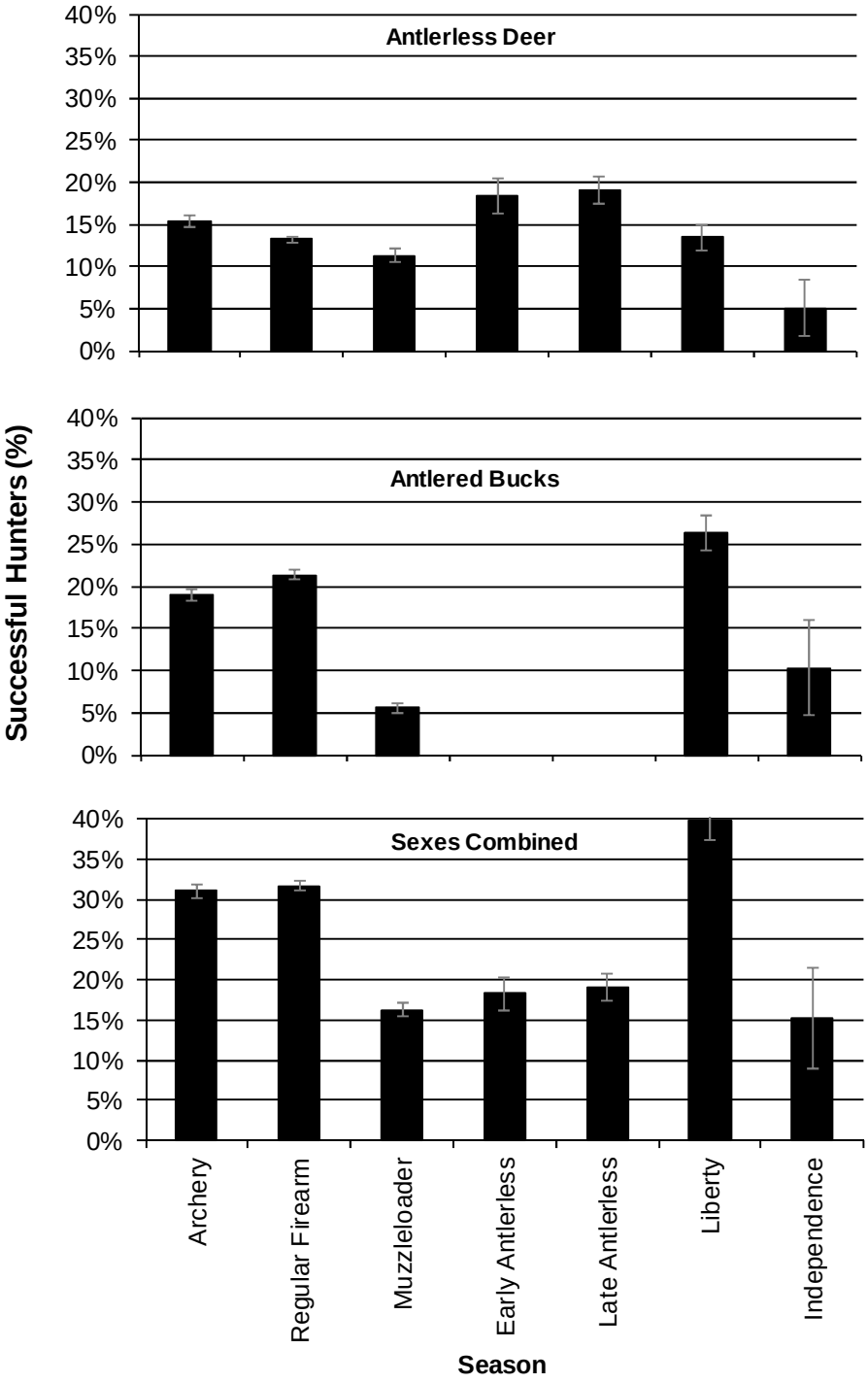

Figure 17. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2013. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

Table 1. Type of deer that could be taken during the 2013 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]
Archery License	Archery seasons	Antlerless or antlered deer[b]
Firearm License	Regular Firearm or Muzzleloader seasons	Antlered deer statewide or antlerless deer in DMU 487[b]
Firearm License	Liberty and Independence seasons[c]	Antlerless or antlered deer[b]
Combination License[d] (Regular harvest tag)	Archery season	Antlerless or antlered deer[b]
Combination License[d] (Regular harvest tag)	Regular Firearm or Muzzleloader seasons	Antlered deer statewide or antlerless deer in DMU 487
Combination License[d] (Regular harvest tag)	Liberty and Independence seasons	Antlerless or antlered deer
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
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 DMU 487
Combination License[d] (Restricted harvest tag)	Liberty and Independence seasons[c]	Antlerless or antlered deer which has at least 1 antler with 4 or more antler points 1 or more inches in length

[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 2013 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	Archery, Regular Firearm, Liberty, Independence, or Muzzleloader seasons	Antlerless or antlered deer
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. Number of Michigan deer licenses purchased and harvest tags issued, 2011-2013.

Licenses or Harvest Tags	Number Purchased or Issued 2011	2012	2013	Change Between 2012 and 2013 (%)
Firearm Licenses				
Resident	196,470	193,144	187,757	-2.8
Non-resident	12,571	12,442	13,452	8.1
Senior	36,729	36,739	36,411	-0.9
Junior	18,175	21,303	23,964	12.5
Military	1,001	1,127	1,568	39.1
Disabled Veteran	NA	NA	753	NA
Subtotal	264,946	264,755	263,905	-0.3
Archery Licenses				
Resident	41,804	42,831	40,146	-6.3
Non-resident	3,022	3,325	3,365	1.2
Junior	4,224	3,793	3,584	-5.5
Senior	6,148	6,870	6,916	0.7
Military	361	383	494	29.0
Disabled Veteran	NA	NA	283	NA
Subtotal	55,559	57,202	54,788	-4.2
Combination Licenses[a]				
Resident	280,744	279,436	282,328	1.0
Non-resident	2,060	2,155	2,289	6.2
Junior	43,293	46,298	46,622	0.7
Senior	41,511	43,262	43,440	0.4
Military	1,727	1,849	3,498	89.2
Disabled Veteran	NA	NA	2,910	NA
Subtotal	369,335	373,000	381,087	2.2
Antlerless Licenses				
Resident	445,018	417,676	405,313	-3.0
Non-resident	3,150	2,150	2,134	-0.7
Junior	3,117	3,481	4,354	25.1
Military	2,493	2,338	4,295	83.7
Pure Michigan Hunt	3	3	3	0.0
Disabled Veteran	NA	NA	1,954	NA
Deer Management Assistance	8,219	8,234	8,981	9.1
Managed Deer Hunt	343	274	185	-32.5
Subtotal	462,343	434,156	427,219	-1.6
Mentored Youth Licenses[a]	NA	10,361	12,384	19.5
Total Licenses Sold	1,152,183	1,139,474	1,139,383	0.0

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

Table 2 (Continued). Number of Michigan deer licenses purchased and harvest tags issued, 2011-2013.

Licenses or Harvest Tags	Number Purchased or Issued 2011	2012	2013	Change Between 2012 and 2013 (%)
Harvest Tags Issued				
Firearm	264,946	264,755	263,905	-0.3
Archery	55,559	57,202	54,788	-4.2
Combination[a]	738,670	746,000	762,174	2.2
Antlerless	462,343	434,156	427,219	-1.6
Mentored Youth[a]	NA	20,722	24,768	19.5
Total Harvest Tags	1,521,518	1,522,835	1,532,854	0.7

[a]Combination and Mentored Youth 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, 2012-2013.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)
Archery								
West UP	24,133	24,922	1,616	3.3	263,892	267,471	24,032	1.4
East UP	7,488	7,724	916	3.1	67,667	76,546	13,502	13.1
NE LP	46,598	47,977	2,201	3.0	484,025	499,360	32,412	3.2
NW LP	64,340	64,711	2,505	0.6	753,234	746,257	39,488	-0.9
Sag. Bay	57,976	60,631	2,425	4.6	701,865	757,837	41,751	8.0
SW LP	54,381	54,412	2,297	0.1	713,493	735,931	41,766	3.1
SC LP	66,991	64,922	2,472	-3.1	912,283	854,202	44,836	-6.4
SE LP	38,683	36,471	1,907	-5.7	478,611	456,010	32,442	-4.7
UP	31,436	32,363	2,896	2.9	331,559	344,017	27,565	3.8
NLP	127,910	130,698	4,111	2.2	1,467,553	1,493,706	56,484	1.8
SLP	191,548	189,246	3,889	-1.2	2,575,958	2,555,890	77,264	-0.8
Statewide[c]	325,424	328,655	4,281	1.0	4,375,070	4,393,613	99,765	0.4
Regular Firearm								
West UP	67,039	70,704	2,592	5.5	471,149	502,433	22,652	6.6
East UP	21,276	22,179	1,533	4.2	134,608	135,071	11,300	0.3
NE LP	104,991	108,733	3,148	3.6	624,931	619,224	23,030	-0.9
NW LP	115,017	118,184	3,224	2.8	654,744	673,005	23,905	2.8
Sag. Bay	92,555	94,472	2,936	2.1	535,401	551,139	21,787	2.9
SW LP	79,148	80,079	2,702	1.2	502,156	496,100	21,234	-1.2
SC LP	99,670	97,577	2,902	-2.1	607,263	586,718	22,835	-3.4
SE LP	41,737	39,950	1,988	-4.3	241,183	233,358	14,437	-3.2
UP	87,928	92,571	1,829	5.3*	605,757	637,503	25,314	5.2
NLP	246,623	254,818	3,368	3.3*	1,451,445	1,476,586	35,564	1.7
SLP	275,583	274,499	3,703	-0.4	1,714,234	1,682,958	38,633	-1.8
Statewide[c]	580,286	593,079	2,987	2.2*	3,771,436	3,797,047	58,508	0.7

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2013 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, 2012-2013.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)
Muzzleloader								
West UP	14,923	13,857	1,226	-7.1	72,933	65,707	6,633	-9.9
East UP	5,627	4,259	682	-24.3	27,227	18,763	3,578	-31.1*
NE LP	22,230	19,420	1,440	-12.6	87,538	75,280	6,508	-14.0
NW LP	25,008	22,348	1,540	-10.6	95,686	89,337	7,255	-6.6
Sag. Bay	30,890	29,497	1,740	-4.5	130,911	130,726	9,489	-0.1
SW LP	33,894	30,687	1,760	-9.5	179,071	155,818	10,979	-13.0*
SC LP	40,221	35,412	1,872	-12.0*	197,620	173,866	11,449	-12.0*
SE LP	19,428	17,833	1,355	-8.2	95,425	86,988	8,009	-8.8
UP	20,434	18,054	1,392	-11.6	100,160	84,470	7,537	-15.7*
NLP	55,271	49,376	2,243	-10.7*	216,085	195,084	10,575	-9.7
SLP	112,988	103,043	2,951	-8.8*	570,165	516,930	19,722	-9.3*
Statewide[c]	184,011	167,832	3,649	-8.8*	886,410	796,484	23,714	-10.1*
Early Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	2,486	3,695	585	48.6*	3,852	5,667	982	47.1
NW LP	2,067	2,084	413	0.9	2,940	2,827	624	-3.8
Sag. Bay	5,271	6,194	723	17.5	7,400	9,319	1,171	25.9
SW LP	5,407	6,021	709	11.4	7,942	8,849	1,100	11.4
SC LP	6,873	8,124	826	18.2	10,011	11,003	1,227	9.9
SE LP	4,669	4,532	624	-2.9	6,558	6,564	991	0.1
UP	0	0	0		0	0	0	
NLP	4,857	6,164	734	26.9	7,187	9,167	1,205	27.6
SLP	21,700	24,333	1,393	12.1	31,517	35,063	2,230	11.3
Statewide[c]	27,125	31,155	734	14.9*	38,704	44,230	2,553	14.3*

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2013 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, 2012-2013.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)
Late Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	5,702	3,643	612	-36.1*	22,821	11,638	2,488	-49.0*
NW LP	4,459	2,547	510	-42.9*	16,739	7,002	1,927	-58.2*
Sag. Bay	11,873	9,952	1,001	-16.2	44,545	30,823	3,810	-30.8*
SW LP	17,554	14,170	1,195	-19.3*	70,796	47,952	4,969	-32.3*
SC LP	21,960	18,100	1,332	-17.6*	87,556	56,365	5,175	-35.6*
SE LP	9,613	8,347	924	-13.2	39,429	25,701	3,444	-34.8*
UP	0	0	0		0	0	0	
NLP	10,446	6,591	817	-36.9*	40,957	19,883	3,234	-51.5*
SLP	59,741	49,656	2,094	-16.9*	240,929	159,598	8,792	-33.8*
Statewide[c]	71,248	57,137	2,218	-19.8*	281,887	179,481	9,404	-36.3*
Liberty[d]								
West UP	2,189	1,560	263	-28.7*	3,408	2,635	468	-22.7
East UP	470	360	115	-23.5	785	583	198	-25.7
NE LP	3,708	2,744	366	-26.0*	6,173	4,300	610	-30.3*
NW LP	7,581	4,640	450	-38.8*	12,337	7,232	758	-41.4*
Sag. Bay	7,732	4,255	450	-45.0*	12,559	6,746	763	-46.3*
SW LP	4,836	1,923	295	-60.2*	7,477	2,723	443	-63.6*
SC LP	6,527	3,646	428	-44.2*	10,016	5,297	682	-47.1*
SE LP	3,476	1,926	317	-44.6*	5,575	3,096	538	-44.5*
UP	2,659	1,920	286	-27.8*	4,193	3,218	508	-23.3
NLP	13,411	8,713	614	-35.0*	21,896	13,649	1,058	-37.7*
SLP	20,292	10,353	689	-49.0*	32,241	15,744	1,166	-51.2*
Statewide[c]	36,418	21,011	902	-42.3*	58,330	32,611	1,659	-44.1*

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2013 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]2012 estimates for the Liberty Hunt excluded disabled hunters, but 2013 estimates included results of both youth and disabled hunters.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2012-2013.

	Number of hunters[a]				Hunting effort (days)			
Season and Area	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)	2012	2013	95% CL[b]	Change from 2012 to 2013 (%)
Independence[d]								
West UP	167	76	32	-54.6	294	184	74	-37.3
East UP	42	39	23	-7.0	77	83	33	8.0
NE LP	168	286	141	70.0	310	606	362	95.7
NW LP	161	344	143	113.7	343	627	321	82.9
Sag. Bay	267	236	126	-11.8	580	371	198	-36.0
SW LP	231	376	175	63.0	573	777	391	35.6
SC LP	135	359	165	165.4	229	535	288	134.0
SE LP	116	236	137	104.3	271	590	378	117.5
UP	209	115	39	-45.1	371	267	81	-27.9
NLP	379	684	210	80.4	847	1,283	485	51.5
SLP	696	1,153	298	65.7	1,459	2,223	646	52.4
Statewide[c]	1,348	1,975	371	46.5	2,676	3,773	812	41.0
All Seasons								
West UP	75,784	78,894	2,711	4.1	811,483	838,265	42,541	3.3
East UP	25,261	25,707	1,642	1.8	230,269	231,006	22,530	0.3
NE LP	120,194	123,451	3,304	2.7	1,229,543	1,216,024	51,811	-1.1
NW LP	135,900	135,481	3,384	-0.3	1,536,443	1,526,556	59,948	-0.6
Sag. Bay	113,356	112,675	3,146	-0.6	1,433,372	1,487,041	63,960	3.7
SW LP	98,109	97,027	2,928	-1.1	1,481,329	1,448,081	65,402	-2.2
SC LP	122,185	119,588	3,148	-2.1	1,824,921	1,687,908	69,634	-7.5
SE LP	60,077	56,234	2,316	-6.4	867,154	812,359	48,743	-6.3
UP	100,377	103,937	3,029	3.5	1,041,751	1,069,270	48,139	2.6
NLP	285,531	289,262	4,188	1.3	3,206,448	3,209,697	86,894	0.1
SLP	340,006	334,502	3,961	-1.6	5,166,313	4,968,272	119,669	-3.8
Statewide[c]	654,122	661,788	1,878	1.2*	9,414,513	9,247,240	155,858	-1.8

[a]Excluded people that did not hunt during the season.
[b]95% confidence limit for the 2013 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]2012 estimates for the Independence Hunt included two separate disabled hunter seasons, but 2013 estimates included only one season.

Table 4. Mean number of days hunters spent hunting deer ($\bar{x}$ hunting effort) in Michigan by hunting season, 2013.[a]

	Season							
	Archery		Regular Firearm		Muzzleloader		Early Antlerless	
Area	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]	$\bar{x}$ days	95% CL[b]
West UP	11.6	0.7	7.6	0.2	5.1	0.2	0.0	0.0
East UP	10.9	1.4	6.7	0.3	5.1	0.4	0.0	0.0
NE LP	11.1	0.5	6.1	0.1	4.3	0.2	1.8	0.1
NW LP	12.3	0.4	6.1	0.1	4.3	0.2	1.7	0.1
Sag. Bay	13.4	0.5	6.3	0.1	4.8	0.2	1.7	0.1
SW LP	14.5	0.5	6.8	0.2	5.5	0.2	1.6	0.1
SC LP	14.1	0.5	6.5	0.1	5.4	0.2	1.6	0.1
SE LP	13.6	0.6	6.4	0.2	5.3	0.3	1.7	0.1
UP	11.5	0.6	7.4	0.1	5.1	0.2	0.0	0.0
NLP	12.2	0.3	6.2	0.1	4.3	0.1	1.8	0.1
SLP	14.5	0.3	6.7	0.1	5.5	0.1	1.6	0.0
Statewide	14.5	0.2	7.0	0.1	5.2	0.1	1.7	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, 2013.[a]

	Season							
	Late Antlerless		Liberty		Disabled		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	1.8	0.1	2.6	0.5	11.4	0.4
East UP	0.0	0.0	1.8	0.1	2.3	0.8	9.8	0.7
NE LP	3.8	0.4	1.8	0.1	2.6	0.4	10.5	0.3
NW LP	3.6	0.6	1.7	0.0	2.3	0.5	12.1	0.3
Sag. Bay	3.7	0.2	1.7	0.1	1.9	0.4	14.2	0.4
SW LP	3.9	0.2	1.6	0.1	2.3	0.5	16.1	0.5
SC LP	3.6	0.2	1.6	0.1	1.9	0.5	15.2	0.4
SE LP	3.6	0.2	1.7	0.1	2.6	0.7	15.7	0.7
UP	0.0	0.0	1.8	0.1	2.5	0.4	11.1	0.4
NLP	3.7	0.3	1.7	0.0	2.5	0.3	11.9	0.2
SLP	3.7	0.1	1.7	0.0	2.2	0.3	16.0	0.3
Statewide	3.7	0.1	1.7	0.0	2.3	0.2	15.2	0.2

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

Table 5. Number of deer harvested in Michigan, 2011-2013.

Season or permit	Type of deer	2011	2012	2013	Change from 2012 to 2013 (%)
Season					
Archery	Antlerless	61,466	58,933	53,890	-8.6
	Antlered bucks	70,148	68,348	62,933	-7.9*
	Sexes combined	131,615	127,281	116,823	-8.2*
Regular firearm	Antlerless	86,697	85,978	82,693	-3.8
	Antlered bucks	127,373	137,280	125,625	-8.5*
	Sexes combined	214,070	223,258	208,317	-6.7*
Muzzleloader	Antlerless	23,838	17,901	19,311	7.9
	Antlered bucks	10,418	9,034	9,020	-0.2
	Sexes combined	34,256	26,935	28,331	5.2
Early antlerless	Antlerless	10,892	6,045	5,820	-3.7
Late antlerless	Antlerless	17,345	17,498	11,228	-35.8*
Early youth	Antlerless	713	0	0	
Liberty[a]	Antlerless	2,736	4,846	2,696	-44.4*
	Antlered bucks	4,634	7,857	5,285	-32.7*
	Sexes combined	7,370	12,703	7,981	-37.2*
Independence[b]	Antlerless	242	162	97	-40.1
	Antlered bucks	217	121	195	61.3
	Sexes combined	460	283	292	3.1
Special permits[c]	Antlerless	5,293	6,213	6,508	4.7
Grand Total	Antlerless	209,223	197,577	182,245	-7.8*
	Antlered bucks	212,791	222,640	203,057	-8.8*
	Sexes combined	422,014	420,217	385,302	-8.3*

[a]2011 and 2012 estimates for the Liberty Hunt excluded disabled hunters, but 2013 estimates included results of both youth and disabled hunters.
[b]2011 and 2012 estimates for the Independence Hunt included two separate disabled hunter seasons, but 2013 estimates included only one 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, 2012-2013.[a]

Season and Area	Antlerless 2012 Harvest	Antlerless 2013 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2012 to 2013 (%)	Antlered Bucks 2012 Harvest	Antlered Bucks 2013 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2012 to 2013	Sexes Combined 2012 Harvest	Sexes Combined 2013 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2012 to 2013
Archery												
West UP	4,662	4,332	714	-7.1	4,122	3,781	648	-8.3	8,784	8,111	997	-7.7
East UP	1,042	1,356	403	30.1	1,135	760	284	-33.0	2,177	2,114	525	-2.9
NE LP	7,050	6,693	897	-5.1	6,778	5,765	795	-14.9	13,828	12,455	1,255	-9.9
NW LP	11,605	10,763	1,108	-7.3	13,167	8,985	1,003	-31.8*	24,772	19,741	1,572	-20.3*
Sag. Bay	10,396	10,218	1,122	-1.7	12,408	11,692	1,132	-5.8	22,804	21,909	1,746	-3.9
SW LP	7,554	6,574	940	-13.0	10,160	10,352	1,078	1.9	17,715	16,930	1,560	-4.4
SC LP	11,079	9,280	1,088	-16.2	13,921	14,450	1,283	3.8	25,001	23,737	1,816	-5.1
SE LP	5,544	4,674	737	-15.7	6,656	7,148	912	7.4	12,200	11,825	1,283	-3.1
UP	5,704	5,688	820	-0.3	5,257	4,541	708	-13.6	10,961	10,226	1,127	-6.7
NLP	22,298	21,100	1,580	-5.4	23,199	18,346	1,432	-20.9*	45,496	39,435	2,247	-13.3*
SLP	30,931	27,102	1,845	-12.4	39,892	40,045	2,124	0.4	70,824	67,163	3,070	-5.2
Statewide	58,933	53,890	2,575	-8.6	68,348	62,933	2,664	-7.9*	127,281	116,823	3,981	-8.2*
Regular Firearm												
West UP	5,690	4,016	696	-29.4*	23,097	18,484	1,420	-20.0*	28,788	22,521	1,635	-21.8*
East UP	84	1	0	-98.8*	5,107	4,073	666	-20.3	5,192	4,081	666	-21.4
NE LP	13,597	13,781	1,250	1.4	22,067	22,681	1,579	2.8	35,664	36,465	2,134	2.2
NW LP	14,097	15,914	1,328	12.9	23,360	19,787	1,465	-15.3*	37,456	35,693	2,129	-4.7
Sag. Bay	18,383	16,020	1,365	-12.9	22,341	20,528	1,476	-8.1	40,723	36,542	2,187	-10.3
SW LP	11,361	11,346	1,180	-0.1	13,575	13,406	1,198	-1.2	24,935	24,745	1,817	-0.8
SC LP	17,873	17,109	1,474	-4.3	21,694	20,439	1,497	-5.8	39,566	37,539	2,278	-5.1
SE LP	4,894	4,506	715	-7.9	6,040	6,228	812	3.1	10,934	10,732	1,178	-1.8
UP	5,774	4,017	696	-30.4*	28,204	22,557	1,569	-20.0*	33,980	26,601	1,765	-21.7*
NLP	33,282	34,350	1,969	3.2	51,335	48,101	2,288	-6.3	84,617	82,444	3,221	-2.6
SLP	46,922	44,326	2,321	-5.5	57,741	54,967	2,433	-4.8	104,662	99,272	3,656	-5.1
Statewide	85,978	82,693	3,140	-3.8	137,280	125,625	3,703	-8.5*	223,258	208,317	5,208	-6.7*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 deer were taken with these permits.
[b]95% confidence limit for the 2013 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2012-2013.[a]

Season and Area	Antlerless 2012 Harvest	Antlerless 2013 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2012 to 2013 (%)	Antlered Bucks 2012 Harvest	Antlered Bucks 2013 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2012 to 2013	Sexes Combined 2012 Harvest	Sexes Combined 2013 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2012 to 2013
Muzzleloader												
West UP	1,500	1,327	397	-11.6	1,087	977	319	-10.2	2,589	2,302	540	-11.1
East UP	28	11	20	-61.7	579	390	200	-32.6	609	399	201	-34.5
NE LP	1,430	2,831	566	98.0*	621	881	303	41.7	2,051	3,713	661	81.1*
NW LP	2,305	2,197	483	-4.7	973	791	284	-18.7	3,277	2,989	577	-8.8
Sag. Bay	4,160	4,429	698	6.4	1,311	1,598	413	21.9	5,469	6,029	847	10.3
SW LP	2,836	2,920	590	3.0	1,438	1,557	399	8.3	4,274	4,476	716	4.7
SC LP	4,160	3,884	675	-6.6	2,402	1,774	433	-26.2	6,563	5,658	827	-13.8
SE LP	1,482	1,714	437	15.7	622	1,052	329	69.1	2,103	2,765	573	31.5
UP	1,528	1,337	397	-12.5	1,666	1,367	376	-18.0	3,198	2,701	576	-15.5
NLP	4,747	6,187	830	30.3	1,744	2,182	475	25.1	6,488	8,372	985	29.0*
SLP	11,627	11,787	1,160	1.4	5,624	5,471	757	-2.7	17,249	17,259	1,429	0.1
Statewide	17,901	19,311	1,485	7.9	9,034	9,020	976	-0.2	26,935	28,331	1,835	5.2
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	747	1,297	389	73.8	0	0	0	0	747	1,297	389	73.8
NW LP	655	395	197	-39.7	0	0	0	0	655	395	197	-39.7
Sag. Bay	1,665	1,166	317	-30.0	0	0	0	0	1,665	1,166	317	-30.0
SW LP	577	796	254	37.9	0	0	0	0	577	796	254	37.9
SC LP	1,653	1,729	425	4.6	0	0	0	0	1,653	1,729	425	4.6
SE LP	749	437	187	-41.7	0	0	0	0	749	437	187	-41.7
UP	0	0	0		0	0	0	0	0	0	0	
NLP	1,512	1,765	443	16.7	0	0	0	0	1,512	1,765	443	16.7
SLP	4,534	4,056	611	-10.5	0	0	0	0	4,534	4,056	611	-10.5
Statewide	6,045	5,820	769	-3.7	0	0	0	0	6,045	5,820	769	-3.7

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 deer were taken with these permits.
[b]95% confidence limit for the 2013 estimate. *P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2012-2013.[a]

Season and Area	Antlerless 2012 Harvest	Antlerless 2013 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2012 to 2013 (%)	Antlered Bucks 2012 Harvest	Antlered Bucks 2013 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2012 to 2013	Sexes Combined 2012 Harvest	Sexes Combined 2013 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2012 to 2013
Late Antlerless												
West UP	0	0	0		0	0	0		0	0	0	
East UP	0	0	0		0	0	0		0	0	0	
NE LP	1,932	1,095	365	-43.4	0	0	0		1,932	1,095	365	-43.4
NW LP	1,351	713	299	-47.2	0	0	0		1,351	713	299	-47.2
Sag. Bay	3,571	2,402	523	-32.7	0	0	0		3,571	2,402	523	-32.7
SW LP	3,331	2,035	476	-38.9*	0	0	0		3,331	2,035	476	-38.9*
SC LP	5,381	3,769	645	-30.0*	0	0	0		5,381	3,769	645	-30.0*
SE LP	1,930	1,215	345	-37.1	0	0	0		1,930	1,215	345	-37.1
UP	0	0	0		0	0	0		0	0	0	
NLP	3,411	1,847	475	-45.8*	0	0	0		3,411	1,847	475	-45.8*
SLP	14,087	9,381	1,016	-33.4*	0	0	0		14,087	9,381	1,016	-33.4*
Statewide	17,498	11,228	1,134	-35.8*	0	0	0		17,498	11,228	1,134	-35.8*
Liberty[c]												
West UP	389	217	88	-44.2	702	411	132	-41.5*	1,090	628	158	-42.4*
East UP	35	45	40	27.8	133	32	35	-75.7*	168	77	53	-54.1
NE LP	547	529	158	-3.3	850	594	154	-30.1	1,397	1,122	221	-19.7
NW LP	1,043	795	182	-23.8	1,889	1,288	232	-31.8*	2,932	2,082	295	-29.0*
Sag. Bay	1,217	530	152	-56.4*	1,855	1,073	204	-42.1*	3,072	1,603	254	-47.8*
SW LP	406	198	85	-51.2*	631	349	114	-44.7*	1,036	547	142	-47.3*
SC LP	893	198	85	-77.9*	1,203	1,207	235	0.3	2,097	1,407	249	-32.9*
SE LP	317	185	83	-41.6	594	331	110	-44.4*	912	516	137	-43.4*
UP	424	262	96	-38.2	835	443	136	-46.9*	1,258	705	167	-44.0*
NLP	1,960	1,575	259	-19.7	3,254	2,040	289	-37.3*	5,214	3,612	388	-30.7*
SLP	2,462	860	188	-65.1*	3,769	2,802	340	-25.7*	6,231	3,665	389	-41.2*
Statewide	4,846	2,696	339	-44.4*	7,857	5,285	467	-32.7*	12,703	7,981	577	-37.2*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 deer were taken with these permits.
[b]95% confidence limit for the 2013 estimate. *P<0.005.
[c]2012 estimates for the Liberty Hunt excluded disabled hunters, but 2013 estimates included results of both youth and disabled hunters.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2012-2013.[a]

Season and Area	Antlerless 2012 Harvest	Antlerless 2013 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2012 to 2013 (%)	Antlered Bucks 2012 Harvest	Antlered Bucks 2013 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2012 to 2013	Sexes Combined 2012 Harvest	Sexes Combined 2013 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2012 to 2013
Independence[c]												
West UP	35	4	3	-87.6	6	2	2	-67.9	42	7	4	-83.7
East UP	2	0	0	-100.0	2	2	2	28.4	3	2	2	-39.2
NE LP	6	13	6	106.9	6	36	29	465.9	13	48	29	283.2*
NW LP	17	51	58	196.4	19	25	21	31.8	36	80	62	123.0
Sag. Bay	63	3	3	-94.6	45	21	21	-54.0	108	23	21	-78.4
SW LP	28	16	21	-44.3	3	42	57	1545.1	31	58	61	85.2
SC LP	11	7	4	-37.6	8	63	64	697.7	19	67	64	255.3
SE LP	0	3	3		32	4	3	-87.3	32	8	4	-76.0
UP	37	4	3	-88.1	8	4	3	-48.7	45	9	4	-80.6
NLP	28	65	58	133.2	30	61	36	102.3	58	130	68	124.8
SLP	98	28	21	-71.6	83	130	88	57.0	180	153	91	-15.0
Statewide	162	97	62	-40.1	121	195	111	61.3	283	292	127	3.1
All Seasons												
West UP	12,288	9,910	1,157	-19.3	29,013	23,652	1,675	-18.5*	41,316	33,588	2,154	-18.7*
East UP	1,194	1,415	406	18.5	6,953	5,255	786	-24.4*	8,153	6,677	938	-18.1
NE LP	25,323	26,234	1,883	3.6	30,326	29,952	1,859	-1.2	55,650	56,185	2,910	1.0
NW LP	31,100	30,845	1,949	-0.8	39,413	30,881	1,906	-21.6*	70,516	61,717	2,993	-12.5*
Sag. Bay	39,449	34,767	2,236	-11.9	37,962	34,916	2,029	-8.0	77,403	69,673	3,445	-10.0*
SW LP	26,078	23,880	1,910	-8.4	25,805	25,702	1,738	-0.4	51,878	49,579	2,910	-4.4
SC LP	41,025	35,951	2,358	-12.4*	39,224	37,933	2,141	-3.3	80,240	73,877	3,611	-7.9
SE LP	14,907	12,733	1,312	-14.6	13,944	14,765	1,337	5.9	28,848	27,498	2,154	-4.7
UP	13,482	11,325	1,226	-16.0	35,966	28,907	1,850	-19.6*	49,468	40,265	2,349	-18.6*
NLP	67,291	66,912	2,951	-0.6	79,571	70,734	2,879	-11.1*	146,863	137,632	4,542	-6.3
SLP	110,591	97,499	3,816	-11.8*	107,103	103,416	3,509	-3.4	217,672	200,896	5,900	-7.7*
Statewide	191,364	175,737	5,013	-8.2*	222,640	203,057	4,917	-8.8*	414,004	378,794	7,848	-8.5*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 deer were taken with these permits.
[b]95% confidence limit for the 2013 estimate. *P<0.005.
[c]2012 estimates for the Independence Hunt included two separate disabled hunter seasons, but 2013 estimates included only one season.

Table 7. Number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2012-2013.[a]

Season and Area	Antlerless 2012 Harvest	Antlerless 2013 Harvest	Antlerless 95% CL[b]	Antlerless Change from 2012 to 2013 (%)	Antlered Bucks 2012 Harvest	Antlered Bucks 2013 Harvest	Antlered Bucks 95% CL[b]	Antlered Bucks Change from 2012 to 2013	Sexes Combined 2012 Harvest	Sexes Combined 2013 Harvest	Sexes Combined 95% CL[b]	Sexes Combined Change from 2012 to 2013
Public Lands												
West UP	3,035	2,310	519	-23.9	9,179	7,297	916	-20.5	12,217	9,623	1,092	-21.2*
East UP	421	260	182	-38.3	2,038	1,809	457	-11.2	2,460	2,074	498	-15.7
NE LP	5,311	6,281	880	18.3	7,887	7,565	938	-4.1	13,198	13,842	1,393	4.9
NW LP	3,835	4,934	753	28.7	8,252	5,748	845	-30.3*	12,088	10,678	1,193	-11.7
Sag. Bay	3,770	4,394	783	16.6	3,732	3,896	687	4.4	7,500	8,281	1,163	10.4
SW LP	2,099	1,487	407	-29.2	1,600	1,713	450	7.0	3,698	3,199	672	-13.5
SC LP	2,665	1,975	486	-25.9	2,434	2,001	491	-17.8	5,097	3,974	753	-22.0
SE LP	1,219	1,153	388	-5.4	825	1,385	408	67.9	2,043	2,537	622	24.2
UP	3,456	2,570	550	-25.6	11,216	9,106	1,024	-18.8	14,677	11,697	1,200	-20.3*
NLP	10,828	12,875	1,239	18.9	17,642	15,199	1,352	-13.8	28,470	28,065	1,972	-1.4
SLP	8,070	7,349	986	-8.9	7,088	7,109	920	0.3	15,153	14,447	1,494	-4.7
Statewide	22,354	22,795	1,688	2.0	35,946	31,414	1,934	-12.6*	58,300	54,209	2,761	-7.0
Private Lands												
West UP	9,256	7,605	1,009	-17.8	19,842	16,352	1,382	-17.6*	29,109	23,971	1,818	-17.7*
East UP	774	1,156	363	49.4	4,917	3,445	630	-29.9*	5,695	4,605	779	-19.1
NE LP	20,016	19,965	1,642	-0.3	22,444	22,385	1,597	-0.3	42,460	42,350	2,511	-0.3
NW LP	27,266	25,916	1,783	-5.0	31,165	25,132	1,705	-19.4*	58,431	51,041	2,716	-12.6*
Sag. Bay	35,678	30,373	2,079	-14.9*	34,226	31,022	1,902	-9.4	69,898	61,389	3,216	-12.2*
SW LP	23,978	22,386	1,863	-6.6	24,200	23,991	1,678	-0.9	48,175	46,375	2,821	-3.7
SC LP	38,356	33,964	2,305	-11.4	36,784	35,934	2,081	-2.3	75,133	69,895	3,517	-7.0
SE LP	13,687	11,578	1,242	-15.4	13,117	13,380	1,271	2.0	26,802	24,959	2,041	-6.9
UP	10,029	8,760	1,073	-12.7	24,759	19,798	1,519	-20.0*	34,804	28,576	1,978	-17.9*
NLP	56,468	54,055	2,651	-4.3	61,938	55,531	2,531	-10.3*	118,405	109,577	4,036	-7.5*
SLP	102,513	90,127	3,674	-12.1*	99,997	96,314	3,381	-3.7	202,495	186,432	5,676	-7.9*
Statewide	169,010	152,942	4,690	-9.5*	186,694	171,643	4,503	-8.1*	355,704	324,585	7,279	-8.7*

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 deer were taken with these permits.
[b]95% confidence limit for the 2013 estimate. *P<0.005.

Table 8. Percentage of deer hunters harvesting deer in Michigan during all seasons, 2013.[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	11.2	1.2	1.5	0.5	0.2	0.2	0.0	0.1	0.0	0.1
East UP	5.3	1.5	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
NE LP	18.6	1.1	2.9	0.5	0.5	0.2	0.1	0.1	0.0	0.1
NW LP	20.7	1.1	2.6	0.4	0.3	0.2	0.0	0.0	0.0	0.0
Sag. Bay	25.5	1.3	5.3	0.7	0.9	0.3	0.2	0.2	0.1	0.1
SW LP	20.3	1.3	4.0	0.7	0.8	0.3	0.2	0.2	0.2	0.1
SC LP	23.7	1.2	5.6	0.7	1.5	0.4	0.3	0.2	0.1	0.1
SE LP	19.3	1.7	3.5	0.8	0.6	0.3	0.1	0.1	0.0	0.0
UP	9.8	1.0	1.3	0.4	0.2	0.1	0.0	0.1	0.0	0.1
NLP	20.4	0.8	3.1	0.3	0.4	0.1	0.1	0.0	0.0	0.0
SLP	23.4	0.7	5.2	0.4	1.1	0.2	0.3	0.1	0.1	0.1
Statewide[d]	22.1	0.5	4.5	0.3	0.9	0.1	0.2	0.1	0.1	0.0
Antlered bucks[c]										
West UP	28.7	1.7	2.5	0.6						
East UP	19.9	2.6	1.4	0.8						
NE LP	23.5	1.3	1.8	0.4						
NW LP	21.4	1.1	2.3	0.4						
Sag. Bay	28.8	1.4	3.5	0.6						
SW LP	25.1	1.4	2.5	0.5						
SC LP	29.1	1.3	3.9	0.6						
SE LP	24.5	1.9	2.9	0.7						
UP	26.7	1.4	2.3	0.5						
NLP	23.2	0.8	2.2	0.3						
SLP	28.6	0.8	3.6	0.3						
Statewide[d]	28.6	0.6	3.6	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, 2013.[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	37.5	1.8	5.7	0.9	0.7	0.3	0.2	0.2	0.0	0.0
East UP	23.3	2.8	3.7	1.2	0.0	0.0	0.0	0.0	0.1	0.1
NE LP	37.0	1.4	8.3	0.8	1.6	0.4	0.3	0.2	0.0	0.0
NW LP	36.9	1.3	8.9	0.8	1.4	0.3	0.2	0.1	0.2	0.2
Sag. Bay	45.2	1.5	14.1	1.1	3.7	0.6	0.9	0.3	0.2	0.2
SW LP	38.6	1.6	10.9	1.0	2.5	0.5	0.7	0.3	0.2	0.2
SC LP	44.7	1.5	13.9	1.0	3.9	0.6	1.2	0.3	0.1	0.1
SE LP	36.9	2.1	10.3	1.3	2.8	0.7	0.7	0.4	0.6	0.6
UP	34.2	1.5	5.3	0.7	0.5	0.2	0.2	0.1	0.0	0.0
NLP	38.2	0.9	9.3	0.6	1.6	0.2	0.3	0.1	0.1	0.1
SLP	43.5	0.9	13.6	0.6	3.8	0.3	1.0	0.2	0.6	0.6
Statewide[d]	43.2	0.6	12.6	0.4	3.1	0.2	0.8	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, 2013.[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	16.8	2.5	5.4	0.9	9.3	2.6	0.0	0.0	0.0	0.0	14.4	5.5
East UP	17.0	4.5	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0	13.0	10.9
NE LP	13.4	1.6	12.2	1.0	14.2	2.6	31.0	7.4	27.3	7.6	20.0	5.4
NW LP	16.1	1.5	13.1	1.0	10.1	2.1	17.9	7.8	26.5	9.0	17.7	3.7
Sag. Bay	15.6	1.5	16.0	1.2	14.7	2.1	19.2	4.8	22.4	4.3	12.9	3.5
SW LP	11.0	1.4	13.0	1.2	9.2	1.7	13.5	4.1	13.9	3.0	10.7	4.4
SC LP	12.9	1.3	15.8	1.2	10.6	1.7	19.8	4.2	20.0	3.0	5.6	2.4
SE LP	12.2	1.8	10.9	1.6	9.3	2.2	9.8	4.1	14.9	4.0	10.0	4.4
UP	17.0	2.2	4.1	0.7	7.2	2.0	0.0	0.0	0.0	0.0	14.1	4.9
NLP	15.4	1.0	12.9	0.7	12.4	1.6	25.8	5.3	26.0	5.5	18.7	2.8
SLP	13.2	0.8	14.9	0.7	11.2	1.0	16.4	2.2	18.2	1.8	8.6	1.8
Statewide	15.4	0.6	13.2	0.4	11.3	0.8	18.3	2.1	19.1	1.7	13.4	1.6
Antlered Bucks												
West UP	15.3	2.4	26.4	1.7	7.3	2.3	0.0	0.0	0.0	0.0	27.5	7.6
East UP	10.3	3.6	18.7	2.7	9.5	4.7	0.0	0.0	0.0	0.0	9.4	9.6
NE LP	12.1	1.6	20.9	1.3	4.7	1.6	0.0	0.0	0.0	0.0	22.6	5.3
NW LP	13.8	1.4	16.7	1.1	3.7	1.3	0.0	0.0	0.0	0.0	29.0	4.5
Sag. Bay	19.2	1.7	21.9	1.4	5.5	1.4	0.0	0.0	0.0	0.0	26.4	4.5
SW LP	18.8	1.7	16.8	1.4	5.2	1.3	0.0	0.0	0.0	0.0	19.0	5.7
SC LP	21.6	1.7	20.7	1.3	5.1	1.2	0.0	0.0	0.0	0.0	34.6	5.6
SE LP	19.1	2.1	15.9	1.9	6.1	1.9	0.0	0.0	0.0	0.0	17.9	5.6
UP	14.2	2.0	24.7	1.5	7.8	2.1	0.0	0.0	0.0	0.0	24.1	6.5
NLP	14.0	1.0	18.9	0.8	4.6	1.0	0.0	0.0	0.0	0.0	24.5	3.1
SLP	20.7	1.0	20.0	0.8	5.4	0.7	0.0	0.0	0.0	0.0	28.3	3.0
Statewide	18.9	0.7	21.3	0.6	5.6	0.6	0.0	0.0	0.0	0.0	26.3	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, 2013.[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	30.6	3.1	30.7	1.8	15.7	3.2	0.0	0.0	0.0	0.0	41.9	8.3
East UP	25.1	5.2	18.7	2.7	9.7	4.7	0.0	0.0	0.0	0.0	22.3	13.6
NE LP	24.1	2.0	30.8	1.5	18.3	2.9	31.0	7.4	27.3	7.6	42.6	6.6
NW LP	28.0	1.8	27.3	1.3	13.3	2.4	17.9	7.8	26.5	9.0	46.8	5.0
Sag. Bay	31.1	1.9	34.2	1.6	19.2	2.4	19.2	4.8	22.4	4.3	39.3	5.1
SW LP	27.1	2.0	27.1	1.6	14.4	2.1	13.5	4.1	13.9	3.0	29.6	6.7
SC LP	31.5	1.9	33.1	1.5	15.2	2.0	19.8	4.2	20.0	3.0	40.2	5.8
SE LP	28.1	2.4	24.4	2.2	14.8	2.8	9.8	4.1	14.9	4.0	27.9	6.8
UP	29.6	2.7	27.9	1.5	14.3	2.7	0.0	0.0	0.0	0.0	38.3	7.3
NLP	27.5	1.3	29.4	0.9	16.5	1.8	25.8	5.3	26.0	5.5	43.2	3.6
SLP	30.4	1.1	31.5	0.9	16.1	1.2	16.4	2.2	18.2	1.8	36.9	3.3
Statewide	31.0	0.8	31.6	0.6	16.3	0.9	18.3	2.1	19.1	1.7	39.8	2.3

[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, 2013.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Antlerless				
West UP	6.0	4.8	11.2	1.2
East UP	0.0	0.0	5.3	1.5
NE LP	4.7	3.1	18.6	1.1
NW LP	15.4	16.0	20.7	1.1
Sag. Bay	1.5	1.6	25.5	1.3
SW LP	3.9	5.7	20.3	1.3
SC LP	2.0	1.6	23.7	1.2
SE LP	1.5	1.6	19.3	1.7
UP	3.9	3.1	9.8	1.0
NLP	10.0	8.6	20.4	0.8
SLP	2.4	2.0	23.4	0.7
Statewide	5.1	3.3	22.1	0.5
Antlered Bucks				
West UP	2.3	3.2	28.7	1.7
East UP	4.6	6.3	19.9	2.6
NE LP	11.0	10.8	23.5	1.3
NW LP	6.4	6.5	21.4	1.1
Sag. Bay	7.8	9.4	28.8	1.4
SW LP	9.9	15.0	25.1	1.4
SC LP	15.4	17.0	29.1	1.3
SE LP	1.5	1.6	24.5	1.9
UP	3.1	3.0	26.7	1.4
NLP	7.8	5.5	23.2	0.8
SLP	9.9	7.6	28.6	0.8
Statewide	10.3	5.6	28.6	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, 2013.[a]

Sex and Area	Season			
	Independence		All Seasons	
	Success	95% CL[b]	Success	95% CL[b]
Sexes combined				
West UP	8.3	6.0	37.5	1.8
East UP	4.6	6.3	23.3	2.8
NE LP	15.7	11.8	37.0	1.4
NW LP	20.8	16.7	36.9	1.3
Sag. Bay	9.3	9.7	45.2	1.5
SW LP	13.8	15.8	38.6	1.6
SC LP	17.4	17.1	44.7	1.5
SE LP	3.0	2.6	36.9	2.1
UP	7.0	4.5	34.2	1.5
NLP	17.2	10.0	38.2	0.9
SLP	12.3	7.8	43.5	0.9
Statewide	15.2	6.3	43.2	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, 2012-2013.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)
Number of deer seen								
West UP	43	26	2	-17*	41	62	2	21*
East UP	36	26	3	-9*	49	58	4	9*
NE LP	35	35	2	0	50	49	2	-1
NW LP	34	35	1	1	50	50	2	0
Sag. Bay	42	37	2	-5*	42	48	2	6*
SW LP	28	28	2	0	58	57	2	0
SC LP	37	36	2	-1	49	49	2	0
SE LP	40	37	2	-2	42	45	2	3
UP	41	26	2	-15*	43	61	2	18*
NLP	34	34	1	0	50	50	1	0
SLP	37	35	1	-2*	48	50	1	2*
Statewide	36	33	1	-3*	48	51	1	3*
Number of antlered deer (bucks) seen								
West UP	30	18	1	-12*	53	68	2	15*
East UP	25	15	3	-10*	58	71	3	12*
NE LP	23	21	1	-2	61	61	2	0
NW LP	23	22	1	0	60	61	1	0
Sag. Bay	28	24	1	-4*	54	59	2	5*
SW LP	20	20	1	0	64	63	2	-1
SC LP	28	26	1	-2	57	56	2	-1
SE LP	26	23	2	-3	53	58	2	5*
UP	29	17	1	-12*	54	69	2	14*
NLP	22	21	1	-1	61	61	1	1
SLP	26	24	1	-2*	57	58	1	2
Statewide	25	22	1	-3*	58	61	1	3*

[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 2013 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, 2012-2013.

	Satisfied hunters (%)[a]				Dissatisfied hunters (%)[b]			
Criteria and area	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)
Overall deer hunting experience								
West UP	54	40	2	-14*	25	40	2	15*
East UP	51	43	4	-8*	27	36	4	9*
NE LP	47	49	2	1	31	29	1	-1
NW LP	46	45	1	-1	31	31	1	1
Sag. Bay	50	46	2	-4*	28	31	2	3*
SW LP	38	40	2	1	39	38	2	-2
SC LP	48	47	2	-1	31	31	1	-1
SE LP	52	49	2	-3	26	28	2	3
UP	53	41	2	-13*	25	39	2	14*
NLP	47	46	1	-1	31	31	1	0
SLP	47	45	1	-1	32	32	1	0
Statewide	47	45	1	-3*	30	33	1	2
Number of deer harvested								
West UP	38	29	2	-9*	28	37	2	9*
East UP	28	23	3	-6	31	40	4	9*
NE LP	29	29	1	0	35	34	2	-1
NW LP	30	27	1	-3*	34	35	1	0
Sag. Bay	36	33	2	-3*	31	32	2	1
SW LP	26	26	2	0	40	38	2	-1
SC LP	33	31	1	-2	35	33	2	-2
SE LP	31	30	2	-1	32	31	2	-1
UP	36	27	2	-8*	29	38	2	9*
NLP	30	28	1	-2	34	34	1	0
SLP	32	30	1	-2	35	34	1	-1
Statewide	32	29	1	-3*	34	35	1	1

[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 2013 estimate.
*P<0.005.

Table 12. Level of support and opposition for the antler point restrictions in the Upper Peninsula among Michigan deer hunters, 2012-2013.

Preferred hunt area	Hunters supporting (%)[a]				Hunters opposing (%)[b]			
	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)	2012	2013	95% CL[c]	Difference from 2012 to 2013 (%)
West UP	58	60	2	2	31	29	2	-1
East UP	59	57	4	-2	31	32	3	0
NE LP	50	50	2	0	21	23	1	3
NW LP	54	51	2	-3	19	23	1	4*
Sag. Bay	54	51	2	-3*	17	22	1	5*
SW LP	55	55	2	-1	14	17	1	3*
SC LP	55	53	2	-2	14	17	1	3*
SE LP	58	56	2	-2	16	18	2	2
UP	58	59	2	1	31	30	2	-1
NLP	52	51	1	-2	19	23	1	3
SLP	55	53	1	-2	15	18	1	3
Statewide	55	53	1	-2	19	22	1	3

[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 2013 estimate.
*P<0.005.

Table 13. Level of support and opposition for the antler point restrictions in DMU 487 among Michigan deer hunters, 2012-2013.[a]

Preferred hunt area	Hunters supporting (%)[b]				Hunters opposing (%)[c]			
	2012	2013	95% CL[d]	Difference from 2012 to 2013 (%)	2012	2013	95% CL[d]	Difference from 2012 to 2013 (%)
West UP	36	35	2	-1	17	17	1	0
East UP	40	40	4	0	24	22	3	-2
NE LP	49	51	2	2	26	26	1	0
NW LP	46	45	2	-1	17	21	1	3*
Sag. Bay	46	44	2	-2	17	23	1	6*
SW LP	46	46	2	0	12	16	1	4*
SC LP	45	46	2	1	13	17	1	4*
SE LP	49	48	2	-1	18	20	2	1
UP	37	36	2	-1	19	18	1	-1
NLP	47	47	1	0	21	23	1	2*
SLP	46	46	1	0	14	19	1	4*
Statewide	45	45	1	0	18	20	1	3*

[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 14. Estimated proportion and number of archers that used a crossbow during 2013 archery season in Michigan, summarized by region.

	Archers using a crossbow during archery season			
Region	%	95% CL	Total	95% CL
UP	54.0	3.2	14,586	1,249
NLP	54.2	1.6	58,311	2,393
SLP	46.5	1.3	76,761	2,644
Unknown[a]	45.0	3.0	13,070	1,174
Statewide	49.5	0.9	162,728	3,641

[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 15. Estimated hunter success of archers hunting with a crossbow during 2013 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	17.8	3.3	14.8	3.1	30.9	4.0
NLP	18.8	1.7	15.1	1.5	31.8	2.0
SLP	14.1	1.3	22.2	1.5	32.7	1.7
Unknown[b]	18.6	3.5	17.2	3.4	31.2	4.2
Statewide	16.5	1.0	18.6	1.0	32.1	1.2

[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 16. Estimated number of deer harvested by archers with a crossbow during 2013 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	2,667	564	2,153	495	4,820	783
NLP	11,359	1,163	8,632	962	19,991	1,590
SLP	11,691	1,219	17,286	1,383	28,977	1,985
Unknown[a]	2,680	605	2,305	515	4,985	888
Statewide	28,397	1,857	30,375	1,807	58,772	2,747

[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 2013, 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	2,881	2,431	0	0	0
003	Allegan County	900	762	731	8,000	7,642	6,260
004	Alpena County[d]	2,000	650	534	0	0	0
005	Antrim County	200	190	190	5,200	4,834	3,421
006	Arenac County	500	433	433	7,000	4,623	3,602
007	Big Bay Unit	0	0	0	0	0	0
009	Bay County	200	158	140	3,000	2,690	2,146
010	Benzie County	600	592	587	400	375	375
012	Branch County	100	72	62	6,000	5,871	4,363
015	Charlevoix County	200	187	180	3,600	3,268	2,296
016	Cheboygan County	400	346	346	700	585	585
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	900	787	787	8,000	7,541	5,652
020	Crawford County	800	829	827	1,000	842	839
021	Manistique Unit	0	0	0	0	0	0
022	Iron Mountain Unit	1,000	847	847	3,500	3,251	2,424
024	Emmet County	200	190	190	1,700	1,520	1,212
025	Genesee County	0	0	0	8,500	5,754	4,870
026	Gladwin County	1,200	1,059	1,059	8,000	7,555	5,599
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	500	489	489	400	380	380
030	Hillsdale County	400	316	270	12,000	7,922	6,130
031	Nisula Unit	0	0	0	0	0	0
034	Ionia County	400	337	296	11,000	6,975	5,488
035	Iosco County[d]	1,000	822	796	0	0	0
036	Amasa/Michigamme Unit	0	0	0	0	0	0
037	Isabella County	100	85	80	11,000	8,748	6,468
038	Jackson County	1,600	1,282	1,115	17,000	10,628	8,310

[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 2013, 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	400	422	422	200	189	188
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	200	302	302	3,000	2,610	2,609
044	Lapeer County	2,000	1,720	1,560	15,000	9,784	7,800
045	Leelanau County	200	206	205	1,400	1,182	1,074
046	Lenawee County	400	332	270	9,000	6,276	5,002
047	Livingston County	2,000	1,608	1,401	15,000	7,280	5,888
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	153	141	4,000	2,835	2,377
051	Manistee County	500	559	557	3,000	2,595	2,593
053	Mason County	400	490	490	5,200	4,585	3,878
055	Menominee Unit	2,000	1,766	1,298	9,000	5,776	4,312
056	Midland County	1,500	1,269	1,139	7,500	6,314	4,920
057	Missaukee County	600	584	584	3,200	2,839	2,568
058	Monroe County	100	107	106	1,000	978	704
060	Montmorency County[d]	5,000	4,093	3,401	0	0	0
063	Oakland County	2,500	2,074	1,740	7,000	4,736	3,850
065	Ogemaw County	1,000	882	881	7,000	6,427	4,798
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	100	128	128	5,300	4,752	4,061
068	Oscoda County[d]	5,000	4,415	3,547	0	0	0
069	Otsego County	300	292	292	600	508	508
071	Presque Isle County[d]	3,000	2,028	1,664	0	0	0
072	Roscommon County	500	493	492	1,500	1,305	1,107
073	Saginaw County	200	169	169	6,500	6,311	4,926
074	St. Clair County	700	557	501	9,500	7,969	6,490
081	Washtenaw County	1,500	1,225	1,086	15,000	6,783	5,380
082	Wayne County	100	75	64	1,200	1,133	944

[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 2013, 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	970	969	3,700	3,325	2,673
115	Beaver Island	300	148	128	400	222	183
117	Drummond Island	0	0	0	0	0	0
121	Bay De Noc Unit	400	332	308	800	714	589
122	Norway Unit	200	165	165	1,500	1,118	912
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
135	Tawas Unit[d]	200	144	119	0	0	0
145	North Manitou Island[e]	0	0	0	0	0	0
149	Round/Bois Blanc Island	100	79	66	100	86	69
152	Gwinn Unit	0	0	0	0	0	0
155	Gladstone Unit	400	333	309	3,000	2,064	1,660
174	St. Clair Flats	132	132	101	300	115	94
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	500	448	446	1,000	928	718
273	Shiawassee Unit[e]	592	592	592	0	0	0
308	Bellevue Unit	2,000	1,656	1,457	32,000	20,289	16,101
311	Keeler Unit	700	569	499	14,000	13,123	10,517
319	Laingsburg Unit	3,400	2,885	2,200	40,000	26,077	19,862
332	Greenleaf Unit	6,200	5,284	4,164	42,000	26,383	19,947
339	Vicksburg Unit	900	749	667	11,000	8,944	6,943
341	Sparta Unit	1,350	1,132	998	22,500	17,415	14,036
349	Engadine Unit	0	0	0	0	0	0
354	Lakeview Unit	1,200	983	943	26,000	20,643	15,441
361	Fremont Unit	400	533	532	9,000	8,359	7,731
452	Core Area[d]	2,000	1,774	1,505	0	0	0
487	Northern Multi-County	0	0	0	30,000	25,901	20,234
NA	Deer Management Assistance Permits	NA	NA	NA	NA	8,981	780
NA	Managed Deer Hunt Permits[e]	NA	185	137	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 2013, 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	7,142	872	61,246	11,248	1,768	511	1,639	444	3,407	772
003	13,522	1,177	196,919	23,665	2,463	560	2,299	527	4,762	814
004	6,105	806	56,063	11,016	1,392	422	1,703	417	3,095	652
005	7,167	870	70,010	12,825	1,889	508	1,378	401	3,267	743
006	8,764	959	112,288	17,512	2,058	531	2,358	525	4,416	847
007	8,355	954	92,788	14,372	381	193	2,290	524	2,671	570
009	5,032	723	63,963	13,556	1,359	446	1,104	355	2,463	644
010	5,381	764	60,621	12,265	936	316	975	355	1,911	496
012	6,736	836	82,288	15,283	2,272	648	2,288	516	4,560	943
015	4,962	720	55,865	12,307	1,328	479	1,147	371	2,475	616
016	7,906	922	81,959	14,210	908	300	2,104	486	3,012	603
017	6,382	836	68,463	13,356	515	247	1,268	382	1,783	482
018	15,255	1,269	181,028	22,226	3,780	734	3,879	687	7,659	1,144
020	9,415	1,008	85,342	13,587	1,532	426	1,734	456	3,266	684
021	8,539	958	83,941	13,669	318	176	1,979	476	2,297	533
022	12,299	1,149	120,556	15,877	2,265	613	3,450	620	5,715	926
024	4,914	715	55,050	12,288	967	316	982	329	1,949	497
025	10,363	1,029	145,203	20,637	1,925	477	2,639	574	4,564	836
026	15,374	1,267	177,514	21,721	4,035	738	3,775	669	7,810	1,084
027	3,084	583	27,786	7,211	272	189	968	336	1,240	394
028	7,286	879	95,455	16,130	1,381	371	1,216	376	2,597	587
030	9,601	1,000	128,400	19,620	2,892	680	2,673	541	5,565	988
031	4,508	699	35,878	7,230	202	134	1,235	364	1,437	396
034	10,782	1,052	141,426	20,888	2,600	612	2,934	594	5,534	966
035	9,993	1,033	99,946	14,174	1,658	513	2,158	510	3,816	777
036	3,401	610	30,880	7,256	153	128	971	325	1,124	349
037	10,902	1,047	128,958	17,617	3,394	685	3,905	664	7,299	1,094
038	14,327	1,214	194,156	22,617	3,419	689	4,313	731	7,732	1,139

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 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 2013, 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	9,097	988	84,436	13,303	1,099	367	1,076	345	2,175	553
042	2,278	501	22,731	6,835	107	101	596	286	703	303
043	15,407	1,274	144,678	16,918	2,892	568	2,395	513	5,287	812
044	14,817	1,226	207,118	24,748	3,791	724	4,063	702	7,854	1,140
045	5,030	734	53,909	11,232	884	314	1,045	363	1,929	533
046	8,019	911	107,771	16,832	2,056	536	2,396	528	4,452	882
047	12,324	1,127	158,525	20,723	3,064	672	3,211	626	6,275	1,007
048	6,110	815	54,871	11,493	399	245	1,086	369	1,485	472
050	4,340	672	58,894	12,972	1,054	366	1,223	407	2,277	628
051	10,529	1,054	95,467	13,526	2,358	501	1,875	479	4,233	731
053	11,684	1,103	132,900	18,363	3,628	690	3,040	609	6,668	1,050
055	12,893	1,170	131,814	16,626	2,685	601	4,111	695	6,796	1,016
056	12,572	1,143	172,979	23,159	3,549	729	3,287	599	6,836	1,070
057	10,136	1,033	103,186	15,139	2,367	532	1,930	472	4,297	793
058	4,038	649	60,664	13,689	252	150	985	359	1,237	398
060	8,897	979	70,032	11,068	1,778	482	1,991	474	3,769	772
063	10,914	1,071	129,992	18,693	2,282	554	2,362	540	4,644	913
065	13,051	1,172	134,605	17,913	3,037	646	2,754	547	5,791	946
066	4,351	690	36,667	7,392	93	97	1,567	427	1,660	438
067	12,930	1,163	138,722	17,934	3,109	690	3,445	624	6,554	1,016
068	9,269	999	71,049	11,245	1,766	467	1,343	369	3,109	636
069	6,747	848	67,664	12,536	686	252	2,022	505	2,708	598
071	9,369	1,001	82,033	12,472	2,532	622	2,796	563	5,328	927
072	11,888	1,131	106,267	15,169	1,061	341	2,533	548	3,594	708
073[f]	10,335	1,023	140,334	19,473	2,436	521	3,206	614	5,642	910
074	12,213	1,112	187,040	23,331	3,024	664	3,073	564	6,097	1,037
081	10,707	1,051	157,175	21,982	2,933	676	3,258	616	6,191	1,025
082	1,585	412	23,275	8,341	247	159	514	231	761	330

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 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 2013, 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	11,319	1,086	112,144	16,435	2,435	533	1,356	377	3,791	693
115	251	168	1,340	929	61	81	126	140	187	180
117	796	298	5,310	2,496	90	99	106	101	196	163
121	3,242	595	32,797	8,586	619	245	833	313	1,452	428
122	1,471	402	13,154	4,660	306	198	374	224	680	329
127	1,633	421	15,070	5,573	33	57	258	163	291	172
131	3,355	604	34,013	8,098	144	118	1,167	358	1,311	385
135	172	133	1,674	1,637	43	61	4	0	47	61
145	0	0	0	0	0	0	0	0	0	0
149	323	188	2,229	1,509	60	79	92	128	152	150
152	3,553	623	37,395	8,459	223	172	962	346	1,185	403
155	4,272	681	54,394	12,182	901	348	1,180	361	2,081	551
174	166	134	2,399	2,746	131	182	30	57	161	236
245	0	0	0	0	0	0	0	0	0	0
249	5,953	804	48,671	9,628	203	141	1,381	393	1,584	433
252	1,392	390	15,933	6,976	62	81	257	155	319	175
255	3,618	627	38,134	8,722	758	317	812	308	1,570	483
273[f]	0	0	0	0	0	0	0	0	0	0
308	29,173	1,716	404,279	33,195	7,484	1,003	8,399	996	15,883	1,577
311	16,734	1,309	266,936	29,084	4,364	808	4,788	748	9,152	1,279
319	37,301	1,908	500,131	37,797	11,739	1,344	12,153	1,213	23,892	2,071
332	40,267	1,976	518,863	37,286	14,360	1,475	13,683	1,262	28,043	2,249
339	12,799	1,157	187,307	23,963	3,516	754	3,365	627	6,881	1,135
341	28,289	1,675	413,810	35,634	6,668	1,031	7,050	899	13,718	1,530
349	1,480	403	12,359	5,043	41	60	371	212	412	235
354	29,663	1,710	344,438	29,905	8,109	1,117	9,236	1,037	17,345	1,700
361	34,310	1,855	407,621	32,155	6,735	911	9,159	1,023	15,894	1,516
452	11,549	1,105	108,046	14,533	3,431	674	3,384	604	6,815	1,014

[a]Harvest estimates do not include deer taken with DMA permits. An additional 6,508 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.