



# Michigan Deer Harvest Survey Report 2020 Seasons

Brian J. Frawley

## ABSTRACT

*A survey of deer hunters was conducted following the 2020 hunting seasons to estimate hunter participation, harvest, and hunting effort. In 2020, an estimated 540,174 hunters spent 8.5 million days afield. Statewide, the number of people hunting increased significantly by about 5% between 2019 and 2020. Hunters harvested about 411,000 deer, which was an increase of nearly 13% from 2019. The number of antlered deer taken in 2020 was not significantly different from 2019; however, the harvest of antlerless deer increased significantly by 26%. The increased participation and harvest probably reflected the effects of COVID-19 restrictions that allowed additional people to hunt in 2020. Increased harvest of antlerless deer likely also reflected that hunters with a combination license could take antlerless deer in the entire Lower Peninsula in all firearm and muzzleloader seasons beginning in 2020. Also, the 2020 antlerless seasons included more area and more days than in 2019. Statewide, about 51% of hunters harvested a deer in 2020. About 26% of hunters took an antlerless deer and 35% took an antlered buck. Approximately 18% of deer hunters harvested two or more deer of any type. About 6% of hunters statewide harvested two antlered bucks. Statewide level of satisfaction with the number of deer harvested were unchanged from 2019; however, levels of satisfaction with the number of deer seen, bucks seen, and the size of the antlers in 2020 decreased from 2019. Statewide, 51% of hunters were satisfied with their overall hunting experience in 2020, which was lower than reported in 2019 (53%). Nearly 72% of archers used a crossbow during the archery season (231,000 hunters). These archers harvested approximately 93,000 deer with the crossbow. An estimated 9% of hunters agreed that COVID-19 had made them more likely to buy a license. About 19% of hunters indicated that they increased the amount of time they hunted in 2020 because of COVID-19. About 14% hunted alone more frequently and 8% of license buyers reduced the distance they traveled to hunt. About 5% of hunters indicated that they found it more difficult to locate a hunting area and 8% indicated that they found it more difficult to locate a meat processor to butcher their deer. Deer hunters were asked whether they*



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

### Equal Rights for Natural Resource Users

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

If you believe that you have been discriminated against in any program, activity, or facility, or if you desire additional information, please write:  
Human Resources, Michigan Department of Natural Resources, PO Box 30473, Lansing MI 48909-7973, or  
Michigan Department of Civil Rights, Cadillac Place, 3054 West Grand Blvd, Suite 3-600, Detroit, MI 48202, or  
Division of Federal Assistance, U.S. Fish & Wildlife Service, 4401 North Fairfax Drive, Mail Stop MBSP-4020, Arlington, VA 22203.

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

*supported several potential regulation changes. About 48% of hunters supported changing the types of deer that could be taken with the combination license so that only one buck and one doe could be harvested statewide. About 26% of hunters supported eliminating the single deer license. About 51% of hunters supported regional APRs on the buck tag, and about 29% of hunters supported allowing hunters to transfer an unused buck tag.*

## **INTRODUCTION**

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

Although estimating harvest, hunter numbers, and hunting effort were the primary objectives of the deer harvest survey (Appendix A), this survey also provided an opportunity to collect information about management issues. Questions were added to investigate hunter satisfaction with the 2020 hunting season and deer numbers. Deer hunters were asked whether they supported several potential regulation changes. The potential changes included (1) changing the types of deer that can be taken with the combination license, (2) eliminating the deer license that only had a single buck tag, (3) adopting regional antler-point restrictions, and (4) allowing hunters to transfer an unused buck tag to another hunter. In addition, hunters were asked to report whether they used trail cameras to hunt deer and report whether they had photographed selected carnivores (bear, bobcat, coyote, fisher, fox, marten, and wolf), deer, and wild pig with their trail camera.

Coronavirus disease (COVID-19) is an infectious disease in humans caused by a newly discovered coronavirus. COVID-19 restrictions were enacted to limit its spread in Michigan during 2020 (e.g., stay at home requirements, travel restrictions, and keeping physical distance), and these restrictions may have impacted deer hunter behavior. Thus, hunters were asked to indicate whether COVID-19 caused them to (1) buy a deer hunting license, (2) spend more time hunting, (3) reduce the distance they traveled to hunt, (4) hunt alone more often, (5) struggle to locate a hunting area, and (6) struggle to locate a processor to butcher their deer.

Deer were grouped into either antlered or antlerless deer when developing hunting regulations. Antlered deer included deer with at least one antler three inches or longer, and antlerless deer included deer without antlers and deer with antlers less than 3 inches in length. The type of deer that could be harvested by hunters depended upon the area hunted, hunting season, and license purchased (Tables 1 and 2). During 2020, deer could be harvested primarily during eight hunting seasons: Liberty, archery, regular firearm, muzzleloader, early antlerless, late antlerless, Independence, and urban archery.

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

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

If a hunter took two antlered deer, one deer needed to have at least one antler with four or more points (qualifying points must be at least one inch), except in the counties in the core CWD management area (Ionia, Kent, Mecosta, Montcalm, and Newaygo counties in the LP and portions of Delta, Dickinson, and Menominee counties in the UP) and the CWD Management Zone (Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties). Also, youth hunters (16 years of age and younger) and apprentice hunters (a person who does not have a hunter safety certificate and is 10 years of age or older) were exempted from APRs during all deer seasons.

The mentored youth hunting (MYH) license allowed youth hunters 9 years of age and younger to hunt with an experienced mentor who is at least 21 years of age. A youth with a MYH license could take any deer in most seasons (except Independence season) and deer management unit, except they were required to take an antlerless deer in the early and late antlerless seasons. Antler point restrictions did not apply to hunters with a MYH license.

Antlerless licenses could be purchased in addition to deer, mentored youth, or combination licenses. Antlerless deer licenses allowed hunters to take antlerless deer during any season with equipment appropriate for the season. The 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 sixteen DMUs in the UP (007, 017, 021, 027, 031, 036, 042, 048, 066, 117, 127, 131, 152, 249, 252, and 349). A limited number of antlerless licenses were issued specifically for either public or private lands. Public land antlerless licenses were not available in all DMUs that had private-land licenses. A public-land antlerless deer license was required to hunt antlerless deer on Commercial Forest land. The number of licenses available in DMUs open to antlerless deer hunting was established by the NRC (Appendix B). Hunters could apply for an antlerless license through the drawing, purchase a private land license for selected areas without application, or wait to purchase a leftover license after the drawing, if available. Beginning in 2020, hunters buying a combination license could also use the two harvest tags to take antlerless deer in the entire Lower Peninsula during the firearm and muzzleloader seasons.

A private-land antlerless deer hunting license was valid for taking antlerless deer only from privately-owned lands within the DMU specified on the license with landowner permission.

A private land license was not valid on land enrolled in the Commercial Forest Act program (Commercial Forest Lands). An individual could purchase up to a season limit of 10 private-land antlerless deer licenses statewide.

A public land antlerless deer hunting license allowed an individual to hunt for antlerless deer upon public 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. There was no seasonal limit for public land antlerless licenses in any DMU where licenses were available.

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

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

Managed Deer Hunt permits were antlerless permits that could be used during special seasons on some public lands (i.e., St. Clair Flats State Wildlife Area [SWA], Gladwin Field Trial Area, Nayanquing Point SWA, Fish Point SWA, DMU 273 State Game Area, DMU 273 Federal Refuge, and Detroit River Federal Refuge). These permits were issued by special random drawings. To use these permits, the hunter also must have purchased a valid deer hunting license and abide by all other hunting regulations.

The Liberty season was held during September 12-13 on public and private lands statewide. Youth (less than 17 years old) and hunters with certain disabilities could take no more than one deer during the season. Hunters with disabilities that were eligible to participate in this season included hunters issued a permit to use a laser-sighting device or to hunt from a standing vehicle, veterans with 100% disability, or rated unemployable as defined by the United States Department of Veterans Affairs, or people who were legally blind. Beginning in 2020, deaf hunters also were eligible to participate in the Liberty season. Hunters could take one deer of either sex using a deer or combination license, and antler point restrictions did not apply to taking antlered deer. Only an antlerless deer could be taken with an antlerless license or DMA permit.

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, 2020,

through January 1, 2021). In addition, a January urban archery hunt also was held for the fourth consecutive year. This archery season occurred during January 2-31, 2021, in Macomb, Oakland, and Wayne counties. Deer licenses, antlerless deer licenses, combination licenses, mentored youth licenses, and DMA permits could be used to take deer during the archery seasons using archery equipment.

Deer could also be taken in the Independence Hunt during October 15-18, 2020. Hunters could take one deer of either sex on private lands or public lands requiring an access permit. Hunters could use a deer or combination license, and antler point restrictions did not apply to taking antlered deer. Only an antlerless deer could be taken with an antlerless license or DMA permit. Only hunters that were issued a permit to use a laser-sighting device or to hunt from a standing vehicle; veterans with 100% disability or rated unemployable as defined by the United States Department of Veterans Affairs; or people who were legally blind could participate in this season. Beginning in 2020, deaf hunters also were eligible to participate in the Independence Hunt.

The statewide regular firearm season occurred November 15-30, and the statewide muzzleloader season was held December 4-13. Hunters could take deer on both public and private lands with mentored youth, deer, and deer combination hunting licenses during the regular firearm and muzzleloader seasons. Antlerless licenses (including DMA permits) also could be used during the firearm seasons. Beginning in 2020, hunters with a combination license could also use the two harvest tags to take antlerless deer in the Lower Peninsula during firearm and muzzleloader season. Also beginning in 2020, the muzzleloader season dates were the same in both the UP and LP. As a result of this consolidation, the muzzleloader season in the SLP during 2020 was seven days shorter than in 2019 (17 days in 2019 versus 10 days in 2020).

The early antlerless firearm season occurred on private land from September 19-20. All license types (i.e., deer, combination, antlerless, mentored youth licenses, and DMA permits) could be used to take an antlerless deer. The area open to hunting during the early antlerless season included the entire LP, except for the island DMUs 145, 245, 115, and 149. Seventeen additional counties (Allegan, Berrien, Branch, Cass, Cheboygan, Crawford, Emmet, Kalamazoo, Kalkaska, Lake, Missaukee, Ogemaw, Otsego, Roscommon, St. Joseph, Van Buren, and Wexford) were open in 2020 than in 2019.

The late antlerless firearm season occurred primarily on private land from December 14, 2020, through January 1, 2021. All license types could be used to take an antlerless deer. In addition, hunters using a muzzleloader could hunt on public lands in the SLP (Zone 3) during the late antlerless season. These muzzleloader hunters on public lands could take either antlered or antlerless deer in Zone 3. All counties open during the early antlerless firearm season were also open for the late antlerless firearm season. Ten additional counties (Cheboygan, Crawford, Emmet, Kalkaska, Lake, Missaukee, Ogemaw, Otsego, Roscommon, and Wexford) were open in 2020 than in 2019. The late antlerless firearm season in 2020 was nine days longer than in 2019 (10 days in 2019 versus 19 days in 2020).

Crossbows were legal to use during all archery and firearm seasons statewide, except in the UP where crossbow use was prohibited from December 1 to March 31 except in the core CWD surveillance area the UP (portions of Delta, Dickinson, and Menominee counties) or unless the hunter was disabled.

## **METHODS**

The Wildlife Division provided all hunters the option to report information about their deer hunting activity voluntarily via the internet. This option was advertised through the hunting regulation booklet (digest) and on the DNR website. Hunters reported whether they hunted, the days spent afield, and whether they harvested a deer. Deer hunters were also asked whether they used a trail camera to hunt deer, whether they supported potential regulation changes, and whether COVID-19 affected their hunting behavior. Following the 2020 deer hunting seasons, a questionnaire (Appendix A) was sent to 62,193 randomly selected individuals who had purchased a hunting license (deer, antlerless, mentored youth, or combination deer hunting licenses). Hunters receiving the mail 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 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). 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 the 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 four groups (strata) based on the type of license purchased and for the seasons that these licenses could be used. The first stratum consisted of people eligible only for the archery, regular firearm, and muzzleloader hunting seasons (N = 406,246). The second stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, early antlerless, and late antlerless seasons (N = 165,916). The third stratum consisted of people eligible to hunt during archery, regular firearm, muzzleloader, late antlerless, and Liberty seasons (N = 34,714). The fourth stratum consisted of 9,072 people that were eligible to participate in the special disabled hunts. Beginning in 2013, veterans with disabilities could obtain a free deer hunting license (i.e., Disabled Veteran license type). A unique type of hunting license was not available for non-veteran hunters with disabilities; however, hunters with disabilities younger than 65 years were sold a discounted hunting license (i.e., sold a senior hunting license). The random sample consisted of 30,589 people from the first stratum; 12,122 from the second stratum; 10,618 from the third stratum; and 8,864 from the fourth stratum. The stratified sampling design accounted for the

varying probabilities of being selected from the strata so estimates could be reliably extrapolated from the sample to all license buyers.

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

Statistical tests are used routinely to determine the likelihood that the differences among estimates are larger than expected by chance alone. The overlap of 95% confidence intervals was used to determine whether estimates differed significantly. Non-overlapping 95% confidence intervals were equivalent to stating that the difference between the means was larger than would be expected 95 out of 100 times if the study had been repeated (Payton et al. 2003).

Questionnaires were initially mailed in late December 2020, 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 62,193 people were selected to receive a questionnaire, 1,610 surveys were undeliverable resulting in an adjusted sample size of 60,583. Questionnaires were returned by 26,403 people (44% adjusted response rate).

Estimates of harvest, hunting effort, and hunter participation are affected by the willingness of people to complete and return their questionnaires. This problem can confound comparisons of estimates made between years if response rates vary greatly. The percentage of people returning their questionnaire this year was higher than last year. To reduce bias caused by this higher response rate, an adjustment was made on the 2020 estimates to make them comparable to the adjusted 2019 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 8.3%, 6.2%, and 2.6%, respectively, to make estimates comparable to 2019. These reductions reflected the average decline noted between estimates calculated when 44% and 74% of the responses were used in 2000 and 2001 surveys.

## **RESULTS AND DISCUSSION**

In 2020, 615,948 people purchased a license to hunt deer in Michigan. The number of people buying a license in 2020 increased by about 2% from 2019 (601,984 people purchased a license in 2019). Most of the people buying a license in 2020 were male (89%), and the average age of license buyers was 44 years (Figure 3). About 11% (66,009) of the license buyers were younger than 18 years old. About 3% (21,137) of the license buyers were younger than 12 years old.

In 2020, 935,541 hunting licenses and permits were issued (Table 3), which was an increase of nearly 2% from 2019 (917,826 licenses and permits issued in 2019). Although the overall number of licenses sold increased, the number of deer licenses and antlerless deer licenses sold declined 24% and 5%, respectively. In contrast, the number of combination licenses sold increased by 23%.

Beginning in 2020, hunters buying a combination license could use the two harvest tags to take antlerless deer in the entire Lower Peninsula during the firearm and muzzleloader seasons. Consequently, hunters purchased fewer antlerless and deer hunting licenses, while they increased purchases of combination licenses. It appears that many hunters perceived that the combination license had gained in value because it could be used to take either sex of deer. Allowing hunters to take antlerless deer with the two harvest tags sold with the combination license greatly increased the overall number of harvest tags that could be used to take antlerless deer in 2020 (Table 3).

The number of people buying a license in 2020 was about 12% less than the number of people who purchased a license ten years ago in 2010 (697,527 people purchased a license in 2008). There were fewer license buyers for all age classes between 12 and 55 years of age in 2020, compared to 2010 (Figure 4). However, there were increased hunter numbers among the youngest and oldest age classes in 2020. 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. Also, the legalization of crossbow use during the archery season probably increased participation among hunters in the oldest age classes. The increased participation among the youngest hunters likely reflected the lowering of the minimum age requirements. In 2012, the minimum age requirement was eliminated to hunt deer with a firearm, while hunters had to be at least 10 years old to participate in 2010.

The number of 2020 deer harvest tags sold for all license types combined increased by nearly 8% from 2019 (Table 3). License buyers purchased an average of 2.2 harvest tags. About 91% of the license buyers obtained three or fewer harvest tags, and about 99% had six or fewer harvest tags (Figure 5). Hunters most frequently obtained antlerless and combination harvest tags (Figure 6). About 34% of the license buyers purchased at least one antlerless license (212,502 people), and greater than 98% of antlerless license buyers purchased three or fewer antlerless licenses, public and private licenses combined (Figure 7).

The antlerless license quota on private lands increased from 322,600 to 353,200 between 2019 and 2020 (9% increase) (Appendix B). The quota for public land antlerless licenses increased from 75,080 to 84,790 between 2019 and 2020 (13% increase). Overall, the antlerless license quota for private and public lands combined increased by about 10% from last year, but the total number of antlerless licenses sold decreased by 5% in 2020 (Table 3).

About  $91.7 \pm 0.3\%$  (565,132 hunters) of the people buying a license in 2020 spent time hunting deer (Table 4). Statewide, the number of people hunting deer during all seasons combined increased significantly by nearly 5% from 2019. Most hunters (488,422) pursued deer during the regular firearm season (Figure 8).



Significantly more people hunted during all seasons except the urban archery season (Table 4). This increase may have been partly explained by Coronavirus disease (COVID-19) restrictions that were enacted in 2020 to limit the spread of COVID-19 (e.g., stay at home requirements, travel restrictions, and keeping physical distance). These restrictions allowed people to have more time to hunt. Additional details about the effects of COVID-19 are presented later in the Discussion.

Participation increased in the early antlerless (92%), late antlerless (74%), Independence (58%), muzzleloader (22%), Liberty (16%), archery (10%), and regular firearm (3%) seasons (Figure 9). The increased participation in the early and late antlerless firearm seasons partly reflected an increase in the area open for hunting. Also, increased participation in the late antlerless firearm seasons reflected an increase in the season length.

About 49% of the days that hunters spent pursuing deer throughout the state occurred in the archery season (Figure 10). About 37% of the hunting effort occurred during the regular firearm season. Nearly 13% of the hunting effort occurred in the muzzleloader and late antlerless seasons combined. Statewide, hunters devoted an average of 15.6 days afield hunting deer during all seasons combined (Table 5). Archers had the greatest number of days available to hunt deer (77 days) and devoted the greatest number of days afield ( $\bar{x}$  = 13.5 days/hunter) (Figure 11, Table 5). Statewide, the total number of days hunting deer during all seasons combined increased significantly by about 14% from 2019 (Table 4). Significantly more days were devoted to hunting during the late antlerless (131%), early antlerless (79%), archery (15%), muzzleloader (10%), and regular firearm (7%) seasons during 2020 (Table 4). Hunting effort was not significantly different in the Independence, Liberty, and urban archery seasons.

About 420,071 deer were harvested statewide in 2020, which was an increase of about 13% from 2019 (Figures 12-13, Tables 6-7). The number of deer harvested increased significantly in the early antlerless (206%), late antlerless (100%), archery (19%), and Liberty (17%) seasons. Harvest was not significantly changed in the remaining seasons (i.e., Independence, muzzleloader, regular firearm, and urban archery seasons). Statewide harvests of antlerless deer for all the seasons combined in 2020 increased significantly by 26% from 2019, while harvest of antlered deer was not significantly different (Table 6). The counties with the greatest harvest densities for antlered and antlerless deer were generally in the central and south-central parts of the state (Figure 14).

The increase in harvest may have reflected by COVID-19 restrictions that allowed additional people to hunt in 2020. The increased harvest of antlerless deer likely also reflected that hunters with a combination license could take antlerless deer in the entire Lower Peninsula during the firearm and muzzleloader seasons beginning in 2020. Also, the early and the late antlerless seasons were open in more areas in 2020.

Also, the muzzleloader season was shortened, and the late antlerless seasons was expanded in Zone 3 from 2019.

Also, the 2020 early and late antlerless seasons were expanded from 2019.

About 48% of the deer harvested (sexes combined) in 2020 were taken during the regular firearm season (Figure 15). Nearly 42% of the antlerless deer and 54% of the antlered bucks were harvested in the regular firearm season. Hunters took 33% of the harvested deer (sexes combined) during the archery season. These archers took 27% of the antlerless deer and 39% 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 89% of the deer harvested (sexes combined) in 2020 were taken on private lands (Table 8). Statewide, most of the antlerless deer (88%) and antlered bucks (89%) were harvested on private lands.

Statewide, 51% of deer hunters harvested at least one deer (all deer seasons and sexes combined) in 2020 (Figure 16, Table 9), compared to the 50% success in 2019. About 26% of hunters took an antlerless deer, and 35% took an antlered buck in 2019. About 18% of deer hunters harvested two or more deer (sexes combined).

Hunters were most successful in taking a deer during the regular firearm (36%), Liberty (35%), and archery (35%) seasons (Figure 17, Table 10). Hunter success was lowest in the muzzleloader (15%) and urban archery (11%) seasons. Nearly 25% of hunters took an antlered buck and 14% harvested an antlerless deer during the regular firearm season (Table 10).

Deer hunters were asked to report how satisfied they were with (1) number of deer seen, (2) number of antlered deer [bucks] seen, (3) size of antlers seen, (4) number of deer taken, and (5) their overall hunting experience. Statewide,  $\leq 51\%$  of hunters were satisfied with the numbers of deer seen, bucks seen, size of antlers seen, deer taken, and their overall hunting experience in 2020 (Tables 11-13). Statewide levels of satisfaction decreased significantly between 2019 and 2020 for the number of deer seen, the number of bucks seen, the size of antlers seen, and the overall deer hunting experience. In contrast, satisfaction with the number of deer harvested did not change significantly between 2019 and 2020. People hunting deer only on private lands were generally more satisfied than people hunting exclusively on public lands (Tables 14-16).

Most archers (72%) used a crossbow during the archery season (230,720 hunters), and about 35% of these archers took at least one deer with a crossbow (Tables 17-18). They harvested about 93,034 deer with the crossbow (Table 19). The number of archers using a crossbow in 2020 increased significantly by 13% from 2019 (204,160 archers in 2019). Harvest of deer by archers using a crossbow increased significantly by 20% from last year (77,375 deer taken in 2019). About 35% of these archers using a crossbow in 2020 harvested a deer with a crossbow in the archery season, versus 33% success in 2019.

An estimated  $144,543 \pm 3,409$  hunters took  $179,587 \pm 4,904$  deer to a commercial meat processor in 2020. Thus, about 44% of the deer harvested in all seasons (179,587 of

410,639 deer) were handled by a commercial processor. This proportion is nearly the same as reported in 2019 (Frawley 2020).

About 47% of the deer hunters statewide used a trail camera to monitor deer activity in their hunt area (Table 20), and hunters in the UP more frequently used trail cameras than hunters in the LP. Although UP hunters more frequently used trail cameras, the mean number of days that they used cameras was less than LP hunters (Table 21). These differences probably reflected geographic differences in hunting success (Table 10) and the mean number of days of hunting effort (Table 5). Hunters in the UP had lower hunting success than LP hunters; thus, UP hunters were more likely to use trail cameras to improve their hunting success. Although a lower proportion of hunters in the LP used cameras, the hunters in the LP that used trail cameras had more opportunities to use cameras than hunters in the UP because they had more hunting seasons and longer seasons (Table 1).

Among the hunters using a trail camera, 96% captured an image of a deer (Table 22). Hunters in the UP were more likely to see bears, fishers, martens, and wolves than hunters in the LP. In contrast, hunters in the LP were more likely to see coyotes and foxes than hunters in the UP. Furthermore, bobcats were more frequently seen by hunters in the NLP than either the UP or SLP. A significantly greater proportion of hunters statewide in 2020 captured a photograph of a bobcat (18.6% in 2020 versus 15.9% in 2019), fisher (3.1% versus 2.4%), fox (32.4% versus 28.5%), and wolf (6.9% versus 5.5%) than in 2019 (Figure 18).

Currently, deer hunters that want to take a buck in Michigan can purchase either a single deer license that has 1 buck kill tag or purchase a combination license that has 2 buck kill tags. In the Lower Peninsula, these tags can also be used to take antlerless deer. The DNR considered changing the types of deer that can be taken with the combination license. The new combination license would still have two tags; however, one tag could be used to take only a buck statewide and one tag could be used only to take a doe statewide. Hunters would no longer be allowed to take two bucks with the new combination license. About 48% of hunters supported changing the types of deer that could be taken with the combination license so that only one buck and one doe could be harvested statewide (Table 23). In contrast, 40% of hunters opposed this change. If all combination licenses were changed to one buck tag and one doe tag, the DNR would also consider eliminating the deer license that only has a single buck tag. About 26% of hunters supported eliminating the single deer license, while 61% of hunters opposed this change (Table 23).

If the types of deer that could be taken with a combination license were changed, the DNR would also consider whether antler point restrictions (APRs) would be imposed on the buck tag. The APRs would be designed to protect over 50% of yearling bucks to promote their growth to older age classes. This APRs would vary across the state. A legal buck would have 2 or more points on one side in the Upper Peninsula, 3 or more points on one side Northern Lower Peninsula, and 4 or more points on one side in the Southern Lower Peninsula. About 51% of hunters supported regional APRs on the buck tag, while 35% of hunters opposed these regional APRs (Table 23). In comparison, most Michigan deer hunters (59%) in 2016 supported regional antler-point restrictions on the existing combination license (Frawley 2017).

Currently, an unused deer harvest tag cannot be transferred to another person. The DNR would consider allowing the transfer of an unused buck tag to another hunter so that they could use it to harvest a buck. About 29% of hunters supported allowing hunters to transfer an unused buck tag, while 56% of hunters opposed transferring an unused buck tag (Table 23).

Hunters were asked to indicate whether COVID-19 caused them to (1) buy a deer hunting license, (2) spend more time hunting, (3) reduce the distance they traveled to hunt, (4) hunt alone more often, (5) struggle to locate a hunting area, or (6) struggle to locate a processor to butcher their deer (Table 24). Many people may have had more time to hunt in 2020 because some businesses and schools shut down and people often worked from home because of COVID-19 restrictions. About 9% of hunters indicated that they were more likely to purchase a license in 2020 (Table 24), and about 19% of hunters indicated that they increased the amount of time they hunted in 2020 because of COVID-19. Michigan residents were encouraged to do fewer long-distance trips in 2020 because of COVID-19, and about 8% of hunters indicated that they reduced the distance they traveled to hunt in 2020. People also were encouraged to keep physical distance between themselves and other people in 2020 because of COVID-19, and about 14% of hunters indicated that they hunted alone more frequently in 2020. About 5% of hunters indicated that they found it more difficult to locate a hunting area in 2020, and about 8% of hunters indicated that they found it more difficult to locate a processor to butcher their deer in 2020 because of COVID-19.

Beginning in March 2020, COVID-19 regulations forced many people to work remotely. Among Americans that could work remotely, 71% of these people were working from home all or most of the time (Pew Research Center 2020). Among workers that shifted to remote working, 49% say they had more flexibility to choose when they worked. This flexibility may have allowed more people to pursue recreational activities such as deer hunting.

## **ACKNOWLEDGMENTS**

I thank all the deer hunters that provided information. Theresa Riebow completed the data entry. The figure of DMUs was prepared by Marshall Strong. Mike Donovan and Chad Stewart reviewed a draft version of this report.

## **LITERATURE CITED**

Albert, D. A. 1995. Regional landscape ecosystems of Michigan, Minnesota, and Wisconsin: a working map and classification. General Technical Report NC-178. U.S. Department of Agriculture, Forest Service, North Central Forest Experimental Station, St. Paul, Minnesota, USA.

Cochran, W. G. 1977. Sampling techniques. John Wiley & Sons, New York, USA.

- Frawley, B. J. 2017. Michigan deer harvest survey report: 2016 seasons. Wildlife Division Report 3639. Michigan Department of Natural Resources, Lansing, USA.
- Frawley, B. J. 2020. Michigan deer harvest survey report: 2019 seasons. Wildlife Division Report 3691. Michigan Department of Natural Resources, Lansing, 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.
- Pew Research Center. 2020. How the coronavirus outbreak has – and hasn't – changed the way Americans work. Retrieved from [https://www.pewresearch.org/social-trends/wp-content/uploads/sites/3/2020/12/PSDT\\_12.09.20\\_covid.work\\_fullreport.pdf](https://www.pewresearch.org/social-trends/wp-content/uploads/sites/3/2020/12/PSDT_12.09.20_covid.work_fullreport.pdf)

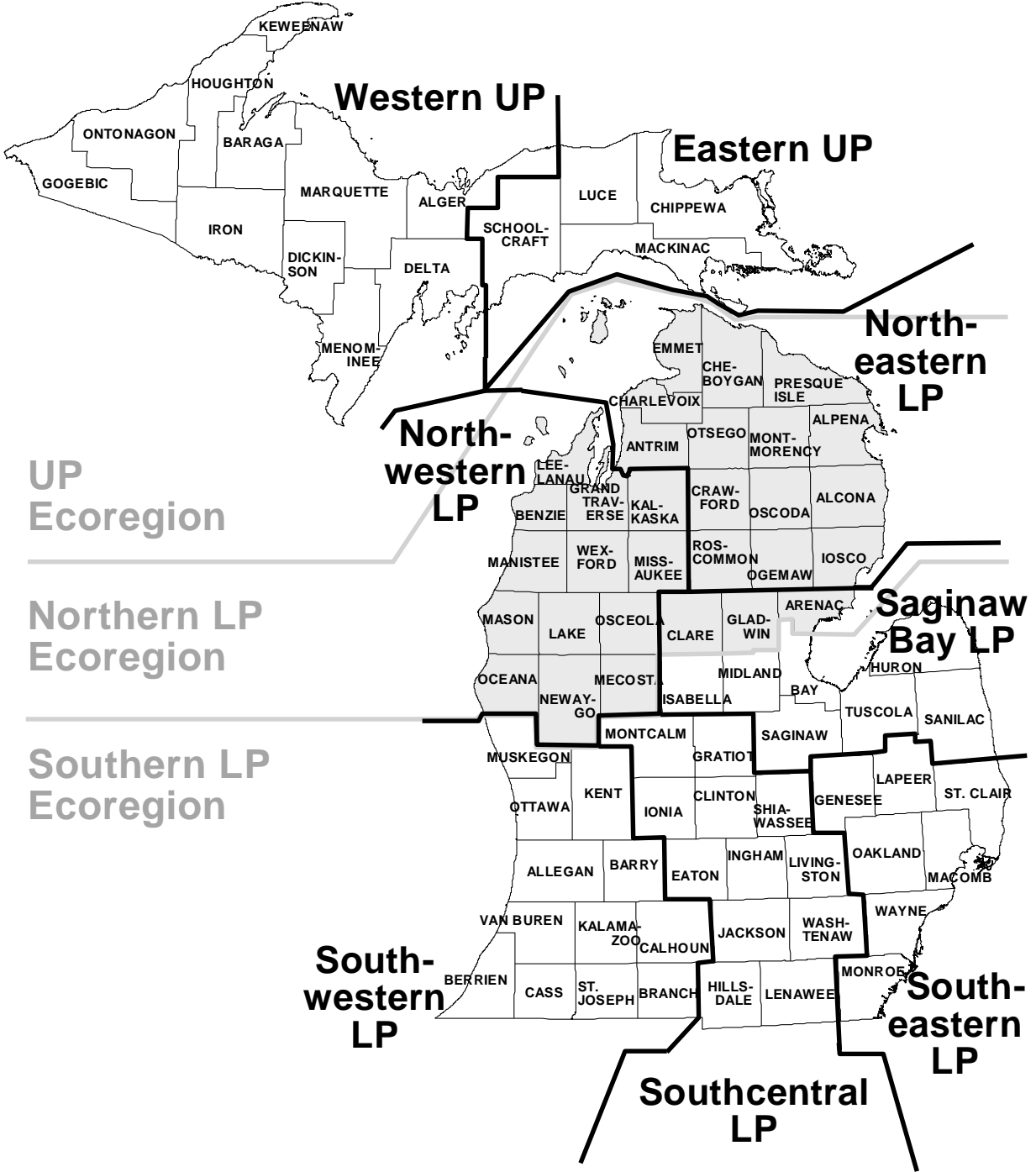


Figure 1. Areas used to summarize deer harvest in Michigan for the 2020 hunting seasons.

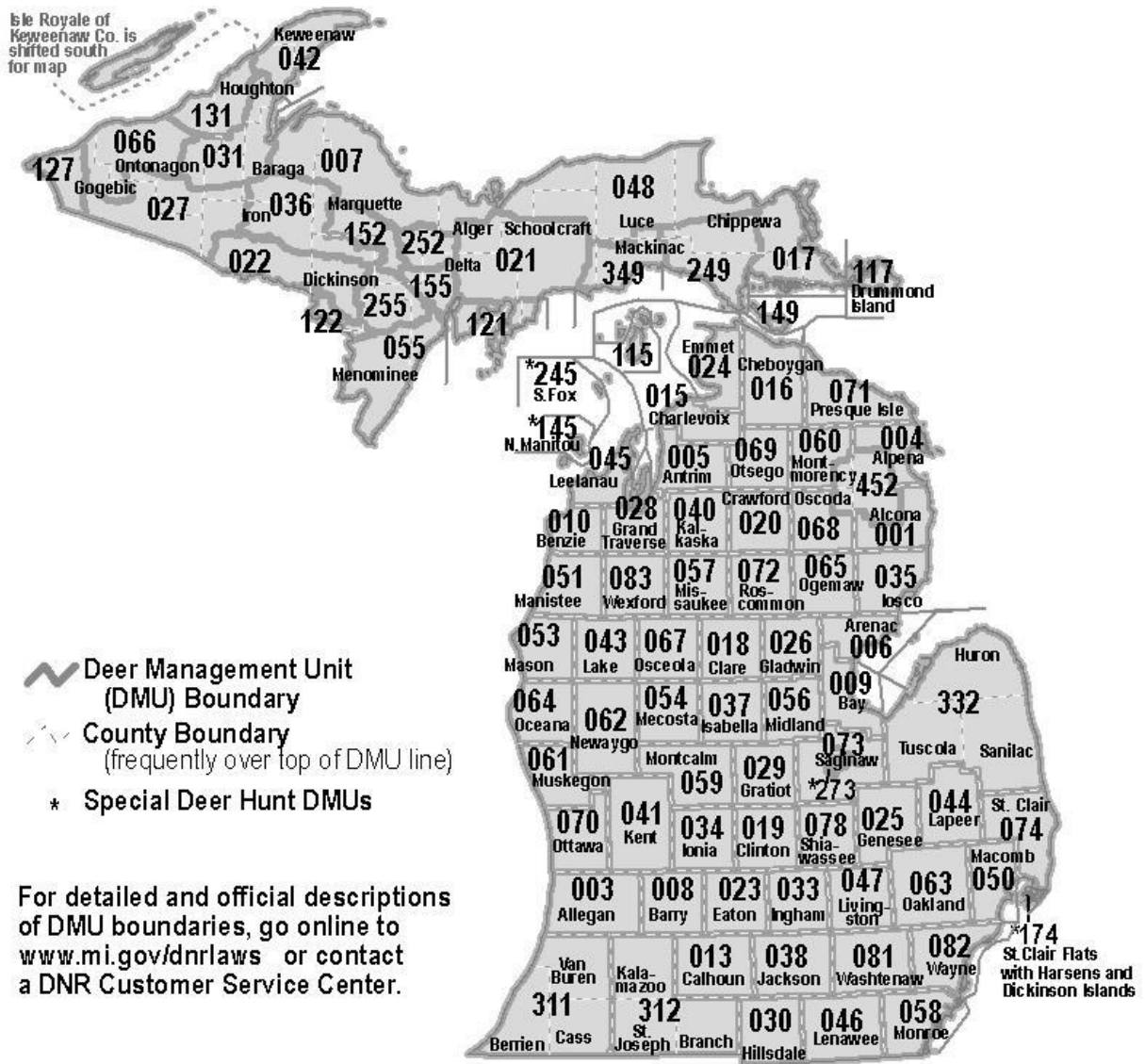


Figure 2. Deer management units in Michigan for the 2020 hunting seasons.

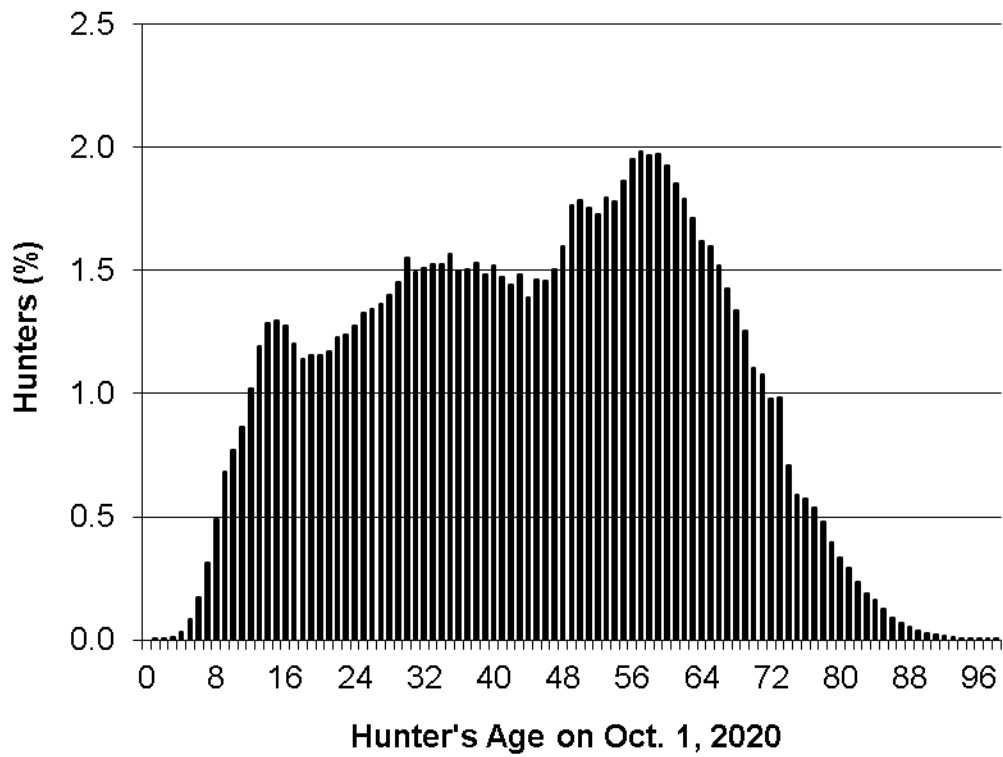


Figure 3. The age of people that purchased a deer hunting license in Michigan for the 2020 hunting seasons (mean = 44 years).



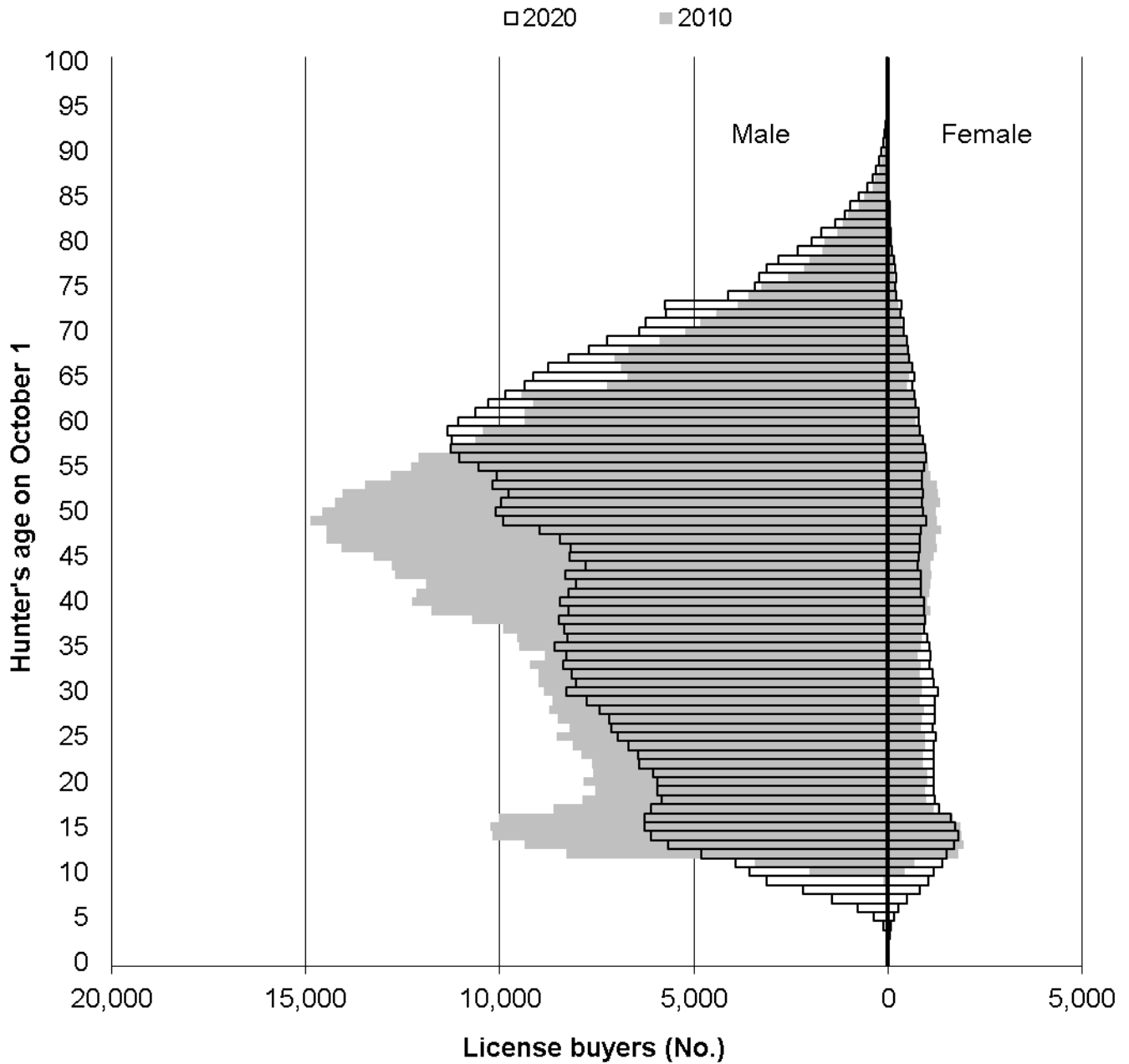


Figure 4. The number of deer hunting license buyers in Michigan by age and sex during the 2010 and 2020 hunting seasons. Deer hunting licenses were purchased by 697,527 people in 2010 and 615,948 people in 2020.

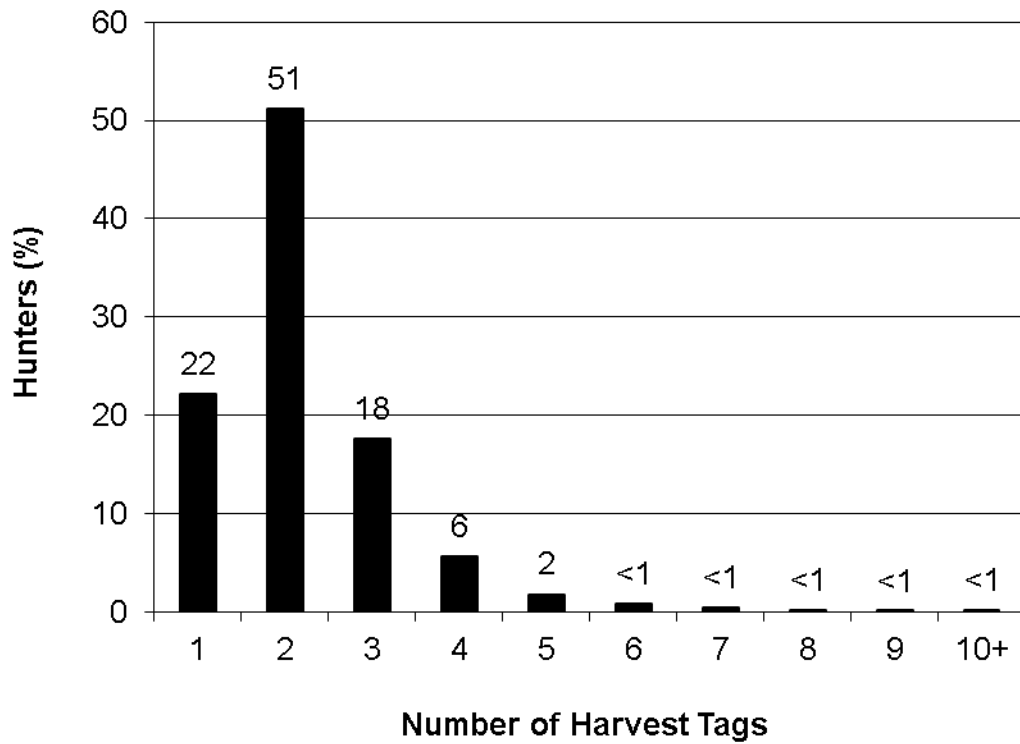


Figure 5. The number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2020 hunting seasons (mean = 2.2 tags). Licenses were purchased by 615,948 people.

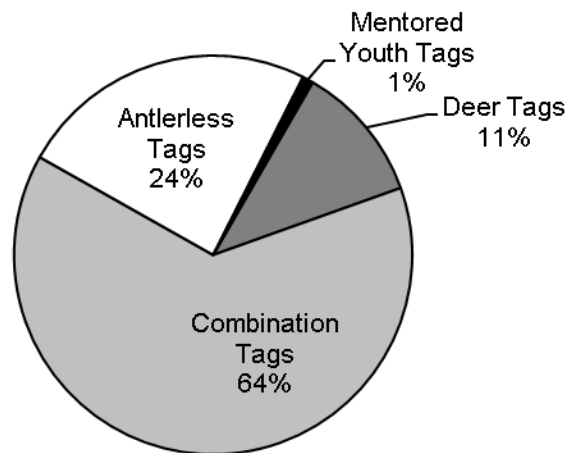


Figure 6. The types of harvest tags issued for deer hunting in Michigan during the 2020 hunting seasons.

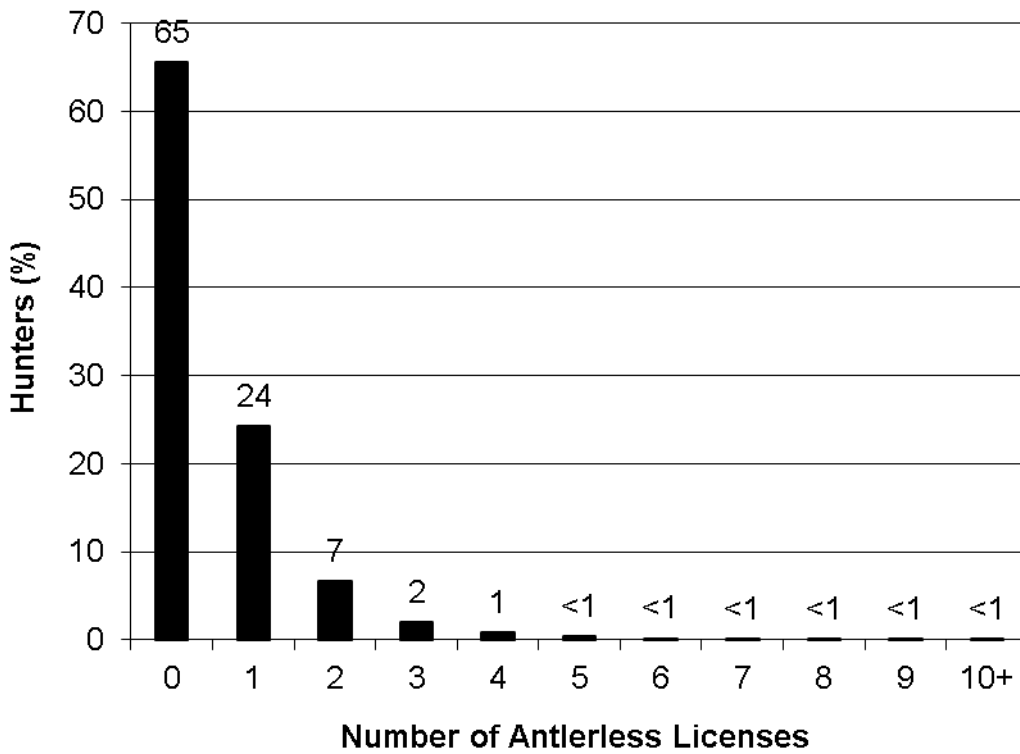


Figure 7. The percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2020 (excluded mentored youth hunting license). Antlerless licenses were purchased by 212,502 of 615,948 people (34%) buying deer hunting license.

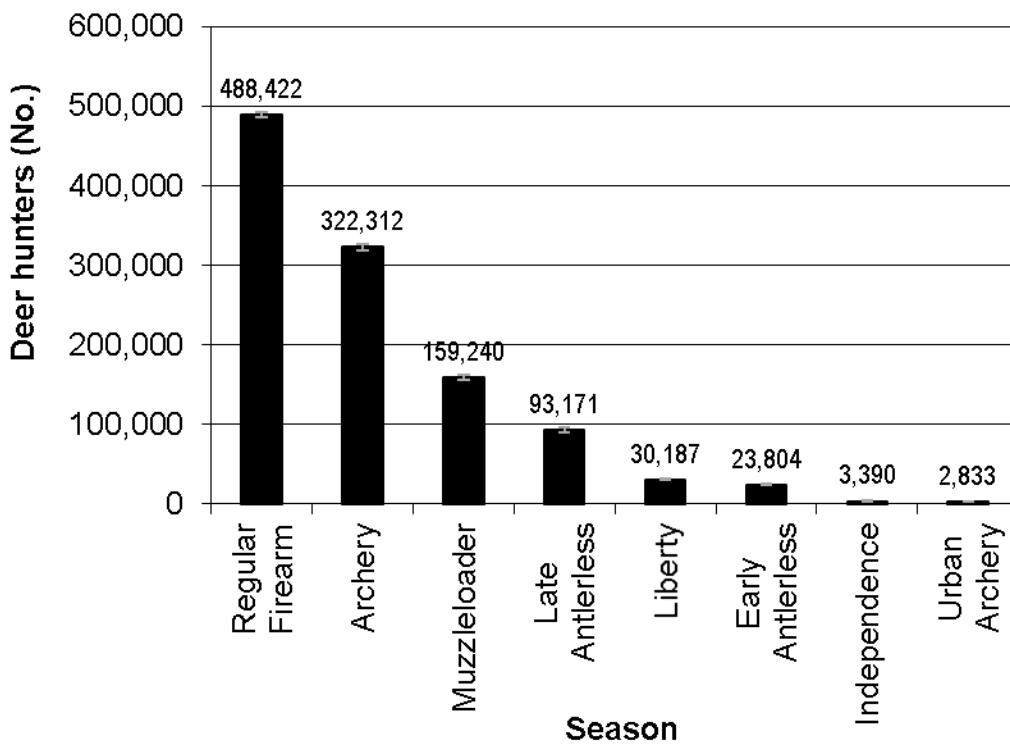


Figure 8. The number of people hunting deer in Michigan during the 2020 hunting seasons. Error bars represent the 95% CLs.

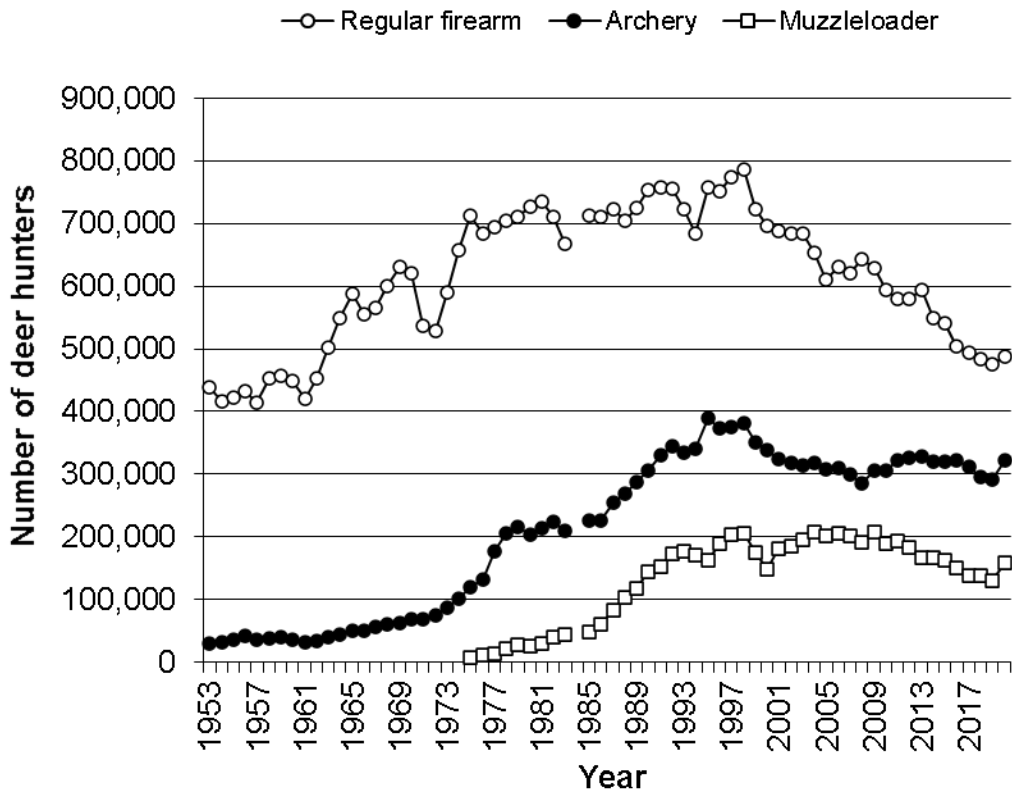


Figure 9. The number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2020.

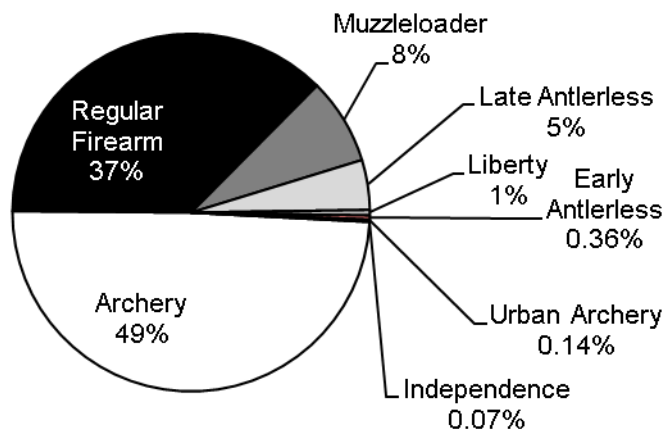


Figure 10. The distribution of hunting effort among deer hunting seasons in Michigan, 2020.

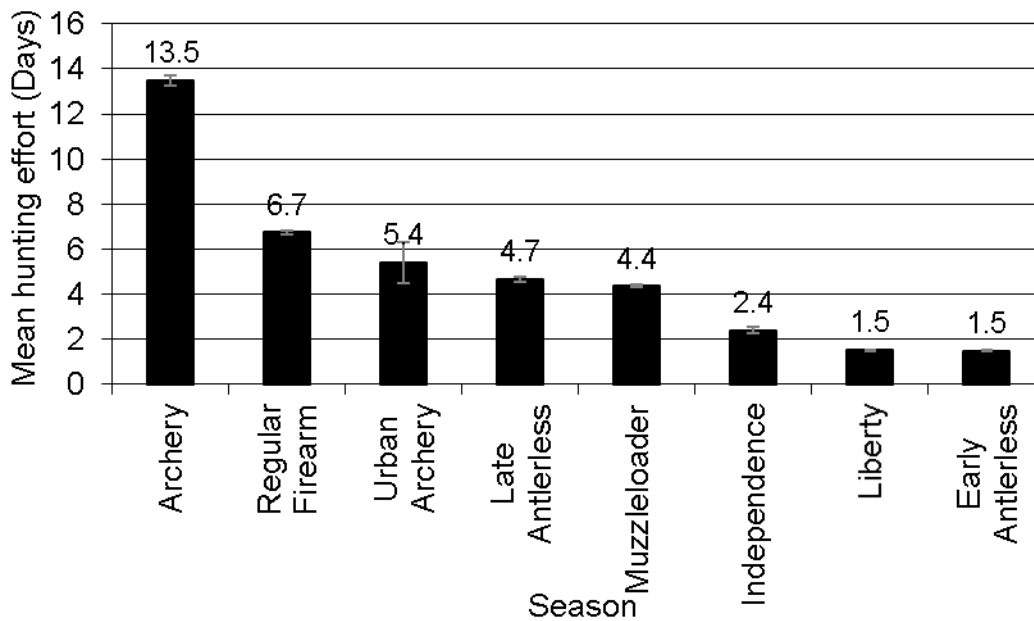


Figure 11. The mean number of days spent hunting deer in Michigan during the 2020 hunting seasons. Error bars represent the 95% CLs.

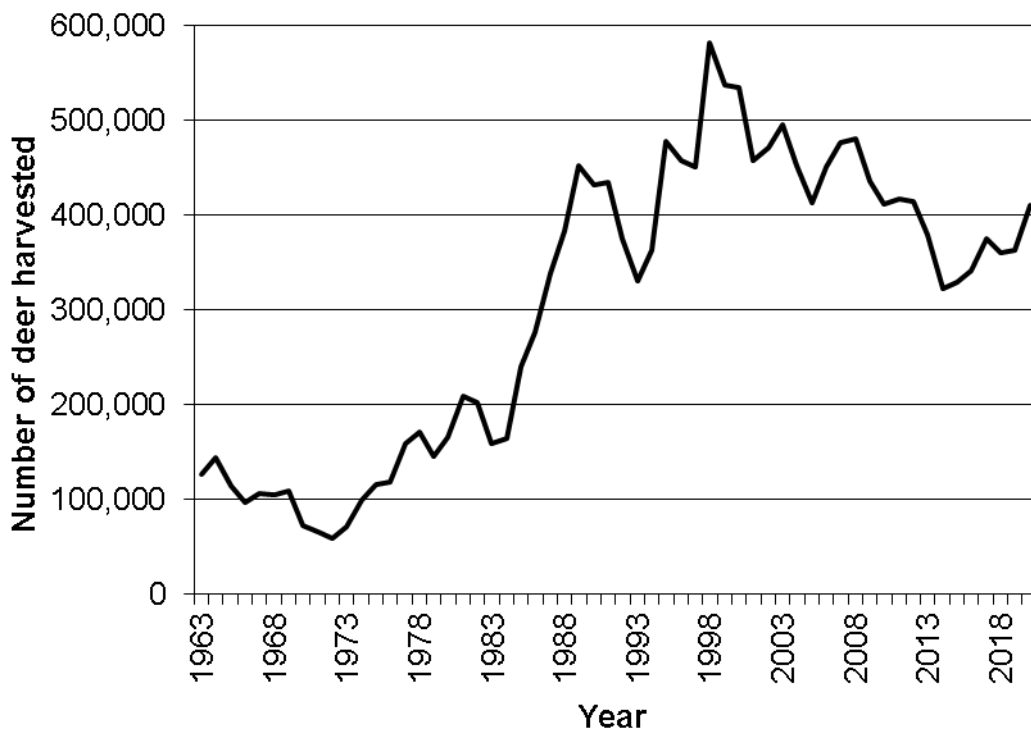


Figure 12. The number of deer harvested in Michigan's hunting seasons, 1963-2020. Harvest from all seasons and for all deer sexes was combined.

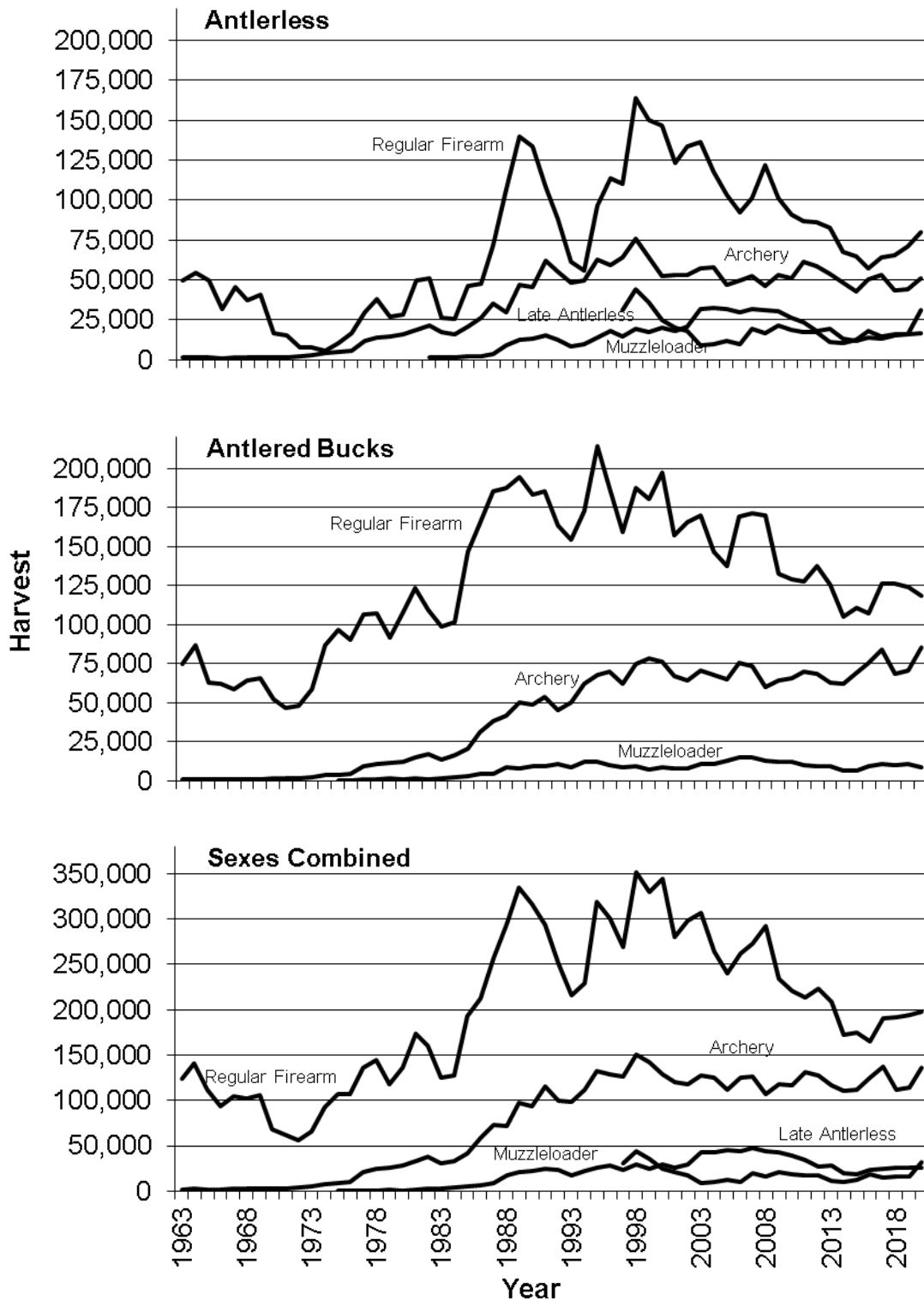


Figure 13. The number of deer harvested in Michigan's hunting seasons, 1963-2020. Harvests for early antlerless, youth, and hunters-with-disabilities seasons were not shown.

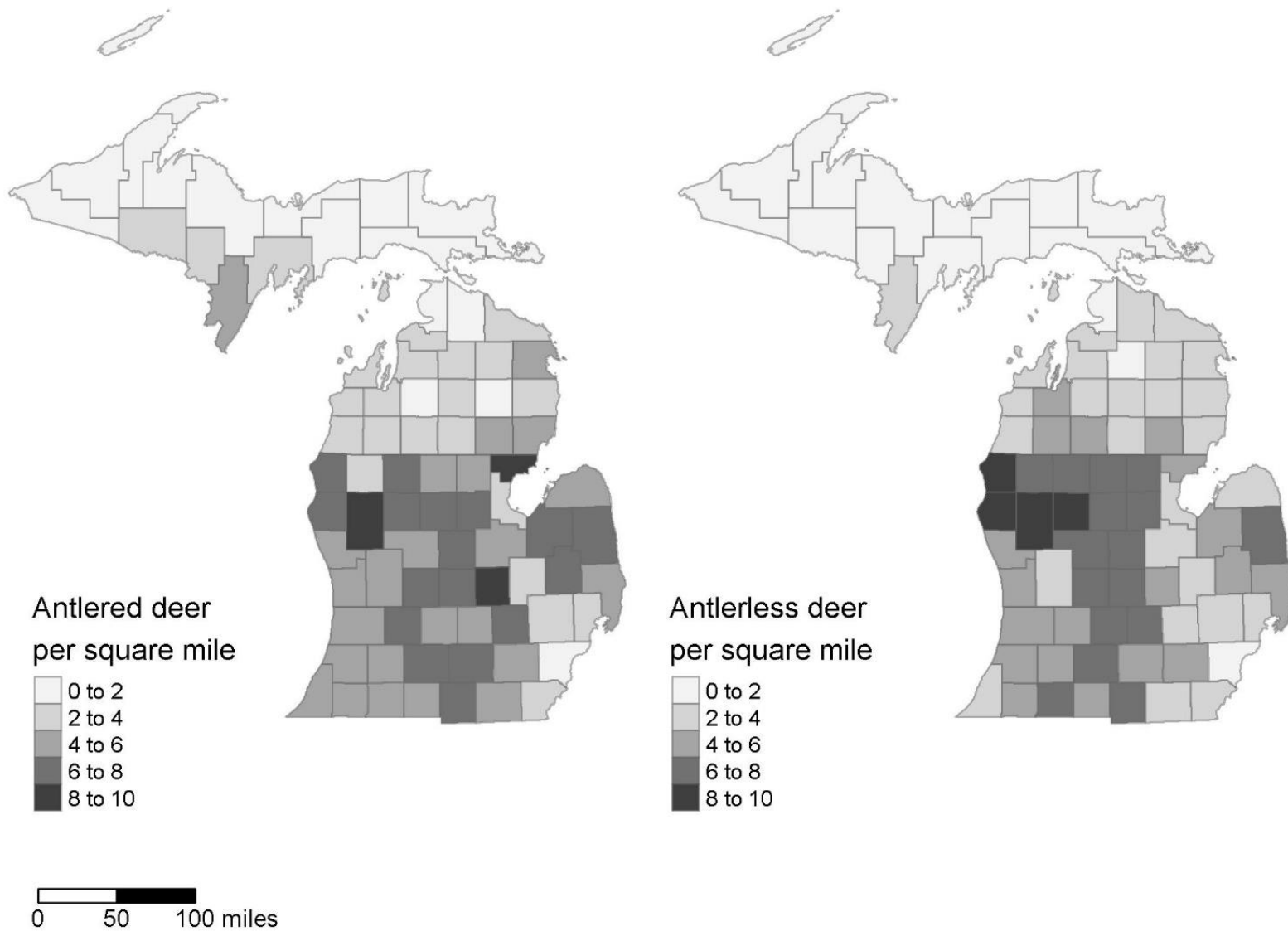


Figure 14. The harvest density of antlered (left) and antlerless (right) deer during all 2020 hunting seasons combined in Michigan.

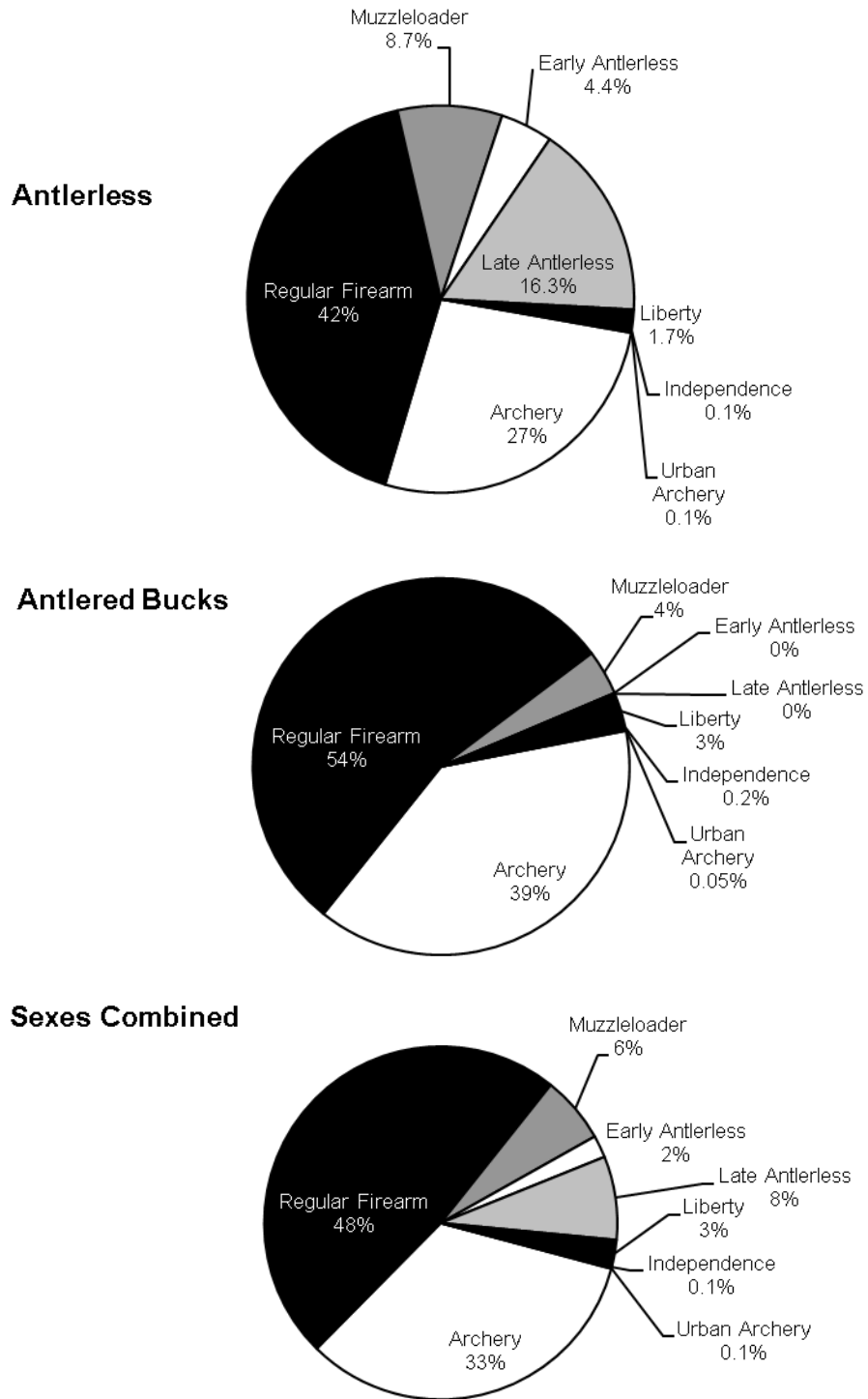


Figure 15. The distribution of harvest among deer hunting seasons in Michigan, 2020. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.



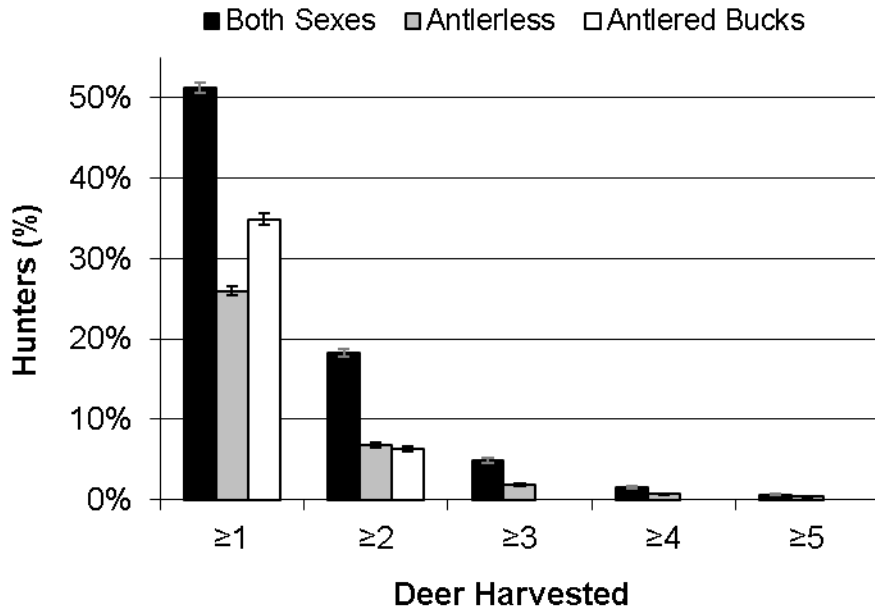


Figure 16. The percentage of hunters harvesting a deer in Michigan, 2020. Error bars represent the 95% CLs.

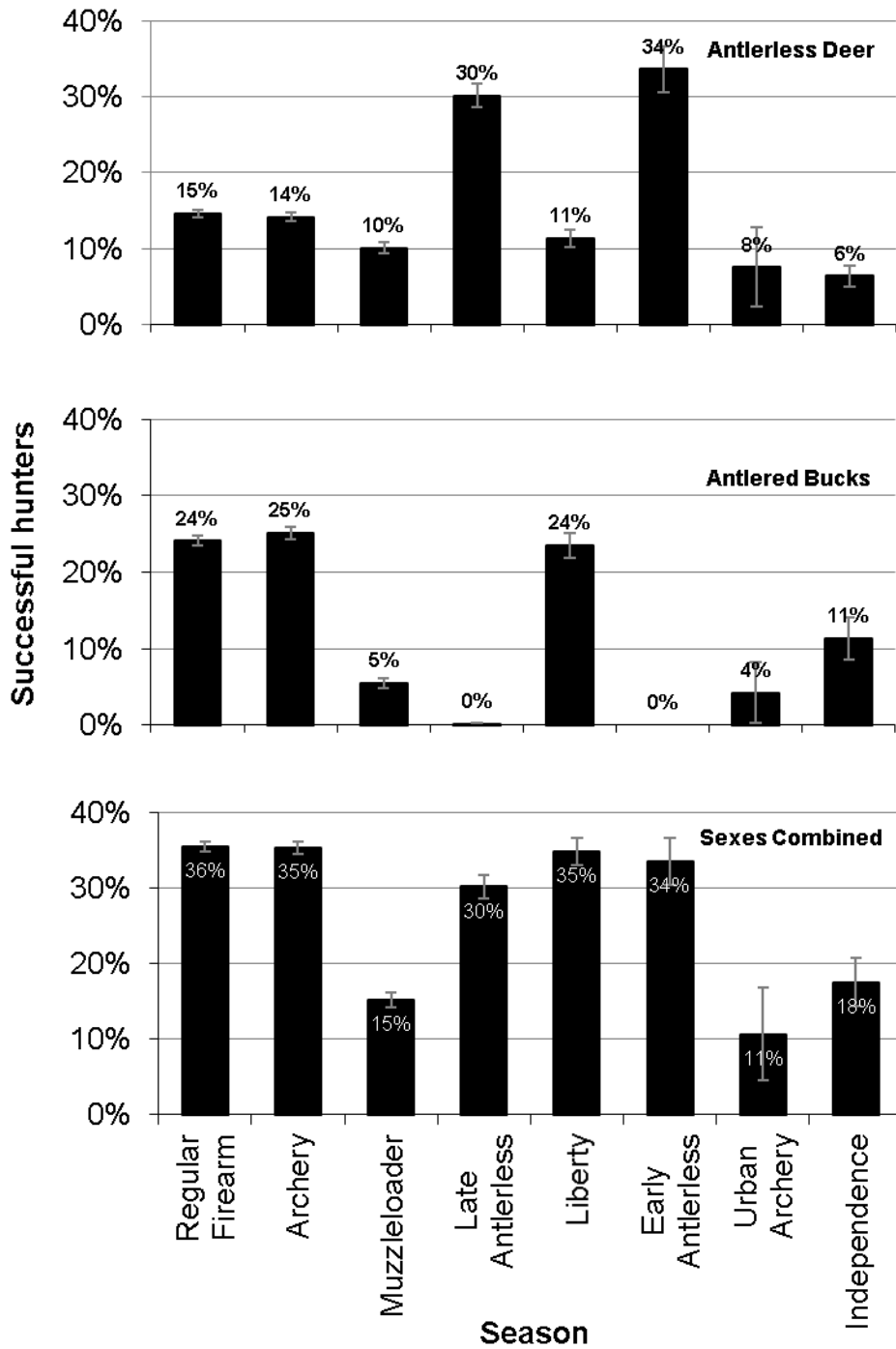


Figure 17. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2020. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches.

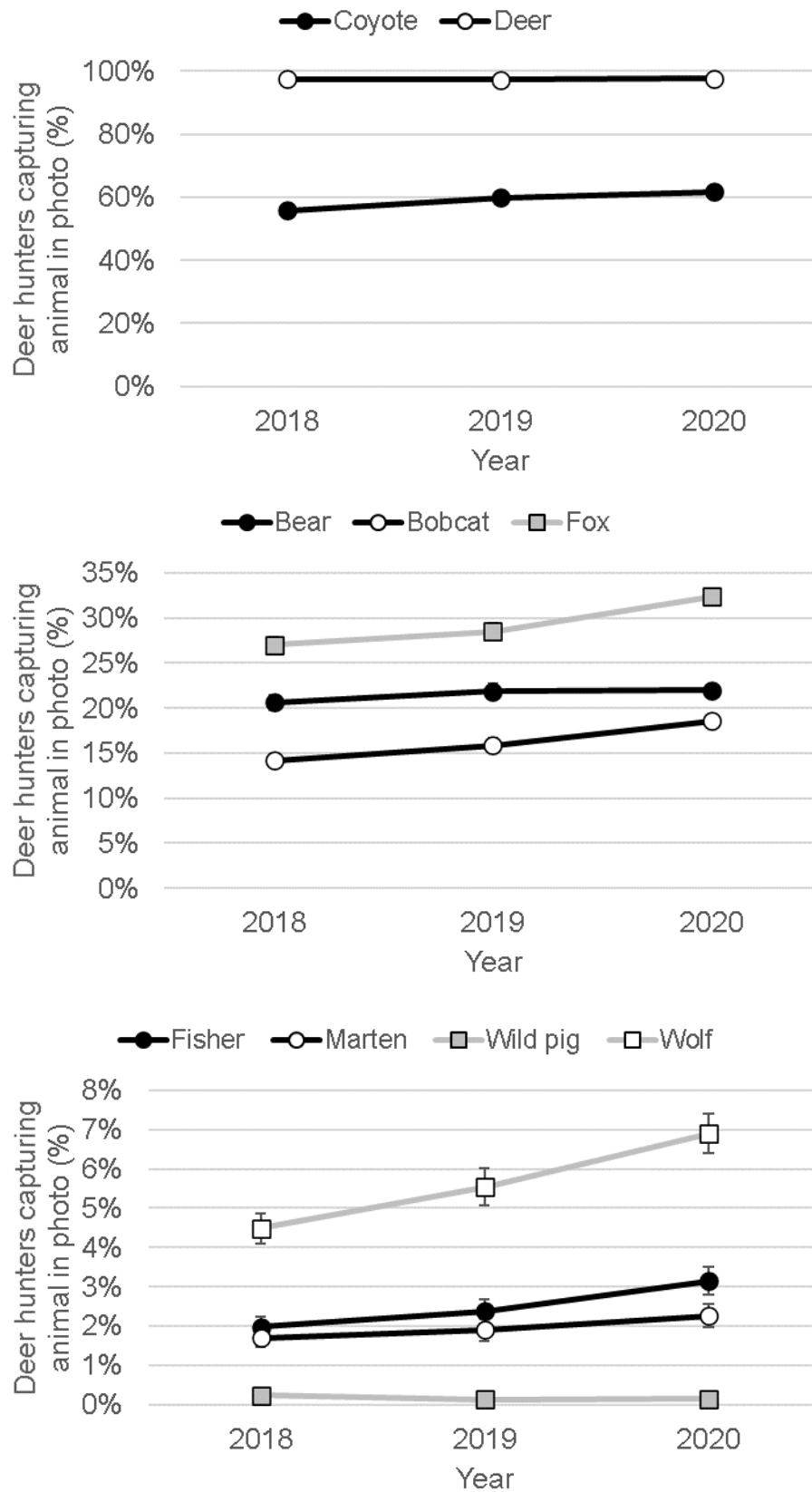


Figure 18. The proportion of deer hunters that used a trail camera and photographed selected carnivores, deer, and wild pigs with their camera in 2018-2020.

Table 1. Deer hunting seasons in Michigan, 2020-2021.

Season	Bag limit	Area	Dates
Liberty/Youth Hunt	1	Statewide	September 12-13
Early Antlerless Firearm	1 per kill tag	Lower Peninsula <sup>a</sup>	September 19-20
Independence Hunt	1	Statewide	October 15-18
Archery	1 per kill tag	Statewide	October 1 – November 14 and December 1 – January 1
Regular Firearm	1 per kill tag	Statewide	November 15-30
Muzzleloader	1 per kill tag	Statewide	December 4-13
Late Antlerless Firearm	1 per kill tag	Lower Peninsula <sup>a</sup>	December 14-January 1
Late Urban Archery	1 per kill tag	Macomb, Oakland, and Wayne counties	January 2-31

<sup>a</sup>The area open to hunting during the early and late antlerless firearm seasons included the entire LP, except for the island DMUs 145, 245, 115, and 149.

Table 2. The types of deer that could be taken during the 2020 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Area	Type of deer that could be harvested <sup>a</sup> and area
Deer license or deer combination regular license	Archery seasons	Upper Peninsula (Zone 1)	Antlered deer (deer with at least 1 antler with 3 or more antler points each 1 or more inches) and antlerless deer. Antlerless deer could not be taken in DMUs 127, 066, 027, 131, 042, 036, and 031. Antler point restrictions did not apply in the core CWD surveillance area. <sup>b</sup>
Deer license or deer combination regular license	Archery seasons	Lower Peninsula (zones 2 and 3)	Antlerless or antlered deer <sup>c</sup>
Deer license or deer combination regular license	Firearm or Muzzleloader seasons	Upper Peninsula (Zone 1)	Antlered deer. Antler point restrictions did not apply in the core CWD surveillance area. <sup>b</sup>
Deer license or deer combination regular license	Firearm or Muzzleloader seasons	Lower Peninsula (zones 2 and 3)	Antlerless or antlered deer <sup>c</sup>
Deer license or deer combination regular license	Liberty and Independence seasons	statewide	Antlerless or antlered deer
Combination License <sup>d</sup> (Restricted harvest tag)	Archery seasons	Upper Peninsula (Zone 1)	An antlerless deer or a deer that has at least 1 antler with 4 or more antler points, 1 or more inches in length. Antlerless deer could not be taken in DMUs 127, 066, 027, 131, 042, 036, and 031. Antler point restrictions did not apply in the core CWD surveillance area. <sup>b</sup>
Combination License <sup>d</sup> (Restricted harvest tag)	Archery seasons	Lower Peninsula (zones 2 and 3)	An antlerless deer or a deer that has at least 1 antler with 4 or more antler points, 1 or more inches in length. Antler point restrictions did not apply in the CWD management zone. <sup>e</sup>

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

<sup>b</sup>Core CWD area included Ionia, Kent, Mecosta, Montcalm, and Newaygo counties in the LP and portions of Delta, Dickinson, and Menominee counties in the UP.

<sup>c</sup>If a person took 2 antlered deer during all seasons combined (except youth and apprentice 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.

<sup>d</sup>Combination licenses included two harvest tags (i.e., regular and restricted harvest tags).

<sup>e</sup>CWD management zone included Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties.

<sup>f</sup>Hunters could harvest only 1 deer in the Liberty and Independence seasons.

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

Table 2 (continued). The types of deer that could be taken during the 2020 Michigan deer hunting seasons for each combination of season and hunting license.

Type of license (harvest tag) or permit	Season	Area	Type of deer that could be harvested <sup>a</sup>
Combination License <sup>d</sup> (Restricted harvest tag)	Firearm or Muzzleloader seasons	Upper Peninsula (Zone 1)	A deer that has at least 1 antler with 4 or more antler points (1 or more inches in length); Antler point restrictions do not apply in the core CWD surveillance area. <sup>b</sup>
Combination License <sup>d</sup> (Restricted harvest tag)	Firearm or Muzzleloader seasons	Lower Peninsula (zones 2 and 3)	An antlerless deer or a deer that has at least 1 antler with 4 or more antler points 1 or more inches in length. Antler point restrictions do not apply in the CWD management zone. <sup>e</sup>
Combination License <sup>d</sup> (Restricted harvest tag)	Liberty and Independence seasons <sup>c</sup>	Statewide	Antlerless or antlered deer statewide
Mentored youth deer license	Archery, Regular Firearm, Muzzleloader, or Liberty seasons <sup>c</sup>	Statewide	Antlerless or antlered deer statewide. Antler point restrictions do not apply.
Mentored Youth	Antlerless seasons	Statewide	Antlerless deer only
Antlerless License <sup>e</sup>	All seasons	Statewide	Antlerless deer only
Deer Management Assistance (DMA) permit <sup>f</sup>	All seasons	Statewide	Antlerless deer only
Managed Deer Hunt permit <sup>g</sup>	Specified season	Statewide	Antlerless deer only

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

<sup>b</sup>Core CWD area included Ionia, Kent, Mecosta, Montcalm, and Newaygo counties in the LP and portions of Delta, Dickinson, and Menominee counties in the UP.

<sup>c</sup>If a person took 2 antlered deer during all seasons combined (except youth and apprentice 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.

<sup>d</sup>Combination licenses included two harvest tags (i.e., regular and restricted harvest tags).

<sup>e</sup>CWD management zone included Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties.

<sup>f</sup>Hunters could harvest only 1 deer in the Liberty and Independence seasons.

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

Table 3. The number of Michigan deer licenses purchased and harvest tags issued, 2018-2020.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2019 and 2020 (%)
	2018	2019	2020	
<b>Deer Licenses</b>				
Resident	130,352	126,284	89,915	-28.8
Non-resident	14,103	14,593	11,864	-18.7
Junior	29,737	25,016	19,949	-20.3
Senior	35,404	34,779	31,272	-10.1
Lifetime	422	427	556	30.2
Active Military	362	361	244	-32.4
Disabled Veteran	531	527	2	-99.6
Subtotal	210,911	201,987	153,802	-23.9
<b>Combination Licenses<sup>a</sup></b>				
Resident	276,579	270,061	333,601	23.5
Non-resident	4,252	4,579	5,149	12.4
Junior	19,093	18,371	25,810	40.5
Senior	48,703	49,853	66,391	33.2
Lifetime	143	141	1,206	755.3
Active Military	4,494	4,164	4,242	1.9
Disabled Veteran	7,185	7,389	4	-99.9
Subtotal	360,449	354,558	436,403	23.1
<b>Antlerless Licenses</b>				
Resident	263,603	257,635	246,586	-4.3
Non-resident	5,337	5,750	6,312	9.8
Junior	16,627	15,798	13,639	-13.7
Senior	45,270	45,349	47,548	4.8
Lifetime	168	185	747	303.8
Active Military	4,587	4,340	4,230	-2.5
Pure Michigan Hunt	3	3	3	0.0
Disabled Veteran	7,553	7,819	15	-99.8
Deer Management Assistance	11,661	13,602	13,637	0.3
Managed Deer Hunt	685	658	599	-9.0
Subtotal	355,494	351,139	333,316	-5.1
<b>Mentored Youth Licenses</b>	11,361	10,142	12,020	18.5
<b>Total Licenses Sold</b>	<b>938,215</b>	<b>917,826</b>	<b>935,541</b>	<b>1.9</b>

<sup>a</sup>Combination licenses included two harvest tags. Other license types had one harvest tag.

Table 3 (continued). The number of Michigan deer licenses purchased and harvest tags issued, 2018-2020.

Licenses or Harvest Tags	Number Purchased or Issued			Change Between 2019 and 2020 (%)
	2018	2019	2020	
Harvest Tags Issued				
Deer <sup>a</sup>	210,911	201,987	153,802	-23.9
Combination <sup>b</sup>	720,898	709,116	872,806	23.1
Antlerless	355,494	351,139	333,316	-5.1
Mentored Youth <sup>b</sup>	11,361	10,142	12,020	18.5
<b>Total Harvest Tags</b>	<b>1,298,664</b>	<b>1,272,384</b>	<b>1,371,944</b>	<b>7.8</b>

<sup>a</sup>Combination licenses included two harvest tags. Other license types had one harvest tag.



Table 4. Number of deer hunters and hunting effort in Michigan by hunting season, 2019-2020.

Season and Area	Number of hunters <sup>a</sup>				Hunting effort (days)			
	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)
<b>Archery</b>								
West UP	18,687	22,227	1,499	18.9*	194,000	257,212	23,134	32.6*
East UP	5,073	6,327	816	24.7	47,117	67,721	11,534	43.7*
NE LP	44,486	46,867	2,149	5.4	447,058	495,914	31,950	10.9
NW LP	60,617	64,527	2,476	6.5	706,949	781,907	41,724	10.6
Sag. Bay	50,290	56,063	2,313	11.5*	587,618	702,243	40,642	19.5*
SW LP	50,149	55,906	2,314	11.5*	618,338	713,945	39,718	15.5*
SC LP	56,962	63,584	2,449	11.6*	699,399	816,297	44,923	16.7*
SE LP	32,037	33,750	1,844	5.3	371,347	388,825	28,821	4.7
UP	23,582	28,331	2,502	20.1	241,117	324,932	25,850	34.8*
NLP	119,339	126,158	3,775	5.7	1,330,078	1,471,249	56,486	10.6*
SLP	167,690	186,048	3,783	10.9*	2,100,631	2,427,882	75,160	15.6*
Statewide <sup>c</sup>	292,367	322,312	3,922	10.2*	3,671,826	4,224,063	98,134	15.0*
<b>Regular Firearm</b>								
West UP	55,790	54,562	2,264	-2.2	382,330	401,410	20,168	5.0
East UP	15,617	14,721	1,239	-5.7	94,417	99,472	9,664	5.4
NE LP	88,081	87,325	2,806	-0.9	508,509	531,736	21,794	4.6
NW LP	93,951	95,215	2,921	1.3	540,341	580,387	22,617	7.4
Sag. Bay	75,719	75,989	2,645	0.4	432,751	461,638	20,428	6.7
SW LP	65,039	69,929	2,553	7.5	383,967	429,233	19,845	11.8*
SC LP	80,064	83,204	2,746	3.9	462,636	498,937	21,056	7.8
SE LP	31,434	33,585	1,839	6.8	173,980	193,145	12,956	11.0
UP	71,141	68,938	1,682	-3.1	476,747	500,882	22,364	5.1
NLP	203,345	202,671	3,261	-0.3	1,186,835	1,248,740	33,246	5.2
SLP	223,174	234,135	3,612	4.9*	1,315,348	1,446,334	36,105	10.0*
Statewide <sup>c</sup>	475,038	488,422	2,990	2.8*	2,978,931	3,195,957	54,460	7.3*

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Number of hunters does not add up to statewide total because hunters can hunt in more than one area.

Table 4 (continued). Number of deer hunters and hunting effort in Michigan by hunting season, 2019-2020.

Season and Area	Number of hunters <sup>a</sup>				Hunting effort (days)			
	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)
<b>Muzzleloader</b>								
West UP	7,840	13,635	1,193	73.9*	34,352	67,029	6,462	95.1*
East UP	3,071	3,573	611	16.3	14,624	19,685	3,691	34.6
NE LP	14,360	17,630	1,356	22.8*	60,837	74,508	6,490	22.5*
NW LP	18,667	23,507	1,555	25.9*	74,696	95,724	7,290	28.2*
Sag. Bay	21,778	24,298	1,580	11.6	94,285	98,470	7,628	4.4
SW LP	25,247	29,299	1,725	16.0*	122,553	117,584	8,160	-4.1
SC LP	30,255	33,611	1,840	11.1	140,848	136,193	8,815	-3.3
SE LP	13,412	14,925	1,253	11.3	65,307	59,210	5,768	-9.3
UP	10,881	17,201	1,332	58.1*	48,976	86,714	7,442	77.1*
NLP	37,959	46,762	2,151	23.2*	154,504	194,643	10,448	26.0*
SLP	83,709	94,144	2,875	12.5*	404,021	387,046	14,895	-4.2
Statewide <sup>c</sup>	130,593	159,240	3,506	21.9*	607,500	668,403	19,962	10.0*
<b>Early Antlerless</b>								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	1,554	3,131	564	101.5*	2,383	4,521	877	89.7*
NW LP	2,482	4,523	663	82.2*	3,428	6,331	986	84.7*
Sag. Bay	2,521	4,328	643	71.7*	3,413	5,905	980	73.0*
SW LP	742	3,402	573	358.7*	1,005	4,156	769	313.7*
SC LP	2,983	4,668	678	56.5*	4,286	6,332	1,009	47.7*
SE LP	2,035	2,557	499	25.6	2,701	3,566	786	32.0
UP	0	0	0		0	0	0	
NLP	4,861	8,671	918	78.4*	6,944	12,239	1,400	76.3*
SLP	7,407	13,879	1,143	87.4*	10,271	18,572	1,723	80.8*
Statewide <sup>c</sup>	12,403	23,804	918	91.9*	17,215	30,811	2,252	79.0*

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Number of hunters does not add up to the statewide total because hunters can hunt in more than one area.

Table 4 (continued). The number of deer hunters and hunting efforts in Michigan by hunting season, 2019-2020.

Season and Area	Number of hunters <sup>a</sup>				Hunting effort (days)			
	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)
<b>Late Antlerless</b>								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	4,249	8,636	953	103.2*	15,056	38,403	5,481	155.1*
NW LP	8,120	15,583	1,268	91.9*	25,017	66,001	7,133	163.8*
Sag. Bay	9,617	16,342	1,295	69.9*	28,125	64,999	6,930	131.1*
SW LP	10,846	19,476	1,414	79.6*	33,078	81,874	7,781	147.5*
SC LP	15,100	23,763	1,555	57.4*	46,068	98,952	8,647	114.8*
SE LP	5,808	8,772	963	51.0*	19,794	36,612	5,195	85.0*
UP	0	0	0		0	0	0	
NLP	14,420	27,812	1,674	92.9*	46,448	117,812	9,453	153.6*
SLP	38,867	63,503	2,412	63.4*	120,691	269,030	14,209	122.9*
Statewide <sup>c</sup>	53,443	93,171	2,814	74.3*	167,139	386,842	17,279	131.4*
<b>Liberty/Youth<sup>d</sup></b>								
West UP	1,569	1,823	278	16.2	2,477	2,729	435	10.2
East UP	346	337	96	-2.5	577	542	165	-6.1
NE LP	2,717	3,132	366	15.3	4,410	4,760	613	7.9
NW LP	5,292	6,370	529	20.4	8,083	9,503	837	17.6
Sag. Bay	5,208	6,068	497	16.5	8,178	8,912	805	9.0
SW LP	4,000	3,975	414	-0.6	5,948	5,546	633	-6.8
SC LP	4,421	5,409	469	22.3*	6,726	7,797	717	15.9
SE LP	2,437	2,362	332	-3.1	3,651	3,391	497	-7.1
UP	1,915	2,161	293	12.8	3,054	3,271	465	7.1
NLP	9,461	11,130	665	17.6*	14,660	16,701	1,121	13.9
SLP	14,511	16,057	757	10.6*	22,336	23,208	1,276	3.9
Statewide <sup>c</sup>	26,059	30,187	939	15.8*	40,051	43,180	1,768	7.8

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Number of hunters does not add up to the statewide total because hunters can hunt in more than one area.

<sup>d</sup>Estimates included results of both youth and disabled hunters.

Table 4 (continued). The number of deer hunters and hunting efforts in Michigan by hunting season, 2019-2020.

Season and Area	Number of hunters <sup>a</sup>				Hunting effort (days)			
	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)
<b>Independence</b>								
West UP	149	150	25	0.3	390	408	75	4.8
East UP	47	59	16	24.5	115	168	49	46.2
NE LP	290	345	92	19.0	782	731	244	-6.5
NW LP	523	689	158	31.8	1,188	1,349	247	13.6
Sag. Bay	441	500	169	13.5	784	839	334	7.0
SW LP	171	540	200	217.0*	353	749	345	112.4
SC LP	353	468	140	32.5	749	792	219	5.8
SE LP	155	290	113	87.4	342	710	347	108.0
UP	197	209	30	6.1	504	576	90	14.3
NLP	993	1,261	225	27.0	2,332	2,476	423	6.2
SLP	939	1,565	289	66.7*	1,865	2,694	584	44.5
Statewide <sup>c</sup>	2,144	3,390	403	58.1*	4,701	5,747	727	22.2
<b>Urban Archery</b>								
West UP	0	0	0		0	0	0	
East UP	0	0	0		0	0	0	
NE LP	0	0	0		0	0	0	
NW LP	0	0	0		0	0	0	
Sag. Bay	0	0	0		0	0	0	
SW LP	0	0	0		0	0	0	
SC LP	0	0	0		0	0	0	
SE LP	3,330	2,372	505	-28.8	16,157	12,189	3,351	-24.6
UP	0	0	0		0	0	0	
NLP	0	0	0		0	0	0	
SLP	3,330	2,372	505	-28.8	16,157	12,189	3,351	-24.6
Statewide <sup>c</sup>	3,330	2,372	505	-28.8	16,157	12,189	3,372	-24.6

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Number of hunters does not add up to the statewide total because hunters can hunt in more than one area.

Table 4 (continued). The number of deer hunters and hunting efforts in Michigan by hunting season, 2019-2020.

Season and Area	Number of hunters <sup>a</sup>				Hunting effort (days)			
	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019	2020	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)
All Seasons								
West UP	61,924	61,452	2,376	-0.8	613,513	728,550	40,260	18.8*
East UP	17,750	17,167	1,333	-3.3	156,827	187,509	19,937	19.6
NE LP	100,547	100,766	2,962	0.2	1,040,450	1,150,516	52,579	10.6*
NW LP	111,126	114,072	3,118	2.7	1,359,921	1,541,579	64,587	13.4*
Sag. Bay	90,513	93,621	2,864	3.4	1,155,265	1,343,221	62,805	16.3*
SW LP	81,619	89,235	2,815	9.3*	1,165,358	1,353,010	61,980	16.1*
SC LP	98,412	105,159	3,003	6.9*	1,360,806	1,565,122	69,055	15.0*
SE LP	46,087	49,032	2,176	6.4	652,730	697,685	44,617	6.9
UP	79,191	78,142	2,629	-1.3	770,340	916,059	44,926	18.9*
NLP	234,728	236,906	3,890	0.9	2,743,486	3,064,303	89,224	11.7*
SLP	276,832	296,193	3,851	7.0*	3,991,044	4,586,829	116,276	14.9*
Statewide <sup>c</sup>	540,174	565,132	1,819	4.6*	7,504,870	8,567,192	154,484	14.2*

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Number of hunters does not add up to the statewide total because hunters can hunt in more than one area.

Table 5. The mean number of days hunters spent hunting deer ( $\bar{x}$  hunting effort) in Michigan by hunting season, 2020.<sup>a</sup>

Area	Season							
	Archery		Regular Firearm		Muzzleloader		Early Antlerless	
	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>
West UP	11.7	0.7	7.4	0.2	4.9	0.2	0.0	0.0
East UP	10.6	1.3	6.8	0.3	5.4	0.5	0.0	0.0
NE LP	10.6	0.5	6.1	0.1	4.2	0.2	1.6	0.1
NW LP	12.3	0.5	6.1	0.1	4.1	0.2	1.5	0.1
Sag. Bay	12.7	0.5	6.1	0.2	4.1	0.2	1.5	0.1
SW LP	12.9	0.5	6.2	0.2	4.0	0.2	1.3	0.1
SC LP	13.0	0.5	6.1	0.1	4.1	0.1	1.5	0.1
SE LP	11.8	0.6	5.9	0.2	4.1	0.2	1.5	0.2
UP	11.5	0.6	7.3	0.2	5.0	0.2	0.0	0.0
NLP	11.8	0.3	6.2	0.1	4.2	0.1	1.5	0.1
SLP	13.2	0.3	6.3	0.1	4.1	0.1	1.5	0.1
Statewide	13.5	0.2	6.7	0.1	4.4	0.1	1.5	<0.1

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit.

Table 5 (continued). The mean number of days hunters spent hunting deer ( $\bar{x}$  hunting effort) in Michigan by hunting season, 2020.<sup>a</sup>

Area	Season							
	Late Antlerless		Liberty (Youth)		Independence		Urban Archery	
	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>	$\bar{x}$ days	95% CL <sup>b</sup>
West UP	0.0	0.0	1.5	0.1	2.8	0.2	0.0	0.0
East UP	0.0	0.0	1.7	0.1	2.9	0.3	0.0	0.0
NE LP	4.6	0.4	1.6	<0.1	2.6	0.3	0.0	0.0
NW LP	4.6	0.3	1.5	<0.1	2.2	0.2	0.0	0.0
Sag. Bay	4.3	0.3	1.5	<0.1	2.2	0.4	0.0	0.0
SW LP	4.5	0.3	1.5	0.1	2.4	0.4	0.0	0.0
SC LP	4.5	0.3	1.5	<0.1	2.2	0.3	0.0	0.0
SE LP	4.5	0.4	1.5	0.1	2.7	0.8	5.5	0.9
UP	0.0	0.0	1.5	0.1	2.8	0.2	0.0	0.0
NLP	4.5	0.2	1.6	<0.1	2.3	0.2	0.0	0.0
SLP	4.6	0.2	1.5	<0.1	2.4	0.3	5.5	0.9
Statewide	4.7	0.1	1.5	<0.1	2.4	0.1	5.4	0.9

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit.

Table 5 (continued). The mean number of days hunters spent hunting deer ( $\bar{x}$  hunting effort) in Michigan by hunting season, 2020.<sup>a</sup>

Area	Season	
	$\bar{x}$ days	95% CL <sup>b</sup>
	All Seasons	
West UP	11.9	0.5
East UP	11.0	0.8
NE LP	11.5	0.4
NW LP	13.6	0.4
Sag. Bay	14.6	0.5
SW LP	15.3	0.5
SC LP	15.1	0.5
SE LP	14.5	0.7
UP	11.7	0.4
NLP	13.0	0.3
SLP	15.7	0.3
Statewide	15.6	0.2

<sup>a</sup>Excluded people that did not hunt during the season.

<sup>b</sup>95 confidence limit.

Table 6. The number of deer harvested in Michigan, 2018-2020.

Season or permit	Type of deer	2018	2019	2020	Change from 2019 to 2020 (%)
<b>Season</b>					
Archery	Antlerless	43,235	43,868	51,408	17.2*
	Antlered bucks	68,382	70,917	85,091	20.0*
	Sexes combined	111,617	114,785	136,498	18.9*
Regular firearm	Antlerless	65,824	70,782	79,827	12.8*
	Antlered bucks	126,396	123,813	118,472	-4.3
	Sexes combined	192,221	194,594	198,299	1.9
Muzzleloader	Antlerless	15,339	15,674	16,726	6.7
	Antlered bucks	9,915	10,591	8,534	-19.4*
	Sexes combined	25,254	26,265	25,261	-3.8
Early antlerless	Antlerless	4,523	2,736	8,382	206.3*
Late antlerless	Antlerless	16,167	15,667	31,253	99.5*
Liberty/Youth <sup>a,b</sup>	Antlerless	3,308	2,966	3,244	9.4
	Antlered bucks	6,753	5,544	6,682	20.5*
	Sexes combined	10,062	8,510	9,926	16.6*
Independence <sup>b</sup>	Antlerless	194	286	211	-26.2
	Antlered bucks	280	336	370	10.1
	Sexes combined	474	622	581	-6.6
Urban Archery	Antlerless	295	384	201	-47.7
	Antlered bucks	27	26	114	332.6
	Sexes combined	322	410	314	-23.4
Disease Hunt	Antlerless	26	88	0	-100.0
	Antlered bucks	0	0	0	
	Sexes combined	26	88	0	-100.0
Special permits <sup>c</sup>	Antlerless	6,986	7,270	9,557	31.5
Grand Total	Antlerless	155,898	159,721	200,809	25.7*
	Antlered bucks	211,754	211,228	219,262	3.8
	Sexes combined	367,652	370,948	420,071	13.2*

<sup>a</sup>Estimates for the Liberty hunt included results of both youth and hunters with disabilities.

<sup>b</sup>Hunters with disabilities could hunt in both the Liberty and Independence seasons.

<sup>c</sup>Includes deer harvested with DMA permits. These permits could be used during any deer hunting season.

\*P<0.05.



Table 7. The number of deer harvested in Michigan by hunting season, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
<b>Archery</b>												
West UP	1,629	2,725	563	67.2*	4,022	4,238	687	5.4	5,653	6,963	945	23.2
East UP	85	808	313	847.2*	826	558	236	-32.5	912	1,366	400	49.8
NE LP	5,554	5,933	865	6.8	7,217	6,729	873	-6.8	12,769	12,664	1,323	-0.8
NW LP	8,798	10,064	1,159	14.4	11,470	12,292	1,185	7.2	20,265	22,359	1,807	10.3
Sag. Bay	7,010	9,122	1,137	30.1*	10,772	15,951	1,372	48.1*	17,781	25,073	1,940	41.0*
SW LP	7,798	9,871	1,207	26.6	13,997	16,855	1,423	20.4*	21,797	26,726	2,040	22.6*
SC LP	9,256	9,004	1,131	-2.7	15,817	20,519	1,608	29.7*	25,075	29,518	2,109	17.7*
SE LP	3,736	3,880	664	3.9	6,796	7,949	972	17.0	10,532	11,828	1,284	12.3
UP	1,715	3,533	644	106.0*	4,848	4,795	726	-1.1	6,566	8,329	1,026	26.9
NLP	16,759	18,384	1,540	9.7	21,518	22,781	1,616	5.9	38,269	41,170	2,416	7.6
SLP	25,394	29,491	2,047	16.1*	44,551	57,515	2,645	29.1*	69,950	86,999	3,634	24.4*
Statewide	43,868	51,408	2,650	17.2*	70,917	85,091	3,198	20.0*	114,785	136,498	4,498	18.9*
<b>Regular Firearm</b>												
West UP	3,124	2,476	556	-20.7	15,856	14,393	1,246	-9.2	18,977	16,865	1,420	-11.1
East UP	30	85	121	184.0	3,386	2,577	508	-23.9	3,416	2,661	522	-22.1
NE LP	11,809	11,208	1,182	-5.1	18,537	15,412	1,313	-16.9*	30,347	26,620	1,870	-12.3
NW LP	14,905	18,963	1,652	27.2*	19,072	17,731	1,412	-7.0	33,979	36,699	2,300	8.0
Sag. Bay	12,425	13,441	1,314	8.2	20,007	20,062	1,504	0.3	32,432	33,503	2,154	3.3
SW LP	9,691	12,329	1,333	27.2	18,214	18,337	1,443	0.7	27,904	30,667	2,115	9.9
SC LP	15,289	17,178	1,595	12.4	21,864	23,258	1,639	6.4	37,154	40,437	2,477	8.8
SE LP	3,509	4,146	794	18.2	6,877	6,702	853	-2.5	10,385	10,848	1,245	4.4
UP	3,154	2,561	569	-18.8	19,242	16,970	1,345	-11.8	22,393	19,526	1,513	-12.8
NLP	30,675	33,605	2,128	9.6	42,778	37,921	2,061	-11.4*	73,455	71,531	3,137	-2.6
SLP	36,953	43,661	2,505	18.2*	61,792	63,580	2,689	2.9	98,746	107,242	3,968	8.6*
Statewide	70,782	79,827	3,354	12.8*	123,813	118,472	3,668	-4.3	194,594	198,299	5,309	1.9

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
<b>Muzzleloader</b>												
West UP	743	370	219	-50.2	808	702	261	-13.1	1,551	1,073	341	-30.8
East UP	28	33	54	16.6	449	72	78	-83.8*	478	106	95	-77.9*
NE LP	989	1,420	397	43.7	796	664	257	-16.6	1,785	2,084	479	16.8
NW LP	2,618	2,528	529	-3.5	711	643	248	-9.5	3,326	3,169	584	-4.7
Sag. Bay	2,868	3,039	584	6.0	1,886	1,071	342	-43.2*	4,753	4,109	690	-13.6
SW LP	3,106	3,779	684	21.7	2,379	2,275	499	-4.4	5,486	6,056	878	10.4
SC LP	4,260	4,164	745	-2.3	2,654	2,121	471	-20.1	6,913	6,285	888	-9.1
SE LP	1,062	1,393	415	31.2	909	985	315	8.4	1,972	2,380	526	20.7
UP	771	403	225	-47.8	1,256	774	273	-38.4	2,029	1,179	354	-41.9*
NLP	4,190	4,597	712	9.7	1,792	1,447	374	-19.2	5,978	6,042	808	1.1
SLP	10,714	11,727	1,211	9.5	7,543	6,313	822	-16.3	18,258	18,040	1,494	-1.2
Statewide	15,674	16,726	1,442	6.7	10,591	8,534	953	-19.4*	26,265	25,261	1,759	-3.8
<b>Early Antlerless</b>												
West UP	0	0	0		0	0	0	0	0	0	0	
East UP	0	0	0		0	0	0	0	0	0	0	
NE LP	420	1,200	360	185.8*	0	0	0	0	420	1,200	360	185.8*
NW LP	576	1,943	498	237.4*	0	0	0	0	576	1,943	498	237.4*
Sag. Bay	457	1,364	392	198.7*	0	0	0	0	457	1,364	392	198.7*
SW LP	200	1,163	372	481.7*						1,163	372	481.7*
SC LP	679	2,083	517	206.7*	0	0	0	0	679	2,083	517	206.7*
SE LP	405	630	245	55.5	0	0	0	0	405	630	245	55.5
UP	0	0	0		0	0	0	0	0	0	0	
NLP	1,154	3,380	628	192.9*	0	0	0	0	1,154	3,380	628	192.9*
SLP	1,583	5,002	776	216.1*	0	0	0	0	1,583	5,002	776	216.1*
Statewide	2,736	8,382	1,005	206.3*	0	0	0	0	2,736	8,382	1,005	206.3*

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
<b>Late Antlerless</b>												
West UP	0	0	0		0	0	0		0	0	0	
East UP	0	0	0		0	0	0		0	0	0	
NE LP	1,282	2,655	579	107.1*	0	28	54		1,282	2,684	581	109.3*
NW LP	2,764	5,593	845	102.3*	0	0	0		2,764	5,592	845	102.3*
Sag. Bay	2,932	6,191	899	111.2*	0	9	16		2,932	6,199	899	111.4*
SW LP	2,962	5,973	917	101.7*	0	31	55		2,962	6,004	919	102.7*
SC LP	4,526	8,722	1,091	92.7*	0	28	54		4,526	8,750	1,092	93.3*
SE LP	1,200	2,119	502	76.6*	0	29	55		1,200	2,148	505	79.1*
UP	0	0	0		0	0	0		0	0	0	
NLP	4,528	9,708	1,112	114.4*	0	28	54		4,528	9,736	1,113	115.0*
SLP	11,139	21,545	1,704	93.4*	0	96	97		11,139	21,642	1,707	94.3*
Statewide	15,667	31,253	2,098	99.5*	0	124	111		15,667	31,378	2,101	100.3*
<b>Liberty (Youth)<sup>c</sup></b>												
West UP	198	273	100	38.3	348	397	116	14.2	546	670	153	22.9
East UP	17	20	23	16.3	64	39	33	-38.2	81	59	40	-26.8
NE LP	309	327	95	5.7	429	551	141	28.3	738	877	169	18.9
NW LP	724	861	182	19.0	1,115	1,412	209	26.7	1,837	2,273	277	23.7
Sag. Bay	534	577	144	8.1	1,338	1,551	235	15.9	1,873	2,128	275	13.6
SW LP	467	462	123	-1.0	661	812	179	22.9	1,127	1,274	218	13.1
SC LP	458	607	148	32.3	1,097	1,396	221	27.3	1,557	2,003	265	28.7
SE LP	259	118	56	-54.5	493	523	153	6.0	752	641	163	-14.8
UP	215	293	103	36.5	412	437	120	6.1	626	729	158	16.5
NLP	1,241	1,368	217	10.2	1,920	2,396	291	24.8	3,160	3,764	363	19.1
SLP	1,510	1,583	236	4.8	3,213	3,849	372	19.8	4,724	5,432	440	15.0
Statewide	2,966	3,244	342	9.4	5,544	6,682	492	20.5*	8,510	9,926	599	16.6*

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

<sup>c</sup>Estimates included results of both youth and hunters with disabilities.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
<b>Independence</b>												
West UP	40	24	10	-40.1	32	19	9	-41.0	72	43	13	-40.0
East UP	0	2	3		13	0	0	-100.0	13	2	3	-83.8*
NE LP	53	42	14	-21.6	59	38	13	-36.5	112	80	19	-28.9
NW LP	90	54	22	-39.7	64	91	28	41.8	155	146	36	-5.9
Sag. Bay	47	28	11	-41.0	78	80	57	2.4	125	107	58	-14.3
SW LP	22	6	5	-72.9	20	29	11	45.8	42	35	12	-17.1
SC LP	25	35	19	37.7	38	58	16	53.6	63	93	25	47.4
SE LP	8	21	18	146.7	32	55	55	72.0	40	75	58	87.3
UP	40	26	10	-35.1	45	19	9	-57.8	84	45	13	-46.5
NLP	164	104	26	-36.7	155	141	32	-9.0	320	246	41	-23.1
SLP	82	81	28	-0.7	136	210	81	54.0	218	290	86	33.1
Statewide	286	211	40	-26.2	336	370	88	10.1	622	581	97	-6.6
<b>Urban Archery</b>												
West UP	0	0	0		0	0	0		0	0	0	
East UP	0	0	0		0	0	0		0	0	0	
NE LP	0	0	0		0	0	0		0	0	0	
NW LP	0	0	0		0	0	0		0	0	0	
Sag. Bay	0	0	0		0	0	0		0	0	0	
SW LP	0	0	0		0	0	0		0	0	0	
SC LP	0	0	0		0	0	0		0	0	0	
SE LP	384	201	145	-47.7	26	114	95	332.6	410	314	190	-23.4
UP	0	0	0		0	0	0		0	0	0	
NLP	0	0	0		0	0	0		0	0	0	
SLP	384	201	145	-47.7	26	114	95	332.6	410	314	190	-23.4
Statewide	384	201	145	-47.7	26	114	109	332.6	410	314	198	-23.4

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
All Seasons												
West UP	5,733	5,899	848	2.9	21,063	19,742	1,505	-6.3	26,807	25,665	1,835	-4.3
East UP	160	955	341	495.9*	4,735	3,245	566	-31.5*	4,899	4,204	666	-14.2
NE LP	20,520	22,817	1,825	11.2	27,038	23,419	1,654	-13.4*	47,557	46,232	2,668	-2.8
NW LP	30,481	40,040	2,593	31.4*	32,437	32,178	1,968	-0.8	62,910	72,192	3,601	14.8*
Sag. Bay	26,271	33,744	2,437	28.4*	34,080	38,735	2,197	13.7*	60,349	72,479	3,692	20.1*
SW LP	24,235	33,563	2,595	38.5*	35,270	38,344	2,234	8.7	59,507	71,907	3,891	20.8*
SC LP	34,488	41,728	2,777	21.0*	41,470	47,392	2,505	14.3*	75,953	89,119	4,216	17.3*
SE LP	10,562	12,506	1,385	18.4	15,133	16,331	1,437	7.9	25,696	28,841	2,255	12.2
UP	5,893	6,854	914	16.3	25,798	22,987	1,608	-10.9	31,706	29,869	1,952	-5.8
NLP	58,821	71,213	3,367	21.1*	68,168	64,725	2,769	-5.1	126,978	135,906	4,789	7.0
SLP	87,737	113,185	4,585	29.0*	117,261	131,674	4,135	12.3*	204,994	244,863	6,984	19.4*
Statewide	152,451	191,252	5,819	25.5*	211,228	219,387	5,260	3.9	363,678	410,639	8,753	12.9*

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

Table 8. The number of deer harvested on public and private lands during all seasons combined in Michigan by management region, 2019-2020.<sup>a</sup>

Season and Area	Antlerless				Antlered Bucks				Sexes Combined			
	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020 (%)	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020	2019 Harvest	2020 Harvest	95% CL <sup>b</sup>	Change from 2019 to 2020
<b>Public Lands</b>												
West UP	1,168	1,315	406	12.6	5,549	5,166	775	-6.9	6,720	6,488	908	-3.5
East UP	30	207	144	590.7	1,003	871	297	-13.2	1,034	1,079	330	4.4
NE LP	5,643	5,147	815	-8.8	5,661	4,517	708	-20.2	11,302	9,663	1,144	-14.5
NW LP	3,973	6,819	947	71.6*	6,014	4,968	764	-17.4	9,987	11,783	1,300	18.0
Sag. Bay	2,087	3,178	658	52.3	2,486	2,630	554	5.8	4,573	5,807	945	27.0
SW LP	1,236	2,160	533	74.7	1,933	1,669	464	-13.6	3,169	3,828	781	20.8
SC LP	1,889	2,576	591	36.3	1,732	2,679	588	54.7	3,620	5,255	914	45.2*
SE LP	814	1,171	454	43.9	911	1,061	348	16.5	1,725	2,232	661	29.4
UP	1,198	1,523	430	27.1	6,552	6,037	830	-7.9	7,754	7,567	966	-2.4
NLP	10,598	12,879	1,289	21.5	12,726	10,584	1,097	-16.8	23,321	23,458	1,804	0.6
SLP	5,046	8,171	1,083	61.9*	6,010	6,941	933	15.5	11,054	15,110	1,588	36.7*
Statewide	16,842	22,573	1,744	34.0*	25,288	23,562	1,667	-6.8	42,130	46,135	2,599	9.5
<b>Private Lands</b>												
West UP	4,563	4,580	737	0.4	15,506	14,560	1,281	-6.1	20,077	19,158	1,572	-4.6
East UP	130	747	309	473.8*	3,731	2,372	482	-36.4*	3,864	3,121	579	-19.2
NE LP	14,869	17,656	1,606	18.7	21,370	18,892	1,491	-11.6	36,240	36,544	2,380	0.8
NW LP	26,506	33,208	2,375	25.3*	26,417	27,202	1,810	3.0	52,915	60,388	3,301	14.1*
Sag. Bay	24,186	30,570	2,339	26.4*	31,599	36,113	2,124	14.3	55,783	66,685	3,544	19.5*
SW LP	23,002	31,414	2,535	36.6*	33,344	36,688	2,183	10.0	56,348	68,103	3,799	20.9*
SC LP	32,603	39,167	2,697	20.1*	39,748	44,725	2,434	12.5*	72,347	83,890	4,085	16.0*
SE LP	9,749	11,337	1,293	16.3	14,225	15,273	1,394	7.4	23,975	26,614	2,139	11.0
UP	4,693	5,327	799	13.5	19,237	16,932	1,368	-12.0	23,941	22,279	1,675	-6.9
NLP	48,213	58,306	3,065	20.9*	55,429	54,122	2,537	-2.4	103,632	112,402	4,372	8.5*
SLP	82,703	105,046	4,434	27.0*	111,274	124,771	4,026	12.1*	193,975	229,822	6,761	18.5*
Statewide	135,609	168,679	5,507	24.4*	185,940	195,825	4,981	5.3*	321,548	364,504	8,287	13.4*

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>95 confidence limit for the 2020 estimate. \*P<0.05.

Table 9. The percentage of deer hunters harvesting deer in Michigan during all seasons, 2020.<sup>a</sup>

Sex and Area	Number of deer harvested									
	≥1 deer		≥2 deer		≥3 deer		≥4 deer		≥5 deer	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
<b>Antlerless</b>										
West UP	8.8	1.2	1.1	0.4	0.1	0.1	0.1	0.1	0.0	0.0
East UP	5.2	1.7	0.4	0.5	0.2	0.3	0.0	0.0	0.0	0.0
NE LP	19.0	1.3	3.6	0.6	0.6	0.3	0.2	0.2	0.1	0.1
NW LP	26.9	1.3	6.8	0.8	1.9	0.4	0.6	0.2	0.2	0.1
Sag. Bay	27.5	1.5	7.0	0.9	2.1	0.5	0.6	0.3	0.2	0.2
SW LP	28.0	1.5	7.3	0.9	1.8	0.5	0.8	0.3	0.5	0.3
SC LP	29.1	1.4	8.3	0.9	2.4	0.5	0.9	0.3	0.4	0.2
SE LP	21.3	1.9	4.0	0.9	0.9	0.4	0.3	0.3	0.1	0.2
UP	8.1	1.0	1.0	0.4	0.1	0.1	0.0	0.1	0.0	0.0
NLP	23.9	0.9	5.4	0.5	1.4	0.2	0.5	0.1	0.2	0.1
SLP	28.4	0.8	7.7	0.5	2.2	0.3	0.8	0.2	0.4	0.1
Statewide <sup>d</sup>	25.9	0.6	6.8	0.3	1.8	0.2	0.7	0.1	0.3	0.1
<b>Antlered bucks<sup>c</sup></b>										
West UP	30.6	1.9	3.1	0.7						
East UP	19.8	3.1	0.0	0.0						
NE LP	22.1	1.4	2.3	0.5						
NW LP	25.8	1.3	3.9	0.6						
Sag. Bay	36.8	1.6	6.6	0.8						
SW LP	37.7	1.7	7.4	0.9						
SC LP	38.7	1.5	8.6	0.9						
SE LP	30.0	2.1	5.0	1.0						
UP	28.4	1.7	2.5	0.6						
NLP	25.4	0.9	3.3	0.4						
SLP	38.7	0.9	8.0	0.5						
Statewide <sup>d</sup>	34.9	0.6	6.3	0.3						

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

<sup>c</sup>The season bag limit for antlered deer was two.

<sup>d</sup>The statewide estimate was derived from all hunters, including hunters that had failed to report where they hunted. In contrast, regional estimates were derived from only hunters that had reported hunting in the area.

Table 9 (continued). The percentage of deer hunters harvesting deer in Michigan during all seasons, 2020.<sup>a</sup>

Sex and Area	Number of deer harvested									
	≥1 deer		≥2 deer		≥3 deer		≥4 deer		≥5 deer	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
Sexes Combined										
West UP	36.6	2.0	6.2	1.0	0.8	0.4	0.3	0.2	0.0	0.0
East UP	24.6	3.4	0.9	0.7	0.2	0.3	0.0	0.0	0.1	0.1
NE LP	36.9	1.6	8.8	0.9	1.6	0.4	0.4	0.2	0.2	0.2
NW LP	45.1	1.5	15.7	1.1	3.6	0.6	1.2	0.3	0.2	0.2
Sag. Bay	53.7	1.7	19.7	1.3	5.2	0.8	1.5	0.4	0.3	0.3
SW LP	54.8	1.7	19.9	1.4	5.6	0.8	1.8	0.5	0.3	0.3
SC LP	56.3	1.6	22.3	1.3	6.5	0.8	2.2	0.5	0.3	0.3
SE LP	44.0	2.3	13.1	1.6	3.4	0.9	0.5	0.3	0.5	0.5
UP	34.2	1.7	5.0	0.8	0.6	0.3	0.2	0.2	0.1	0.1
NLP	42.8	1.0	13.1	0.7	2.8	0.3	0.9	0.2	0.2	0.2
SLP	55.7	0.9	21.1	0.8	6.2	0.4	2.0	0.3	0.5	0.5
Statewide <sup>d</sup>	51.2	0.7	18.3	0.5	4.8	0.3	1.5	0.2	0.6	0.1

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

<sup>c</sup>The season bag limit for antlered deer was two.

<sup>d</sup>The statewide estimate was derived from all hunters, including hunters that had failed to report where they hunted. In contrast, regional estimates were derived from only hunters that had reported hunting in the area.



Table 10. The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2020.<sup>a</sup>

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Liberty (Youth)	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
<b>Antlerless</b>												
West UP	11.8	2.2	4.3	0.9	2.4	1.3	0.0	0.0	0.0	0.0	15.7	5.4
East UP	12.4	4.3	0.4	0.6	1.0	1.6	0.0	0.0	0.0	0.0	6.1	7.0
NE LP	11.8	1.6	12.0	1.1	7.8	2.1	37.9	8.8	27.6	5.0	10.9	3.1
NW LP	13.9	1.4	17.5	1.3	10.6	2.1	38.1	7.2	32.1	3.9	14.1	2.8
Sag. Bay	14.5	1.5	16.2	1.4	12.0	2.2	30.7	7.0	32.7	3.8	10.0	2.4
SW LP	15.4	1.6	15.7	1.4	11.8	2.0	32.0	8.1	26.1	3.3	12.2	3.2
SC LP	12.1	1.3	17.6	1.4	11.2	1.8	40.3	7.3	31.9	3.1	11.7	2.8
SE LP	11.3	1.8	10.9	1.8	8.8	2.4	25.7	8.7	22.7	4.7	5.2	2.5
UP	12.0	2.0	3.5	0.7	2.1	1.1	0.0	0.0	0.0	0.0	14.2	4.7
NLP	13.3	1.0	15.0	0.8	9.6	1.4	36.4	5.2	31.1	2.9	12.9	2.0
SLP	13.8	0.8	16.3	0.8	11.5	1.1	33.9	4.1	29.4	1.9	10.3	1.5
Statewide	14.2	0.6	14.6	0.5	10.1	0.8	33.6	3.1	30.1	1.6	11.4	1.1
<b>Antlered Bucks</b>												
West UP	18.7	2.7	26.4	2.0	5.3	2.0	0.0	0.0	0.0	0.0	22.9	6.1
East UP	9.3	3.8	18.4	3.3	2.1	2.3	0.0	0.0	0.0	0.0	12.2	9.6
NE LP	14.2	1.7	17.5	1.3	3.9	1.5	0.0	0.0	0.3	0.7	18.4	4.4
NW LP	18.5	1.6	18.3	1.3	2.8	1.1	0.0	0.0	0.0	0.0	23.3	3.2
Sag. Bay	27.1	1.9	25.8	1.6	4.3	1.3	0.0	0.0	0.1	0.1	26.8	3.6
SW LP	28.5	2.0	25.7	1.7	7.7	1.6	0.0	0.0	0.2	0.3	21.4	4.3
SC LP	29.5	1.9	27.0	1.6	6.2	1.3	0.0	0.0	0.1	0.2	27.1	3.8
SE LP	22.6	2.4	20.0	2.3	6.9	2.2	0.0	0.0	0.3	0.7	23.2	6.0
UP	16.7	2.3	24.8	1.7	4.7	1.6	0.0	0.0	0.0	0.0	21.2	5.4
NLP	17.6	1.1	18.4	0.9	3.2	0.8	0.0	0.0	0.1	0.2	22.6	2.5
SLP	28.9	1.1	26.5	0.9	6.6	0.8	0.0	0.0	0.2	0.2	25.1	2.2
Statewide	25.2	0.8	24.1	0.6	5.5	0.6	0.0	0.0	0.1	0.1	23.5	1.6

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2020.<sup>a</sup>

Sex and Area	Season											
	Archery		Regular Firearm		Muzzleloader		Early Antlerless		Late Antlerless		Liberty (Youth)	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
Sexes combined												
West UP	28.2	3.1	29.2	2.0	7.7	2.3	0.0	0.0	0.0	0.0	38.5	7.3
East UP	20.7	5.3	18.8	3.3	3.1	2.8	0.0	0.0	0.0	0.0	18.3	11.3
NE LP	24.2	2.1	27.4	1.6	11.6	2.5	37.9	8.8	28.0	5.0	29.4	5.1
NW LP	28.9	1.8	33.0	1.6	13.4	2.3	38.1	7.2	32.1	3.9	37.4	4.0
Sag. Bay	37.5	2.1	38.1	1.8	16.1	2.4	30.7	7.0	32.8	3.8	36.8	4.0
SW LP	39.2	2.1	38.1	1.9	18.6	2.4	32.0	8.1	26.3	3.3	33.6	4.9
SC LP	38.0	2.0	40.5	1.8	17.2	2.1	40.3	7.3	32.0	3.1	38.8	4.3
SE LP	30.4	2.6	29.3	2.6	15.5	3.1	25.7	8.7	23.0	4.7	28.4	6.3
UP	26.7	2.7	27.2	1.8	6.7	2.0	0.0	0.0	0.0	0.0	35.4	6.4
NLP	28.0	1.3	31.0	1.1	12.8	1.6	36.4	5.2	31.2	2.9	35.5	2.9
SLP	38.4	1.2	39.0	1.0	17.6	1.3	33.9	4.1	29.5	1.9	35.5	2.4
Statewide	35.4	0.9	35.6	0.7	15.3	0.9	33.6	3.1	30.3	1.6	34.9	1.8

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2020.<sup>a</sup>

Sex and Area	Season					
	Independence		Urban Archery		All Seasons	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
<b>Antlerless</b>						
West UP	16.9	6.4	0.0	0.0	8.8	1.2
East UP	3.6	5.0	0.0	0.0	5.2	1.7
NE LP	12.2	4.7	0.0	0.0	19.0	1.3
NW LP	8.1	3.5	0.0	0.0	26.9	1.3
Sag. Bay	5.9	2.9	0.0	0.0	27.5	1.5
SW LP	1.2	1.1	0.0	0.0	28.0	1.5
SC LP	7.8	4.6	0.0	0.0	29.1	1.4
SE LP	6.8	6.5	9.0	6.2	21.3	1.9
UP	21.4	8.9	0.0	0.0	8.1	1.0
NLP	17.5	7.7	0.0	0.0	23.9	0.9
SLP	9.2	3.3	7.5	5.2	28.4	0.8
Statewide	14.2	4.0	7.5	5.2	25.9	0.6
<b>Antlered Bucks</b>						
West UP	12.7	5.7	0.0	0.0	30.6	1.9
East UP	0.0	0.0	0.0	0.0	19.8	3.1
NE LP	10.4	4.3	0.0	0.0	22.1	1.4
NW LP	13.4	4.8	0.0	0.0	25.8	1.3
Sag. Bay	16.2	11.4	0.0	0.0	36.8	1.6
SW LP	5.5	2.8	0.0	0.0	37.7	1.7
SC LP	12.2	4.7	0.0	0.0	38.7	1.5
SE LP	19.0	17.5	3.8	4.2	30.0	2.1
UP	9.1	4.2	0.0	0.0	28.4	1.7
NLP	11.2	3.1	0.0	0.0	25.4	0.9
SLP	13.4	5.3	4.3	4.0	38.7	0.9
Statewide	11.4	2.8	4.3	4.0	34.9	0.6

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2020.<sup>a</sup>

Sex and Area	Season					
	Independence		Urban Archery		All Seasons	
	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>	Success	95% CL <sup>b</sup>
Sexes combined						
West UP	29.6	7.8	0.0	0.0	36.6	2.0
East UP	3.6	5.0	0.0	0.0	24.6	3.4
NE LP	22.7	7.2	0.0	0.0	36.9	1.6
NW LP	21.5	6.4	0.0	0.0	45.1	1.5
Sag. Bay	21.7	11.8	0.0	0.0	53.7	1.7
SW LP	6.6	3.3	0.0	0.0	54.8	1.7
SC LP	19.6	7.3	0.0	0.0	56.3	1.6
SE LP	25.1	17.8	11.5	6.9	44.0	2.3
UP	22.2	6.0	0.0	0.0	34.2	1.7
NLP	19.6	4.4	0.0	0.0	42.8	1.0
SLP	18.4	5.7	10.7	6.1	55.7	0.9
Statewide	17.6	3.2	10.7	6.1	51.2	0.7

<sup>a</sup>Excluded people that did not hunt during the season and deer taken with DMA permits.

<sup>b</sup>95 confidence limit.

Table 11. Level of satisfaction and dissatisfaction with the number of deer seen and the number of antlered deer (bucks) seen among Michigan deer hunters, 2019-2020.

Criteria and area	Satisfied hunters (%) <sup>a</sup>				Dissatisfied hunters (%) <sup>b</sup>			
	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)
<b>Number of deer seen</b>								
West UP	38	31	2	-7*	48	55	2	8*
East UP	31	23	4	-7	53	65	4	13*
NE LP	32	27	2	-5*	55	58	2	3
NW LP	38	35	2	-3	47	49	2	2
Sag. Bay	47	48	2	1	39	36	2	-3
SW LP	53	53	2	0	31	30	2	-1
SC LP	59	58	2	-1	26	26	1	0
SE LP	48	48	3	0	36	34	3	-2
UP	36	29	2	-7*	49	57	2	9*
NLP	35	32	1	-3*	51	53	1	2
SLP	54	54	1	0	31	29	1	-1
Statewide	44	42	1	-2*	41	42	1	1
<b>Number of antlered deer (bucks) seen</b>								
West UP	27	21	2	-6*	57	64	2	7*
East UP	22	11	3	-11*	63	76	4	13*
NE LP	22	20	1	-3	61	64	2	3
NW LP	29	26	1	-3*	54	58	2	3*
Sag. Bay	33	33	2	0	50	47	2	-2
SW LP	39	38	2	-1	42	43	2	1
SC LP	43	43	2	0	38	37	2	-1
SE LP	34	33	2	-2	47	47	3	0
UP	26	19	2	-7*	59	66	2	8*
NLP	26	23	1	-2*	58	60	1	2*
SLP	39	39	1	-1	42	42	1	0
Statewide	32	30	1	-2*	50	52	1	2*

<sup>a</sup>Included hunters who were "very satisfied" or "somewhat satisfied."

<sup>b</sup>Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

<sup>c</sup>95 confidence limit for the 2020 estimate.

\*P<0.05.

Table 12. Level of satisfaction and dissatisfaction with the size of the antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters, 2019-2020.

Criteria and area	Satisfied hunters (%) <sup>a</sup>				Dissatisfied hunters (%) <sup>b</sup>			
	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)
<b>Size of antlers</b>								
West UP	22	18	2	-4*	51	55	2	4
East UP	16	12	3	-4	54	60	4	6
NE LP	22	18	1	-4*	49	53	2	4*
NW LP	28	26	1	-2	44	46	2	2
Sag. Bay	28	28	2	0	45	44	2	0
SW LP	35	33	2	-1	37	39	2	2
SC LP	35	36	2	1	37	37	2	1
SE LP	30	28	2	-2	42	42	3	0
UP	21	17	1	-4*	52	56	2	4*
NLP	25	22	1	-3*	47	50	1	3*
SLP	33	33	1	0	39	39	1	1
Statewide	28	27	1	-2*	44	45	1	2*
<b>Overall deer hunting experience</b>								
West UP	51	41	2	-10*	29	39	2	10*
East UP	47	33	4	-14*	32	49	4	17*
NE LP	44	41	2	-3	36	39	2	3
NW LP	48	47	2	-1	32	31	2	0
Sag. Bay	52	54	2	2	27	25	2	-3
SW LP	60	58	2	-3	20	20	1	0
SC LP	63	64	2	1	18	18	1	0
SE LP	56	53	3	-3	25	25	2	0
UP	50	39	2	-11*	29	41	2	11*
NLP	46	44	1	-2	33	34	1	1
SLP	60	59	1	-1	21	20	1	-1
Statewide	53	51	1	-2*	27	28	1	1

<sup>a</sup>Included hunters who were "very satisfied" or "somewhat satisfied."

<sup>b</sup>Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

<sup>c</sup>95 confidence limit for the 2020 estimate.

\*P<0.05.

Table 13. Level of satisfaction and dissatisfaction with overall deer hunting experience and the number of deer harvested among Michigan deer hunters, 2019-2020.

Criteria and area	Satisfied hunters (%) <sup>a</sup>				Dissatisfied hunters (%) <sup>b</sup>			
	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)	2019	2020	95% CL <sup>c</sup>	Difference from 2019 to 2020 (%)
Number of deer harvested								
West UP	33	29	2	-4	31	36	2	5*
East UP	26	21	4	-5	35	41	4	5
NE LP	29	27	2	-2	36	38	2	2
NW LP	33	34	2	1	34	32	2	-3
Sag. Bay	39	41	2	2	29	26	2	-3
SW LP	42	43	2	0	25	25	2	0
SC LP	44	47	2	3	25	21	1	-4*
SE LP	38	37	3	0	31	29	2	-2
UP	31	28	2	-4*	32	37	2	5*
NLP	31	31	1	0	35	34	1	-1
SLP	42	44	1	2	27	24	1	-3*
Statewide	36	37	1	0	31	30	1	-1

<sup>a</sup>Included hunters who were “very satisfied” or “somewhat satisfied.”

<sup>b</sup>Included hunters who were “somewhat dissatisfied” or “strongly dissatisfied.”

<sup>c</sup>95 confidence limit for the 2020 estimate.

\*P<0.05.

Table 14. Level of satisfaction and dissatisfaction with the number of deer seen and the number of antlered deer (bucks) seen among Michigan deer hunters in 2020. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) <sup>a</sup>					Dissatisfied hunters (%) <sup>b</sup>				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
<b>Number of deer seen</b>										
West UP	38	3	23	4	-15*	48	3	63	5	15*
East UP	28	5	18	7	-9	60	6	69	9	9
NE LP	33	2	18	3	-15*	53	2	67	3	14*
NW LP	40	2	26	3	-14*	43	2	58	4	15*
Sag. Bay	51	2	22	5	-29*	32	2	60	6	28*
SW LP	55	2	32	7	-23*	28	2	49	7	21*
SC LP	60	2	32	6	-29*	24	2	47	6	23*
SE LP	50	3	22	8	-28*	32	3	59	9	27*
UP	36	2	22	4	-14*	50	3	64	4	14*
NLP	37	1	21	2	-16*	47	1	64	2	17*
SLP	56	1	30	3	-27*	27	1	50	4	23*
Statewide	48	1	23	2	-24*	36	1	60	2	24*
<b>Number of antlered deer (bucks) seen</b>										
West UP	25	2	17	4	-8*	58	3	67	5	9*
East UP	12	4	13	6	2	75	5	73	8	-2
NE LP	23	2	13	2	-10*	60	2	70	3	10*
NW LP	29	2	19	3	-10*	53	2	64	4	11*
Sag. Bay	36	2	16	4	-20*	45	2	61	6	17*
SW LP	40	2	24	6	-16*	41	2	56	7	15*
SC LP	45	2	24	6	-21*	35	2	59	6	24*
SE LP	35	3	17	7	-18*	46	3	58	9	12
UP	23	2	16	3	-6*	62	3	69	4	7*
NLP	27	1	15	2	-12*	56	1	67	2	12*
SLP	40	1	21	3	-19*	40	1	57	4	17*
Statewide	34	1	17	1	-17*	47	1	65	2	18*

<sup>a</sup>Included hunters who were "very satisfied" or "somewhat satisfied."

<sup>b</sup>Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

\*P<0.05.



Table 15. Level of satisfaction and dissatisfaction with the size of antlers on antlered deer (bucks) and overall deer hunting experience among Michigan deer hunters in 2020. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) <sup>a</sup>					Dissatisfied hunters (%) <sup>b</sup>				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
<b>Size of antlers</b>										
West UP	22	2	18	4	-4	52	3	54	5	2
East UP	11	4	16	7	5	60	6	60	9	0
NE LP	20	2	14	3	-7	54	2	49	4	-5
NW LP	29	2	19	3	-10*	44	2	46	4	2
Sag. Bay	29	2	17	4	-12*	43	2	50	6	6
SW LP	35	2	18	5	-18*	38	2	41	7	3
SC LP	37	2	22	5	-16*	37	2	41	6	4
SE LP	29	3	19	7	-10*	42	3	41	9	-1
UP	19	2	17	3	-2	53	3	55	4	2
NLP	25	1	16	2	-9*	49	1	49	3	0
SLP	34	1	20	3	-15*	39	1	42	4	3
Statewide	30	1	17	1	-13*	44	1	48	2	5*
<b>Overall deer hunting experience</b>										
West UP	45	3	39	5	-7	33	3	43	5	10*
East UP	35	6	32	9	-2	46	6	49	9	3
NE LP	45	2	35	3	-9*	36	2	42	4	6
NW LP	50	2	41	4	-10*	28	2	36	4	8*
Sag. Bay	57	2	34	5	-23*	22	2	43	6	21*
SW LP	59	2	40	7	-19*	19	2	30	7	12*
SC LP	66	2	49	6	-16*	17	1	30	6	13*
SE LP	53	3	39	9	-14*	24	2	33	9	10
UP	43	3	37	4	-6	36	2	45	4	9*
NLP	48	1	37	2	-11*	31	1	40	2	9*
SLP	61	1	43	4	-18*	19	1	33	3	14*
Statewide	55	1	38	2	-16*	25	1	39	2	14*

<sup>a</sup>Included hunters who were "very satisfied" or "somewhat satisfied."

<sup>b</sup>Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

\*P<0.05.

Table 16. Level of satisfaction and dissatisfaction with the number of deer harvested among Michigan deer hunters in 2020. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Criteria and preferred hunt area	Satisfied hunters (%) <sup>a</sup>					Dissatisfied hunters (%) <sup>b</sup>				
	Private only	95% CL	Public only	95% CL	Difference between land types (%)	Private only	95% CL	Public only	95% CL	Difference between land types (%)
Number of deer harvested										
West UP	34	3	25	4	-8*	32	3	36	5	4
East UP	25	5	16	7	-8	38	6	47	10	9
NE LP	31	2	18	3	-14*	36	2	41	4	6*
NW LP	39	2	24	3	-16*	29	2	35	4	6*
Sag. Bay	44	2	21	5	-23*	25	2	35	6	10*
SW LP	45	2	25	6	-19*	23	2	33	7	10*
SC LP	49	2	25	6	-24*	20	1	36	6	17*
SE LP	39	3	25	8	-14*	28	3	35	9	7
UP	32	2	23	4	-8*	33	2	38	4	5
NLP	36	1	20	2	-16*	32	1	39	3	7*
SLP	46	1	25	3	-21*	23	1	34	4	11*
Statewide	41	1	22	2	-19*	27	1	38	2	11*

<sup>a</sup>Included hunters who were "very satisfied" or "somewhat satisfied."

<sup>b</sup>Included hunters who were "somewhat dissatisfied" or "strongly dissatisfied."

\*P<0.05.

Table 17. The estimated proportion and number of archers that used a crossbow during 2020 archery season in Michigan, summarized by region.

Region	Archers using a crossbow during archery season			
	%	95% CL	Total	95% CL
UP	66.4	3.1	16,488	1,296
NLP	76.8	1.4	80,158	2,719
SLP	70.0	1.2	114,101	3,097
Unknown <sup>a</sup>	66.0	2.8	19,973	1,436
Statewide	71.6	0.8	230,720	3,859

<sup>a</sup>Region could not be determined when hunters did not report where they hunted or when hunters reported hunting in more than one region.

Table 18. The estimated hunter success of archers hunting with a crossbow during 2020 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless		Antlered Bucks		Sexes Combined	
	% <sup>a</sup>	95% CL	% <sup>a</sup>	95% CL	% <sup>a</sup>	95% CL
UP	11.3	2.5	20.3	3.2	29.9	3.7
NLP	13.3	1.2	18.7	1.4	29.4	1.7
SLP	13.6	1.0	30.2	1.4	39.6	1.5
Unknown <sup>b</sup>	17.1	2.8	23.2	3.1	36.4	3.5
Statewide	13.6	0.7	24.9	0.9	35.1	1.0

<sup>a</sup>Percentage of crossbow hunters harvesting at least one deer.

<sup>b</sup>Region could not be determined when hunters did not report where they hunted or when hunters reported hunting in more than one region.

Table 19. The estimated number of deer harvested by archers with a crossbow during 2020 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	1,904	473	3,259	587	5,163	798
NLP	11,237	1,178	15,107	1,303	26,343	1,868
SLP	16,661	1,433	36,528	2,066	53,188	2,686
Unknown <sup>a</sup>	3,604	670	4,735	747	8,339	1,087
Statewide	33,405	1,988	59,628	2,547	93,034	3,390

<sup>a</sup>Region could not be determined when hunters did not report where they hunted or when hunters reported hunting in more than one region.

Table 20. The estimated proportion and number of deer hunters that used a trail camera to hunt deer in Michigan, summarized by area.

Area	Deer hunters using a trail camera <sup>a</sup>			
	%	95% CL	Total	95% CL
West UP	60	2	36,178	1,903
East UP	64	4	9,305	998
NE LP	44	2	39,898	2,010
NW LP	47	2	47,903	2,177
Sag. Bay	44	2	37,841	1,937
SW LP	44	2	35,455	1,886
SC LP	42	2	40,875	2,016
SE LP	48	3	18,754	1,391
UP	61	2	45,483	2,112
NLP	45	1	98,973	2,998
SLP	44	1	121,753	3,197
Statewide	47	1	270,469	4,048

<sup>a</sup>Excluded license buyers that did not hunt.

Table 21. The estimated number of trail cameras used by deer hunters and the number of days these cameras were operated in Michigan during 2020, summarized by area.

Area	Number of trail cameras used				Number of days that trail cameras operated			
	Mean	95%		95%	Mean	95%		95% CL
		CL	Total			CL	CL	
West UP	2.5	0.1	88,381	6,374	52.3	3.2	1,776,657	145,267
East UP	2.4	0.2	22,064	2,949	54.9	7.7	481,675	85,830
NE LP	2.8	0.1	112,243	7,467	69.7	4.2	2,604,180	206,225
NW LP	2.9	0.1	136,355	7,868	71.6	3.7	3,150,380	221,113
Sag. Bay	2.9	0.1	108,522	7,229	79.4	4.3	2,775,271	210,466
SW LP	2.9	0.1	103,129	7,265	82.6	4.7	2,669,305	213,241
SC LP	3.0	0.1	122,374	7,891	85.7	4.5	3,153,521	232,010
SE LP	2.5	0.1	46,577	4,425	84.3	7.0	1,439,554	164,256
UP	2.5	0.1	110,446	6,957	52.9	3.0	2,258,332	167,517
NLP	2.9	0.1	281,830	11,287	72.5	2.7	6,646,118	322,929
SLP	2.9	0.1	347,370	12,388	82.5	2.5	9,146,093	376,939
Statewide	2.8	<0.1	751,147	16,653	73.2	1.6	18,230,787	493,669

<sup>a</sup>Excluded license buyers that did not hunt and hunters that failed to report the number of cameras used and days of observation.

Table 22. The proportion of deer hunters using a trail camera that photographed the following selected carnivores, deer, and wild pig with their trail camera in 2020, summarized by area.<sup>a</sup>

Area	Species									
	Bear		Bobcat		Coyote		Deer		Fisher	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL	%	95% CL
West UP	52	3	20	2	49	3	96	1	18	2
East UP	40	5	20	4	45	5	96	2	13	4
NE LP	38	3	27	2	62	3	97	1	1	0.4
NW LP	36	2	38	2	61	2	98	1	0.4	0.3
Sag. Bay	8	1	15	2	62	3	98	1	0.3	0.3
SW LP	1	0.4	6	1	68	3	98	1	1	0.4
SC LP	1	0.4	8	1	69	2	99	1	0.3	0.3
SE LP	0.2	0.3	1	1	68	4	98	1	0.3	0.4
UP	49	2	20	2	48	2	96	1	17	2
NLP	35	2	34	2	62	2	97	1	0.5	0.2
SLP	1	0.3	6	1	67	1	99	0.4	0.4	0.2
Statewide	25	7	15	6	58	8	96	3	0.1	0.1

<sup>a</sup>Excluded hunters that did not use a trail camera.

Table 22 (continued). The proportion of deer hunters using a trail camera that photographed the following selected carnivores, deer, and wild pig with their trail camera in 2020, summarized by area.<sup>a</sup>

Area	Species							
	Fox		Marten		Wild pig		Wolf	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
West UP	19	2	11	2	0.1	0.2	38	3
East UP	21	4	14	4	0.0	0.0	42	5
NE LP	28	2	0.4	0.3	0.0	0.0	1	0.5
NW LP	31	2	1	0.4	0.1	0.2	0.4	0.3
Sag. Bay	40	3	0.4	0.3	0.3	0.3	0.2	0.3
SW LP	36	3	0.3	0.3	0.2	0.2	0.3	0.3
SC LP	42	3	1	0.4	0.3	0.3	0.2	0.3
SE LP	37	4	0.2	0.3	0.1	0.1	0.2	0.3
UP	19	2	11	2	0.1	0.1	38	2
NLP	30	2	0.5	0.2	0.1	0.1	1	0.3
SLP	39	1	0.4	0.2	0.2	0.1	0.2	0.1
Statewide	22	7	2	2	<0.1	<0.1	6	4

<sup>a</sup>Excluded hunters that did not use a trail camera.

Table 23. The proportion of hunters that supported or opposed the following deer hunting regulation changes.

Statement and region	Hunter's opinion							
	Supported		Neither		Opposed		Unsure	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
<i>Support for changing the types of deer that could be taken with the new combination license. The new combination license could only be used to take one buck statewide and one doe statewide.</i>								
West UP	51	2	8	1	35	2	6	1
East UP	50	4	8	2	35	4	7	2
NE LP	49	2	8	1	38	2	5	1
NW LP	50	2	8	1	38	2	5	1
Sag. Bay	47	2	7	1	42	2	5	1
SW LP	45	2	8	1	42	2	5	1
SC LP	46	2	6	1	43	2	4	1
SE LP	50	3	6	1	39	3	5	1
UP	51	2	8	1	35	2	6	1
NLP	49	1	8	1	38	1	5	<1
SLP	47	1	7	<1	42	1	4	<1
Statewide	48	1	7	<1	40	1	5	<1
<i>Support for eliminating the single deer license. As a result, hunters could only purchase a combination license or antlerless license to deer hunt.</i>								
West UP	21	2	7	1	68	2	4	1
East UP	21	4	8	2	67	4	4	2
NE LP	24	1	8	1	64	2	5	1
NW LP	28	1	10	1	59	2	4	1
Sag. Bay	27	2	9	1	60	2	4	1
SW LP	27	2	10	1	59	2	5	1
SC LP	28	2	8	1	60	2	4	1
SE LP	30	2	9	1	57	3	4	1
UP	21	2	7	1	68	2	4	1
NLP	26	1	9	1	61	1	4	<1
SLP	28	1	9	1	59	1	4	<1
Statewide	26	1	9	<1	61	1	4	<1

Table 23 (continued). The proportion of hunters that supported or opposed the following deer hunting regulation changes.

Statement and region	Hunter's opinion							
	Supported		Neither		Opposed		Unsure	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
<i>Support for regional antler point restrictions (APRs) on the buck tag from the new combination license. This APRs would protect over 50% of yearling bucks to promote their growth to older age classes. This APRs would vary across the state. A legal buck would have 2 or more points on one side in the Upper Peninsula, 3 or more points on one side Northern Lower Peninsula, and 4 or more points on one side in the Southern Lower Peninsula.</i>								
West UP	54	2	9	1	32	2	5	1
East UP	55	4	8	2	32	4	5	2
NE LP	51	2	9	1	35	2	5	1
NW LP	59	2	8	1	29	1	4	1
Sag. Bay	47	2	9	1	39	2	4	1
SW LP	45	2	9	1	40	2	5	1
SC LP	51	2	9	1	37	2	4	1
SE LP	48	3	9	1	38	3	6	1
UP	54	2	9	1	32	2	5	1
NLP	55	1	9	1	32	1	4	<1
SLP	48	1	9	1	39	1	4	<1
Statewide	51	1	9	<1	35	1	5	<1
<i>Support for allowing hunters to transfer an unused buck tag to another hunter so that they could use it to harvest a buck.</i>								
West UP	34	2	10	1	52	2	4	1
East UP	27	4	9	2	60	4	4	2
NE LP	29	2	10	1	58	2	4	1
NW LP	30	1	11	1	56	2	4	1
Sag. Bay	28	2	11	1	57	2	4	1
SW LP	28	2	11	1	56	2	4	1
SC LP	29	2	10	1	57	2	4	1
SE LP	29	2	10	2	57	3	4	1
UP	33	2	10	1	54	2	4	1
NLP	29	1	10	1	57	1	4	<1
SLP	28	1	11	1	57	1	4	<1
Statewide	29	1	10	<1	56	1	4	<1



Table 24. The proportion of Michigan deer hunters that indicated the COVID-19 pandemic affected their deer hunting activity in 2020.

Statement and region	Hunter's opinion							
	Agreed		Neither		Disagreed		Unsure	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
<i>The proportion of Michigan deer hunters that indicated they were more likely to purchase a hunting license in 2020 because of the COVID-19 pandemic.</i>								
West UP	8	1	39	2	52	2	1	<1
East UP	9	2	36	4	54	4	1	1
NE LP	8	1	39	2	50	2	2	<1
NW LP	8	1	40	2	51	2	1	<1
Sag. Bay	9	1	38	2	51	2	2	<1
SW LP	10	1	38	2	50	2	2	<1
SC LP	10	1	39	2	50	2	2	<1
SE LP	12	2	36	3	51	3	2	1
UP	8	1	38	2	52	2	1	<1
NLP	8	1	39	1	51	1	2	<1
SLP	10	1	38	1	50	1	2	<1
Statewide	9	<1	39	1	51	1	2	<1
<i>The proportion of Michigan deer hunters that indicated they increased the amount of time they hunted in 2020 because of the COVID-19 pandemic.</i>								
West UP	15	1	32	2	52	2	1	<1
East UP	15	3	32	4	53	4	1	1
NE LP	17	1	32	2	50	2	1	<1
NW LP	18	1	32	2	49	2	1	<1
Sag. Bay	19	1	31	2	48	2	1	<1
SW LP	21	1	31	2	48	2	1	<1
SC LP	22	1	30	2	47	2	1	<1
SE LP	23	2	28	2	48	3	1	1
UP	15	1	32	2	52	2	1	<1
NLP	17	1	32	1	50	1	1	<1
SLP	21	1	30	1	47	1	1	<1
Statewide	19	1	31	1	49	1	1	<1

Table 24 (continued). The proportion of Michigan deer hunters that indicated the COVID-19 pandemic affected their deer hunting activity in 2020.

Statement and region	Hunter's opinion							
	Agreed		Neither		Disagreed		Unsure	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
<i>The proportion of Michigan deer hunters that indicated they reduced the distance they traveled to hunt in 2020 because of the COVID-19 pandemic.</i>								
West UP	5	1	31	2	63	2	1	<1
East UP	7	2	29	4	63	4	1	1
NE LP	6	1	31	2	62	2	1	<1
NW LP	6	1	34	2	59	2	1	<1
Sag. Bay	8	1	34	2	57	2	1	<1
SW LP	9	1	34	2	56	2	1	<1
SC LP	9	1	35	2	55	2	1	<1
SE LP	15	2	30	2	54	3	1	1
UP	5	1	31	2	63	2	1	<1
NLP	6	1	32	1	60	1	1	<1
SLP	10	1	34	1	55	1	1	<1
Statewide	8	<1	33	1	58	1	1	<1
<i>The proportion of Michigan deer hunters that indicated they hunted alone more frequently in 2020 because of the COVID-19 pandemic.</i>								
West UP	13	1	31	2	55	2	1	<1
East UP	13	3	30	4	57	4	<1	1
NE LP	15	1	31	2	53	2	1	<1
NW LP	15	1	32	2	52	2	1	<1
Sag. Bay	15	1	31	2	52	2	1	<1
SW LP	12	1	34	2	53	2	1	<1
SC LP	14	1	33	2	52	2	1	<1
SE LP	17	2	31	2	51	3	1	1
UP	13	1	31	2	55	2	1	<1
NLP	15	1	31	1	53	1	1	<1
SLP	14	1	33	1	52	1	1	<1
Statewide	14	<1	32	1	53	1	1	<1

Table 24 (continued). The proportion of Michigan deer hunters that indicated the COVID-19 pandemic affected their deer hunting activity in 2020.

Statement and region	Hunter's opinion							
	Agreed		Neither		Disagreed		Unsure	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
<i>The proportion of Michigan deer hunters that indicated they found it more difficult to locate a hunting area in 2020 because of the COVID-19 pandemic.</i>								
West UP	3	1	30	2	66	2	1	<1
East UP	4	2	30	4	66	4	1	1
NE LP	4	1	31	2	62	2	2	<1
NW LP	5	1	32	2	62	2	2	<1
Sag. Bay	4	1	32	2	63	2	2	<1
SW LP	5	1	34	2	59	2	2	<1
SC LP	5	1	33	2	59	2	2	<1
SE LP	9	1	31	2	58	3	2	1
UP	3	1	30	2	66	2	1	<1
NLP	4	<1	31	1	62	1	2	<1
SLP	5	<1	33	1	60	1	2	<1
Statewide	5	<1	32	1	61	1	2	<1
<i>The proportion of Michigan deer hunters that indicated that found it more difficult to locate a meat processor to butcher their deer because of the COVID-19 pandemic.</i>								
West UP	3	1	40	2	49	2	7	1
East UP	6	2	40	4	42	4	12	3
NE LP	6	1	40	2	43	2	10	1
NW LP	8	1	39	2	45	2	8	1
Sag. Bay	8	1	37	2	48	2	7	1
SW LP	11	1	39	2	43	2	7	1
SC LP	9	1	37	2	47	2	7	1
SE LP	8	1	36	3	50	3	7	1
UP	4	1	40	2	48	2	8	1
NLP	7	1	39	1	45	1	9	1
SLP	10	1	37	1	46	1	7	<1
Statewide	8	<1	38	1	46	1	8	<1

Appendix A. The questionnaire that was used to collect answers for the 2020 Michigan deer harvest survey.



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

# 2020 MICHIGAN DEER HARVEST STUDY

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



**It is important that you return this questionnaire even if you did not hunt or harvest a deer. Please report only your hunting activities, and only report taking a deer if your kill tag was attached to it.**

**1. Did you hunt deer in Michigan during the 2020 seasons?**

1  Yes.    2  No. Skip to Question #12.



Appendix A (continued). The questionnaire that was used to collect answers for the 2020 Michigan deer harvest survey.

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

SEASON HUNTED (Check box if you hunted during the season.)	LOCATION HUNTED (For each season hunted, list the management unit and county hunted on separate lines. See map on first page.)		NUMBER OF DAYS HUNTED	NUMBER OF DEER HARVESTED (Record by type of deer and land ownership type where each deer was taken.)			
	Deer Management Unit	County		Antlered Bucks		Antlerless	
				Public Land	Private Land	Public Land	Private Land
<input checked="" type="checkbox"/> <b>Example</b>	1 041	Kent	12	0	1	0	0
<input type="checkbox"/> <b>Archery</b> Oct 1-Nov 14 and Dec 1-Jan 1 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> <b>Regular Firearm</b> Nov 15-30 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> <b>Muzzleloader</b> Dec 4-13 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> <b>Early Firearm</b> Sept 19-20 (Lower Peninsula)	1			Only antlerless deer could be taken on private land during the early firearm season			
	2						
	3						
<input type="checkbox"/> <b>Late Firearm</b> Dec 14-Jan 1 (Lower Peninsula)	1				No bucks allowed on private land		
	2						
	3						
<input type="checkbox"/> <b>Liberty/Youth Hunt</b> Sept 12-13 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> <b>Independence Hunt</b> Oct 15-18 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> <b>Late Urban Archery Hunt</b> Jan 2-31 (Macomb, Oakland, & Wayne counties only)	1						
	2						
	3						

Appendix A (continued). The questionnaire that was used to collect answers for the 2020 Michigan deer harvest survey.

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

<sup>1</sup>  Yes      <sup>2</sup>  No. Skip to Question #5.

4. If you used a crossbow to hunt deer during the archery season, how many deer did you take using the crossbow in 2020?

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

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

5. If you harvested a deer in 2020, how many of your deer were taken to a commercial meat processor for processing?

\_\_\_\_\_ Report the number of deer taken to a commercial meat processor.

6. What is your preferred county to hunt deer in Michigan? Please select one county from the counties you reported hunting during the 2020 seasons in Question #2.

Please write county name

7. On what type of land did you hunt deer in your preferred county in 2020?

<sup>1</sup>  Public      <sup>2</sup>  Private      <sup>3</sup>  Both private and public lands

8. Please indicate how satisfied or dissatisfied you were with the following for the 2020 deer hunting seasons in your preferred county:  
(Select one choice per item.)

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

9. Did you use a trail camera to monitor deer activity in the county where you preferred to deer hunt in 2020?

<sup>1</sup>  Yes      <sup>2</sup>  No (If no, please skip to question 12.)

10. If you used a trail camera in 2020, how many cameras did you use and how many days did you use a camera to monitor deer activity in your preferred county?

\_\_\_\_\_ Report the number of trail cameras you used in your preferred county.

\_\_\_\_\_ Report the average number of days you used each trail camera in your preferred county.

11. If you used a trail camera, which of the following animals did you photograph in the county where you preferred to deer hunt in 2020? (Select all that apply.)

- <sup>0</sup>  None      <sup>1</sup>  Bear      <sup>2</sup>  Bobcat      <sup>3</sup>  Coyote      <sup>4</sup>  Deer  
<sup>5</sup>  Fisher      <sup>6</sup>  Fox      <sup>7</sup>  Marten      <sup>8</sup>  Wild pig      <sup>9</sup>  Wolf



Appendix A (continued). The questionnaire that was used to collect answers for the 2020 Michigan deer harvest survey.

**12. Currently, hunters that want to take a buck can purchase either a single deer license (\$20) that has 1 buck kill tag or purchase a combination license (\$40) that has 2 buck kill tags. In the Lower Peninsula, these tags can also be used for antlerless deer. The DNR is considering changing the types of deer that can be taken with the combination license. The new combination license would still have two tags and still cost \$40; however, one tag could be used to take only a buck statewide and one tag could be used only to take a doe statewide. Hunters would no longer be allowed to take two bucks with the new combination license. How much would you support or oppose changing the types of deer that could be taken with the new combination license?**

1  Strongly support    2  Support    3  Neither    4  Oppose    5  Strongly oppose    6  Unsure

**13. If all combination licenses are changed to one buck tag and one doe tag, the DNR would also consider eliminating the single deer license that only has a single buck tag. Thus, a buck could only be taken with the new combination license. How much would you support or oppose eliminating the single deer license and only purchasing a combination license or antlerless license to deer hunt in Michigan?**

1  Strongly support    2  Support    3  Neither    4  Oppose    5  Strongly oppose    6  Unsure

**14. If all combination licenses are changed to one buck tag and one doe tag, the DNR would still need to consider whether minimum antler point restrictions (APRs) would apply for taking a buck. These APRs would protect over 50% of yearling bucks to promote their growth to older age classes. These APRs would vary across the state. A legal buck would have 2 or more points on one side in the Upper Peninsula, 3 or more points on one side Northern Lower Peninsula, and 4 or more points on one side in the Southern Lower Peninsula. How much would you support these regional APRs being applied to the buck tag from the new combination license.**

1  Strongly support    2  Support    3  Neither    4  Oppose    5  Strongly oppose    6  Unsure

**15. How much do you support or oppose allowing hunters to transfer an unused buck tag to another hunter so that they could use it to harvest a buck? This change may increase the overall number of bucks harvested.**

1  Strongly support    2  Support    3  Neither    4  Oppose    5  Strongly oppose    6  Unsure

**16. To what extent do you agree or disagree with each of the following statements regarding the impacts of the COVID-19 pandemic on your deer hunting activity during 2020? (Select one choice per item.)**

	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	Unsure
a. I was <u>more likely</u> to buy a hunting license because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
b. I <u>increased</u> the amount of time that I spent hunting deer because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
c. I <u>reduced</u> the distance I travelled to hunt deer because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
d. I hunted <u>alone more frequently</u> because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
e. I found it <u>more difficult</u> to locate a hunting area because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
f. I found it <u>more difficult</u> to locate a meat processor to butcher my deer because of the COVID-19 pandemic.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

**Please return questionnaire in the enclosed postage-paid envelope. Thanks for your help!**

Appendix B. Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2020, summarized by Deer Management Unit and license type (public and private lands).

DMU <sup>a</sup>	DMU name	Public land			Private land		
		License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>	License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>
003	Allegan County	750	656	570	10,000	6,748	4,634
005	Antrim County	1,200	790	667	7,000	2,300	1,781
006	Arenac County	600	460	401	7,000	2,572	1,985
007	Big Bay Unit	0	0	0	0	0	0
008	Barry County	1,500	1,331	1,030	10,000	4,051	3,160
009	Bay County	200	183	136	3,000	1,655	1,292
010	Benzie County	1,000	857	702	1,600	1,410	1,082
013	Calhoun County	100	93	84	10,000	5,764	4,189
015	Charlevoix County	1,200	537	451	6,000	1,667	1,286
016	Cheboygan County	1,800	1,278	1,047	2,000	1,328	1,110
017	Sault Ste. Marie Unit	0	0	0	0	0	0
018	Clare County	1,000	834	707	8,000	4,995	3,750
019	Clinton County	1,600	992	775	Unlimited	4,618	3,360
020	Crawford County	1,200	874	873	1,200	914	798
021	Manistique Unit	0	0	0	0	0	0
022	Crystal Falls Unit	240	207	207	500	412	408
023	Eaton County	250	174	156	Unlimited	4,698	3,518
024	Emmet County	1,000	768	635	3,200	1,256	1,038
025	Genesee County	0	0	0	7,000	3,815	3,151
026	Gladwin County	1,400	1,070	969	8,000	4,221	3,180
027	Watersmeet Unit	0	0	0	0	0	0
028	Grand Traverse County	1,000	864	712	1,600	1,334	1,070
029	Gratiot County	2,200	1,410	1,112	Unlimited	4,006	2,714
030	Hillsdale County	400	378	286	12,000	5,786	4,288
031	Nisula Unit	0	0	0	0	0	0
033	Ingham County	800	547	455	Unlimited	4,199	3,036
034	Ionia County	1,200	804	647	Unlimited	4,570	3,260
036	Amasa/Michigamme Unit	0	0	0	0	0	0
037	Isabella County	100	86	74	Unlimited	5,267	3,725
038	Jackson County	1,600	1,180	1,021	16,000	6,810	5,149

<sup>a</sup>See Figure 2 for the locations of DMUs.

<sup>b</sup>The number of license buyers does not add up to the statewide total because hunters could purchase licenses in more than one DMU. The number of licenses sold could exceed the quota because junior licenses sold did not count against the quota.

<sup>c</sup>Special deer hunts on public land. Licenses for these DMUs were available on a local basis.

<sup>d</sup>Portion of a larger DMU.



Appendix B (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2020, summarized by Deer Management Unit and license type (public and private lands).

DMU <sup>a</sup>	DMU name	Public land			Private land		
		License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>	License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>
040	Kalkaska County	600	461	454	800	588	555
041	Kent County	1,400	656	565	Unlimited	4,196	3,285
042	Keweenaw Unit	0	0	0	0	0	0
043	Lake County	900	719	716	5,000	4,159	3,293
044	Lapeer County	2,000	826	729	12,000	6,197	4,787
045	Leelanau County	600	532	452	1,600	1,248	936
046	Lenawee County	400	376	307	7,500	4,557	3,480
047	Livingston County	2,000	955	846	10,000	4,311	3,457
048	Newberry Unit	0	0	0	0	0	0
050	Macomb County	200	183	170	4,000	2,026	1,598
051	Manistee County	1,500	1,322	1,064	3,500	2,852	2,153
053	Mason County	400	335	333	8,000	6,195	3,916
054	Mecosta County	500	443	369	Unlimited	4,617	3,350
055	Menominee Unit	1,200	1,077	846	7,000	5,372	4,075
056	Midland County	1,500	1,323	1,052	7,500	3,181	2,528
057	Missaukee County	600	478	466	5,000	3,384	2,473
058	Monroe County	100	75	73	1,000	853	820
059	Montcalm County	1,600	1,081	915	Unlimited	5,768	4,101
061	Muskegon County	800	691	580	Unlimited	2,412	1,878
062	Newaygo County	1,500	1,248	1,065	Unlimited	6,734	4,828
063	Oakland County	2,500	1,798	1,562	6,000	2,758	2,212
064	Oceana County	1,500	1,350	1,061	6,000	5,422	3,558
065	Ogemaw County	700	482	482	6,000	3,841	2,885
066	Ontonagon County	0	0	0	0	0	0
067	Osceola County	300	236	219	9,000	6,016	4,149
069	Otsego County	1,800	1,227	1,057	2,000	1,115	931
070	Ottawa County	450	404	355	Unlimited	3,095	2,476
072	Roscommon County	600	472	472	1,000	783	679
073	Saginaw County	200	165	156	6,500	4,832	3,601
074	St. Clair County	700	622	552	9,500	5,679	4,393
078	Shiawassee County	200	160	151	Unlimited	4,913	3,564
081	Washtenaw County	1,500	863	737	15,000	4,282	3,252
082	Wayne County	100	86	77	1,200	739	602
083	Wexford County	1,000	774	750	3,700	2,814	2,165

<sup>a</sup>See Figure 2 for the locations of DMUs.

<sup>b</sup>The number of license buyers does not add up to the statewide total because hunters could purchase licenses in more than one DMU. The number of licenses sold could exceed the quota because junior licenses sold did not count against the quota.

<sup>c</sup>Special deer hunts on public land. Licenses for these DMUs were available on a local basis.

<sup>d</sup>Portion of a larger DMU.

Appendix B (continued). Antlerless deer hunting license quotas, number of antlerless licenses sold, and number of hunters purchasing an antlerless license in Michigan during 2020, summarized by Deer Management Unit and license type (public and private lands).

DMU <sup>a</sup>	DMU name	Public land			Private land		
		License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>	License quota	Licenses sold <sup>b</sup>	License buyers <sup>b</sup>
115	Beaver Island	200	72	67	300	144	129
117	Drummond Island	0	0	0	0	0	0
121	Bay De Noc Unit	500	454	368	800	720	563
122	Norway Unit	300	291	245	1,000	707	589
127	Ironwood Unit	0	0	0	0	0	0
131	Twin Lakes Unit	0	0	0	0	0	0
145	North Manitou Island <sup>d</sup>	0	0	0	0	0	0
149	Round/Bois Blanc Island	100	83	68	100	95	74
152	Gwinn Unit	0	0	0	0	0	0
155	Gladstone Unit	400	361	298	1,800	1,358	1,080
174	St. Clair Flats <sup>d</sup>	0	0	0	300	202	183
245	South Fox Island <sup>d</sup>	0	0	0	0	0	0
249	Trout Lake Unit	0	0	0	0	0	0
252	Rock Unit	0	0	0	0	0	0
255	LaBranche Unit	600	541	418	1,000	971	780
273	Shiawassee Unit <sup>d</sup>	0	0	0	0	0	0
311	Keeler Unit	600	527	443	14,000	13,562	7,849
312	Sherwood Unit	1,200	1,083	922	16,000	11,895	8,213
332	Greenleaf Unit	5,200	3,271	2,623	35,000	15,722	11,556
349	Engadine Unit	0	0	0	0	0	0
452	Core TB Area <sup>c</sup>	3,000	2,017	1,719	0	0	0
487	Northern Multi-County Deer Management	21,000	9,525	7,544	30,000	18,348	13,570
NA	Assistance Permits	NA	NA	NA	NA	13,637	1,044
NA	Managed Deer Hunt Permits <sup>c</sup>	NA	599	538	NA	NA	NA

<sup>a</sup>See Figure 2 for the locations of DMUs.

<sup>b</sup>The number of license buyers does not add up to the statewide total because hunters could purchase licenses in more than one DMU. The number of licenses sold could exceed the quota because junior licenses sold did not count against the quota.

<sup>c</sup>Special deer hunts on public land. Licenses for these DMUs were available on a local basis. Includes licenses for St. Clair Flats State Wildlife Area (SWA), Gladwin Field Trial Area, Nayanquing Point SWA, Fish Point SWA, DMU 273 State Game Area, DMU 273 Federal Refuge, and Detroit River Federal Refuge.

<sup>d</sup>Portion of a larger DMU.

Appendix C. The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2020, summarized by Deer Management Unit.

DMU <sup>d</sup>	Hunters <sup>b,c</sup>		Hunting effort (days) <sup>b</sup>		Deer harvested (all seasons combined) <sup>a</sup>					
	No.	95% CL <sup>e</sup>	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
001	6,613	840	71,911	13,935	1,311	451	1,359	384	2,670	662
003	12,149	1,121	177,574	23,071	3,673	752	4,145	738	7,818	1,220
004	3,817	639	40,840	9,222	785	339	897	317	1,682	512
005	6,586	835	69,984	12,419	1,628	524	1,783	459	3,411	758
006	6,706	828	94,621	16,593	1,600	468	3,149	604	4,749	870
007	6,883	851	77,358	12,696	212	144	1,448	405	1,660	443
008	9,911	1,019	127,924	18,881	2,504	606	3,356	652	5,860	1,029
009	4,405	674	61,437	14,065	1,446	518	1,575	442	3,021	719
010	4,273	672	49,383	11,276	718	296	1,199	395	1,917	524
013	9,401	994	133,203	19,548	4,367	845	4,597	741	8,964	1,308
015	3,387	599	36,071	8,804	846	374	987	345	1,833	543
016	6,806	844	75,496	13,556	1,440	420	1,183	371	2,623	592
017	3,748	627	47,518	11,207	254	155	930	303	1,184	349
018	11,466	1,087	137,540	19,066	3,625	719	3,097	599	6,722	1,025
019	9,104	972	132,263	20,576	3,784	856	4,400	747	8,184	1,272
020	8,383	945	94,390	15,431	1,381	421	1,714	441	3,095	643
021	6,277	818	72,186	13,223	155	122	1,141	352	1,296	373
022	6,408	818	68,830	12,291	778	284	2,077	497	2,855	617
023	7,772	904	109,670	17,254	3,882	900	3,425	685	7,307	1,299
024	4,360	681	43,806	9,248	869	359	933	346	1,802	522
025	7,728	894	114,666	19,155	1,588	466	2,396	579	3,984	813
026	10,880	1,067	142,332	19,650	3,168	742	2,940	581	6,108	1,022
027	2,018	463	15,909	4,848	39	57	677	279	716	295
028	6,495	828	80,954	14,359	2,113	556	1,312	393	3,425	724
029	8,312	927	108,086	17,263	3,912	862	4,383	769	8,295	1,344
030	8,880	964	126,489	20,689	4,014	867	3,685	708	7,699	1,239
031	3,664	617	39,414	10,715	101	84	1,079	336	1,180	347
033	7,778	905	116,766	19,337	3,358	790	3,055	628	6,413	1,132
034	10,582	1,040	141,377	19,696	3,992	859	4,001	701	7,993	1,263
035	7,528	884	90,092	15,231	1,763	489	2,342	531	4,105	780
036	5,070	738	51,482	9,956	177	133	1,377	392	1,554	421
037	8,658	941	120,201	18,946	3,719	829	3,822	689	7,541	1,237
038	12,411	1,138	179,493	22,694	3,694	741	4,878	798	8,572	1,255

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

<sup>c</sup>The number of hunters does not add up to the statewide total because hunters can hunt in more than one DMU.

<sup>d</sup>See Figure 2 for the locations of DMUs.

<sup>e</sup>95 confidence limit.

Appendix C (continued). The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2020, summarized by Deer Management Unit.

DMU <sup>d</sup>	Hunters <sup>b,c</sup>		Hunting effort (days) <sup>b</sup>		Deer harvested (all seasons combined) <sup>a</sup>					
	No.	95% CL <sup>e</sup>	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
040	6,519	826	70,967	13,324	1,187	356	905	332	2,092	522
041	13,698	1,191	176,013	21,427	2,986	624	4,925	759	7,911	1,073
042	1,757	429	17,001	5,136	28	54	409	198	437	205
043	13,175	1,172	150,170	18,735	3,441	740	1,995	474	5,436	945
044	11,539	1,088	160,546	20,778	3,517	781	4,173	711	7,690	1,212
045	3,597	619	43,967	11,126	825	336	956	333	1,781	521
046	7,468	886	118,920	20,468	2,407	678	3,691	718	6,098	1,124
047	9,923	1,019	134,628	20,742	2,200	528	3,831	709	6,031	966
048	3,291	593	33,480	8,403	103	97	491	219	594	239
050	4,180	658	48,255	10,450	1,013	353	1,138	366	2,151	587
051	8,582	949	111,869	18,382	2,128	571	1,778	461	3,906	808
053	10,532	1,042	128,292	17,258	4,533	939	3,428	649	7,961	1,286
054	11,535	1,088	143,460	19,154	4,765	891	3,570	651	8,335	1,223
055	11,629	1,103	129,431	16,924	2,226	515	4,356	694	6,582	965
056	10,118	1,025	149,776	22,718	3,480	715	4,115	727	7,595	1,165
057	8,737	955	112,799	18,774	2,698	641	1,867	471	4,565	854
058	5,222	740	74,106	14,642	1,123	352	1,368	413	2,491	581
059	12,270	1,119	166,781	22,643	5,094	955	4,027	699	9,121	1,304
060	7,502	893	61,683	10,029	1,275	395	1,077	341	2,352	571
061	7,076	856	98,333	15,934	2,323	652	2,342	553	4,665	936
062	19,036	1,392	258,185	26,852	7,188	1,160	6,749	909	13,937	1,624
063	9,219	990	113,332	17,501	1,854	485	3,008	614	4,862	845
064	10,607	1,045	144,654	20,105	4,419	942	3,344	629	7,763	1,314
065	11,132	1,078	126,990	18,375	2,798	650	2,642	524	5,440	930
066	3,727	630	39,456	8,617	45	36	1,187	371	1,232	375
067	11,326	1,080	134,707	18,720	3,546	701	4,090	702	7,636	1,108
068	6,257	815	66,861	12,212	1,486	445	834	317	2,320	572
069	5,607	766	51,574	9,679	968	334	1,432	406	2,400	555
070	8,874	953	123,837	18,459	2,422	602	3,059	616	5,481	961
071	7,947	911	95,250	15,455	1,734	463	2,228	517	3,962	766
072	8,999	974	102,780	17,119	1,437	414	1,144	353	2,581	570
073	8,927	958	125,920	18,531	2,359	605	3,742	697	6,101	1,026
074	11,274	1,078	169,829	22,583	3,134	755	3,893	700	7,027	1,204
078	8,426	936	118,359	19,114	2,310	651	4,329	786	6,639	1,148
081	9,630	1,005	121,897	17,815	3,306	833	3,976	714	7,282	1,209
082	1,222	359	14,343	6,059	157	146	234	154	391	226
083	9,895	1,015	120,195	18,750	2,600	629	1,203	354	3,803	774

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

<sup>c</sup>The number of hunters does not add up to the statewide total because hunters can hunt in more than one DMU.

<sup>d</sup>See Figure 2 for the locations of DMUs.

<sup>e</sup>95 confidence limit.

Appendix C (continued). The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2020, summarized by Deer Management Unit.

DMU <sup>d</sup>	Hunters <sup>b,c</sup>		Hunting effort (days) <sup>b</sup>		Deer harvested (all seasons combined) <sup>a</sup>					
	No.	95% CL <sup>e</sup>	No.	95% CL	Antlerless		Antlered bucks		Sexes combined	
					No.	95% CL	No.	95% CL	No.	95% CL
115	427	217	2,091	1,307	0	0	203	182	203	182
117	1,079	342	6,885	2,778	116	109	207	144	323	180
121	2,363	497	28,015	7,580	299	225	780	297	1,079	388
122	2,424	504	35,351	10,143	279	196	1,091	392	1,370	464
127	1,087	341	15,401	5,860	30	54	207	143	237	153
131	2,367	486	29,041	8,025	81	66	521	224	602	234
145	0	0	0	0	0	0	0	0	0	0
149	948	322	10,404	5,001	115	133	211	145	326	197
152	2,548	519	30,098	8,201	81	80	631	272	712	294
155	4,203	665	45,570	9,793	750	372	1,385	386	2,135	563
174	251	164	1,575	1,542	62	78	86	94	148	122
245	0	0	0	0	0	0	0	0	0	0
249	2,083	472	23,268	6,828	35	55	267	163	302	172
252	1,970	456	27,833	8,395	0	0	349	182	349	182
255	2,993	562	34,138	8,483	679	318	945	334	1,624	532
273	1,311	360	15,453	6,564	299	201	324	202	623	345
311	17,056	1,325	278,058	29,954	7,340	1,239	8,154	1,054	15,494	1,862
312	17,704	1,350	254,999	25,742	8,179	1,535	8,220	1,059	16,399	2,109
332	35,909	1,876	506,664	38,909	14,364	1,672	16,212	1,422	30,576	2,487
349	2,067	470	21,571	6,256	172	133	327	180	499	224
452	8,659	959	92,864	14,171	2,350	672	2,385	528	4,735	938

<sup>a</sup>Harvest estimates do not include deer taken with DMA permits. An additional 9,557 deer were taken with these permits.

<sup>b</sup>Column totals for hunting effort and harvest may not equal regional and statewide totals because of rounding errors.

<sup>c</sup>The number of hunters does not add up to the statewide total because hunters can hunt in more than one DMU.

<sup>d</sup>See Figure 2 for the locations of DMUs.

<sup>e</sup>95 confidence limit.