



MICHIGAN DEER HARVEST SURVEY REPORT 2012 SEASONS

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ABSTRACT

A survey of deer hunters was conducted following the 2012 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2012, an estimated 654,100 hunters spent 9.4 million days afield. Statewide, the number of people hunting and their hunting effort was nearly unchanged between 2011 and 2012. Hunters harvested about 418,000 deer, which also was nearly unchanged from the number taken in 2011. Statewide, 46% of hunters harvested a deer in 2012. About 23% of the hunters took an antlerless deer and 31% took an antlered buck in 2012. About 15% of deer hunters harvested two or more deer of any type (two antlerless deer, two antlered bucks, or one of each). Less than 5% 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 were all slightly higher in 2012 than in 2011. Statewide, 47% of hunters were satisfied with their overall hunting experience in 2012, and satisfaction was highest in the Upper Peninsula. About 142,500 hunters used a crossbow during the 2012 archery season, and they harvested about 59,800 deer with the crossbow. About 11% fewer individuals purchased a deer hunting license in 2012 than ten years ago in 2002. Although the overall number of license buyers declined from 2002, an increased number of people younger than 14 years of age and people older than 49 purchased a license in 2012. Nearly 12% of the license buyers in 2012 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 2012 hunting season and deer numbers. Deer hunters were also asked whether they supported the antler point restrictions that were enacted in the UP and Deer Management Unit (DMU) 487 (northeast LP).

During 2012, white-tailed deer (*Odocoileus virginianus*) could be harvested primarily during the following hunting seasons: youth and 100% percent disabled veterans, archery, regular firearm, muzzleloader, early antlerless, late antlerless, and special hunt for disabled hunters. 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 an 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 Youth 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 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 twelve DMUs (007, 017, 021, 027, 042, 048, 066, 127, 131, 149, 249, 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 permission of the landowner. 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 DMUs 486 and 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 DMUs 486 and 487 and public land antlerless licenses for DMU 452 where hunters could purchase five licenses each day.

On November 8, 2012, the antlerless license season limits were reduced for southern Michigan units in response to an outbreak of epizootic hemorrhagic disease among deer during the summer of 2012. The number of private land antlerless licenses for DMU 486 was reduced from ten to five licenses per hunter. Also, the public land antlerless license season purchase limit per hunter was changed from unlimited to two licenses for each of the following DMUs: 012 (Branch), 034 (Ionia), 039 (Kalamazoo), 041 (Kent), 044 (Lapeer), 076 (Sanilac), 078 (Shiawassee), 079 (Tuscola), and 080 (Van Buren).

Two new private land DMUs were created in 2009 to aid in the harvest of antlerless deer. Deer Management Unit 486 was a multi-county DMU in the southern LP. Deer Management Unit 486 included private land in DMUs 003, 008, 009, 011, 012, 013, 014, 019, 023, 025, 029, 030, 032, 033, 034, 037, 038, 039, 041, 044, 046, 047, 054, 056, 059, 061, 063, 070,

073, 075, 076, 078, 079, 080, 081, and 162. A private land antlerless deer license for DMU 486 was valid on private land within any of these subunits. DMU 487 was the second new multi-county DMU and was located in the northeast LP. 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 Youth and 100% Disabled Veterans Season was held during September 22-23 on public and private lands statewide. Youth (less than 17 years old) and disabled veterans could take no more than one deer during the 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,

2012, through January 1, 2013). 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 special disabled firearm hunt October 18-21, 2012. Hunters could take deer on private lands or public lands requiring an access permit. Only hunters that were issued a permit 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 7-16 in the UP, December 14-23 in the Northern LP, and December 7-23 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 22-23. Hunters pursuing deer during this season had to have purchased an antlerless license or mentored youth license and 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 2012 were the same as in 2011.

The late antlerless firearm season occurred from December 17, 2012, through January 1, 2013. Hunters pursuing deer during this season had to have purchased an antlerless license or mentored youth license and 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 area open to hunting during the 2012 late antlerless season was the same as in 2011.

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 (91,532). 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 2012 deer hunting seasons, a questionnaire was sent to 55,046 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 = 434,304). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 210,898). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and youth seasons (N = 51,199). The fourth stratum consisted of 1,344 people that were eligible to participate in the special disabled hunts. (Disabled hunters were not required to purchase a unique type of hunting license; 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 3,256 people that had voluntarily reported information about their hunting activity via the Internet before the random sample was selected. The random sample consisted of 28,740 people from the first stratum; 13,707 from the second stratum; 11,258 from the third stratum; and 1,341 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. The state was divided into eight areas that closely matched the DNR's 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 2013, 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 55,046 people were sent the questionnaire, 1,333 surveys were undeliverable resulting in an adjusted sample size of 53,713. Questionnaires were returned by 28,488 people (53% 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 some previous years. To reduce bias caused by this lower response rate, an adjustment was made on the 2012 estimates to make them comparable to the adjusted 2011 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 5.9, 4.2, and 1.7%, respectively, to make estimates comparable to 2011. These reductions reflected the average decline noted between estimates calculated when 53 and 74% of the responses were used in 2000 and 2001 surveys.

RESULTS

In 2012, 701,001 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2012 increased by about 1% from 2011 (691,215 people purchased a license in 2011). Most of the people buying a license were male (90%), and the average age of license buyers was 42 years (Figure 3). Nearly 12% (82,119) of the license buyers were younger than 17 years old. About 3% (24,184) of the license buyers were younger than 12 years old.

The number of people buying a license in 2012 was about 11% less than the number of people who purchased a license ten years ago in 2002 (788,271 people purchased a license in 2002). There were fewer license buyers for most age classes between 14 and 49 years of age in 2012, compared to 2002 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2012. 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 the hunters had to be at least 12 years old to participate in 2002.

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 10,000 additional youth purchasing a deer hunting license in 2012. The cumulative effect of these 2006-2012 changes resulted in approximately 30,000 additional youth purchasing a deer hunting license in 2012.

The number of 2012 deer harvest tags sold for all license types combined increased slightly (0.1%) from 2011 (Table 2). License buyers were issued an average of 2.2 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 43% of the license buyers purchased at least one antlerless license (301,858 people), and greater than 98% 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 7% from 683,700 in 2011 to 637,900 licenses in 2012 (Appendix A). The quota for public land antlerless licenses decreased 4% from 72,500 to 69,350 between 2011 and 2012. The number of antlerless licenses sold declined 6% between 2011 and 2012 (Table 2).

About $93.7 \pm 0.3\%$ (654,122 hunters) of the people buying a license in 2012 actually spent time hunting deer (Table 3). Most hunters (580,286) 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 2011.

A significantly greater number of people hunted during the youth season (54%) during 2012 (Table 3). The increased participation in the youth season likely reflected the elimination of the minimum age requirements to participate. Hunters had to be at least 10 years old to participate in 2011. Significantly fewer people hunted during the muzzleloader (-5%), late antlerless (-15%), and early antlerless (-22%) seasons. The numbers of people hunting in the archery, regular firearm, and disabled hunter seasons were nearly unchanged between 2011 and 2012 (Figure 10).

About 47% 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 12% of the hunting effort occurred in the muzzleloader and late antlerless seasons combined. Statewide, hunters devoted an average of 14.9 days afield hunting deer during all seasons combined (Table 4). Archers had the greatest number of days available to hunt deer (77 days) and devoted the greatest number of days afield (\bar{x} = 13.9 days/hunter) (Figure 12, Table 4). For all seasons combined, hunting effort statewide was nearly unchanged between 2011 and 2012 (Table 3). Hunting effort increased significantly during the youth season (58%) but decreased significantly during the muzzleloader (-8%), late antlerless (-15%), and early antlerless (-47%) season. Hunting effort was unchanged during the archery, regular firearm, and disabled hunter seasons between 2011 and 2012.

About 415,000 deer were harvested in 2012, which was not significantly different from the number of deer taken in 2011 (Figures 13-14, Tables 5-6). Harvest of antlerless deer declined nearly 7% in 2012, while harvest of antlered deer was not significantly different from 2011 (Table 5). Between 2011 and 2012, harvest of antlered deer increased significantly during the regular firearm (8%) and youth (70%) seasons, but was unchanged in other seasons. Harvest of antlerless deer increased significantly (77%) in the youth season, but it decreased significantly in the muzzleloader (-25%) and early antlerless (-45%) seasons.

About 54% of the deer harvested (sexes combined) in 2012 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. During the archery season, hunters 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 21% of the antlerless deer harvested.

About 86% of the animals harvested (sexes combined) in 2012 were taken on private lands (Table 7). Statewide, most of the antlerless deer (88%) and antlered bucks (84%) were harvested on private lands. Some noteworthy changes between 2011 and 2012 included increased harvest of antlered deer on private lands in the UP and decreased take of antlerless deer on private land in the Southern LP.

Statewide, 46% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2012 (Figure 16, Table 8), compared to 45% success in 2011. About 23% of hunters took an antlerless deer, and 31% took an antlered buck in 2012. About 15% of deer hunters harvested two or more deer.

Hunters were most successful in taking a deer during the youth (36% successful), regular firearm (34%), and archery (33%) seasons (Figure 17, Table 9). Hunter success was lowest in the muzzleloader (14%) season. Nearly 24% of hunters took an antlered buck and 14% 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, $\leq 47\%$ of hunters were satisfied with numbers of deer seen, bucks seen, deer taken, and their overall hunting experience in 2012 (Tables 10-11). Statewide levels of satisfaction increased for all measures between 2011 and 2012. Furthermore, levels of dissatisfaction declined significantly for all measures.

Statewide, about 55% of hunters supported the antler point restrictions on buck harvest implemented for the UP (Table 12), and about 58% of the hunters that preferred to hunt in the UP supported the antler point restrictions. Statewide support for the antler point restrictions increased significantly between 2011 and 2012 (increased from 51% to 55%).

Statewide, about 45% of hunters supported the antler point restrictions on buck harvest implemented for the DMU 487 (Table 13), and about 49% of the hunters that preferred to hunt in the northeast LP supported the antler point restrictions. Statewide support for the antler point restrictions in DMU 487 increased significantly (and opposition declined significantly) between 2011 and 2012.

About 142,548 hunters used a crossbow during the archery season, and they harvested about 59,771 deer with the crossbow (Tables 14-16). The number of archers using a crossbow increased 20% from 2011 (118,573 archers in 2011), and harvest of deer by archers using a crossbow increased 9% (54,902 deer taken in 2011). About 36% of these archers using a crossbow in 2012 harvested a deer with a crossbow. Hunters using a crossbow to hunt deer were required to obtain a crossbow stamp, unless they were a disabled hunter that already had a DNR-issued crossbow permit. About $52 \pm 1\%$ of the archers using a crossbow during the archery season in 2012 had obtained the required crossbow stamp in 2012. However, $71 \pm 1\%$ of the archers using a crossbow during the archery season in 2012 had obtained a crossbow stamp during at least one year during 2009-2012.

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LITERATURE CITED

- Albert, D. A. 1995. Regional landscape ecosystems of Michigan, Minnesota, and Wisconsin: a working map and classification. General Technical Report NC-178. U.S. Department of Agriculture, Forest Service, North Central Forest Experimental Station, St. Paul, Minnesota, USA.
- Cochran, W. G. 1977. Sampling techniques. John Wiley & Sons, New York, USA.

Payton, M. E., M. H. Greenstone, and N. Schenker. 2003. Overlapping confidence intervals or standard error intervals: what do they mean in terms of statistical significance? *Journal of Insect Science* 3:34.

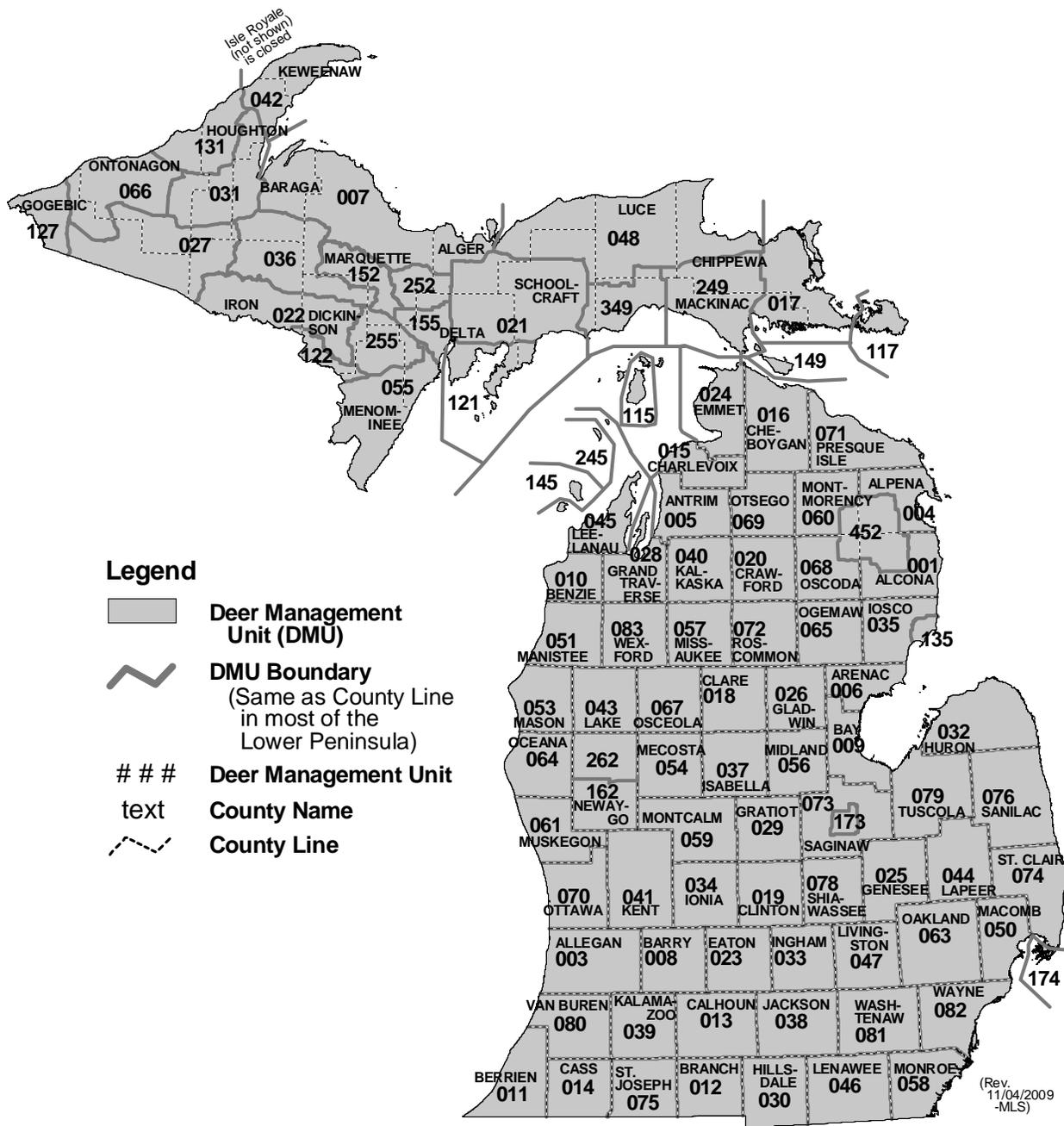


Figure 2. Deer Management Units in Michigan for the 2012 hunting seasons.

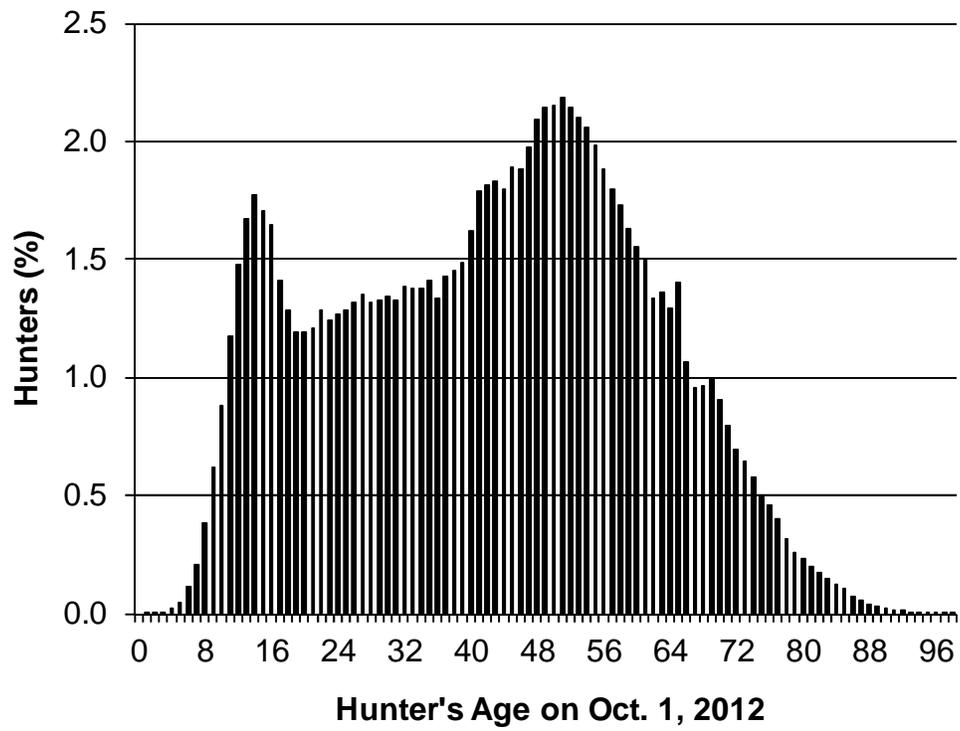


Figure 3. Age of people that purchased a deer hunting license in Michigan for the 2012 hunting seasons ($\bar{x} = 43$ years).

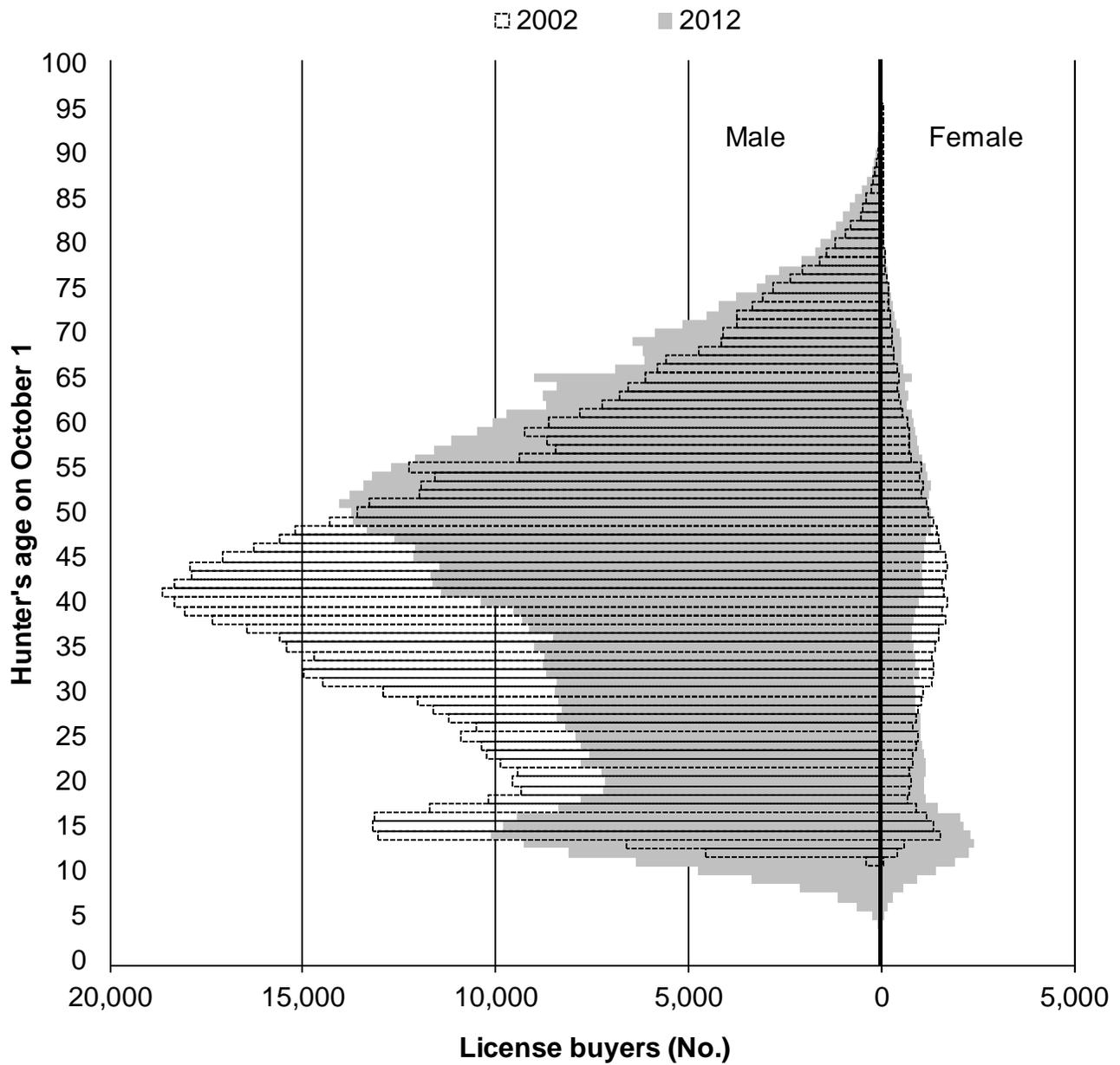


Figure 4. Number of deer hunting license buyers in Michigan by age and sex during 2002 and 2012 hunting seasons. Deer hunting licenses were purchased by 788,271 people in 2002 and 701,001 people in 2012.

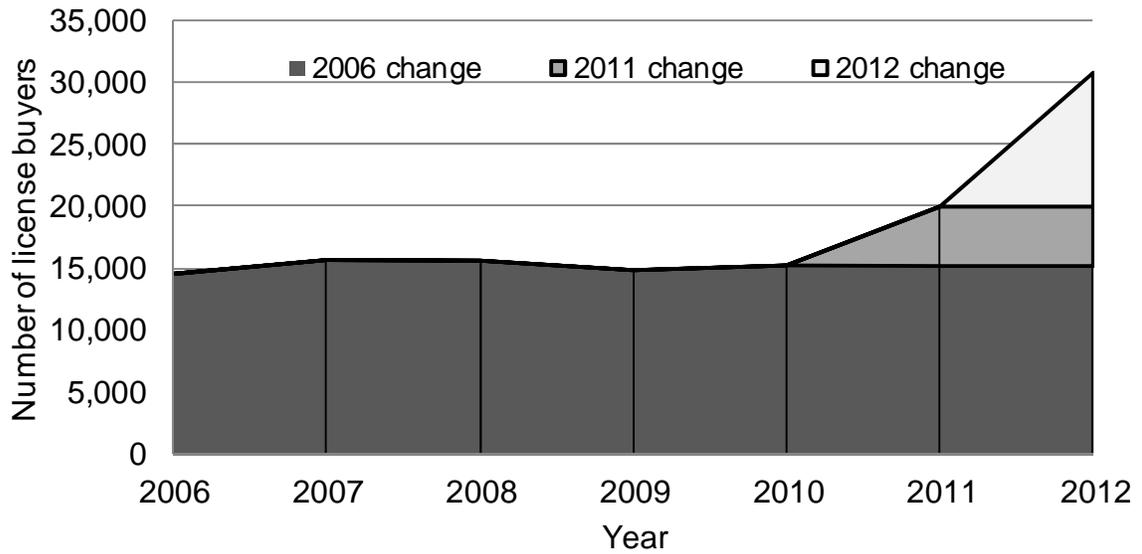


Figure 5. The number of youth deer hunting license buyers by year during 2006-2012, showing annual differences attributed to lowering the minimum age requirement.

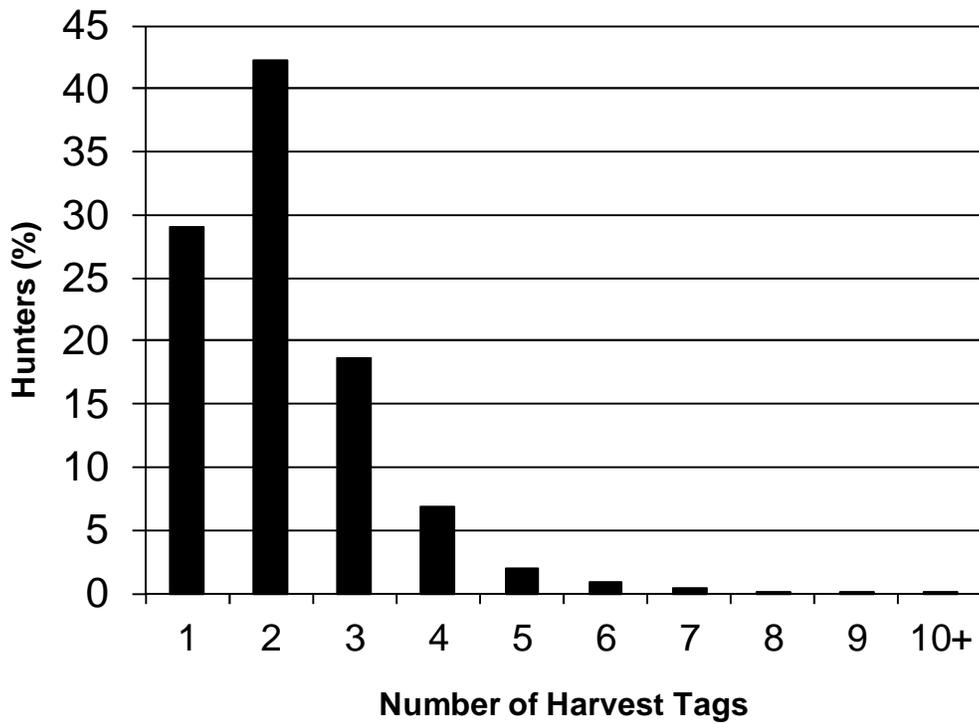


Figure 6. Number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2012 hunting seasons ($\bar{x} = 2.2$ tags). Licenses were purchased by 701,001 people.

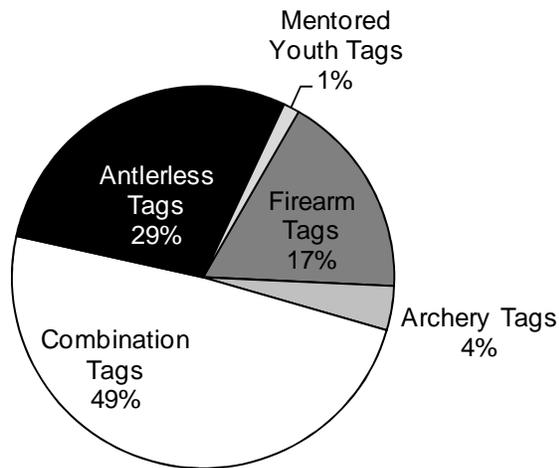


Figure 7. Types of harvest tags issued for deer hunting in Michigan during the 2012 hunting seasons.

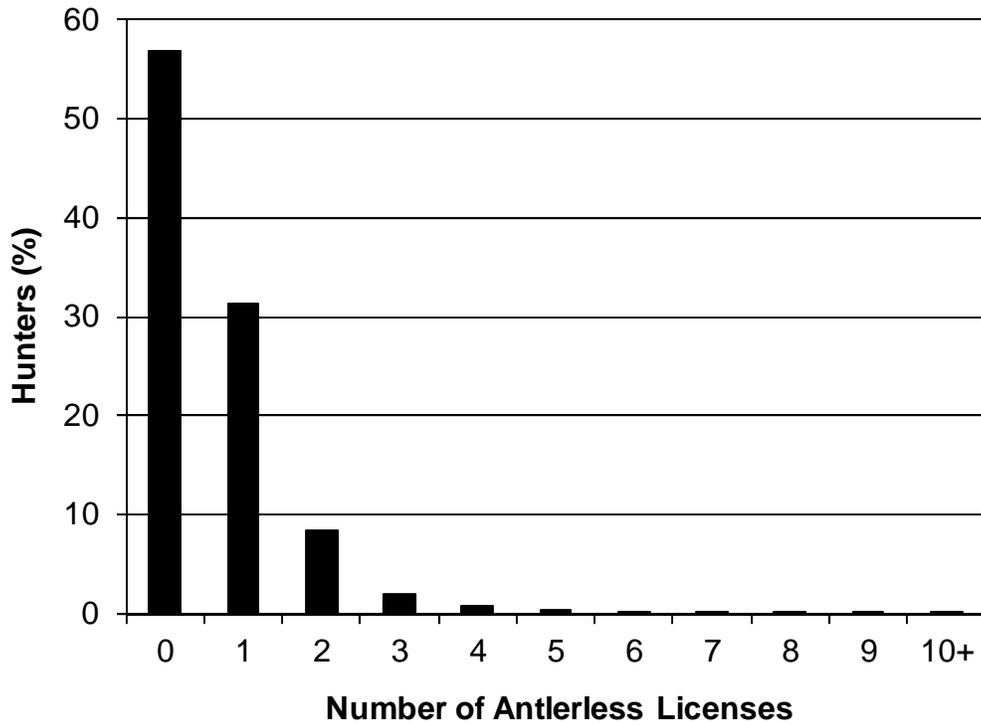


Figure 8. Percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2012. Antlerless licenses were purchased by 301,858 of 701,001 people (43%) buying deer hunting licenses.

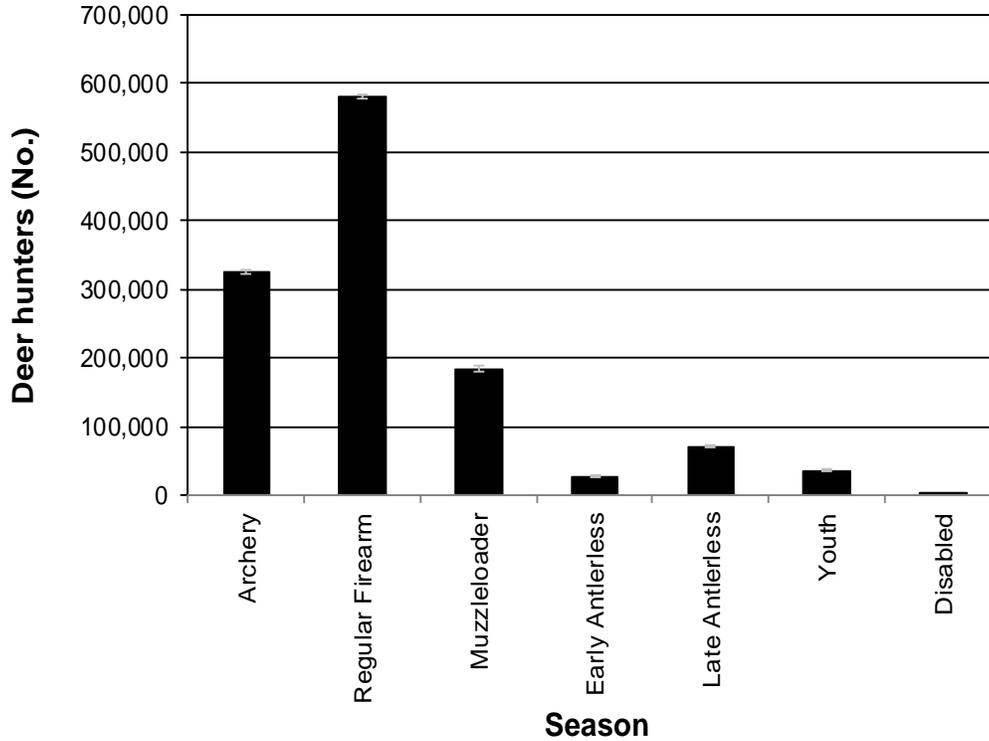


Figure 9. Number of people hunting deer in Michigan during the 2012 hunting seasons. Error bars represent the 95% CLs.

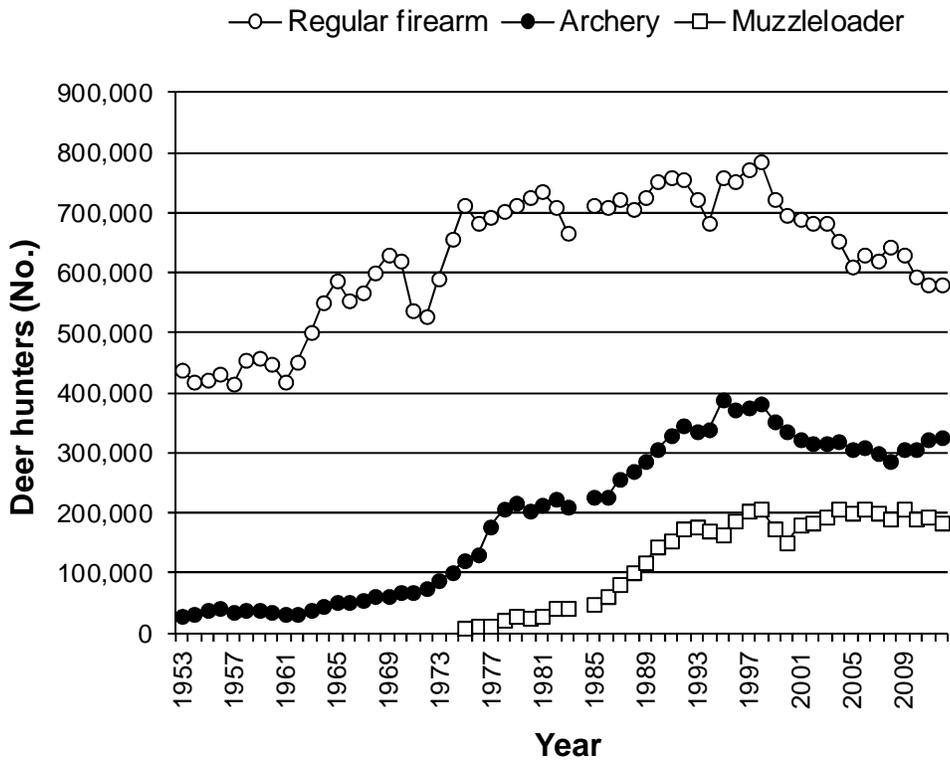


Figure 10. Number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2012.

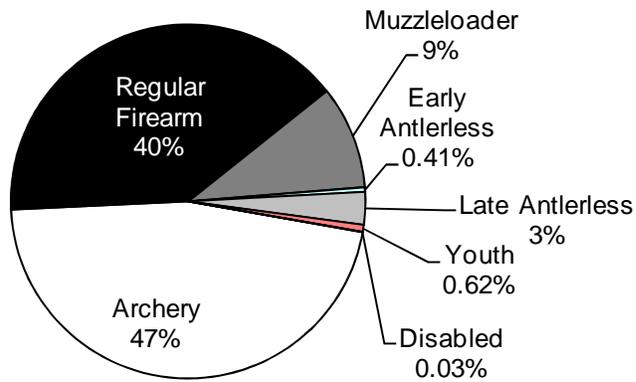


Figure 11. Distribution of hunting effort among deer hunting seasons in Michigan, 2012.

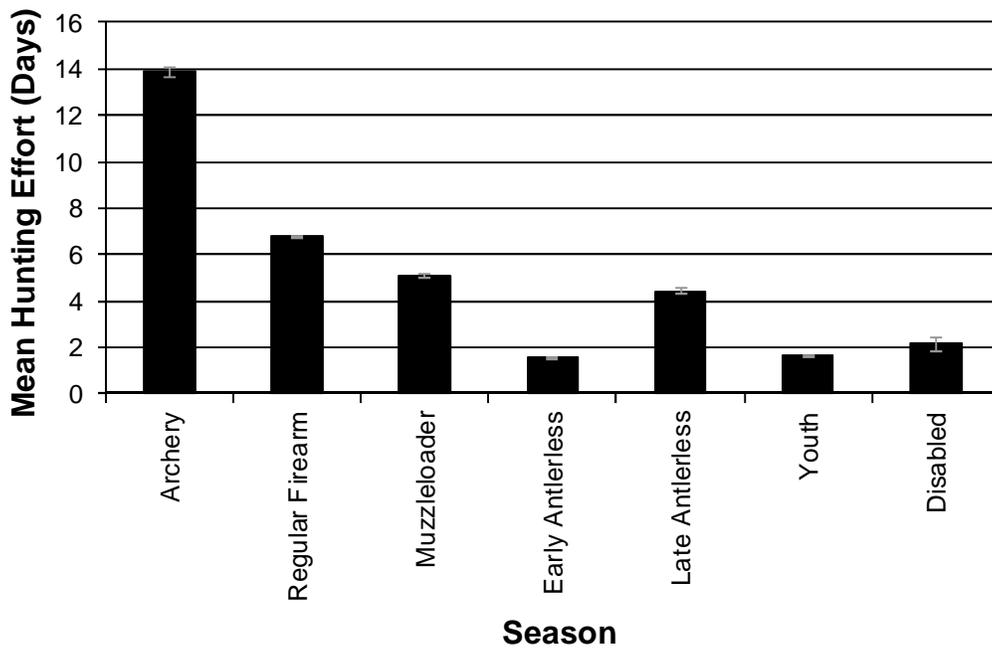


Figure 12. Mean number of days per hunter spent hunting deer in Michigan during the 2012 hunting seasons. Error bars represent the 95% CLs.

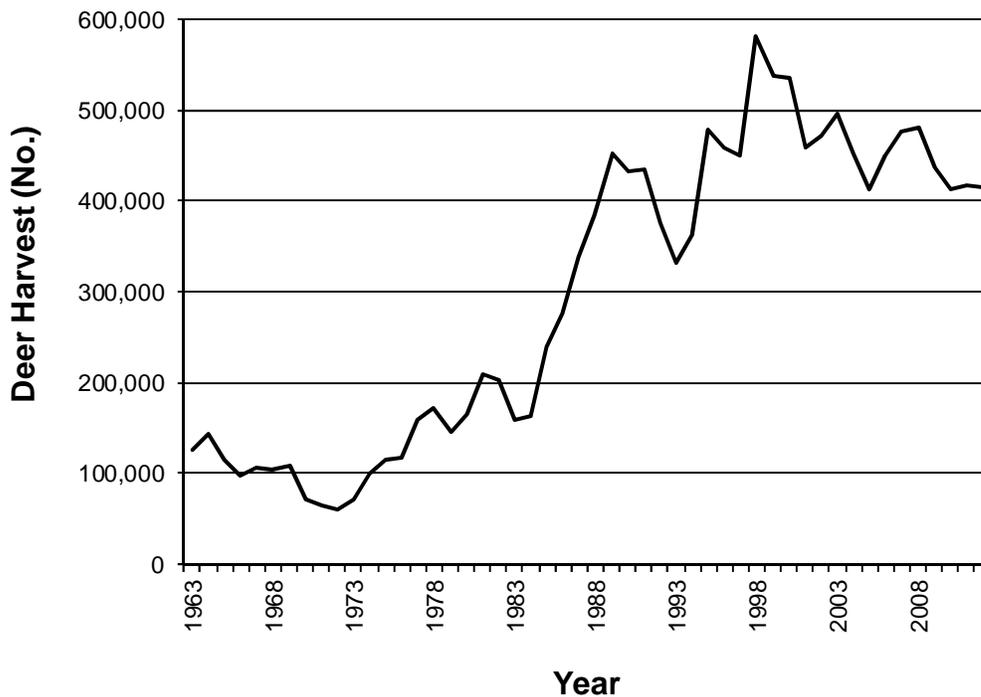


Figure 13. Number of deer harvested in Michigan's hunting seasons, 1963-2012. Harvest from all seasons and for all deer sexes was combined.

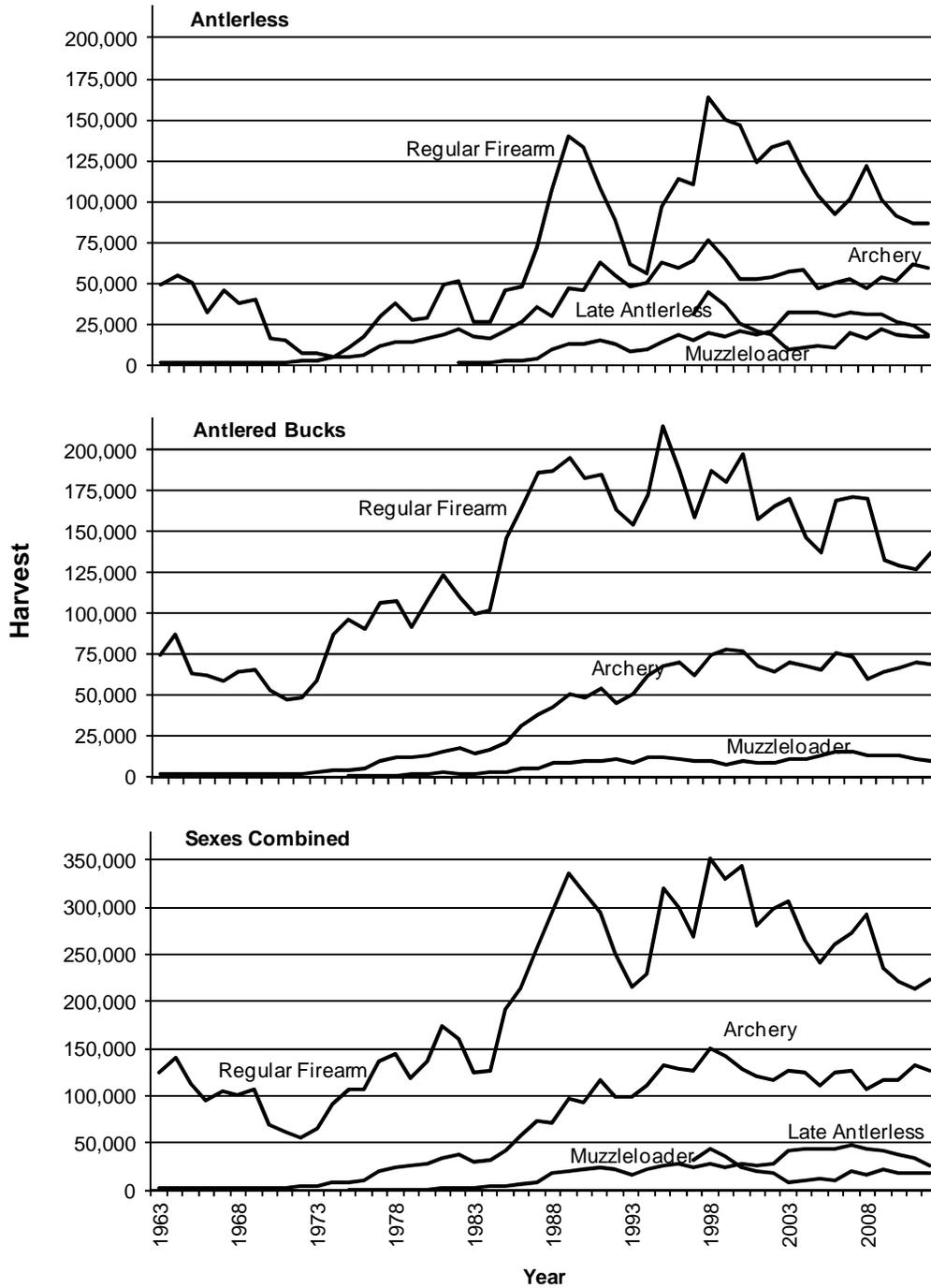


Figure 14. Number of deer harvested in Michigan’s hunting seasons, 1963-2012. Harvests for early antlerless, youth, and special disabled hunter seasons were not shown.

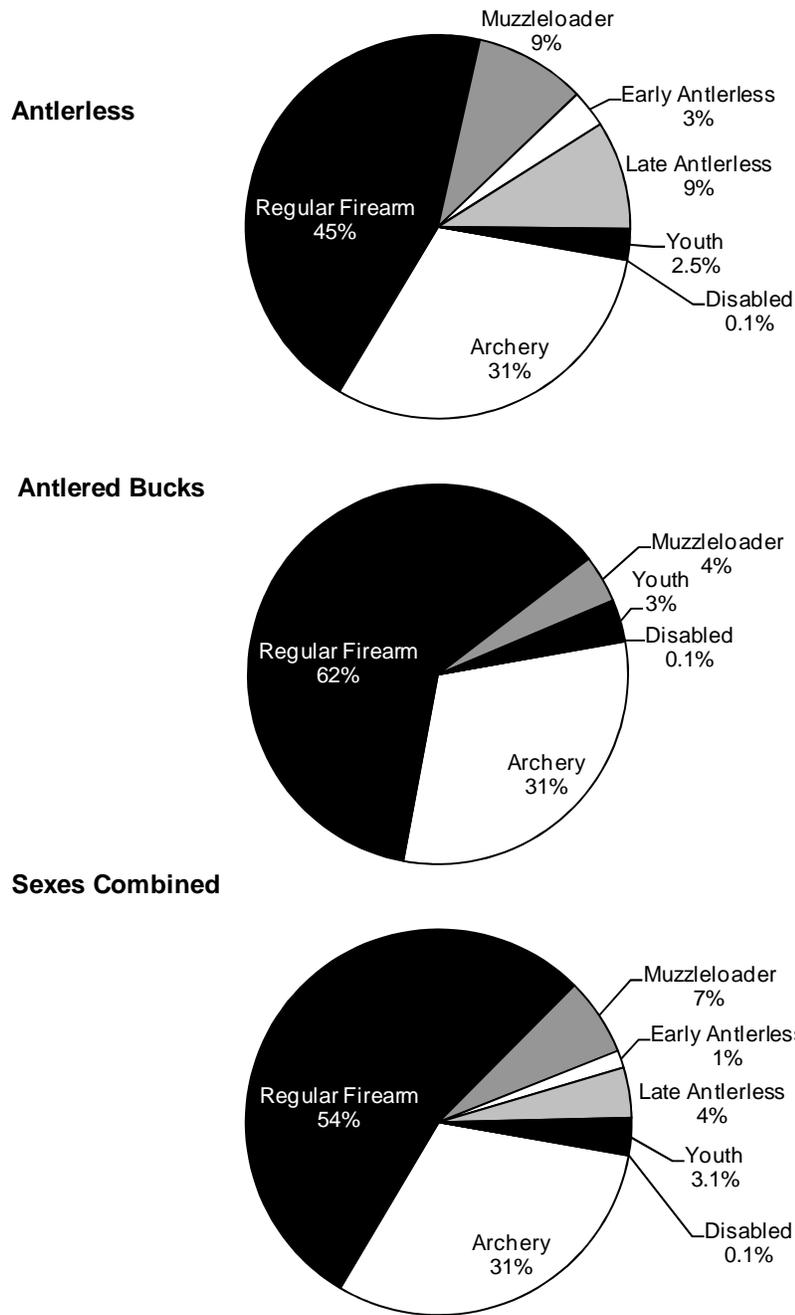


Figure 15. Distribution of harvest among deer hunting seasons in Michigan, 2012. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

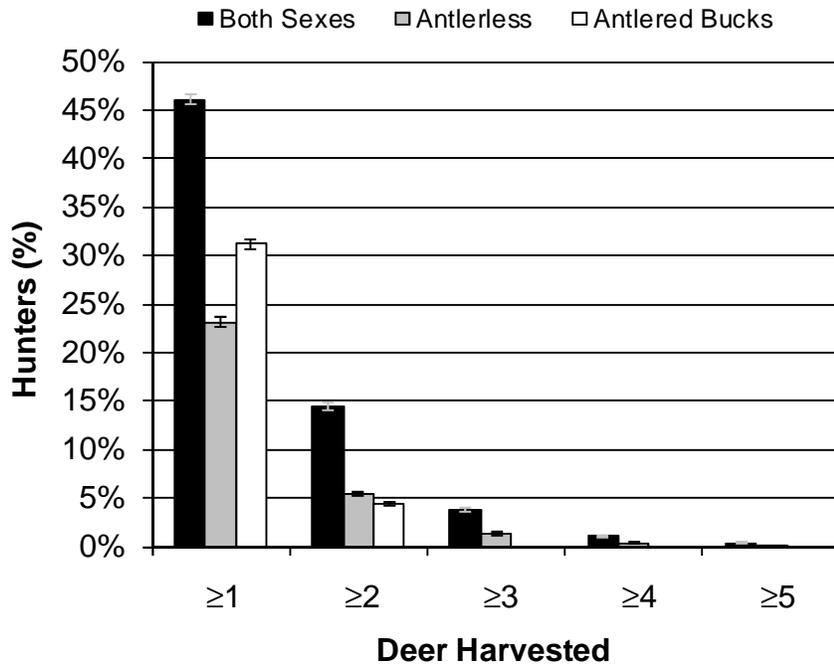


Figure 16. Percentage of hunters harvesting a deer in Michigan, 2012. Error bars represent the 95% CLs.

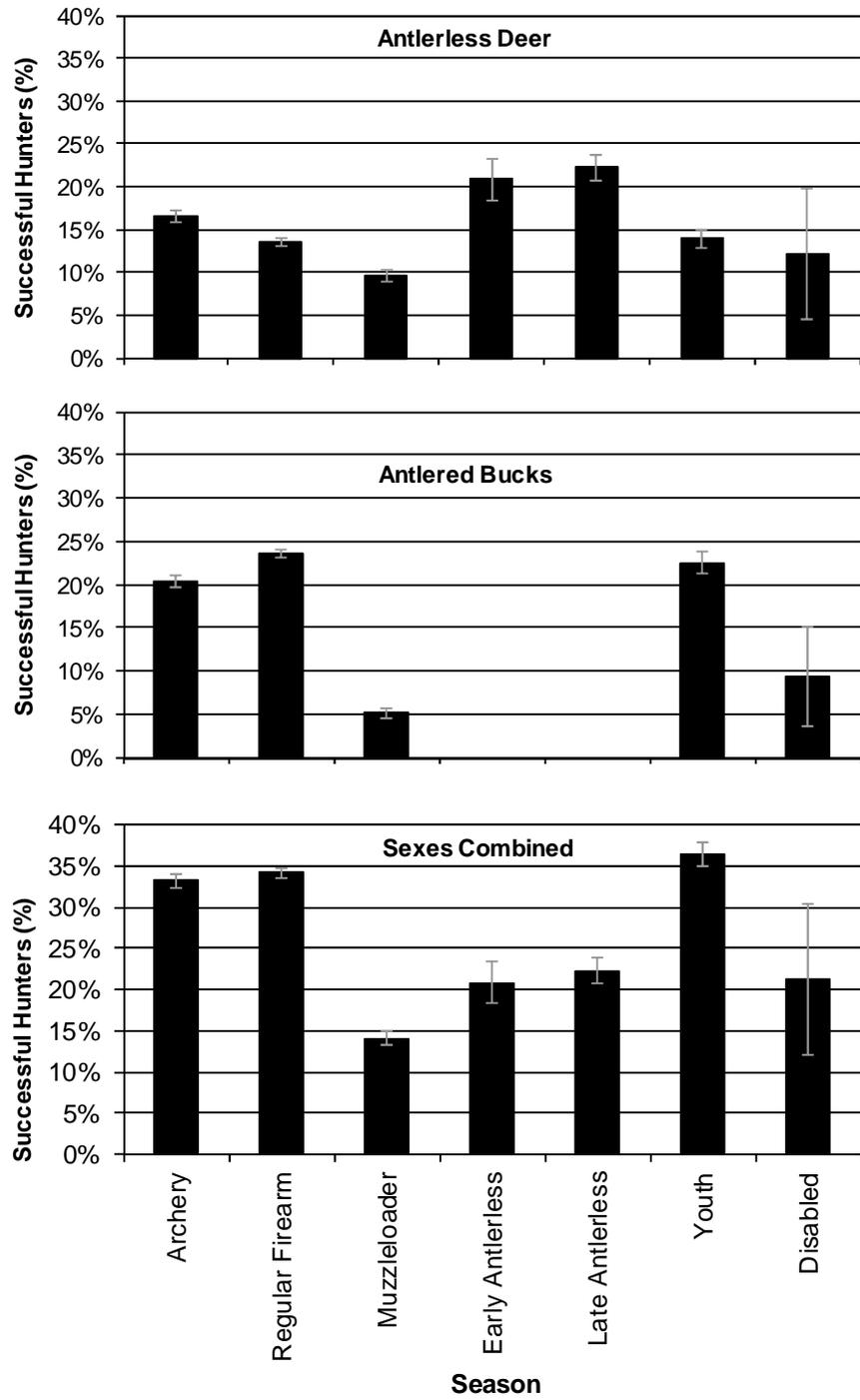


Figure 17. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2012. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

Table 1. Kind of deer that could be taken during the 2012 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Kind 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 and antlerless deer in DMU 487 ^b
Firearm License	Youth and 100% disabled veteran hunt ^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 and antlerless deer in DMU 487
Combination License ^d (Regular harvest tag)	Youth and 100% disabled veteran hunt	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, Youth, 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)	Youth and 100% disabled veteran hunt	Antlerless or antlered deer which has at least 1 antler with 4 or more antler points 1 or more inches in length

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

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

^cYouth less than 14 years of age could hunt with archery and crossbow equipment on public or private lands or with a firearm on private or Commercial Forest lands only. Hunters could harvest only 1 deer in the youth and 100% disabled veterans season.

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

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

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

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

Table 1 (Continued). Kind of deer that could be taken during the 2012 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Kind of deer that could be harvested ^a
Mentored Youth	Archery, Regular Firearm, Youth, 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

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

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

^cYouth less than 14 years of age could hunt with archery and crossbow equipment on public or private lands or with a firearm on private or Commercial Forest lands only. Hunters could harvest only 1 deer in the youth and 100% disabled veterans season.

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

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

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

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

Table 2. Number of Michigan deer licenses purchased and harvest tags issued, 2010-2012.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2011 and 2012 (%)
	2010	2011	2012	
Firearm Licenses				
Resident	217,816	196,470	193,144	-1.7
Non-resident	12,753	12,571	12,442	-1.0
Senior	36,606	36,729	36,739	0.0
Junior	NA	18,175	21,303	17.2
Military	926	1,001	1,127	12.6
Subtotal	268,101	264,946	264,755	-0.1
Archery Licenses				
Resident	40,803	41,804	42,831	2.5
Non-resident	3,070	3,022	3,325	10.0
Junior	4,477	4,224	3,793	-10.2
Senior	5,366	6,148	6,870	11.7
Military	312	361	383	6.1
Subtotal	54,028	55,559	57,202	3.0
Combination Licenses^a				
Resident	281,091	280,744	279,436	-0.5
Non-resident	1,952	2,060	2,155	4.6
Junior	46,632	43,293	46,298	6.9
Senior	39,332	41,511	43,262	4.2
Military	1,583	1,727	1,849	7.1
Subtotal	370,590	369,335	373,000	1.0
Antlerless Licenses				
Resident	463,947	445,018	417,676	-6.1
Non-resident	2,154	3,150	2,150	-31.7
Junior	3,319	3,117	3,481	11.7
Military	2,537	2,493	2,338	-6.2
Pure Michigan Hunt	3	3	3	0.0
Deer Management Assistance	7,771	8,219	8,234	0.2
Managed Deer Hunt	296	343	274	-20.1
Subtotal	480,027	462,343	434,156	-6.1
Mentored Youth Licenses^a				
	NA	NA	10,361	NA
Total Licenses Sold	1,172,746	1,152,183	1,129,113	-2.0

^aCombination 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, 2010-2012.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2011 and 2012 (%)
	2010	2011	2012	
Harvest Tags Issued				
Firearm	268,101	264,946	264,755	-0.1
Archery	54,028	55,559	57,202	3.0
Combination ^a	741,180	738,670	746,000	1.0
Antlerless	480,027	462,343	434,156	-6.1
Mentored Youth ^a	NA	NA	20,722	NA
Total Harvest Tags	1,543,336	1,521,518	1,522,835	0.1

^aCombination 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, 2011-2012.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)
Archery								
West UP	24,126	24,133	1,537	0.0	275,824	263,892	22,872	-4.3
East UP	6,645	7,488	872	12.7	60,164	67,667	11,169	12.5
NE LP	45,317	46,598	2,104	2.8	486,639	484,025	30,654	-0.5
NW LP	61,131	64,340	2,421	5.3	733,623	753,234	39,613	2.7
Sag. Bay	56,259	57,976	2,303	3.1	684,153	701,865	37,980	2.6
SW LP	59,279	54,381	2,227	-8.3*	818,849	713,493	38,768	-12.9*
SC LP	68,234	66,991	2,441	-1.8	921,631	912,283	45,242	-1.0
SE LP	35,922	38,683	1,910	7.7	453,457	478,611	32,647	5.5
UP	30,465	31,436	2,736	3.2	335,988	331,559	25,453	-1.3
NLP	122,505	127,910	3,944	4.4	1,426,806	1,467,553	55,041	2.9
SLP	192,769	191,548	3,776	-0.6	2,671,546	2,575,958	74,414	-3.6
Statewide ^c	321,869	325,424	4,124	1.1	4,434,340	4,375,070	96,117	-1.3
Regular Firearm								
West UP	66,491	67,039	2,442	0.8	463,416	471,149	21,044	1.7
East UP	19,683	21,276	1,452	8.1	128,860	134,608	10,918	4.5
NE LP	102,419	104,991	3,006	2.5	610,367	624,931	22,703	2.4
NW LP	106,545	115,017	3,082	8.0*	630,940	654,744	22,906	3.8
Sag. Bay	93,192	92,555	2,816	-0.7	555,182	535,401	20,771	-3.6
SW LP	86,944	79,148	2,611	-9.0*	558,953	502,156	20,911	-10.2*
SC LP	101,672	99,670	2,860	-2.0	612,411	607,263	22,708	-0.8
SE LP	39,712	41,737	1,974	5.1	222,727	241,183	14,163	8.3
UP	85,737	87,928	1,743	2.6	592,275	605,757	23,707	2.3
NLP	235,652	246,623	3,234	4.7*	1,418,821	1,451,445	34,315	2.3
SLP	283,746	275,583	3,611	-2.9*	1,771,759	1,714,234	38,046	-3.2
Statewide ^c	578,855	580,286	2,929	0.2	3,782,855	3,771,436	56,631	-0.3

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2012 estimate.

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

*P<0.005.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2011-2012.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)
Muzzleloader								
West UP	15,123	14,923	1,229	-1.3	73,929	72,933	6,773	-1.3
East UP	5,116	5,627	761	10.0	24,190	27,227	4,220	12.6
NE LP	22,249	22,230	1,492	-0.1	94,526	87,538	6,876	-7.4
NW LP	24,954	25,008	1,571	0.2	102,291	95,686	7,269	-6.5
Sag. Bay	33,114	30,890	1,726	-6.7	150,397	130,911	9,113	-13.0*
SW LP	39,845	33,894	1,796	-14.9*	212,044	179,071	11,755	-15.6*
SC LP	42,899	40,221	1,937	-6.2	213,086	197,620	11,978	-7.3
SE LP	18,813	19,428	1,378	3.3	90,181	95,425	8,347	5.8
UP	20,156	20,434	1,430	1.4	98,118	100,160	7,980	2.1
NLP	55,620	55,271	2,286	-0.6	233,084	216,085	10,871	-7.3
SLP	122,772	112,988	2,988	-8.0*	629,441	570,165	20,404	-9.4*
Statewide ^c	194,186	184,011	3,649	-5.2*	960,643	886,410	24,555	-7.7*
Early Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	3,195	2,486	492	-22.2	7,379	3,852	848	-47.8*
NW LP	2,216	2,067	447	-6.7	4,434	2,940	696	-33.7
Sag. Bay	6,298	5,271	710	-16.3	12,589	7,400	1,091	-41.2*
SW LP	8,494	5,407	713	-36.3*	18,115	7,942	1,122	-56.2*
SC LP	9,294	6,873	813	-26.0*	19,944	10,011	1,292	-49.8*
SE LP	5,116	4,669	670	-8.7	10,935	6,558	1,033	-40.0*
UP	0	0	0		0	0	0	
NLP	5,642	4,857	684	-13.9	12,401	7,187	1,124	-42.0*
SLP	28,622	21,700	1,399	-24.2*	60,996	31,517	2,264	-48.3*
Statewide ^c	34,957	27,125	684	-22.4*	73,397	38,704	2,544	-47.3*

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2012 estimate.

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

*P<0.005.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2011-2012.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)
Late Antlerless								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	5,460	5,702	752	4.4	20,367	22,821	3,862	12.0
NW LP	4,890	4,459	655	-8.8	18,520	16,739	3,160	-9.6
Sag. Bay	14,445	11,873	1,057	-17.8*	53,750	44,545	5,214	-17.1
SW LP	23,841	17,554	1,287	-26.4*	96,023	70,796	6,595	-26.3*
SC LP	26,275	21,960	1,431	-16.4*	107,648	87,556	7,535	-18.7*
SE LP	8,977	9,613	967	7.1	36,269	39,429	5,186	8.7
UP	0	0	0		0	0	0	
NLP	10,675	10,446	1,002	-2.1	40,043	40,957	5,091	2.3
SLP	71,877	59,741	2,211	-16.9*	292,535	240,929	12,383	-17.6*
Statewide ^c	83,744	71,248	2,365	-14.9*	332,578	281,887	13,454	-15.2*
Youth								
West UP	1,692	2,189	261	29.4	2,677	3,408	438	27.3
East UP	359	470	121	31.0	552	785	212	42.3
NE LP	2,713	3,708	333	36.7*	4,555	6,173	598	35.5*
NW LP	4,727	7,581	461	60.4*	7,534	12,337	841	63.8*
Sag. Bay	4,796	7,732	460	61.2*	7,679	12,559	838	63.6*
SW LP	3,005	4,836	374	60.9*	4,647	7,477	638	60.9*
SC LP	4,072	6,527	431	60.3*	6,012	10,016	743	66.6*
SE LP	2,055	3,476	323	69.1*	3,185	5,575	556	75.0*
UP	2,051	2,659	286	29.7*	3,229	4,193	487	29.9*
NLP	8,967	13,411	571	49.6*	14,479	21,896	1,120	51.2*
SLP	12,267	20,292	632	65.4*	19,133	32,241	1,334	68.5*
Statewide ^c	23,597	36,418	603	54.3*	36,841	58,330	1,812	58.3*

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2012 estimate.

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

*P<0.005.

Table 3 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2011-2012.

Season and Area	Number of hunters ^a				Hunting effort (days)			
	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)	2011	2012	95% CL ^b	Change from 2011 to 2012 (%)
Disabled hunts								
West UP	108	167	112	55.3	246	294	237	19.5
East UP	11	42	56	293.0	21	77	109	272.0
NE LP	300	168	112	-44.0	597	310	230	-48.1
NW LP	396	161	79	-59.3	856	343	243	-60.0
Sag. Bay	454	267	147	-41.1	1,094	580	436	-47.0
SW LP	242	231	134	-4.8	673	573	388	-14.8
SC LP	248	135	95	-45.6	620	229	161	-63.1
SE LP	235	116	95	-50.8	280	271	225	-3.1
UP	118	209	125	76.7	266	371	261	39.1
NLP	806	379	148	-52.9*	1,843	847	466	-54.1
SLP	1,040	696	233	-33.1	2,276	1,459	558	-35.9
Statewide ^c	2,045	1,348	312	-34.1	4,386	2,676	773	-39.0
All Seasons								
West UP	76,166	75,784	2,567	-0.5	815,984	811,483	40,548	-0.6
East UP	22,631	25,261	1,574	11.6	213,712	230,269	20,097	7.7
NE LP	117,877	120,194	3,163	2.0	1,224,343	1,229,543	50,792	0.4
NW LP	124,714	135,900	3,272	9.0*	1,499,273	1,536,443	59,136	2.5
Sag. Bay	111,615	113,356	3,046	1.6	1,466,876	1,433,372	58,954	-2.3
SW LP	106,591	98,109	2,856	-8.0*	1,711,858	1,481,329	63,574	-13.5*
SC LP	124,958	122,185	3,094	-2.2	1,884,311	1,824,921	71,854	-3.2
SE LP	56,700	60,077	2,320	6.0	818,018	867,154	50,040	6.0
UP	97,971	100,377	2,881	2.5	1,029,697	1,041,751	45,255	1.2
NLP	271,567	285,531	4,034	5.1*	3,148,624	3,206,448	84,814	1.8
SLP	346,439	340,006	3,837	-1.9	5,456,054	5,166,313	118,607	-5.3*
Statewide ^c	648,127	654,122	1,812	0.9*	9,634,375	9,414,513	152,957	-2.3

^aExcluded people that did not hunt during the season.

^b95% confidence limit for the 2012 estimate.

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

*P<0.005.

Table 4. Mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2012.^a

Area	Season							
	Archery		Regular Firearm		Muzzleloader		Early Antlerless	
	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b
West UP	11.1	0.6	7.2	0.2	5.0	0.2	0.0	0.0
East UP	9.3	1.1	6.5	0.3	4.9	0.4	0.0	0.0
NE LP	10.6	0.5	6.1	0.1	4.1	0.2	1.7	0.1
NW LP	12.1	0.4	5.8	0.1	4.0	0.2	1.6	0.1
Sag. Bay	12.4	0.4	5.9	0.1	4.4	0.2	1.5	0.1
SW LP	13.4	0.5	6.6	0.1	5.5	0.2	1.5	0.1
SC LP	13.9	0.4	6.3	0.1	5.2	0.2	1.6	0.1
SE LP	12.8	0.6	6.0	0.2	5.1	0.2	1.5	0.1
UP	10.7	0.6	7.1	0.1	5.0	0.2	0.0	0.0
NLP	11.8	0.3	6.0	0.1	4.1	0.1	1.6	0.1
SLP	13.8	0.3	6.4	0.1	5.3	0.1	1.6	0.0
Statewide	13.9	0.2	6.8	0.1	5.1	0.1	1.6	0.0

^aExcluded people that did not hunt during the season.

^b95% confidence limit.

Table 4 (Continued). Mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2012.^a

Area	Season							
	Late Antlerless		Youth		Disabled		All Seasons	
	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b	\bar{x} days	95% CL ^b
West UP	0.0	0.0	1.6	0.1	1.8	0.8	10.9	0.4
East UP	0.0	0.0	1.7	0.1	1.9	0.1	9.3	0.6
NE LP	4.3	0.4	1.7	0.0	1.9	0.5	10.5	0.3
NW LP	4.1	0.5	1.6	0.0	2.2	0.6	11.6	0.3
Sag. Bay	4.1	0.3	1.6	0.0	2.5	1.0	12.9	0.4
SW LP	4.4	0.2	1.6	0.0	2.5	0.5	15.5	0.5
SC LP	4.4	0.2	1.6	0.0	1.7	0.3	15.4	0.4
SE LP	4.6	0.3	1.6	0.0	2.4	0.8	14.9	0.6
UP	0.0	0.0	1.6	0.1	1.8	0.7	10.6	0.3
NLP	4.3	0.3	1.6	0.0	2.3	0.6	11.5	0.2
SLP	4.4	0.1	1.6	0.0	2.2	0.3	15.6	0.3
Statewide	4.4	0.1	1.6	0.0	2.2	0.3	14.9	0.2

^aExcluded people that did not hunt during the season.

^b95% confidence limit.

Table 5. Number of deer harvested in Michigan, 2010-2012.

Season or permit	Type of deer	2010	2011	2012	Change from 2011 to 2012 (%)
Season					
Archery	Antlerless	51,309	61,466	58,933	-4.1
	Antlered bucks	65,871	70,148	68,348	-2.6
	Sexes combined	117,180	131,615	127,281	-3.3
Regular firearm	Antlerless	90,927	86,697	85,978	-0.8
	Antlered bucks	129,376	127,373	137,280	7.8*
	Sexes combined	220,303	214,070	223,258	4.3
Muzzleloader	Antlerless	26,627	23,838	17,901	-24.9*
	Antlered bucks	12,348	10,418	9,034	-13.3
	Sexes combined	38,975	34,256	26,935	-21.4*
Early antlerless	Antlerless	8,423	10,892	6,045	-44.5*
Late antlerless	Antlerless	18,957	17,345	17,498	0.9
Early youth	Antlerless	720	713	0	NA
Youth	Antlerless	2,748	2,736	4,846	77.1*
	Antlered bucks	4,557	4,634	7,857	69.5*
	Sexes combined	7,305	7,370	12,703	72.4*
Disabled hunts	Antlerless	248	242	162	-32.9
	Antlered bucks	189	217	121	-44.4
	Sexes combined	436	460	283	-38.4
Special permits ^a	Antlerless	5,551	5,293	4,008	-24.3
Grand Total	Antlerless	205,509	209,223	195,372	-6.6*
	Antlered bucks	212,341	212,791	222,640	4.6
	Sexes combined	417,850	422,014	418,012	-0.9

^aIncludes 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, 2011-2012.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)
Archery												
West UP	5,418	4,662	742	-14.0	4,215	4,122	648	-2.2	9,630	8,784	1,014	-8.8
East UP	862	1,042	328	20.9	580	1,135	335	95.6	1,442	2,177	475	51.0
NE LP	6,476	7,050	899	8.9	6,464	6,778	843	4.9	12,938	13,828	1,308	6.9
NW LP	10,297	11,605	1,166	12.7	11,083	13,167	1,194	18.8	21,380	24,772	1,818	15.9
Sag. Bay	9,682	10,396	1,153	7.4	11,911	12,408	1,184	4.2	21,594	22,804	1,807	5.6
SW LP	10,222	7,554	979	-26.1*	12,240	10,160	1,055	-17.0	22,463	17,715	1,577	-21.1*
SC LP	12,986	11,079	1,163	-14.7	17,302	13,921	1,232	-19.5*	30,291	25,001	1,854	-17.5*
SE LP	5,523	5,544	858	0.4	6,353	6,656	854	4.8	11,876	12,200	1,295	2.7
UP	6,280	5,704	812	-9.2	4,795	5,257	730	9.6	11,072	10,961	1,119	-1.0
NLP	20,197	22,298	1,612	10.4	20,809	23,199	1,581	11.5	41,003	45,496	2,435	11.0
SLP	34,989	30,931	1,986	-11.6	44,544	39,892	2,098	-10.4*	79,540	70,824	3,155	-11.0*
Statewide	61,466	58,933	2,690	-4.1	70,148	68,348	2,734	-2.6	131,615	127,281	4,149	-3.3
Regular Firearm												
West UP	5,265	5,690	836	8.1	19,541	23,097	1,567	18.2*	24,802	28,788	1,869	16.1*
East UP	0	84	92		3,322	5,107	725	53.7*	3,321	5,192	731	56.3*
NE LP	12,437	13,597	1,265	9.3	20,259	22,067	1,510	8.9	32,695	35,664	2,094	9.1
NW LP	12,038	14,097	1,258	17.1	20,626	23,360	1,546	13.3	32,662	37,456	2,113	14.7*
Sag. Bay	18,091	18,383	1,479	1.6	21,147	22,341	1,530	5.6	39,239	40,723	2,306	3.8
SW LP	14,217	11,361	1,207	-20.1*	15,102	13,575	1,187	-10.1	29,321	24,935	1,824	-15.0*
SC LP	19,818	17,873	1,487	-9.8	21,499	21,694	1,532	0.9	41,319	39,566	2,316	-4.2
SE LP	4,832	4,894	737	1.3	5,878	6,040	772	2.7	10,711	10,934	1,144	2.1
UP	5,265	5,774	841	9.7	22,863	28,204	1,726	23.4*	28,122	33,980	2,006	20.8*
NLP	29,863	33,282	1,959	11.4	46,848	51,335	2,298	9.6*	76,709	84,617	3,206	10.3*
SLP	51,569	46,922	2,397	-9.0	57,663	57,741	2,466	0.1	109,239	104,662	3,727	-4.2
Statewide	86,697	85,978	3,217	-0.8	127,373	137,280	3,798	7.8*	214,070	223,258	5,325	4.3

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

^b95 confidence limit for the 2012 estimate.

*P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2011-2012.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012
Muzzleloader												
West UP	1,415	1,500	410	6.0	1,670	1,087	329	-34.9	3,084	2,589	541	-16.1
East UP	2	28	53	1699.5	214	579	238	170.4	215	609	244	182.8*
NE LP	1,837	1,430	388	-22.2	883	621	259	-29.7	2,721	2,051	472	-24.6
NW LP	2,039	2,305	487	13.0	862	973	308	12.9	2,901	3,277	595	13.0
Sag. Bay	5,003	4,160	674	-16.8	1,436	1,311	364	-8.7	6,439	5,469	786	-15.1
SW LP	4,776	2,836	567	-40.6*	1,928	1,438	370	-25.4	6,704	4,274	704	-36.2*
SC LP	6,913	4,160	653	-39.8*	2,380	2,402	494	0.9	9,294	6,563	841	-29.4*
SE LP	1,853	1,482	411	-20.0	1,045	622	243	-40.5	2,898	2,103	482	-27.4
UP	1,417	1,528	413	7.9	1,884	1,666	406	-11.6	3,299	3,198	594	-3.1
NLP	5,022	4,747	701	-5.5	1,958	1,744	426	-10.9	6,980	6,488	840	-7.1
SLP	17,400	11,627	1,125	-33.2*	6,576	5,624	743	-14.5	23,977	17,249	1,387	-28.1*
Statewide	23,838	17,901	1,403	-24.9*	10,418	9,034	954	-13.3	34,256	26,935	1,744	-21.4*
Early 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	900	747	304	-17.1	0	0	0		900	747	304	-17.1
NW LP	617	655	280	6.0	0	0	0		617	655	280	6.0
Sag. Bay	2,473	1,665	429	-32.7	0	0	0		2,473	1,665	429	-32.7
SW LP	2,316	577	233	-75.1*	0	0	0		2,316	577	233	-75.1*
SC LP	3,019	1,653	451	-45.2*	0	0	0		3,019	1,653	451	-45.2*
SE LP	1,566	749	298	-52.2*	0	0	0		1,566	749	298	-52.2*
UP	0	0	0		0	0	0		0	0	0	
NLP	1,600	1,512	426	-5.5	0	0	0		1,600	1,512	426	-5.5
SLP	9,292	4,534	720	-51.2*	0	0	0		9,292	4,534	720	-51.2*
Statewide	10,892	6,045	842	-44.5*	0	0	0		10,892	6,045	842	-44.5*

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

^b95 confidence limit for the 2012 estimate.

*P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2011-2012.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012
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	1,177	1,932	496	64.1	0	0	0		1,177	1,932	496	64.1
NW LP	1,064	1,351	404	27.0	0	0	0		1,064	1,351	404	27.0
Sag. Bay	3,608	3,571	684	-1.0	0	0	0		3,608	3,571	684	-1.0
SW LP	3,384	3,331	635	-1.6	0	0	0		3,384	3,331	635	-1.6
SC LP	6,450	5,381	831	-16.6	0	0	0		6,450	5,381	831	-16.6
SE LP	1,662	1,930	454	16.1	0	0	0		1,662	1,930	454	16.1
UP	0	0	0		0	0	0		0	0	0	
NLP	2,294	3,411	652	48.7	0	0	0		2,294	3,411	652	48.7
SLP	15,051	14,087	1,323	-6.4	0	0	0		15,051	14,087	1,323	-6.4
Statewide	17,345	17,498	1,489	0.9	0	0	0		17,345	17,498	1,489	0.9
Youth												
West UP	303	389	108	28.2	425	702	152	65.0	729	1,090	186	49.7*
East UP	75	35	33	-53.0	66	133	63	101.9	141	168	71	19.1
NE LP	399	547	129	37.1	467	850	160	81.9*	867	1,397	205	61.2*
NW LP	841	1,043	177	24.0	923	1,889	238	104.7*	1,766	2,932	296	66.1*
Sag. Bay	516	1,217	192	135.9*	1,127	1,855	236	64.6*	1,642	3,072	303	87.0*
SW LP	97	406	111	320.1*	413	631	137	52.6	509	1,036	176	103.5*
SC LP	311	893	170	187.1*	889	1,203	189	35.4	1,199	2,097	254	74.9*
SE LP	194	317	98	63.6	324	594	133	83.4*	518	912	165	76.0*
UP	378	424	113	12.1	491	835	164	70.0*	870	1,258	199	44.7*
NLP	1,563	1,960	243	25.4	1,661	3,254	312	95.9*	3,227	5,214	395	61.6*
SLP	795	2,462	276	209.8*	2,482	3,769	336	51.8*	3,274	6,231	434	90.3*
Statewide	2,736	4,846	385	77.1*	4,634	7,857	488	69.5*	7,370	12,703	621	72.4*

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

^b95 confidence limit for the 2012 estimate.

*P<0.005.

Table 6 (continued). Number of deer harvested in Michigan by hunting season, 2011-2012.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012
Disabled Hunts												
West UP	8	35	53	353.8	9	6	4	-27.9	17	42	53	152.8
East UP	0	2	2		0	2	2		0	3	3	
NE LP	32	6	4	-80.5	8	6	4	-18.7	40	13	5	-68.5
NW LP	43	17	7	-60.1	91	19	7	-79.2	134	36	10	-73.2
Sag. Bay	59	63	75	7.1	38	45	54	18.2	97	108	92	11.5
SW LP	9	28	52	203.6	2	3	2	66.7	11	31	52	186.0
SC LP	35	11	7	-69.3	40	8	4	-80.5	76	19	9	-75.3
SE LP	56	0	0	-100.0	30	32	52	7.9	86	32	52	-63.0
UP	8	37	53	373.7	9	8	4	-9.9	17	45	54	171.7
NLP	75	28	9	-62.6	106	30	8	-71.9	181	58	12	-68.1
SLP	160	98	92	-38.9	102	83	75	-18.8	262	180	118	-31.0
Statewide	242	162	106	-32.9	217	121	75	-44.4	460	283	130	-38.4
All Seasons												
West UP	12,417	12,288	1,276	-1.0	25,852	29,013	1,816	12.2	38,277	41,316	2,386	7.9
East UP	939	1,194	346	27.2	4,181	6,953	869	66.3*	5,122	8,153	953	59.2*
NE LP	23,270	25,323	1,851	8.8	28,079	30,326	1,821	8.0	51,351	55,650	2,844	8.4
NW LP	27,008	31,100	2,050	15.1*	33,587	39,413	2,099	17.3*	60,599	70,516	3,286	16.4*
Sag. Bay	39,566	39,449	2,493	-0.3	35,660	37,962	2,096	6.5	75,223	77,403	3,697	2.9
SW LP	35,200	26,078	1,983	-25.9*	29,687	25,805	1,728	-13.1*	64,882	51,878	2,985	-20.0*
SC LP	49,789	41,025	2,583	-17.6*	42,113	39,224	2,136	-6.9	91,896	80,240	3,765	-12.7*
SE LP	15,742	14,907	1,462	-5.3	13,631	13,944	1,262	2.3	29,372	28,848	2,160	-1.8
UP	13,355	13,482	1,322	0.9	30,033	35,966	2,013	19.8*	43,399	49,468	2,569	14.0*
NLP	60,703	67,291	3,015	10.9*	71,383	79,571	2,970	11.5*	132,091	146,863	4,698	11.2*
SLP	129,872	110,591	4,183	-14.8*	111,374	107,103	3,526	-3.8	241,231	217,672	6,184	-9.8*
Statewide	203,930	191,364	5,344	-6.2*	212,791	222,640	5,047	4.6	416,721	414,004	8,207	-0.7

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

^b95 confidence limit for the 2012 estimate.

*P<0.005.

Table 7. Number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2011-2012.^a

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)	2011 Harvest	2012 Harvest	95% CL ^b	Change from 2011 to 2012 (%)
Public Lands												
West UP	3,097	3,035	620	-2.0	8,456	9,179	999	8.5	11,556	12,217	1,220	5.7
East UP	259	421	200	62.6	1,409	2,038	473	44.7	1,668	2,460	519	47.4
NE LP	5,236	5,311	767	1.4	6,697	7,887	939	17.8	11,931	13,198	1,297	10.6
NW LP	2,683	3,835	656	42.9	6,393	8,252	944	29.1*	9,078	12,088	1,202	33.2*
Sag. Bay	4,213	3,770	674	-10.5	3,721	3,732	636	0.3	7,932	7,500	1,013	-5.4
SW LP	2,203	2,099	563	-4.7	2,455	1,600	412	-34.8	4,658	3,698	733	-20.6
SC LP	2,801	2,665	561	-4.9	3,051	2,434	529	-20.2	5,851	5,097	848	-12.9
SE LP	1,452	1,219	456	-16.1	963	825	292	-14.4	2,415	2,043	562	-15.4
UP	3,356	3,456	651	3.0	9,865	11,216	1,105	13.7	13,225	14,677	1,326	11.0
NLP	9,513	10,828	1,103	13.8	14,363	17,642	1,388	22.8*	23,876	28,470	1,877	19.2*
SLP	9,076	8,070	1,047	-11.1	8,917	7,088	886	-20.5	17,989	15,153	1,484	-15.8
Statewide	21,946	22,354	1,661	1.9	33,144	35,946	1,993	8.5	55,089	58,300	2,747	5.8
Private Lands												
West UP	9,331	9,256	1,099	-0.8	17,423	19,842	1,489	13.9	26,761	29,109	1,995	8.8
East UP	681	774	283	13.6	2,777	4,917	725	77.0*	3,460	5,695	793	64.6*
NE LP	18,052	20,016	1,662	10.9	21,397	22,444	1,552	4.9	39,452	42,460	2,485	7.6
NW LP	24,323	27,266	1,933	12.1	27,201	31,165	1,868	14.6*	51,527	58,431	3,006	13.4*
Sag. Bay	35,352	35,678	2,378	0.9	31,929	34,226	1,990	7.2	67,278	69,898	3,507	3.9
SW LP	32,986	23,978	1,896	-27.3*	27,218	24,200	1,674	-11.1	60,200	48,175	2,874	-20.0*
SC LP	46,970	38,356	2,507	-18.3*	39,041	36,784	2,067	-5.8	86,006	75,133	3,649	-12.6*
SE LP	14,288	13,687	1,368	-4.2	12,661	13,117	1,223	3.6	26,948	26,802	2,063	-0.5
UP	10,012	10,029	1,135	0.2	20,200	24,759	1,657	22.6*	30,220	34,804	2,147	15.2*
NLP	51,209	56,468	2,781	10.3	57,040	61,938	2,612	8.6	108,255	118,405	4,228	9.4*
SLP	120,763	102,513	4,021	-15.1*	102,407	99,997	3,406	-2.4	223,157	202,495	5,955	-9.3*
Statewide	181,985	169,010	5,039	-7.1*	179,647	186,694	4,615	3.9	361,632	355,704	7,637	-1.6

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

^b95 confidence limit for the 2012 estimate.

*P<0.005.

Table 8. Percentage of deer hunters harvesting deer in Michigan during all seasons, 2012.^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	13.8	1.3	2.5	0.6	0.4	0.2	0.1	0.1	0.0	0.0
East UP	4.8	1.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0
NE LP	18.1	1.1	2.9	0.5	0.6	0.2	0.1	0.1	0.1	0.1
NW LP	19.2	1.1	3.6	0.5	0.7	0.2	0.2	0.1	0.0	0.0
Sag. Bay	27.3	1.3	6.1	0.7	1.7	0.4	0.6	0.2	0.2	0.1
SW LP	21.0	1.3	4.8	0.7	1.2	0.3	0.4	0.2	0.1	0.1
SC LP	25.5	1.2	6.6	0.7	1.8	0.4	0.5	0.2	0.3	0.1
SE LP	20.9	1.6	3.7	0.8	0.7	0.3	0.3	0.2	0.1	0.1
UP	11.6	1.0	1.9	0.4	0.3	0.2	0.1	0.1	0.0	0.0
NLP	19.9	0.7	3.6	0.3	0.7	0.2	0.2	0.1	0.1	0.0
SLP	25.0	0.7	6.1	0.4	1.7	0.2	0.6	0.1	0.2	0.1
Statewide ^d	23.1	0.5	5.4	0.3	1.4	0.1	0.4	0.1	0.1	0.0
Antlered bucks^c										
West UP	35.9	1.8	3.8	0.7						
East UP	26.5	2.8	2.0	0.9						
NE LP	24.1	1.2	2.1	0.4						
NW LP	26.8	1.2	3.3	0.5						
Sag. Bay	30.3	1.4	4.5	0.6						
SW LP	23.9	1.4	3.3	0.6						
SC LP	29.2	1.3	4.1	0.6						
SE LP	21.2	1.7	2.9	0.7						
UP	33.7	1.5	3.4	0.6						
NLP	26.0	0.8	2.9	0.3						
SLP	28.4	0.8	4.3	0.3						
Statewide ^d	31.2	0.6	4.4	0.3						

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

^b95 confidence limit.

^cThe season bag limit for antlered deer was two.

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

Table 8 (continued). Percentage of deer hunters harvesting deer in Michigan during all seasons, 2012.^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	45.2	1.8	9.8	1.1	1.1	0.4	0.3	0.2	0.0	0.0
East UP	30.3	2.9	3.1	1.1	0.0	0.0	0.0	0.0	0.1	0.1
NE LP	37.4	1.4	8.4	0.8	1.7	0.4	0.4	0.2	0.1	0.1
NW LP	39.7	1.3	10.8	0.8	2.3	0.4	0.6	0.2	0.2	0.2
Sag. Bay	48.3	1.5	15.6	1.1	4.5	0.6	1.4	0.4	0.2	0.2
SW LP	38.3	1.5	11.7	1.0	3.2	0.6	1.0	0.3	0.2	0.2
SC LP	46.2	1.4	15.5	1.0	4.3	0.6	1.3	0.3	0.2	0.2
SE LP	35.9	1.9	10.4	1.2	2.6	0.6	0.5	0.3	0.6	0.6
UP	41.8	1.6	8.2	0.9	0.8	0.3	0.2	0.1	0.1	0.1
NLP	40.0	0.9	10.3	0.6	2.2	0.3	0.5	0.1	0.1	0.1
SLP	44.8	0.8	15.1	0.6	4.3	0.3	1.3	0.2	0.6	0.6
Statewide ^d	46.1	0.6	14.5	0.4	3.7	0.2	1.1	0.1	0.4	0.1

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

^b95 confidence limit.

^cThe season bag limit for antlered deer was two.

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

Table 9. Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2012.^a

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Youth	
	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	17.9	2.5	7.8	1.0	9.5	2.4	0.0	0.0	0.0	0.0	18.5	4.7
East UP	14.1	4.1	0.4	0.5	0.5	1.0	0.0	0.0	0.0	0.0	7.8	7.0
NE LP	14.6	1.7	12.0	1.0	6.3	1.7	26.3	8.8	30.4	6.1	15.4	3.3
NW LP	16.7	1.5	11.6	0.9	9.1	1.8	28.6	9.9	27.3	6.6	14.4	2.3
Sag. Bay	16.2	1.5	18.1	1.3	13.0	1.9	29.9	6.3	25.8	4.0	16.4	2.4
SW LP	12.4	1.4	12.8	1.2	7.9	1.5	11.0	4.2	17.2	2.9	8.8	2.3
SC LP	14.9	1.4	16.2	1.2	10.2	1.5	21.0	4.9	21.4	2.8	14.3	2.5
SE LP	13.1	1.7	11.2	1.5	7.0	1.9	15.3	5.3	19.3	4.1	9.5	2.8
UP	17.1	2.2	6.1	0.8	7.1	1.8	0.0	0.0	0.0	0.0	16.6	4.1
NLP	16.4	1.0	12.6	0.7	8.5	1.2	28.0	6.4	29.2	4.4	15.3	1.7
SLP	14.3	0.8	15.4	0.7	9.8	0.9	19.4	2.7	21.0	1.7	12.7	1.3
Statewide	16.5	0.7	13.6	0.4	9.5	0.7	20.9	2.5	22.2	1.6	13.9	1.0
Antlered Bucks												
West UP	17.4	2.5	34.1	1.9	7.5	2.2	0.0	0.0	0.0	0.0	33.3	5.8
East UP	15.7	4.3	24.2	3.0	10.6	4.2	0.0	0.0	0.0	0.0	29.4	11.8
NE LP	14.5	1.6	21.0	1.3	2.8	1.1	0.0	0.0	0.0	0.0	23.8	3.9
NW LP	19.9	1.6	20.3	1.2	4.0	1.3	0.0	0.0	0.0	0.0	25.9	2.8
Sag. Bay	20.4	1.7	23.8	1.4	4.3	1.2	0.0	0.0	0.0	0.0	24.9	2.8
SW LP	17.9	1.7	17.0	1.3	4.3	1.1	0.0	0.0	0.0	0.0	13.6	2.8
SC LP	20.1	1.6	21.1	1.3	6.0	1.2	0.0	0.0	0.0	0.0	19.2	2.7
SE LP	16.4	1.9	14.7	1.7	3.3	1.3	0.0	0.0	0.0	0.0	17.8	3.6
UP	17.1	2.2	31.9	1.6	8.4	2.0	0.0	0.0	0.0	0.0	32.6	5.2
NLP	17.7	1.1	20.8	0.8	3.2	0.8	0.0	0.0	0.0	0.0	25.2	2.1
SLP	19.9	0.9	20.6	0.8	5.1	0.7	0.0	0.0	0.0	0.0	19.3	1.6
Statewide	20.3	0.7	23.6	0.6	5.1	0.5	0.0	0.0	0.0	0.0	22.5	1.2

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

^b95 confidence limit.

Table 9 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2012.^a

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Youth	
	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	34.0	3.1	39.7	1.9	16.4	3.1	0.0	0.0	0.0	0.0	51.9	6.1
East UP	29.4	5.3	24.6	3.0	11.1	4.3	0.0	0.0	0.0	0.0	37.2	12.5
NE LP	27.0	2.1	30.7	1.4	9.0	2.0	26.3	8.8	30.4	6.1	39.2	4.5
NW LP	33.0	1.9	29.7	1.3	12.8	2.1	28.6	9.9	27.3	6.6	40.3	3.2
Sag. Bay	33.0	2.0	38.1	1.6	16.7	2.1	29.9	6.3	25.8	4.0	41.4	3.2
SW LP	27.4	1.9	27.3	1.6	11.7	1.8	11.0	4.2	17.2	2.9	22.3	3.4
SC LP	31.5	1.8	33.7	1.5	15.7	1.8	21.0	4.9	21.4	2.8	33.4	3.3
SE LP	27.0	2.3	24.0	2.1	10.2	2.2	15.3	5.3	19.3	4.1	27.3	4.3
UP	33.1	2.7	36.2	1.6	15.1	2.6	0.0	0.0	0.0	0.0	49.3	5.5
NLP	31.1	1.3	31.0	0.9	11.4	1.4	28.0	6.4	29.2	4.4	40.5	2.4
SLP	30.8	1.1	32.6	0.9	14.4	1.0	19.4	2.7	21.0	1.7	32.0	1.9
Statewide	33.2	0.8	34.2	0.6	14.1	0.8	20.9	2.5	22.2	1.6	36.4	1.4

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

^b95 confidence limit.

Table 9 (Continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2012.^a

Sex and Area	Season			
	Disabled Hunts		All Seasons	
	Success	95% CL ^b	Success	95% CL ^b
Antlerless				
West UP	22.1	28.9	13.8	1.3
East UP	3.9	6.9	4.8	1.3
NE LP	3.9	3.4	18.1	1.1
NW LP	10.1	6.1	19.2	1.1
Sag. Bay	24.6	24.9	27.3	1.3
SW LP	12.8	21.5	21.0	1.3
SC LP	6.0	5.2	25.5	1.2
SE LP	0.0	0.0	20.9	1.6
UP	18.4	23.9	11.6	1.0
NLP	7.3	3.5	19.9	0.7
SLP	13.9	12.5	25.0	0.7
Statewide	12.1	7.7	23.1	0.5
Antlered Bucks				
West UP	3.9	3.5	35.9	1.8
East UP	3.9	6.9	26.5	2.8
NE LP	3.9	3.4	24.1	1.2
NW LP	12.1	7.0	26.8	1.2
Sag. Bay	17.4	19.4	30.3	1.4
SW LP	1.1	1.1	23.9	1.4
SC LP	6.0	5.2	29.2	1.3
SE LP	28.4	38.5	21.2	1.7
UP	3.9	3.1	33.7	1.5
NLP	8.1	3.8	26.0	0.8
SLP	12.3	10.6	28.4	0.8
Statewide	9.3	5.7	31.2	0.6

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

^b95 confidence limit.

Table 9 (continued). Percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2012.^a

Sex and Area	Season			
	Disabled Hunts		All Seasons	
	Success	95% CL ^b	Success	95% CL ^b
Sexes combined				
West UP	26.0	28.9	45.2	1.8
East UP	7.8	12.1	30.3	2.9
NE LP	7.7	6.0	37.4	1.4
NW LP	22.2	11.7	39.7	1.3
Sag. Bay	41.4	27.2	48.3	1.5
SW LP	14.0	21.5	38.3	1.5
SC LP	10.8	8.5	46.2	1.4
SE LP	28.4	38.5	35.9	1.9
UP	22.3	24.0	41.8	1.6
NLP	15.4	6.5	40.0	0.9
SLP	25.7	15.0	44.8	0.8
Statewide	21.2	9.1	46.1	0.6

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

^b95 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, 2011-2012.

Criteria and area	Satisfied hunters (%) ^a				Dissatisfied hunters (%) ^b			
	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)
Number of deer seen								
West UP	39	43	2	4*	46	41	2	-5*
East UP	27	36	3	8*	61	49	4	-12*
NE LP	27	35	2	8*	59	50	2	-10*
NW LP	28	34	1	6*	59	50	1	-9*
Sag. Bay	37	42	2	5*	48	42	2	-6*
SW LP	28	28	2	0	57	58	2	0
SC LP	37	37	1	0	48	49	2	1
SE LP	36	40	2	3	46	42	2	-4
UP	36	41	2	5*	49	43	2	-6*
NLP	28	34	1	7*	59	50	1	-9*
SLP	35	37	1	2	49	48	1	-2
Statewide	33	36	1	4*	53	48	1	-5*
Number of antlered deer (bucks) seen								
West UP	24	30	2	6*	61	53	2	-7*
East UP	16	25	3	9*	71	58	4	-12*
NE LP	17	23	1	6*	67	61	2	-6*
NW LP	18	23	1	5*	67	60	1	-7*
Sag. Bay	25	28	1	3	58	54	2	-4*
SW LP	20	20	1	0	64	64	2	0
SC LP	26	28	1	2	56	57	2	0
SE LP	24	26	2	2	57	53	2	-4
UP	23	29	2	6*	63	54	2	-8*
NLP	18	22	1	5*	67	61	1	-6*
SLP	24	26	1	2*	58	57	1	-2
Statewide	21	25	1	3*	62	58	1	-4*

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

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

^c95 confidence limit for the 2012 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, 2011-2012.

Criteria and area	Satisfied hunters (%) ^a				Dissatisfied hunters (%) ^b			
	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)
Overall deer hunting experience								
West UP	49	54	2	5*	31	25	2	-7*
East UP	39	51	4	12*	41	27	3	-14*
NE LP	41	47	2	6*	38	31	1	-7*
NW LP	41	46	1	6*	37	31	1	-7*
Sag. Bay	47	50	2	4*	32	28	1	-5*
SW LP	40	38	2	-1	38	39	2	1
SC LP	48	48	2	0	30	31	1	1
SE LP	47	52	2	5*	30	26	2	-4
UP	47	53	2	6*	33	25	1	-8*
NLP	41	47	1	6*	37	31	1	-7*
SLP	46	47	1	1	33	32	1	-1
Statewide	44	47	1	3*	35	30	1	-4*
Number of deer harvested								
West UP	34	38	2	3	32	28	2	-4*
East UP	22	28	3	7*	46	31	3	-15*
NE LP	26	29	1	3	37	35	2	-3
NW LP	28	30	1	3	38	34	1	-3*
Sag. Bay	34	36	2	2	33	31	2	-2
SW LP	27	26	2	-1	39	40	2	1
SC LP	35	33	1	-2	34	35	1	1
SE LP	29	31	2	2	33	32	2	-1
UP	32	36	2	4*	35	29	2	-6*
NLP	27	30	1	3*	37	34	1	-3*
SLP	32	32	1	0	35	35	1	0
Statewide	30	32	1	1*	36	34	1	-2*

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

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

^c95 confidence limit for the 2012 estimate.

*P<0.005.

Table 12. Level of support and opposition for the antler point restrictions in the Upper Peninsula among Michigan deer hunters, 2011-2012.

Preferred hunt area	Hunters supporting (%) ^a				Hunters opposing (%) ^b			
	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)	2011	2012	95% CL ^c	Difference from 2011 to 2012 (%)
West UP	57	58	2	1	32	31	2	-1
East UP	54	59	4	5	37	31	3	-6
NE LP	47	50	2	4*	23	21	1	-3
NW LP	50	54	1	4*	19	19	1	-1
Sag. Bay	50	54	2	4*	19	17	1	-2
SW LP	52	55	2	3	14	14	1	0
SC LP	53	55	2	2	16	14	1	-1
SE LP	53	58	2	5	18	16	2	-1
UP	56	58	2	2	33	31	2	-2
NLP	48	52	1	4*	21	19	1	-2*
SLP	52	55	1	3*	16	15	1	-1
Statewide	51	55	1	3*	20	19	0	-1

^aIncluded hunters who “strongly supported” or “supported” antler point restrictions in the UP.

^bIncluded hunters who “opposed” or “strongly opposed” antler point restrictions in the UP.

^c95 confidence limit for the 2012 estimate.

*P<0.005.

Table 13. Level of support and opposition for the antler point restrictions in DMU 487 among Michigan deer hunters, 2011-2012.^a

Preferred hunt area	Hunters supporting (%) ^b				Hunters opposing (%) ^c			
	2011	2012	95% CL ^d	Difference from 2011 to 2012 (%)	2011	2012	95% CL ^d	Difference from 2011 to 2012 (%)
West UP	35	36	2	1	18	17	1	-1
East UP	39	40	4	1	24	24	3	0
NE LP	45	49	2	3	28	26	1	-3
NW LP	40	46	1	6*	19	17	1	-2
Sag. Bay	41	46	2	6*	20	17	1	-3*
SW LP	41	46	2	5*	14	12	1	-2
SC LP	43	45	2	2	16	13	1	-3*
SE LP	47	49	2	2	18	18	2	1
UP	36	37	2	1	19	19	1	0
NLP	42	47	1	5*	23	21	1	-2*
SLP	43	46	1	3*	16	14	1	-2*
Statewide	42	45	1	4*	19	18	0	-2*

^aNew 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.

^bGroup supporting restrictions included hunters reporting they “strongly supported” or “supported.”

^cGroup opposing restrictions included hunters reporting they “opposed” or “strongly opposed.”

^d95% confidence limit. Excluded people that did not hunt.

*P<0.005.

Table 14. Estimated proportion and number of archers that used a crossbow during 2012 archery season in Michigan, summarized by region.

Region	Archers using a crossbow during archery season			
	%	95% CL	Total	95% CL
UP	45.7	3.1	11,813	1,085
NLP	47.1	1.6	48,792	2,140
SLP	41.8	1.2	69,512	2,463
Unknown ^a	41.2	2.9	12,431	1,118
Statewide	43.7	0.9	142,548	3,365

^aRegion 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 2012 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless		Antlered Bucks		Sexes Combined	
	% ^a	95% CL	% ^a	95% CL	% ^a	95% CL
UP	18.5	3.6	20.4	3.8	38.2	4.5
NLP	21.7	1.9	20.1	1.8	38.5	2.2
SLP	16.0	1.4	22.5	1.6	34.2	1.8
Unknown ^b	21.4	3.7	21.1	3.7	38.2	4.4
Statewide	18.6	1.0	21.4	1.1	36.4	1.3

^aPercentage of crossbow hunters harvesting at least one deer.

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

Table 16. Estimated number of deer harvested by archers with a crossbow during 2012 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless		Antlered Bucks		Sexes Combined	
	No.	95% CL	No.	95% CL	No.	95% CL
UP	2,235	500	2,335	485	4,570	715
NLP	11,196	1,146	9,845	1,019	21,040	1,641
SLP	12,413	1,279	16,093	1,319	28,506	2,022
Unknown ^a	2,787	566	2,866	593	5,653	888
Statewide	28,630	1,857	31,140	1,810	59,771	2,785

^aRegion 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 2012, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU Name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^c	License quota	Licenses sold ^{b,c}	License buyers ^c
001	Alcona County ^d	4,000	2,693	2,255	0	0	0
003	Allegan County ^d	2,000	1,749	1,505	0	0	0
004	Alpena County ^d	2,000	645	538	0	0	0
005	Antrim County	0	0	0	5,000	4,674	3,384
006	Arenac County	500	416	416	7,000	4,789	3,728
007	Big Bay Unit	0	0	0	0	0	0
008	Barry County ^d	1,800	1,497	1,281	0	0	0
009	Bay County ^d	200	163	147	0	0	0
010	Benzie County	0	0	0	300	324	324
011	Berrien County ^d	200	172	157	0	0	0
012	Branch County ^d	100	75	69	0	3	3
013	Calhoun County ^d	100	84	72	0	0	0
014	Cass County ^d	400	304	271	0	0	0
015	Charlevoix County	0	0	0	3,400	3,201	2,268
016	Cheboygan County	300	265	265	600	500	497
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	900	784	784	8,000	7,520	5,585
019	Clinton County ^d	1,200	993	767	0	0	0
020	Crawford County	800	789	788	1,000	856	829
021	Manistique Unit	0	0	0	0	0	0
022	Iron Mountain Unit	1,000	848	848	4,000	3,764	2,736
023	Eaton County ^d	100	78	70	0	0	0
024	Emmet County	0	0	0	1,500	1,410	1,146
025	Genesee County ^d	0	0	0	0	0	0
026	Gladwin County	1,200	1,046	1,046	8,000	7,433	5,452
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	0	0	0	300	337	337
029	Gratiot County ^d	1,600	1,430	1,120	0	0	0
030	Hillsdale County ^d	400	347	296	0	0	0
031	Nisula Unit	0	0	0	400	360	359
032	Huron County ^d	1,500	1,235	1,044	0	0	0
033	Ingham County ^d	600	531	430	0	0	0
034	Ionia County ^d	1,200	996	798	0	0	0

^aSee Figure 2 for the locations of DMUs.

^bNumber of licenses sold could exceed the quota because junior licenses do not count towards the quota.

^cNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.

^dAlso part of either DMU 486 or DMU 487.

^eSpecial 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 2012, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU Name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^c	License quota	Licenses sold ^{b,c}	License buyers ^c
035	Iosco County ^d	1,000	829	812	0	0	0
036	Amasa/Michigamme Unit	0	0	0	100	87	87
037	Isabella County ^d	100	78	76	0	0	0
038	Jackson County ^d	1,600	1,311	1,124	0	0	0
039	Kalamazoo County ^d	900	752	668	0	0	0
040	Kalkaska County	0	0	0	100	123	123
041	Kent County ^d	1,100	955	839	0	0	0
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	0	0	0	3,000	2,636	2,632
044	Lapeer County ^d	2,000	1,716	1,547	0	0	0
045	Leelanau County	0	0	0	300	338	334
046	Lenawee County ^d	400	337	288	0	0	0
047	Livingston County ^d	1,400	1,165	1,017	0	0	0
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	165	147	4,000	2,610	2,185
051	Manistee County	0	0	0	3,000	2,743	2,737
053	Mason County	200	228	226	5,000	4,644	3,814
054	Mecosta County ^d	200	166	166	0	0	0
055	Menominee Unit	3,000	2,495	1,827	9,000	6,049	4,461
056	Midland County ^d	1,500	1,306	1,173	0	0	0
057	Missaukee County	600	565	564	3,200	2,870	2,452
058	Monroe County	100	89	89	1,000	1,006	707
059	Montcalm County ^d	1,500	1,266	1,053	0	0	0
060	Montmorency County ^d	5,000	3,943	3,260	0	0	0
061	Muskegon County ^d	500	407	406	0	0	0
063	Oakland County ^d	2,500	2,138	1,814	0	0	0
064	Oceana County	500	520	519	4,500	4,236	3,347
065	Ogemaw County	1,000	831	831	7,000	6,527	4,787
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	0	0	0	5,000	4,650	3,939
068	Oscoda County ^d	5,000	4,491	3,623	0	0	0
069	Otsego County	200	195	194	500	429	428

^aSee Figure 2 for the locations of DMUs.

^bNumber of licenses sold could exceed the quota because junior licenses do not count towards the quota.

^cNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.

^dAlso part of either DMU 486 or DMU 487.

^eSpecial 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 2012, summarized by Deer Management Unit and license type (public and private lands).

DMU ^a	DMU Name	Public land			Private land		
		License quota	Licenses sold ^b	License buyers ^c	License quota	Licenses sold ^{b,c}	License buyers ^c
070	Ottawa County ^d	300	255	237	0	0	0
071	Presque Isle County ^d	3,000	2,007	1,624	0	0	0
072	Roscommon County	500	477	477	1,000	881	782
073	Saginaw County ^d	200	159	158	0	0	0
074	St. Clair County	500	376	355	7,000	6,754	5,643
075	St. Joseph County ^d	300	257	209	0	0	0
076	Sanilac County ^d	2,000	1,483	1,171	0	0	0
078	Shiawassee County ^d	200	132	122	0	0	0
079	Tuscola County ^d	2,700	2,359	1,919	0	0	0
080	Van Buren County ^d	200	159	146	0	0	0
081	Washtenaw County ^d	1,500	1,223	1,060	0	0	0
082	Wayne County	100	78	63	1,200	986	831
083	Wexford County	600	571	569	3,400	3,161	2,456
115	Beaver Island	300	145	126	400	207	167
117	Drummond Island	100	95	94	100	88	88
121	Bay De Noc Unit	400	350	330	800	755	603
122	Norway Unit	200	172	155	1,500	1,002	787
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
135	Tawas Unit ^d	200	162	138	0	0	0
145	North Manitou Island ^e	0	0	0	0	0	0
149	Round/Bois Blanc Island	0	0	0	0	0	0
152	Gwinn Unit	0	0	0	550	505	427
155	Gladstone Unit	600	528	433	3,000	1,888	1,464
162	South Newaygo County ^d	250	244	244	0	0	0
173	Shiawassee Flats	0	0	0	0	0	0
174	St. Clair Flats ^d	0	123	100	300	124	106
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	500	444	382
255	LaBranche Unit	600	524	466	1,300	1,253	937
262	North Newaygo County	0	0	0	1,650	1,584	1,579
273	Shiawassee Unit ^{d,e}	0	781	752	0	0	0
349	Engadine Unit	0	0	0	0	0	0
452	Core Area ^d	2,000	1,646	1,429	0	0	0
486	Southern Multi-County	0	0	0	500,000	248,745	184,287
487	Northern Multi-County	0	0	0	30,000	26,028	20,269
NA	Deer Management Assistance Permits	NA	NA	NA	NA	8,234	688
NA	Managed Deer Hunt Permits ^e	NA	274	242	NA	NA	NA

^aSee Figure 2 for the locations of DMUs.

^bNumber of licenses sold could exceed the quota because junior licenses do not count towards the quota.

^cNumber of license buyers does not add up to statewide total because hunters could purchase licenses in more than one DMU.

^dAlso part of either DMU 486 or DMU 487.

^eSpecial 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 2012, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
					Antlerless		Antlered bucks		Sexes combined	
	No.	95% CL ^e	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
001	9,266	961	85,331	12,022	2,120	518	2,127	486	4,247	761
003	12,653	1,108	181,929	21,977	2,841	588	2,581	561	5,422	898
004	5,431	736	53,044	9,938	1,423	491	1,574	394	2,997	707
005	7,696	870	79,612	12,900	2,043	526	1,986	465	4,029	788
006	8,362	899	105,081	16,969	2,813	619	3,034	581	5,847	971
007	7,732	890	75,984	11,744	463	222	2,470	537	2,933	582
008	11,943	1,083	164,483	20,982	2,493	578	2,694	511	5,187	851
009	5,059	694	69,468	14,512	1,397	450	1,447	392	2,844	637
010	4,372	660	46,155	10,042	564	241	1,781	462	2,345	569
011	4,976	704	75,520	14,589	960	359	1,276	369	2,236	598
012	6,183	781	91,039	16,053	2,609	744	2,351	539	4,960	1,100
013	9,638	973	138,246	20,124	2,769	645	2,192	487	4,961	907
014	5,485	743	83,256	15,157	1,530	458	1,555	431	3,085	735
015	5,185	714	58,255	11,085	1,471	462	1,633	434	3,104	721
016	7,465	859	75,039	12,510	888	330	2,107	466	2,995	622
017	4,706	687	46,459	9,065	244	163	1,495	390	1,739	430
018	15,283	1,222	179,733	21,487	3,413	667	3,302	616	6,715	997
019	10,806	1,020	153,160	20,893	3,404	750	2,674	555	6,078	1,028
020	7,995	895	68,722	10,838	1,052	322	1,636	422	2,688	586
021	8,314	918	80,102	12,988	521	218	2,276	488	2,797	555
022	9,768	989	102,574	14,346	2,178	537	3,246	596	5,424	847
023	9,158	945	125,642	18,252	2,375	636	2,496	530	4,871	900
024	4,966	706	55,938	11,694	821	333	1,800	456	2,621	608
025	10,393	1,003	165,892	23,050	2,002	479	2,597	541	4,599	790
026	15,143	1,217	161,185	19,154	4,721	794	3,656	617	8,377	1,117
027	2,711	527	22,386	5,770	169	150	972	332	1,141	364
028	7,043	826	82,908	14,137	909	296	2,135	481	3,044	601
029	8,259	897	94,291	14,497	2,774	661	3,482	658	6,256	1,096
030	9,917	982	130,935	18,857	3,164	696	2,858	578	6,022	1,021
031	3,641	603	39,033	9,410	320	187	1,329	392	1,649	454
032	11,886	1,068	125,217	15,578	4,283	804	4,031	669	8,314	1,202
033	9,056	947	130,635	18,989	2,400	585	2,943	580	5,343	922
034	10,162	989	129,967	17,364	2,674	631	2,946	551	5,620	920

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.

Appendix B (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2012, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
					Antlerless		Antlered bucks		Sexes combined	
	No.	95% CL ^e	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
035	9,376	971	97,750	14,721	2,204	607	1,827	443	4,031	812
036	4,533	684	35,934	6,797	300	184	1,515	432	1,815	470
037	12,048	1,068	151,018	18,872	5,148	951	5,040	776	10,188	1,404
038	15,743	1,241	243,399	26,830	4,802	961	4,646	735	9,448	1,352
039	7,356	855	103,178	16,012	2,010	529	1,877	450	3,887	788
040	8,412	923	87,160	14,241	656	282	1,698	434	2,354	554
041	16,692	1,266	204,658	22,453	3,559	697	4,292	710	7,851	1,102
042	2,472	500	22,648	5,969	132	132	1,066	354	1,198	386
043	16,586	1,280	150,668	17,137	2,229	500	2,956	553	5,185	785
044	16,209	1,247	211,734	24,031	5,146	844	4,498	717	9,644	1,260
045	4,051	628	39,819	8,064	677	252	1,532	434	2,209	525
046	7,826	879	118,510	18,391	2,566	648	2,080	481	4,646	895
047	13,598	1,154	194,910	23,785	3,597	717	3,308	614	6,905	1,055
048	5,385	742	44,528	7,863	207	141	1,687	457	1,894	490
050	4,907	688	62,169	12,398	1,426	529	1,011	338	2,437	682
051	9,891	987	95,991	13,856	1,578	411	2,400	504	3,978	700
053	12,049	1,083	134,765	18,038	3,049	599	4,084	678	7,133	1,032
054	14,070	1,164	144,618	16,918	4,817	893	4,566	719	9,383	1,318
055	12,324	1,102	130,808	16,528	3,993	731	5,928	825	9,921	1,225
056	12,160	1,083	149,969	18,837	3,619	736	3,799	658	7,418	1,117
057	10,844	1,031	118,423	16,905	1,809	444	2,753	567	4,562	766
058	4,573	675	65,698	13,254	472	206	672	283	1,144	364
059	16,667	1,257	235,991	26,561	6,461	1,023	6,587	856	13,048	1,516
060	8,176	912	68,023	11,655	1,266	383	1,326	367	2,592	572
061	8,232	897	109,584	16,502	1,362	405	1,591	411	2,953	656
063	12,683	1,120	172,463	22,058	2,972	711	2,663	552	5,635	1,034
064	11,845	1,067	151,832	19,873	3,649	725	3,061	580	6,710	1,094
065	13,759	1,170	145,888	18,710	3,112	659	3,991	652	7,103	1,040
066	4,413	672	38,145	7,597	162	121	1,847	458	2,009	480
067	12,896	1,120	124,073	15,562	3,550	684	3,879	626	7,429	1,019
068	9,485	977	71,950	10,367	1,743	445	1,656	419	3,399	651
069	7,283	856	66,939	11,981	673	266	1,901	479	2,574	578

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.

Appendix B (continued). Estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2012, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}		Hunting effort (days) ^b		Deer harvested (all seasons combined) ^a					
					Antlerless		Antlered bucks		Sexes combined	
	No.	95% CL ^e	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
070	9,470	947	140,283	19,315	2,449	642	1,969	487	4,418	908
071	9,311	963	88,481	13,688	2,615	597	2,638	522	5,253	887
072	11,886	1,089	122,902	17,011	1,476	439	1,889	443	3,365	658
073	7,814	868	107,083	16,001	2,415	610	2,503	545	4,918	948
074	11,847	1,067	171,672	22,374	2,733	583	2,394	503	5,127	846
075	5,583	742	89,813	16,214	1,630	475	1,950	473	3,580	754
076	16,863	1,266	189,685	20,413	6,771	1,083	6,449	864	13,220	1,587
078	9,787	974	134,956	18,910	3,317	684	3,062	584	6,379	1,032
079	14,057	1,161	181,843	21,247	4,338	870	4,718	734	9,056	1,304
080	7,745	873	117,963	18,556	2,079	615	1,880	474	3,959	891
081	10,546	1,015	155,467	21,880	3,832	819	2,776	585	6,608	1,126
082	1,652	405	23,249	8,124	168	128	297	184	465	248
083	13,093	1,135	129,753	18,355	2,675	622	3,046	553	5,721	924
115	264	165	2,757	2,778	31	53	142	160	173	199
117	1,603	402	10,277	3,483	113	106	219	143	332	177
121	2,102	461	26,131	7,568	509	244	745	294	1,254	411
122	2,343	483	23,955	7,344	430	210	776	287	1,206	365
127	2,583	513	35,148	10,586	222	178	842	293	1,064	359
131	2,478	498	28,161	7,636	171	122	958	317	1,129	364
135	870	298	10,659	5,494	283	195	206	140	489	290
145	0	0	0	0	0	0	0	0	0	0
149	397	201	2,586	1,769	0	0	97	93	97	93
152	4,436	673	43,836	8,963	402	199	1,339	365	1,741	467
155	4,037	638	45,521	9,932	989	381	1,414	401	2,403	593
162	13,248	1,126	157,898	19,470	3,520	745	3,693	652	7,213	1,150
173	952	288	9,394	3,604	346	259	200	151	546	317
174	190	136	2,149	2,330	27	52	12	16	39	54
245	29	56	171	325	0	0	28	53	28	53
249	6,104	792	56,694	9,827	200	140	1,544	394	1,744	424
252	1,990	449	23,354	7,133	212	155	594	247	806	302
255	3,320	577	37,893	8,434	1,094	430	1,486	418	2,580	700
262	6,951	831	71,924	11,945	1,332	386	1,839	428	3,171	641
273	1,036	323	13,017	5,929	193	138	177	150	370	204
349	1,407	375	14,337	5,337	65	77	302	156	367	176
452	8,635	937	75,039	11,176	1,988	515	2,045	447	4,033	723

^aHarvest estimates do not include deer taken with DMA permits. An additional 4,008 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.