



2023 Michigan Deer Harvest Survey Report

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ABSTRACT

This survey examined deer hunting participation, harvest, and hunter effort in Michigan for 2023. The number of hunters increased slightly (2%) from 2022, with a total harvest of 347,008 deer (similar to 2022). Antlerless deer harvest rose significantly (3%), while antlered deer harvest remained stable. Overall satisfaction with deer seen, harvested, and the hunting experience decreased slightly compared to 2022. Crossbows were popular among archers (75% used them), harvesting nearly 79,000 deer in the archery seasons. Beginning in 2022, all successful deer hunters were required to report deer that they harvested via the Internet within 72 hours. Hunters submitted harvest reports for 267,393 deer in 2023. The estimated harvest for all seasons combined was 30% greater than the number of harvest reports submitted (347,008 versus 267,393). Most hunters found the harvest reporting system easy to use (69%). Hunters generally preferred harvesting 1-2 deer, with Upper Peninsula and older hunters preferring to take fewer deer. The universal antlerless license (introduced in 2021) was supported by hunters in most regions except the Upper Peninsula. Similarly, allowing any legal firearm during the southern Lower Peninsula muzzleloader season (since 2020) had high support (48% statewide, 61% in the southern Lower Peninsula where the regulation applied). Likewise, the combination license allowing the harvest of any type of deer in the Lower Peninsula (since 2020) was widely supported (68% statewide and highest support in the southern and northern Lower Peninsula). Youth hunter participation in the youth hunting season remained steady at around 40%. While youth participation in the youth hunting season slightly increased future license purchases, the cause cannot be definitively linked to the youth season. Regulations allowing multiple antlerless deer but only one antlered deer in the youth season had moderate support (36% agreed) while extending the season beyond two days had low support (24% agreed). Restricting youth harvest to antlerless deer received moderate statewide support (40%).



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INTRODUCTION

The Natural Resources Commission (NRC) and the Michigan Department of Natural Resources (DNR) are responsible for protecting and managing Michigan's wildlife resources. Harvest surveys were used to estimate hunter participation, harvest, and hunting effort, which help monitor deer (*Odocoileus virginianus*) populations and establish harvest regulations. These estimates, along with data from deer harvest check stations, trends in deer-vehicle collisions, and public input, contribute to the management of deer populations in the state.

When developing hunting regulations, deer were categorized as either antlered (having at least one antler of three inches or more) or antlerless (having no antlers or antlers less than three inches long). The type of deer that hunters could harvest depended on the area hunted, hunting season, and license purchased (Tables 1 and 2). In 2023, deer could be harvested primarily during eight hunting seasons: Liberty/Youth, archery, regular firearm, muzzleloader, early antlerless, late antlerless, Independence, and urban archery.

To harvest a deer, hunters were required to possess a hunting license (deer, combination, antlerless, or mentored youth license) (Table 2). Each hunting license included a harvest tag, with deer, mentored youth, and antlerless licenses having one tag each, while combination licenses had two harvest tags.

Hunters could purchase a maximum of two harvest tags for antlered deer. Those wanting to harvest only one antlered deer could purchase a single deer license with one harvest tag, while those wanting to take two antlered deer could purchase a combination license with two harvest tags. Hunters who purchased a single deer license were not allowed to purchase a second deer license or a combination license.

Hunters could take two antlered deer, but one deer needed to have at least one antler with four or more points (each point being at least one inch long). This rule applied except in certain counties in the LP (Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee) and portions of Delta, Dickinson, and Menominee counties in the UP. Youth hunters (16 years old and younger) and apprentice hunters (those without a hunter safety certificate and 10 years old or older) were exempt from antler point restrictions (APRs) during all deer seasons.

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

Universal antlerless deer licenses allowed hunters to take an antlerless deer on public or private land in any open deer management unit (DMU) in the LP or parts of the UP. These licenses were available over the counter, with a maximum purchase limit of 10. In DMUs 351 and 352 in the UP, antlerless deer harvest was determined by a quota. To hunt in these

DMUs, hunters needed both an antlerless deer hunting access permit, distributed via a drawing, and a universal antlerless deer license. Hunters with a combination license could also use the two harvest tags to take antlerless deer throughout the LP during all hunting seasons.

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 when the number of antlerless licenses was insufficient to meet their specific objectives, such as controlling crop damage. These permits allowed hunters to take one antlerless deer per permit during any deer season on the issued land or adjacent private lands with the landowner's permission. Hunters using these permits were required to have 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 issued through special random drawings and could be used during specific seasons on certain public lands, including Sharonville State Game Area, DMU 273 Shiawassee River State Game Area, DMU 273 Shiawassee National Wildlife Refuge, and Detroit River International Wildlife Refuge. As with DMA permits, hunters using these permits were required to have a valid deer hunting license and adhere to all other hunting regulations.

The Liberty/Youth season took place on September 9-10 on public and private lands statewide. Youth aged 16 or younger, along with eligible hunters with disabilities, participated in this hunt. Eligible hunters with disabilities included those issued permits for laser-sighting devices or hunting from standing vehicles, veterans with 100% disability, and individuals rated unemployable by the United States Department of Veterans Affairs. Legally blind and deaf individuals were also eligible. During this season, hunters could use a deer or deer combo license for either antlered or antlerless deer, without antler point restrictions. In addition, the universal antlerless license or DMA permit allowed for harvesting antlerless deer only. Hunters could take multiple antlerless deer (one per harvest tag) but were limited to harvesting only one antlered deer.

The statewide archery season, divided into early (October 1-November 14) and late (December 1, 2023-January 1, 2024) segments, allowed hunters to use deer licenses, antlerless deer licenses, combination licenses, mentored youth licenses, and DMA permits. A January urban archery hunt (January 2-31, 2024) was held in Macomb, Oakland, and Wayne counties.

The Independence Hunt (October 19-22, 2023) allowed eligible hunters to take one deer of either sex on private or permitted public lands, using a deer or combination license, with antler point restrictions waived. Antlerless deer could be taken with an antlerless license or DMA permit.

The statewide regular firearm (November 15-30) and muzzleloader (December 1-10) seasons allowed hunters to use mentored youth, deer, and deer combination licenses on public and private lands. Antlerless licenses and DMA permits were also valid. Combination license holders could use two harvest tags for antlerless deer in the LP.

The early antlerless firearm season (September 16-17) on private lands in the LP, except for island DMUs 115, 145, 149, and 245, allowed hunters to use all license types to take antlerless deer. The UP was closed during this season.

The late antlerless firearm season (December 11, 2023-January 1, 2024) on private lands in areas open during the early antlerless season allowed hunters to use all license types to take antlerless deer.

Crossbows were legal to use during all archery and firearm seasons statewide, except in the UP where crossbow use was prohibited after November 30 except in the core CWD surveillance area in the UP (portions of Delta, Dickinson, and Menominee counties) or unless the hunter was disabled.

Since the 1950s, the DNR has used mail surveys to estimate deer harvests. However, the response rate has significantly dropped from over 70% in the early 2000s to 32% in 2023, leading to potentially inaccurate estimates. To address this, the DNR implemented mandatory deer harvest reporting in 2022. All successful hunters holding a state-issued deer license, including those with Deer Management Assistance Permits, were required to report their harvest within 72 hours of recovery and before transferring the animal's possession. This reporting system, accessible via the internet or a mobile application, required hunters to provide details such as the unique kill tag license number, their birth date, the harvest location, the type of deer harvested, the number of antler points for bucks, and the date of the kill. This new system enabled the DNR to obtain near real-time deer harvest estimates, a feature not possible with the mail survey method.

METHODS

The primary objectives of the harvest survey were to estimate hunter participation, harvest, and hunting effort. The survey also collected data on management issues. Hunters reported if they used trail cameras for deer hunting and if they captured images of selected carnivores (bear, bobcat, coyote, fisher, fox, marten, and wolf), deer, and wild pigs. They were asked about their use of crossbows during the archery season and if they employed commercial processors for deer butchering. Additional questions were included to gauge hunter satisfaction with the 2023 hunting season and deer population.

Hunters were asked about the ease of use of the website or mobile application for reporting deer harvests. They were also asked about their deer hunting preferences and regulations. This included their maximum annual deer harvest, views on the universal antlerless deer license, opinions on firearm regulations during specific seasons, supervision of young hunters, and attitudes towards changes in the youth hunting season, such as permitting multiple antlerless deer harvests and views on the length and restrictions of the youth season.

Response estimates were calculated separately for ten age classes (0-9, 10-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80+ years old), each gender, and for rural and urban areas, as responses may vary by sex, age, and residence. The U.S. Census Bureau (2010) classified counties as completely rural, mostly rural, and mostly urban based on population density. Completely rural counties, where 100% of the population lived in areas with less than 1,000 people per square mile, included Antrim, Arenac, Baraga, Benzie, Keweenaw, Lake, Missaukee, Montmorency, Ogemaw, Ontonagon, Osceola, and Oscoda. Mostly rural counties, where 50.1% to 99.9% of the population lived in areas with less than 1,000 people per square mile, included Alcona, Alger, Allegan, Alpena, Barry, Branch, Cass, Charlevoix, Cheboygan, Clare, Clinton, Crawford, Emmet, Gladwin, Gogebic, Gratiot, Hillsdale, Huron, Ionia, Iosco, Iron, Kalkaska, Lapeer, Leelanau, Lenawee, Luce, Mackinac, Manistee, Mason, Mecosta, Menominee, Montcalm, Newaygo, Oceana, Otsego, Presque Isle, Roscommon, St. Joseph, Sanilac, Schoolcraft, Shiawassee, Tuscola, Van Buren, and Wexford. Mostly urban counties, with populations greater than 50,000 and more than 50% of residents living in areas with over 1,000 people per square mile, included Bay, Berrien, Calhoun, Chippewa, Delta, Dickinson, Eaton, Genesee, Grand Traverse, Houghton, Ingham, Isabella, Jackson, Kalamazoo, Kent, Livingston, Macomb, Marquette, Midland, Monroe, Muskegon, Oakland, Ottawa, Saginaw, St. Clair, Washtenaw, and Wayne.

In mid-December, following the regular firearm season, a random sample of 61,956 license buyers was selected to receive a mail version of the harvest questionnaire, with an online version also available for completion. Hunters were instructed not to report hunting efforts and harvest related to DMA permits, as landowners obtaining these permits were already required to report the number of harvested deer to the DNR.

License buyers were divided into three strata based on age and license type. The first stratum included 29,492 youth license buyers (under 17) eligible for the Liberty/Youth season. The second stratum consisted of 10,638 individuals eligible for special disabled hunts. The third stratum comprised the remaining 554,218 license buyers. The random sample included 10,302, 8,816, and 42,838 people from the first, second, and third strata, respectively. The stratified sampling design accounted for varying selection probabilities, allowing reliable extrapolation of estimates from the sample to all license buyers.

Estimates were based on information collected from random samples of hunting license buyers. Thus, these estimates were subject to sampling errors (Cochran 1977). A stratified random sampling design (Cochran 1977) was used to calculate estimates, which were presented with their 95% confidence limit (CL). The 95% confidence interval, calculated by adding and subtracting the CL from the estimate, measures the precision of the estimate and

implies that the true value would fall within this interval 95% of the time. However, surveys may be affected by other sources of error, such as nonresponse bias, question wording, and question order, which are more difficult to measure than sampling error.

Estimates were calculated separately by hunt location, with the state divided into eight areas closely matching the DNR's previous wildlife management administrative units (Figure 1) for consistency with past surveys. The state was also divided into three ecological regions (UP, Northern LP, and Southern LP), generally aligning with major ecoregions (Albert 1995), except in the UP where two ecoregions were combined. Ecoregions are characterized by similar soils, vegetation, climate, geology, and physiography. Estimates were also calculated for each DMU (Figure 2, Appendix B), with deer harvested from unknown locations allocated proportionally among areas based on known harvest data.

Statistical tests were used to determine if differences among estimates were larger than expected by chance. Non-overlapping 95% confidence intervals indicated that the difference between means was larger than would be expected 95 out of 100 times if the study were repeated (Payton et al. 2003).

In mid-January 2024, questionnaires were mailed, with one follow-up questionnaire sent to nonrespondents in early March. Of the 61,956 people selected, 3,556 surveys were undeliverable, resulting in an adjusted sample size of 58,400. Questionnaires were returned by 18,562 people (32% adjusted response rate).

Estimates of harvest, hunting effort, and hunter participation are affected by response rates, which can confound comparisons between years if rates vary greatly. To reduce bias caused by the lower response rate, 2023 estimates were adjusted to make them comparable to the adjusted 2022 estimates (adjusted to a 74% response rate). Estimates of harvest, hunting effort, and hunter numbers were reduced by 11.6%, 8.6%, and 3.6%, respectively, reflecting the average decline noted between estimates calculated when 32% and 74% of responses were used in surveys done in 2000 and 2001.

RESULTS AND DISCUSSION

In 2023, 594,348 people purchased a deer hunting license in Michigan, a 1.4% increase from 2022 (586,323 licenses). Most license buyers in 2023 were males (89%), with an average age of 45 years (Figure 3). Approximately 10% (60,870) of license buyers were under 18 years old, and 3% (20,396) were younger than 12 years old.

In 2023, 901,541 hunting licenses and permits were issued (Table 3), a 2.3% increase from 2022 (881,373). Deer license sales declined by 2.6%, while combination (2.4%), antlerless (4.1%), and mentored youth (7.5%) licenses increased.

Starting in 2020, people who bought combination licenses were allowed to use the two harvest tags for antlerless deer across the entire LP during all deer hunting seasons. Before this change, only hunters in disease management areas could take antlerless deer with their combination license in the LP. As a result, hunters bought fewer antlerless and deer licenses

but more combination licenses (Figure 4), as they saw more value in the combination license due to its flexibility in taking either sex of deer. This change also significantly increased the overall number of harvest tags available for antlerless deer (Table 3).

The number of hunting license buyers in 2023 was about 17% lower than in 2013 (712,404). Most age groups under 60 had fewer buyers in 2023 compared to 2013 (see Figure 5). However, there was an increase in the number of hunters in the oldest age groups in 2023. This rise is likely due to the growing proportion of older individuals in the population as baby boomers age, and the legalization of crossbow use during archery season in 2009, which may have encouraged more participation among older hunters.

The number of youth deer hunters (under 20) remained relatively stable between 1995 and 2005 (Figure 6). In 2006, when the minimum hunting age was lowered from 14 to 12, youth hunter numbers increased by 19%. In 2012, the minimum age limit was removed, resulting in a 20% increase in youth hunters. However, since 2013, the number of youth hunters has declined by 36%, with a temporary 7.6% increase in 2020 coinciding with the start of the COVID-19 pandemic. Participation has declined in two out of the last three years since 2020.

In 2023, the number of deer harvest tags sold for all license types increased by approximately 2% from 2022 (Table 3), with license buyers purchasing an average of 2.2 harvest tags. Around 91% of license buyers obtained three or fewer harvest tags, and about 99% had six or fewer (Figure 7). Antlerless and combination harvest tags were the most frequently purchased (Figure 8), with about 34% of license buyers (200,283 people) purchasing at least one antlerless license and over 99% purchasing three or fewer (Figure 9).

In the UP, antlerless deer harvest was restricted in DMUs 351 and 352, requiring hunters to obtain an antlerless deer hunting access permit and a universal antlerless deer license. Access permits were distributed via a drawing, with leftover licenses sold on a first-come, first-served basis. In 2023, 1,000 permits were available for each UP DMU, with a total of 1,289 hunters obtaining access permits (672 for DMU 351 and 617 for DMU 352).

In 2023, $88.7 \pm 0.4\%$ (527,292) of license buyers spent time hunting deer (Table 4), with the number of hunters increasing significantly by 2% from 2022. Most hunters (457,020) participated in the regular firearm season (Figure 10). Participation increased significantly in all seasons except urban archery, Independence, and Liberty/Youth (Table 4 and Figure 11), with notable increases in early antlerless (32%), late antlerless (23%), muzzleloader (9%), archery (4%), and regular firearm (3%) seasons.

Approximately 49% of hunting days occurred during the archery season, 38% during the regular firearm season, and nearly 12% in the muzzleloader and late antlerless seasons combined (Figure 12). Statewide, hunters spent an average of 12.3 days afield (Table 5), with archers having the most available days (77) and spending the most time hunting (mean = 11.2 days/hunter) (Figure 13, Table 5). The total number of hunting days increased significantly by 11% from 2022 (Table 4), with significant increases in all seasons except urban archery, Independence, and Liberty/Youth. Notable increases occurred in late

antlerless (43%), early antlerless (28%), muzzleloader (17%), archery (9%), and regular firearm (9%) seasons (Table 4).

Statewide, 353,914 deer were harvested across all seasons in 2023 (including those harvested with DMA permits), which was not significantly different from 2022 (Figures 14-15, Tables 6-7). Season-specific harvests were not significantly different from 2022, except for late antlerless (28%) and Liberty/Youth (19%) seasons. Antlerless deer harvest increased significantly by 3% from 2022, while antlered deer harvest did not differ significantly (Table 6). Counties with the highest harvest densities for both antlered and antlerless deer were generally located in the central and south-central parts of the state (Figure 16).

In 2023, 51% of the total deer harvest occurred during the regular firearm season (Figure 17), with 45% of antlerless deer and 56% of antlered bucks taken during this time. The archery season accounted for 32% of the total harvest, with 22% of antlerless deer and 38% of antlered bucks harvested. Only 3% of antlered bucks were taken during the muzzleloader season, while the early and late antlerless and muzzleloader seasons combined accounted for 24% of the antlerless deer harvest.

Private lands yielded 90% of the total deer harvest in 2023 (Table 8), with 90% of both antlerless deer and antlered bucks harvested on private property.

Statewide, 43% of deer hunters harvested at least one deer across all seasons and sexes in 2023 (Figure 18, Table 9), compared to 50% in 2022. Approximately 18% of hunters took an antlerless deer, and 32% harvested an antlered buck in 2023, with 14% of hunters harvesting two or more deer.

Hunter success was highest during the Liberty/Youth (33%), regular firearm (31%), and archery (30%) seasons (Figure 19, Table 10), and lowest during the muzzleloader (12%) and urban archery (8%) seasons. During the regular firearm season, 23% of hunters harvested an antlered buck, and 11% took an antlerless deer (Table 10).

Deer hunters reported their satisfaction with (1) the number of deer seen, (2) the number of antlered bucks seen, (3) the size of antlers seen, (4) the number of deer taken, and (5) overall hunting experience. Less than 50% of hunters were satisfied with most of these items (Tables 11-15, Figure 20). Statewide satisfaction levels significantly decreased from 2022 to 2023 for the number of deer seen, deer harvested, and overall hunting experience, but remained unchanged for the number of bucks seen and antler size. Despite the general decline in satisfaction compared to the previous year, levels remain close to the highest reported (Figure 20). Hunters who exclusively hunted on private lands were generally more satisfied than those who only hunted on public lands (Tables 16-20).

Most archers (75% or 213,800 hunters) used a crossbow during the archery season, with about 33% of these archers harvesting at least one deer with a crossbow (Tables 21-22), totaling approximately 78,967 deer (Table 23). The number of archers using a crossbow in 2023 significantly declined by 4% from 2022 (223,547 archers), and the harvest of deer by these archers also significantly decreased by 12% (89,344 deer taken in 2022). In 2023,

33% of archers using a crossbow harvested a deer during the archery season, compared to 36% success in 2022.

An estimated $139,242 \pm 3,949$ hunters brought $166,617 \pm 5,605$ deer to a commercial meat processor in 2023, accounting for about 48% of the total deer harvested across all seasons (166,617 of 347,008 deer), which is consistent with the proportion reported in 2022 (Frawley 2023).

In 2023, $25 \pm 1\%$ of active hunters reported difficulty in finding a processor to butcher their deer, which is the same level as in 2022 but higher than the $8 \pm 1\%$ of hunters in 2020 who experienced difficulty due to COVID-19 (Frawley 2022). The challenges in locating a commercial processor in 2023 appear to be due to a decrease in the number of processors accepting deer and the increased difficulty processors faced in hiring workers (Bestul 2022).

Statewide, about 45% of deer hunters used a trail camera to monitor deer activity in their hunting area (Table 24), marking a significant increase from 42% in 2022. Hunters in the UP used trail cameras more frequently than those in the LP, although UP hunters used cameras for fewer days on average compared to LP hunters (Table 25). These differences likely reflect geographic variations in hunting success (Table 10) and mean hunting effort (Table 5). UP hunters had lower hunting success than LP hunters, possibly leading to a higher likelihood of using trail cameras to improve their success. Despite a lower proportion of LP hunters using cameras, those who did had more opportunities to use them due to more hunting seasons and longer season durations (Table 1).

Deer were the most commonly observed species by hunters using trail cameras, with 97% capturing deer images (Table 26). UP hunters were more likely to see bears, fishers, martens, and wolves than LP hunters, while LP hunters were more likely to see coyotes and foxes. Bobcats were more frequently observed by hunters in the NLP compared to the UP or SLP. In 2023, a significantly higher proportion of hunters statewide photographed bobcats (22.4% in 2023 versus 18.8% in 2012), coyotes (65.8% versus 63.0%), and wolves (8.9% versus 7.2%) compared to 2022 (Figure 21).

In 2023, successful deer hunters with a state-issued license were required to report their harvest within 72 hours of recovery, resulting in 267,393 submitted harvest reports (Table 27). The estimated harvest for all seasons combined was 30% higher than the number of harvest reports (347,008 versus 267,393). This difference between the estimate and the number of deer harvest reports in Michigan was smaller compared to most other states (Table 28), where it was common for harvest estimates to be 50% or more than the number of submitted harvest reports. These large differences in other states may partly reflect harvest overestimation due to low survey response rates, which can lead to biased estimates if the sample is not representative of the target population. Michigan estimates may also be affected by low response rates; however, an attempt has been made to reduce these effects by applying a correction factor to the estimates (see Methods), resulting in smaller differences between estimates and reported harvest in Michigan.

Successful hunters were asked about the ease of use of the website or phone application for reporting their harvested deer. Statewide, 69% of hunters found the harvest reporting systems easy to use, while 12% found them hard to use (Table 29, Figure 22). Only $3 \pm 0.4\%$ of hunters reported the system as very hard to use. Ease of use was slightly lower among UP hunters, although 64% still found the system easy to use. Ease of use also varied significantly by the hunter's age (Table 30), with hunters younger than 60 reporting the systems as easier to use compared to older hunters. Ease of use was similar among hunter groups defined by sex (males versus females), residence type (rural versus urban), or license buying history (new versus repeat buyers).

Desired Deer Harvest

Most hunters across all regions preferred to harvest one or two deer to meet their venison needs, with smaller proportions desiring three, four, or more deer (Table 31). However, the preference for the maximum number of deer varied among regions. In the UP regions, a higher proportion of hunters preferred to harvest one deer compared to other regions. In contrast, the LP regions had a higher proportion of hunters preferring to harvest three deer. The proportion of hunters preferring to harvest four or more deer was generally low across all regions.

While preferences varied slightly among different demographic groups (Table 32), the most notable variation was observed among age groups. Older hunters (ages 70 and above) showed a higher preference for harvesting fewer deer compared to younger age groups.

The reported number of deer taken by age group in 2023 generally aligned with hunters' desired take. Older hunters, especially those aged 70 and above, reported taking fewer deer than younger hunters (Figure 23). Additionally, hunt success for older license buyers was lower than that of younger individuals (Figure 24).

The Universal Antlerless License

The universal antlerless deer license, introduced in 2021, allowed hunters to take antlerless deer in any open unit in the LP and parts of the UP on public and private land without specific quotas. In 2023, 60% of active hunters statewide supported this license (Table 33). Regionally, most deer hunters supported the universal antlerless deer license, except for hunters in the UP.

Across all demographic groups, most deer hunting license buyers in 2023 supported the universal antlerless deer license (Table 34). Support ranged from 48% to 68%, with an overall support rate of 60% among all license buyers. Support was highest among license buyers aged 30-39 (68%) and 20-29 (62%), while it was lowest among those aged 80+ (48%). Opposition to the universal antlerless deer license also varied across demographic groups. License buyers aged 80+ (27%) and those from completely rural areas (27%) exhibited higher levels of opposition compared to other groups.

Overall, despite some variations in the level of support and opposition among different demographic groups, most license buyers across all groups supported the universal antlerless deer license.

Using Firearms in the Muzzleloader Season

Starting in 2020, hunters in the southern LP (SLP) could use any legal firearm, rather than only muzzleloaders, during the muzzleloader season. In 2023, 48% of active hunters statewide supported this regulation, with the highest level of support (61%) among hunters who preferred to hunt in the SLP, where the regulation applied (Table 35). Hunters who preferred to hunt in the northern LP (NLP) and the UP had the lowest levels of support at 40% and 20%, respectively, although the regulation did not apply in these regions.

Support for allowing any legal firearm during the muzzleloader season varied among different demographic groups (Table 36). It was highest among mostly urban license buyers (51%) and new buyers (50%), while it was lowest among completely rural buyers (28%). Additionally, license buyers aged 80+ (37%) and completely rural buyers (39%) exhibited higher levels of opposition compared to other groups.

Deer Taken with a Combination License

Starting in 2020, hunters in the LP could take any type of deer with a combination license during all deer hunting seasons, eliminating the need for an antlerless license to harvest antlerless deer. In 2023, 68% of deer hunters statewide supported this regulation (Table 37). However, support varied among regions, with the highest level in the southern LP (SLP) at 78% and the lowest in the UP at 30%.

While regional differences existed in the level of support and opposition for this regulation, deer hunters in the LP, where the regulation applied, generally showed strong support. Overall, despite some minor demographic variations, there was generally strong support among deer hunting license buyers across all demographic groups (Table 38).

Youth Hunting Season

During the 2-day youth hunting season, young hunters must be accompanied by an adult aged 18 or older. Among license buyers who were at least 18 years old in 2023, 26 ± 1% had hunted with a youth in at least one year since the youth season was created in 2000.

From 2008 to 2023, about 40% of youth eligible for the youth hunting season participated (Figure 25). Initially, eligibility was for individuals aged 10-16 (2008-2011) but later extended to 16 or younger (2012-2023). Participation remained relatively stable at about 40% from 2008 to 2012. However, a noticeable decline to 20% occurred in 2013, coinciding with the removal of the minimum age requirement. Subsequently, participation gradually increased, returning to approximately 40% by 2018 and remaining consistent through 2023.

We compared the average number of years of deer hunting license purchases between youth season participants and non-participants (Figure 26). The data tracked the average years of license purchases over time, regardless of the hunters' age. Initially, groups were based on youth season eligibility, although some may have become ineligible in subsequent years. We aimed to monitor license purchases after the initial year, regardless of age.

The surveys could have been received by young hunters at any eligible age (0-16 years old), not necessarily their first or last participation year. Participation in a given year was only confirmed if indicated in the survey.

The groups were not entirely independent as hunters may have participated in a year without receiving a survey, potentially making participation between the groups more similar than if fully independent. Despite these complexities, we observed slight yet notable differences between the groups in certain periods, suggesting that participation may influence future license purchases.

This evaluation was observational, which means that any relationships identified did not imply cause and effect because participants and non-participants were not randomly assigned. Therefore, observed differences may be due to unknown factors rather than the impact of the youth hunting season. For example, differences in motives for hunting could explain variations in license purchases.

2023 Youth Hunting Season Regulations

In the 2023 youth hunting season, young hunters could take multiple antlerless deer (one per tag) but only one antlered deer. Statewide, 36% of deer hunters agreed with the regulations, while 26% disagreed (Table 39). Support varied regionally (highest in southern LP at 40%, lowest in UP at 31%). Agreement was higher among female (44%) and new license buyers (49%) but lower among rural residents (29%) and hunters aged 80+ (28%) (Table 40).

Few active hunters (24%) statewide supported extending the youth season beyond two days, with similar levels across regions (Table 41). Disagreement was generally higher. Likewise, only 24% of license buyers agreed (Table 42), with higher disagreement (44%). Agreement was higher among females (30%) and new buyers (45%) but lower among rural residents (19%) and older hunters (17%).

During the youth season, there was moderate statewide support (40%) for restricting young hunters to antlerless deer, with similar agreement across regions (Table 43). However, among license buyers, approval varied by age, ranging from 13% (aged 0-9) to 50% (aged 60-69) (Table 44).

ACKNOWLEDGMENTS

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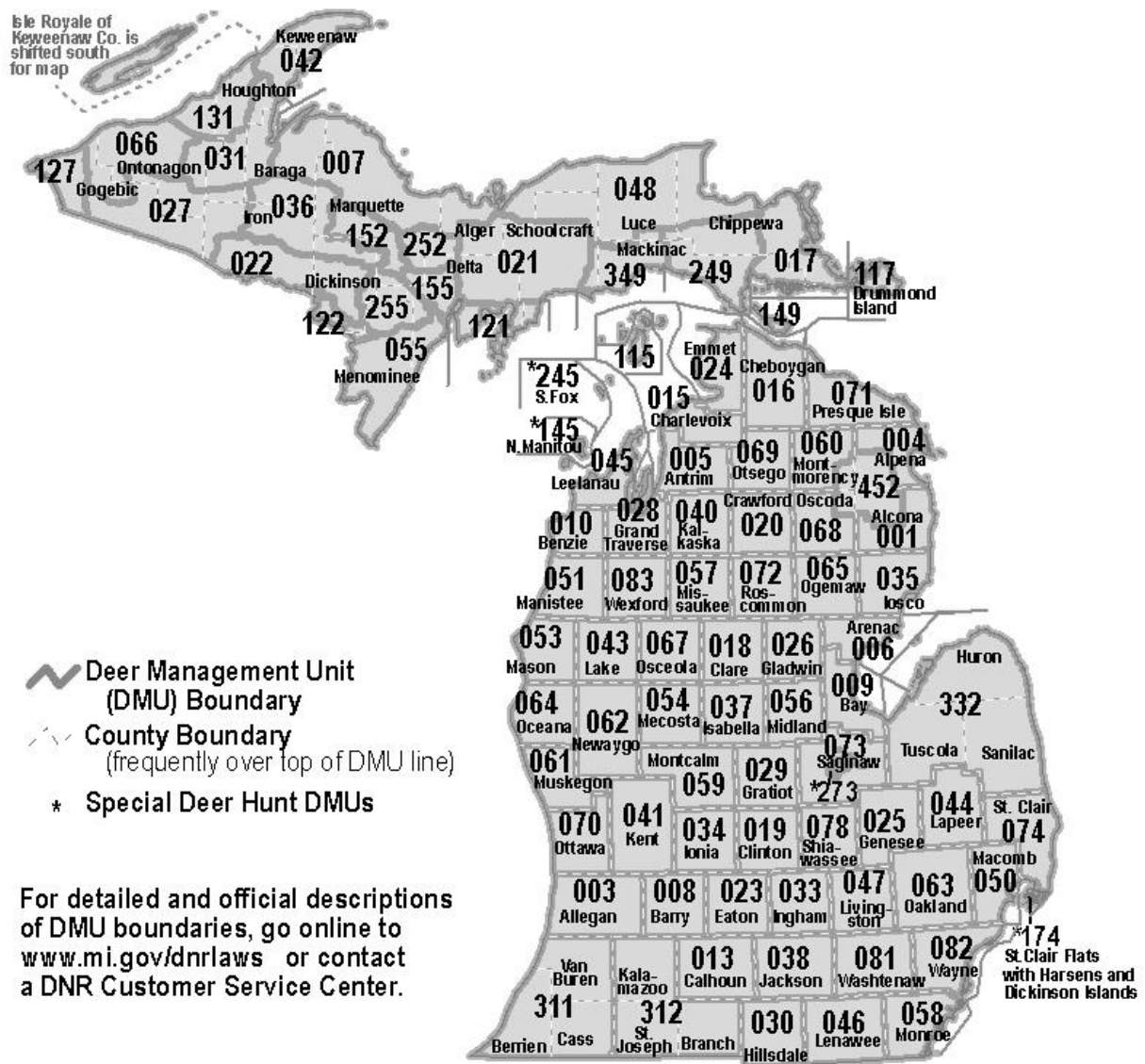


Figure 2. Deer management units in Michigan for the 2023 hunting seasons.

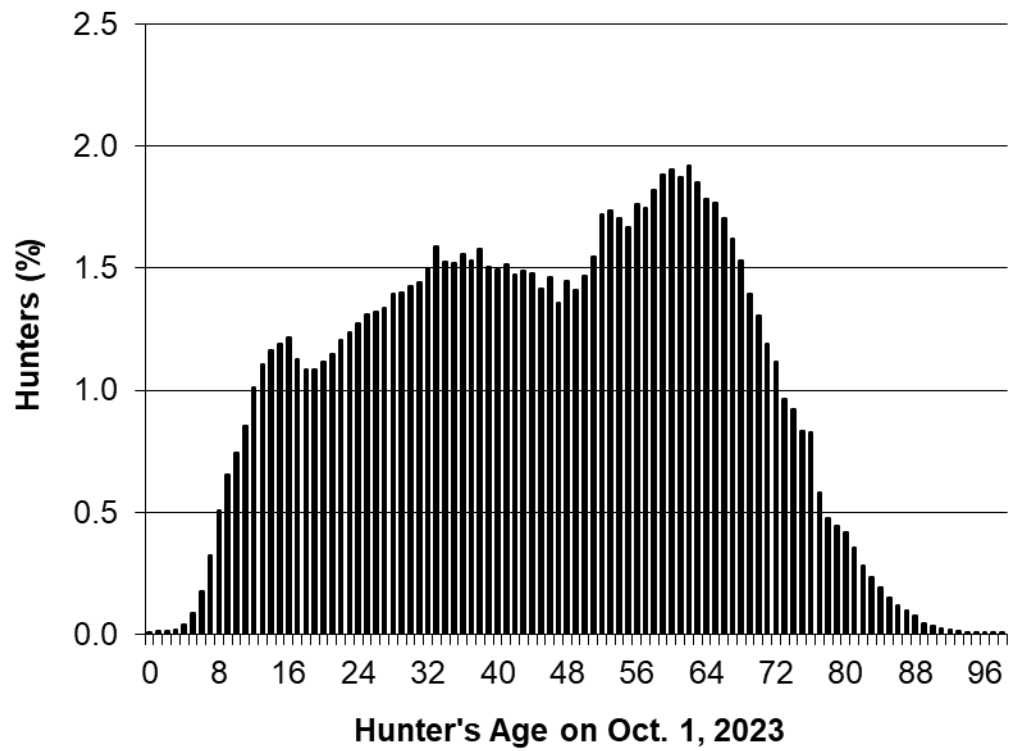


Figure 3. The age of people that purchased a deer hunting license in Michigan for the 2023 hunting seasons (mean = 45 years).

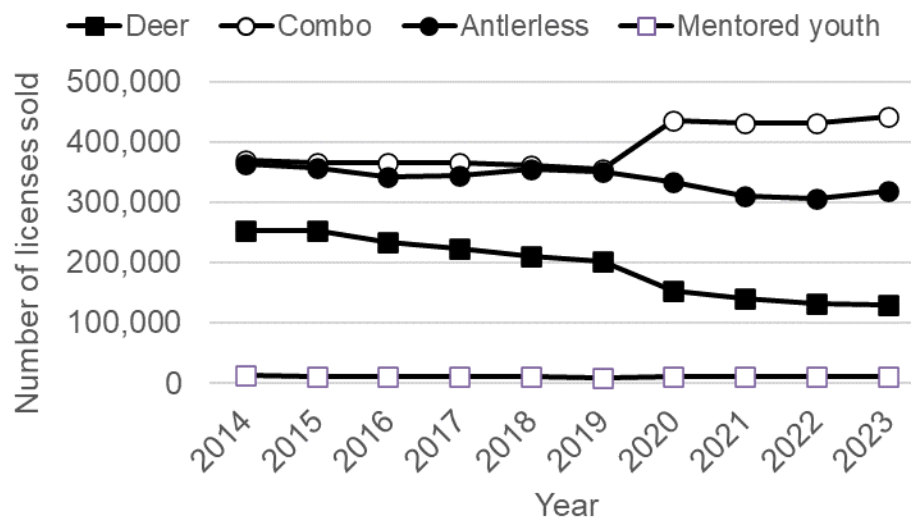


Figure 4. The number of deer hunting licenses sold in Michigan summarized by license types (deer, combination, antlerless, and mentored youth) during 2014-2023. Beginning in 2020, hunters buying a combination license could use the two harvest tags to take antlerless deer in the entire Lower Peninsula during all hunting seasons.

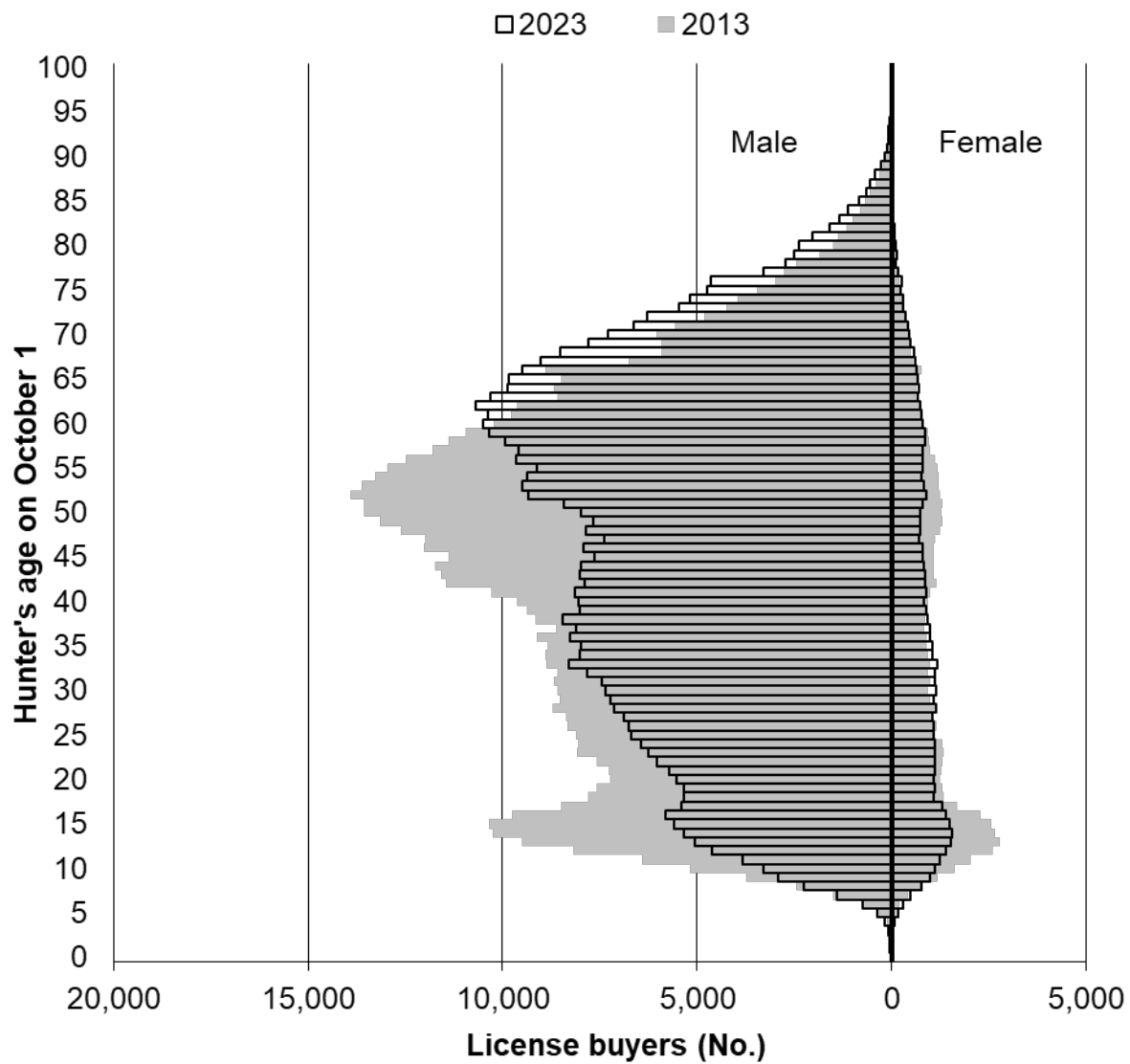


Figure 5. The number of deer hunting license buyers in Michigan by age and sex during the 2013 and 2023 hunting seasons. Deer hunting licenses were purchased by 712,404 people in 2013 and 594,348 in 2023.

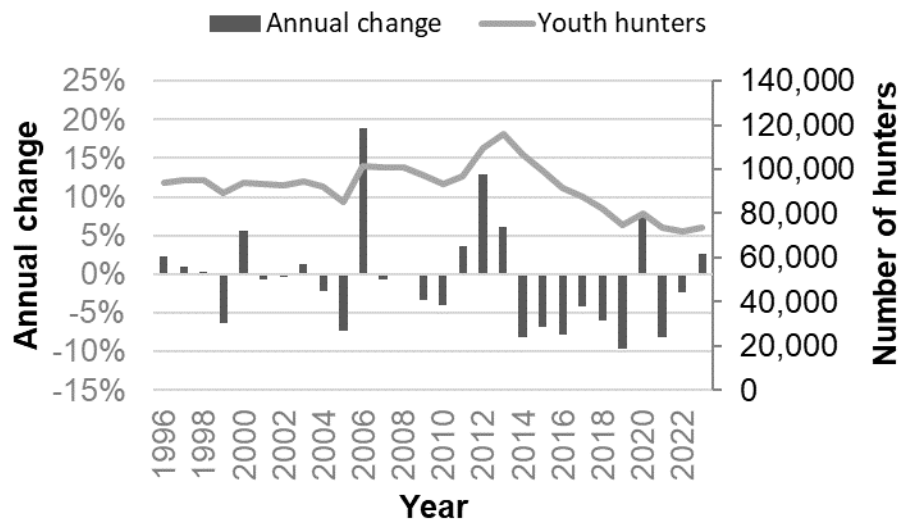


Figure 6. The number of Michigan youth deer hunters (less than 20 years old) and the annual change in participation during 1996-2023. The youth hunting season was created in 2000. The minimum age for hunting deer was lowered from 14 to 12 in 2006, and the minimum age limit was removed in 2012. In 2020, the increase in youth participation coincided with the start of the COVID-19 pandemic.

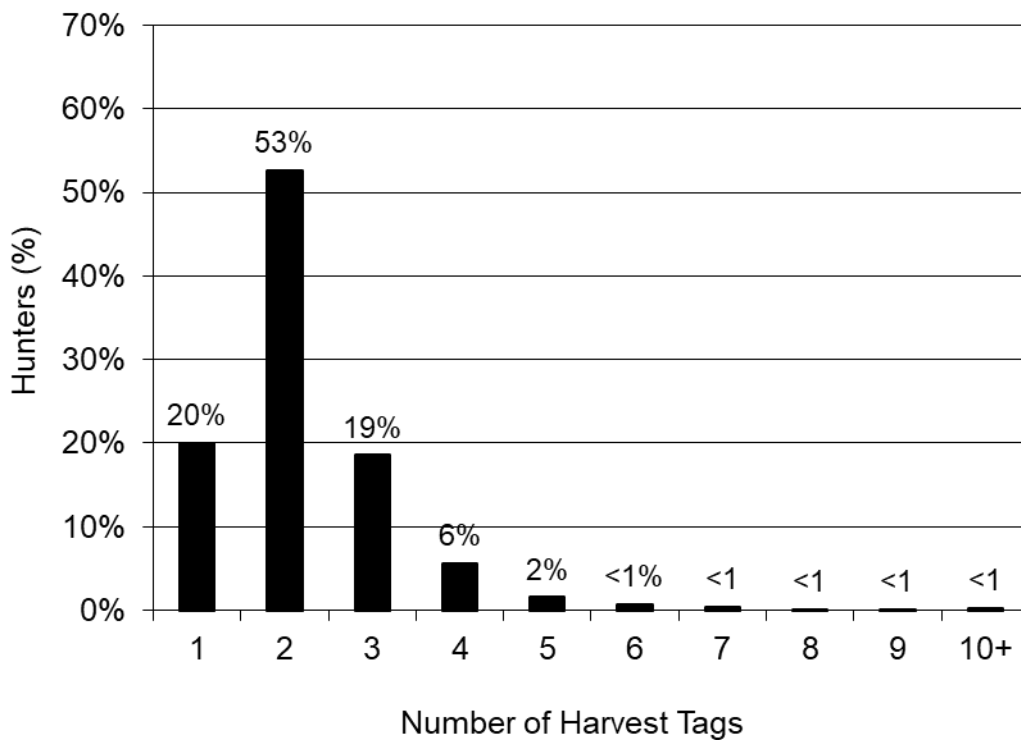


Figure 7. The number of harvest tags (all license and tag types) issued per person for hunting deer in Michigan during the 2023 hunting seasons (mean = 2.2 tags). Licenses were purchased by 594,348 people.

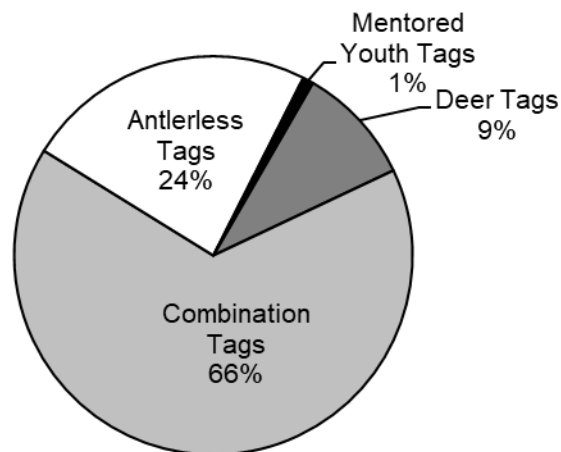


Figure 8. The types of harvest tags issued for deer hunting in Michigan during the 2023 hunting seasons.

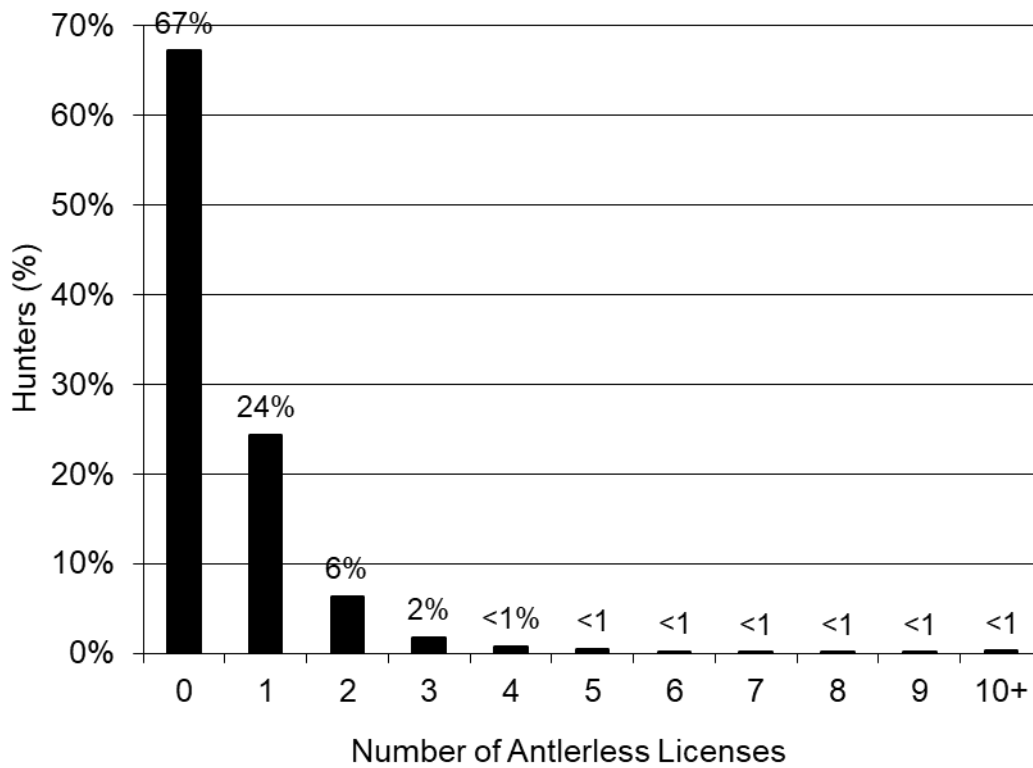


Figure 9. The percentage of deer hunting license buyers (all license types) purchasing an antlerless license in Michigan, 2023 (excluded mentored youth hunting license). Antlerless licenses were purchased by 200,283 of 594,348 people (34%) buying deer hunting license.

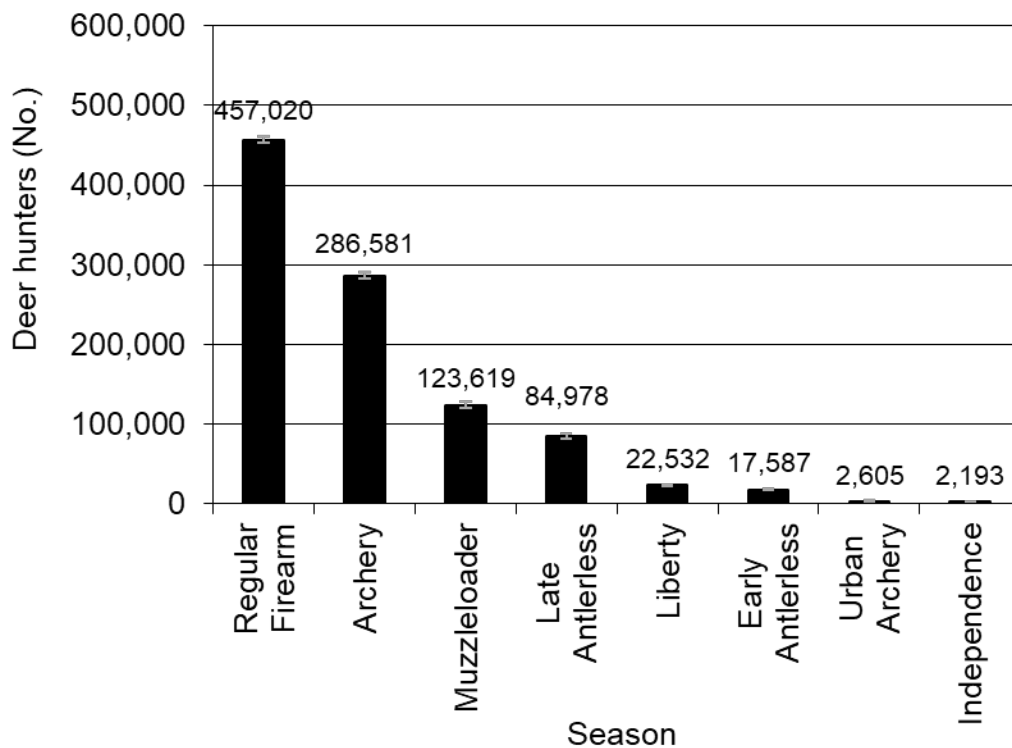


Figure 10. The number of people hunting deer in Michigan during the 2023 hunting seasons. Error bars represent the 95% CLs.

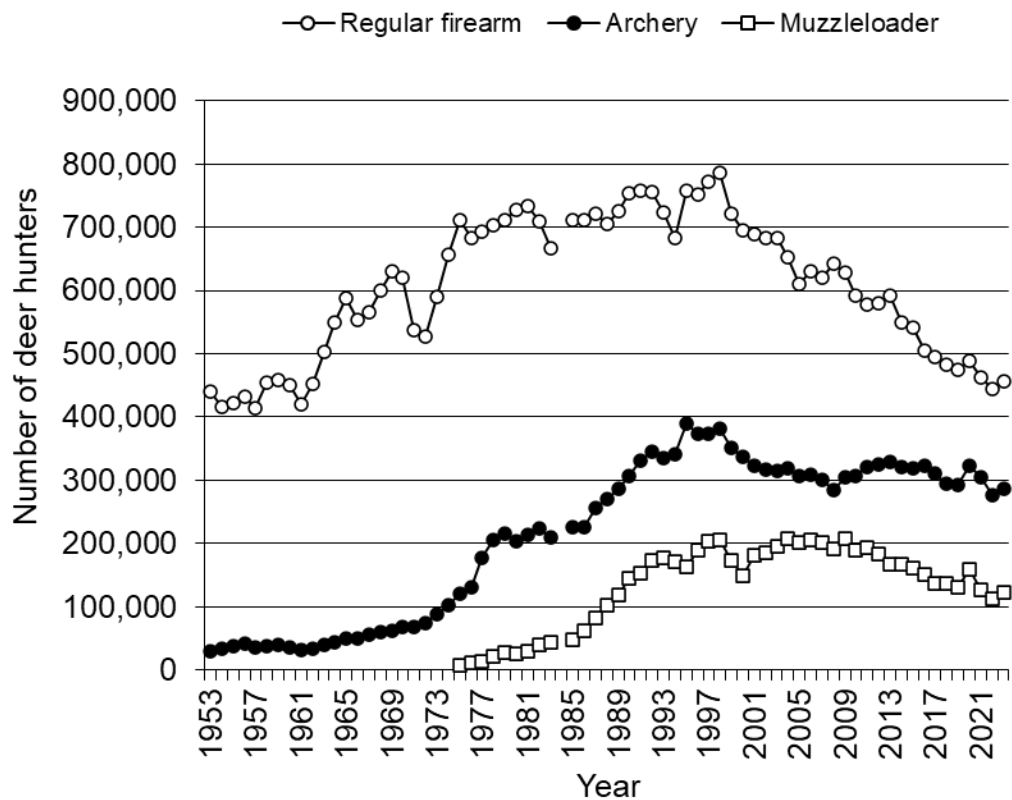


Figure 11. The number of people hunting deer in Michigan during the regular firearm, archery, and muzzleloader seasons, 1953-2023.

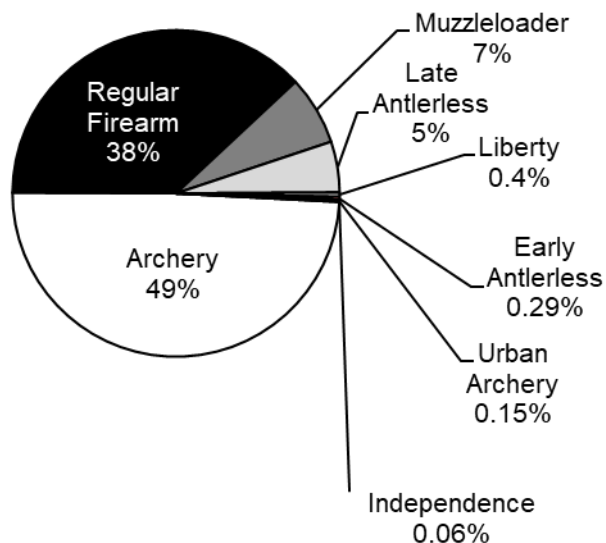


Figure 12. The distribution of hunting effort among deer hunting seasons in Michigan, 2023.

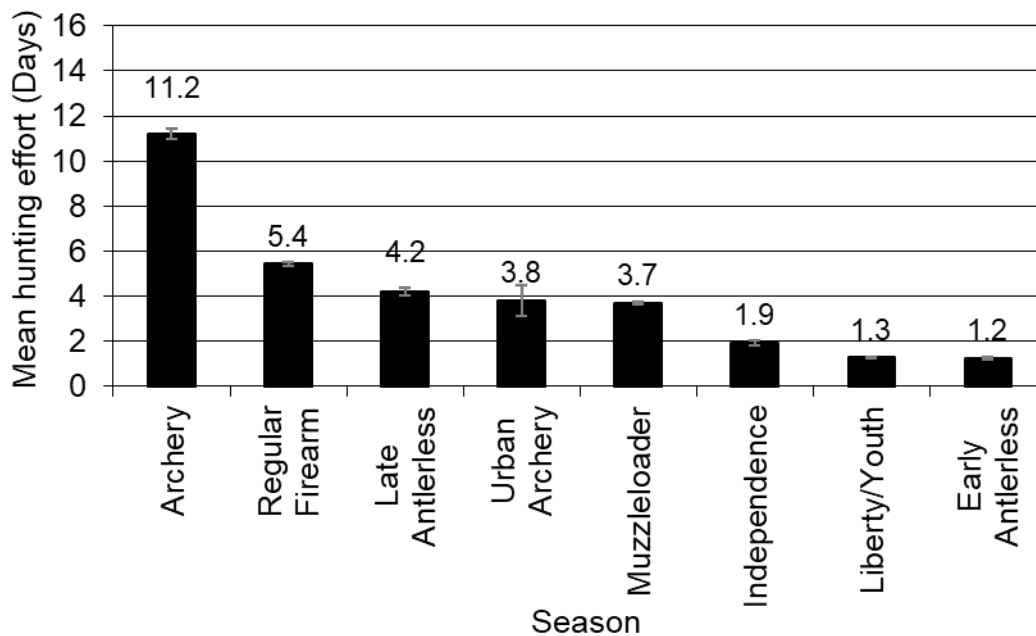


Figure 13. The mean number of days spent hunting deer in Michigan during the 2023 hunting seasons. Error bars represent the 95% CLs.

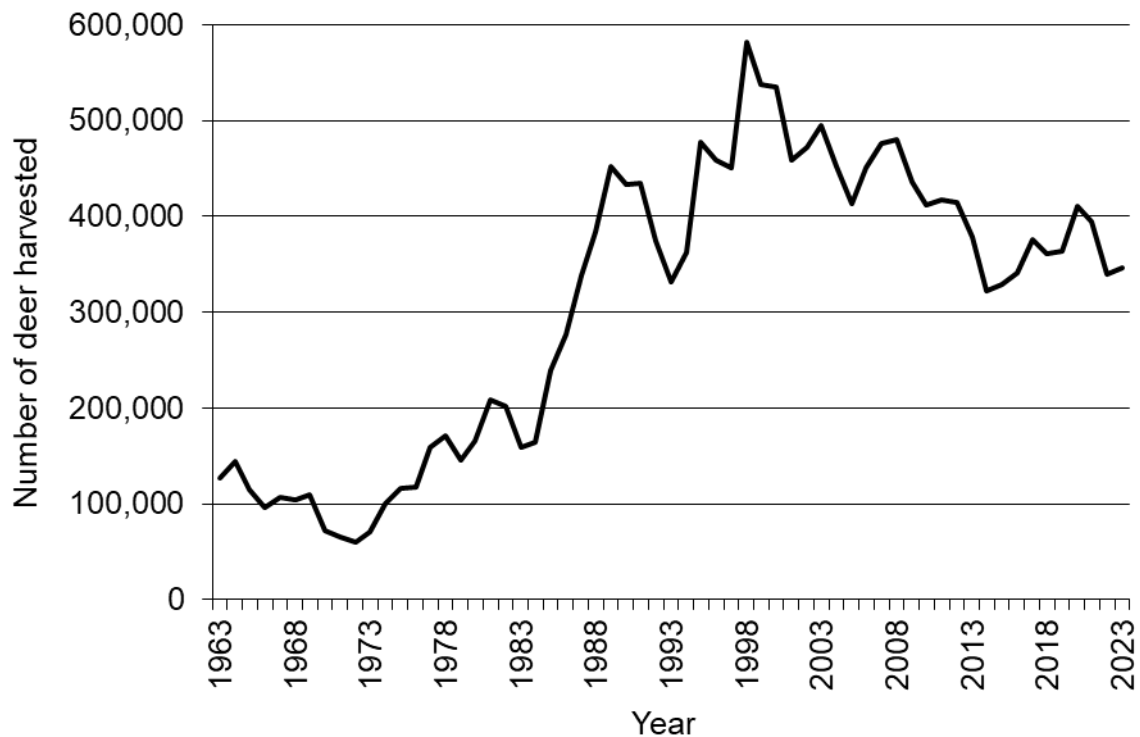


Figure 14. The number of deer harvested in Michigan's hunting seasons, 1963-2023. Harvest from all seasons and for all deer sexes was combined.

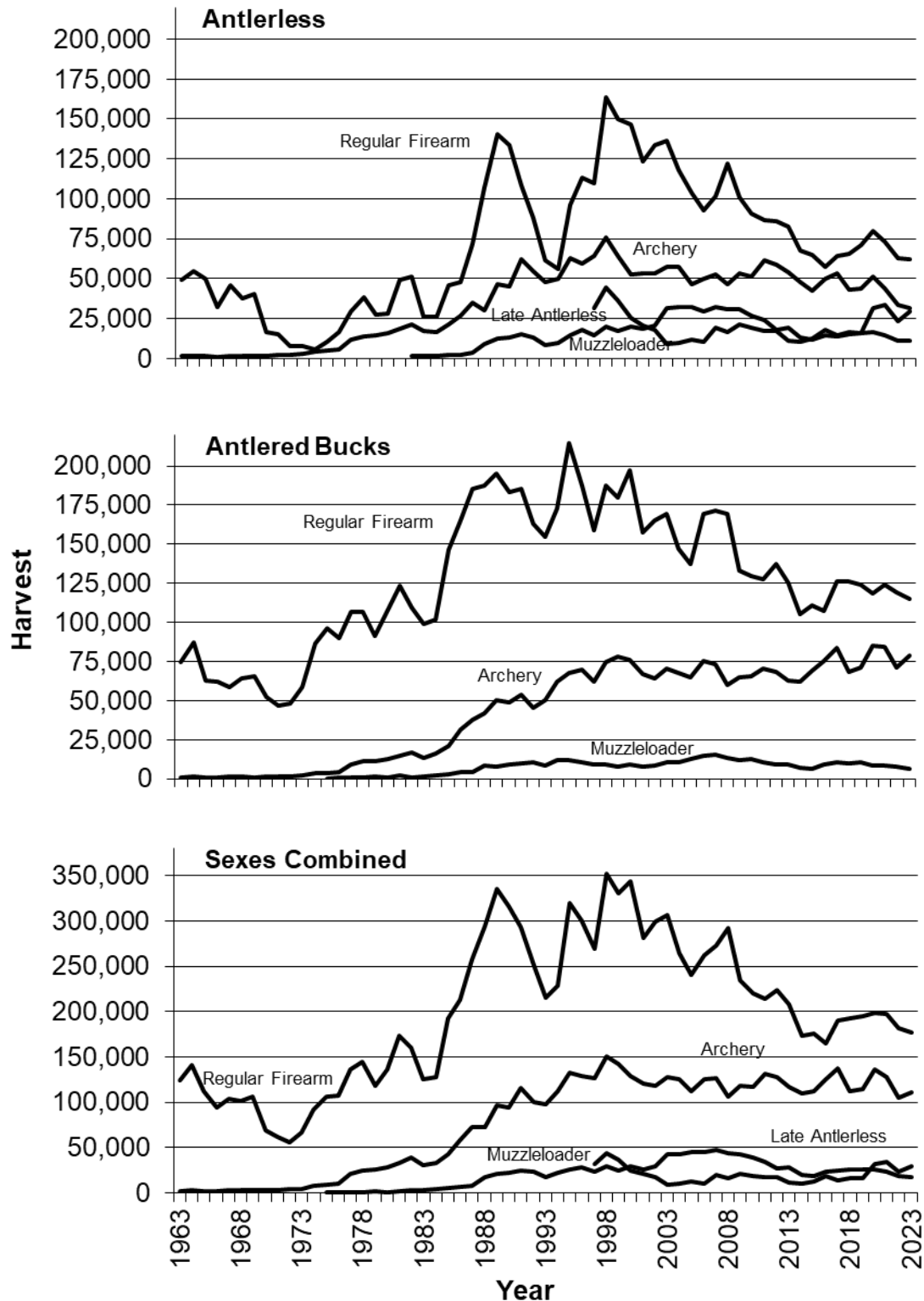


Figure 15. The number of deer harvested in Michigan's hunting seasons, 1963-2023. Harvests for early antlerless, youth, and hunters-with-disabilities seasons were not shown.

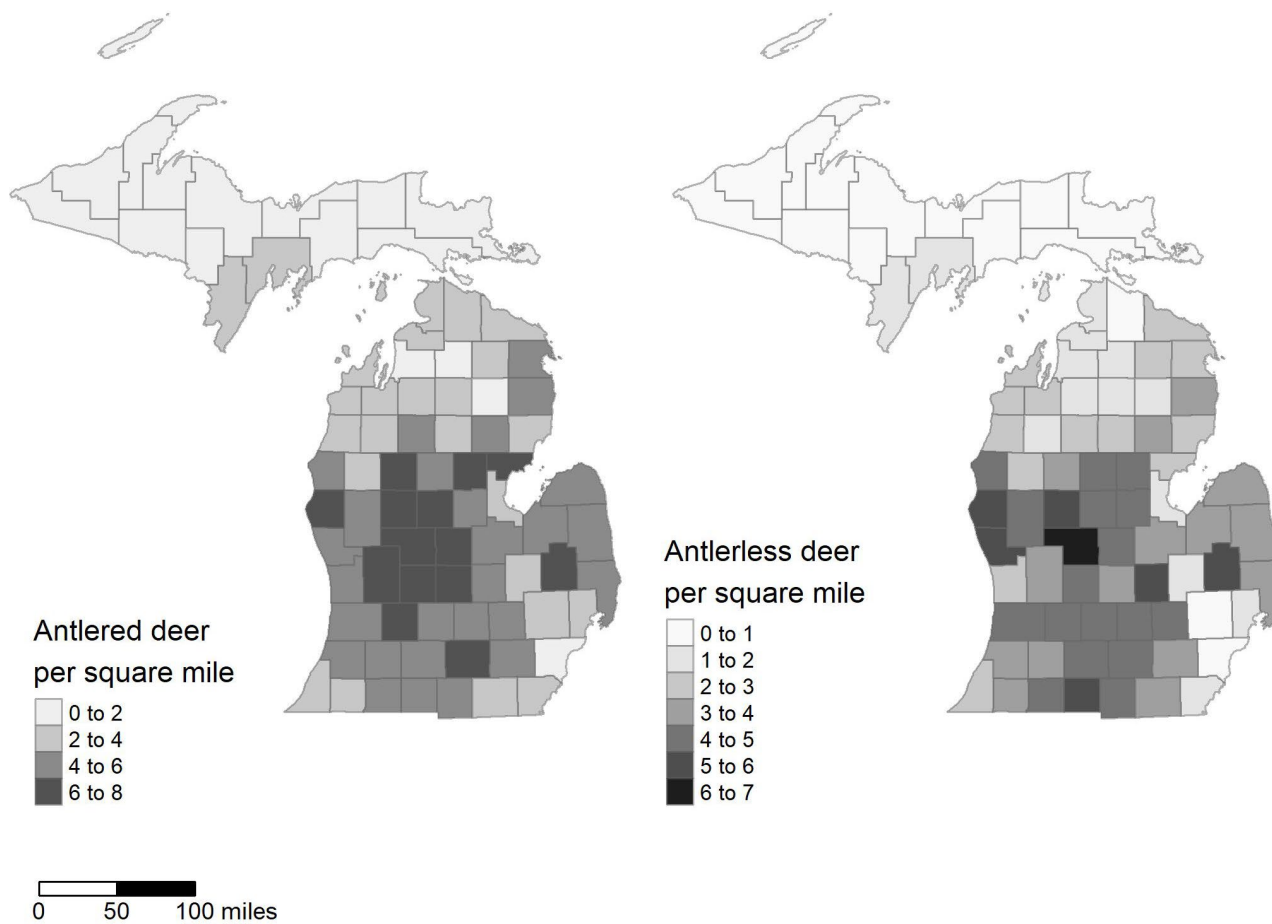


Figure 16. The harvest density of antlered (left) and antlerless (right) deer during all 2023 hunting seasons combined in Michigan.

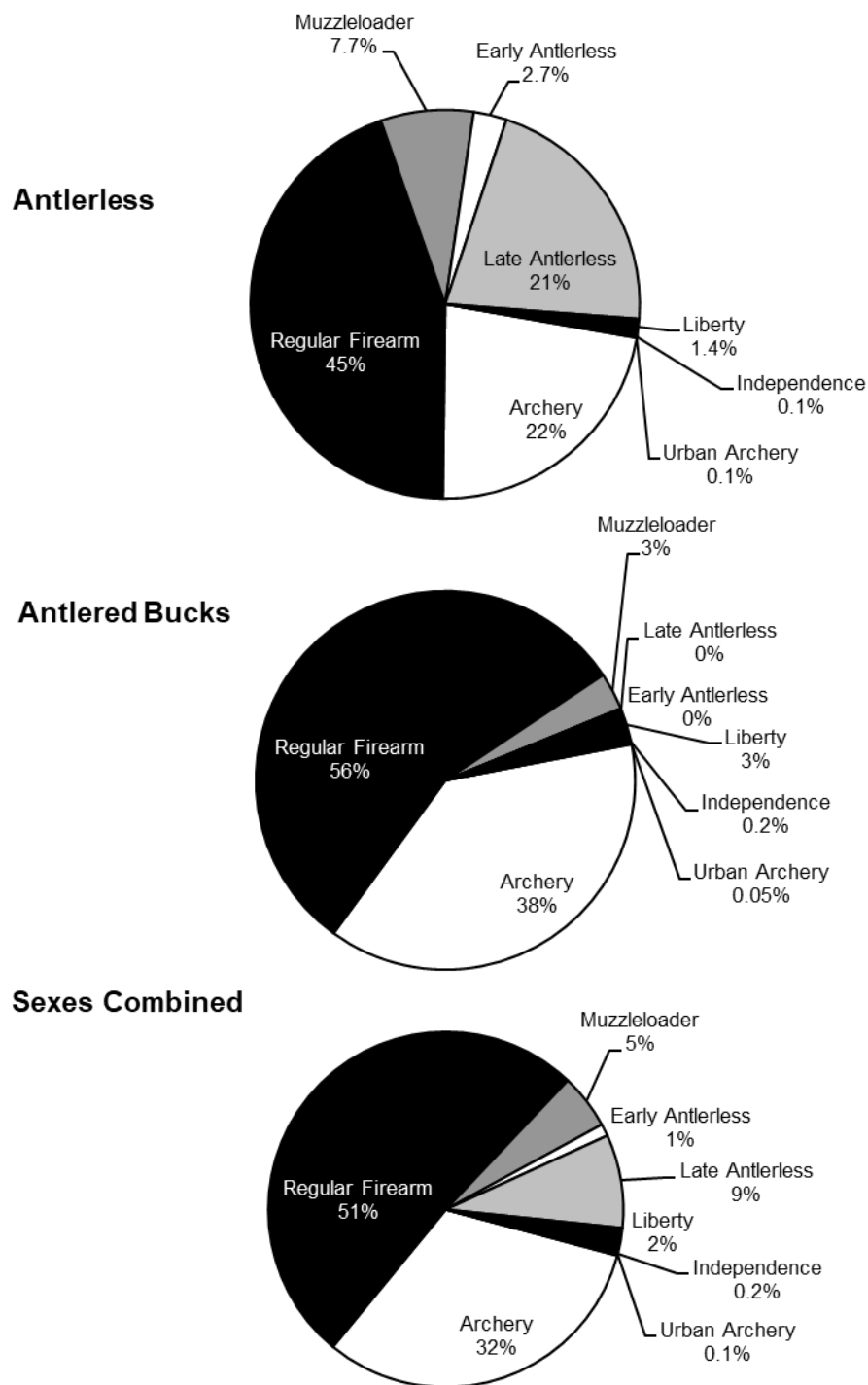


Figure 17. The distribution of harvest among deer hunting seasons in Michigan, 2023. Antlered deer had antlers at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches in length.

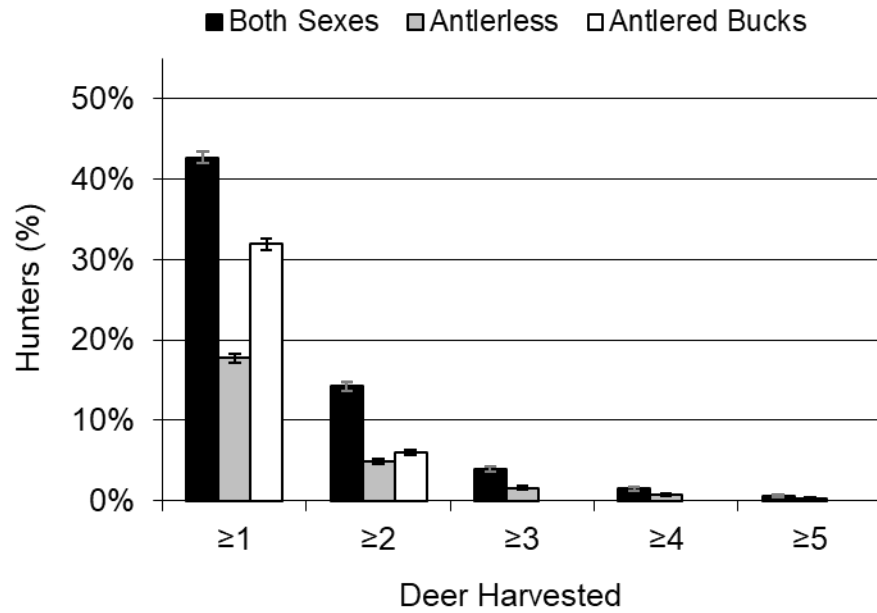


Figure 18. The percentage of hunters harvesting a deer in Michigan, 2023. Error bars represent the 95% CLs.

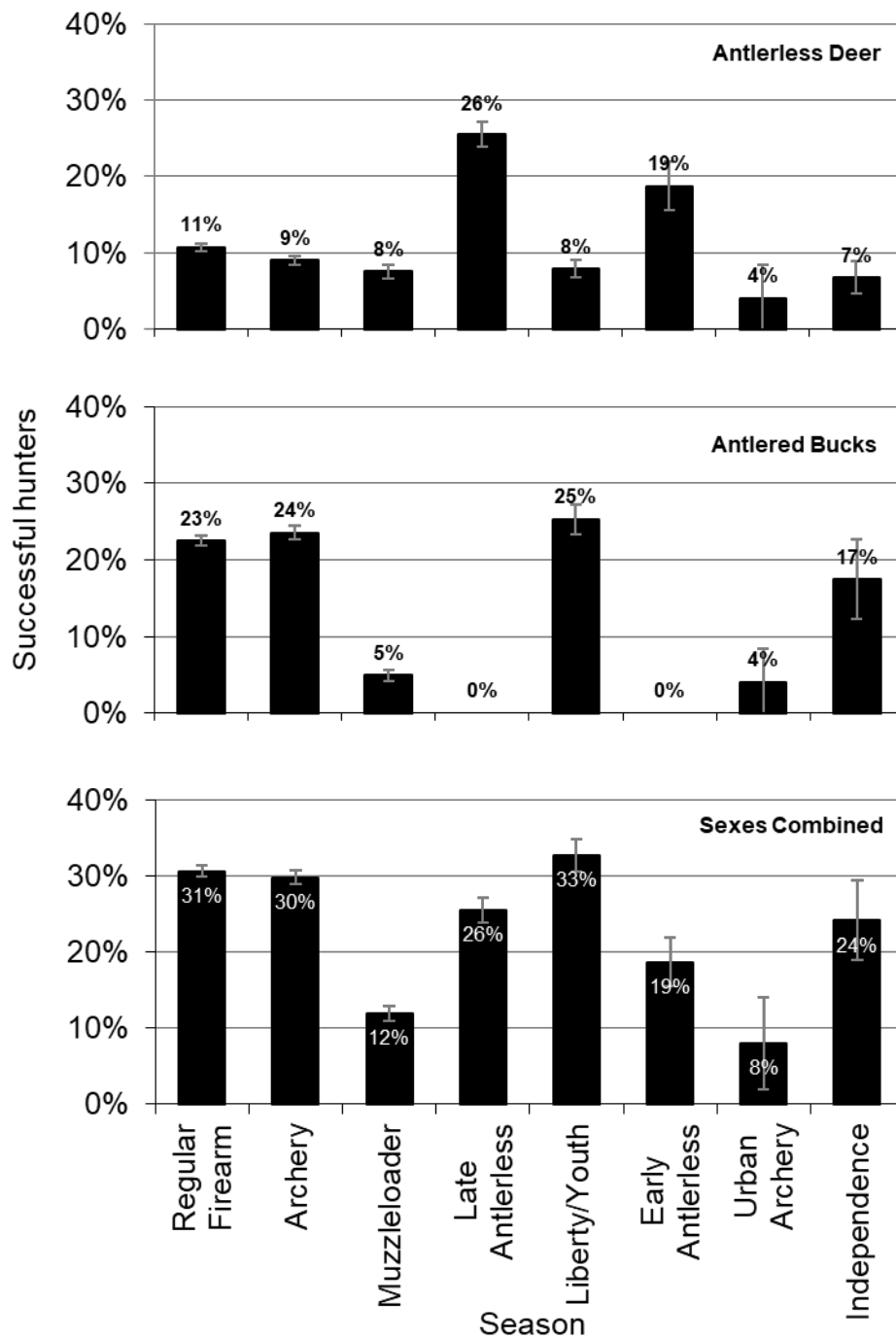


Figure 19. Percentage of hunters harvesting a deer in Michigan's deer hunting seasons, 2023. Error bars represent the 95% CLs. Antlered deer had at least one antler at least 3 inches in length; antlerless deer included deer without antlers and deer with antlers less than 3 inches.

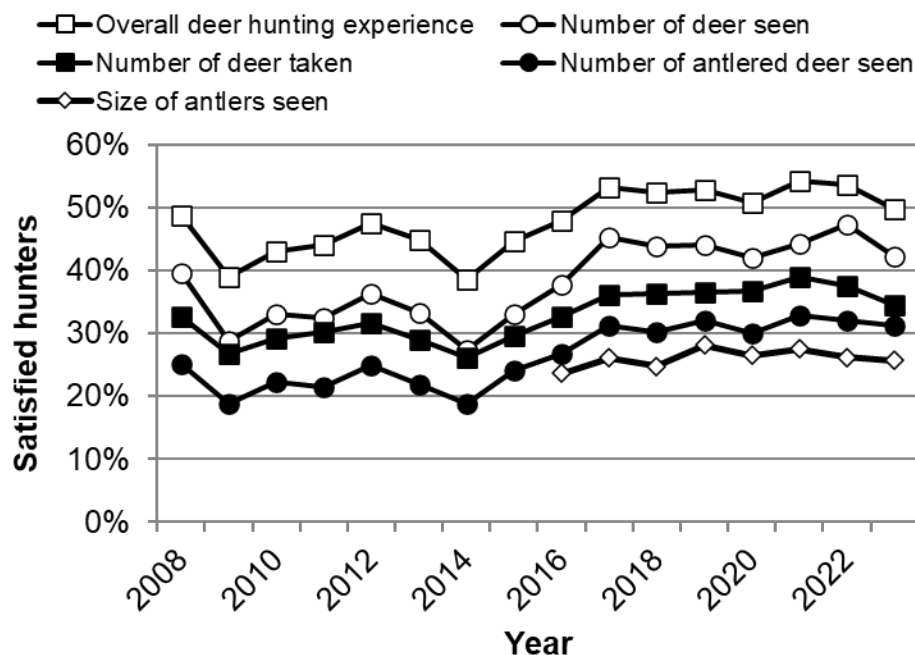


Figure 20. Proportion of hunters that were satisfied with (1) number of deer seen, (2) number of antlered deer [bucks] seen, (3) size of antlers seen, (4) number of deer taken, and (5) their overall hunting experience during 2008-2023. The “satisfied” category combined respondents that reported that they “very satisfied” or “somewhat satisfied.”

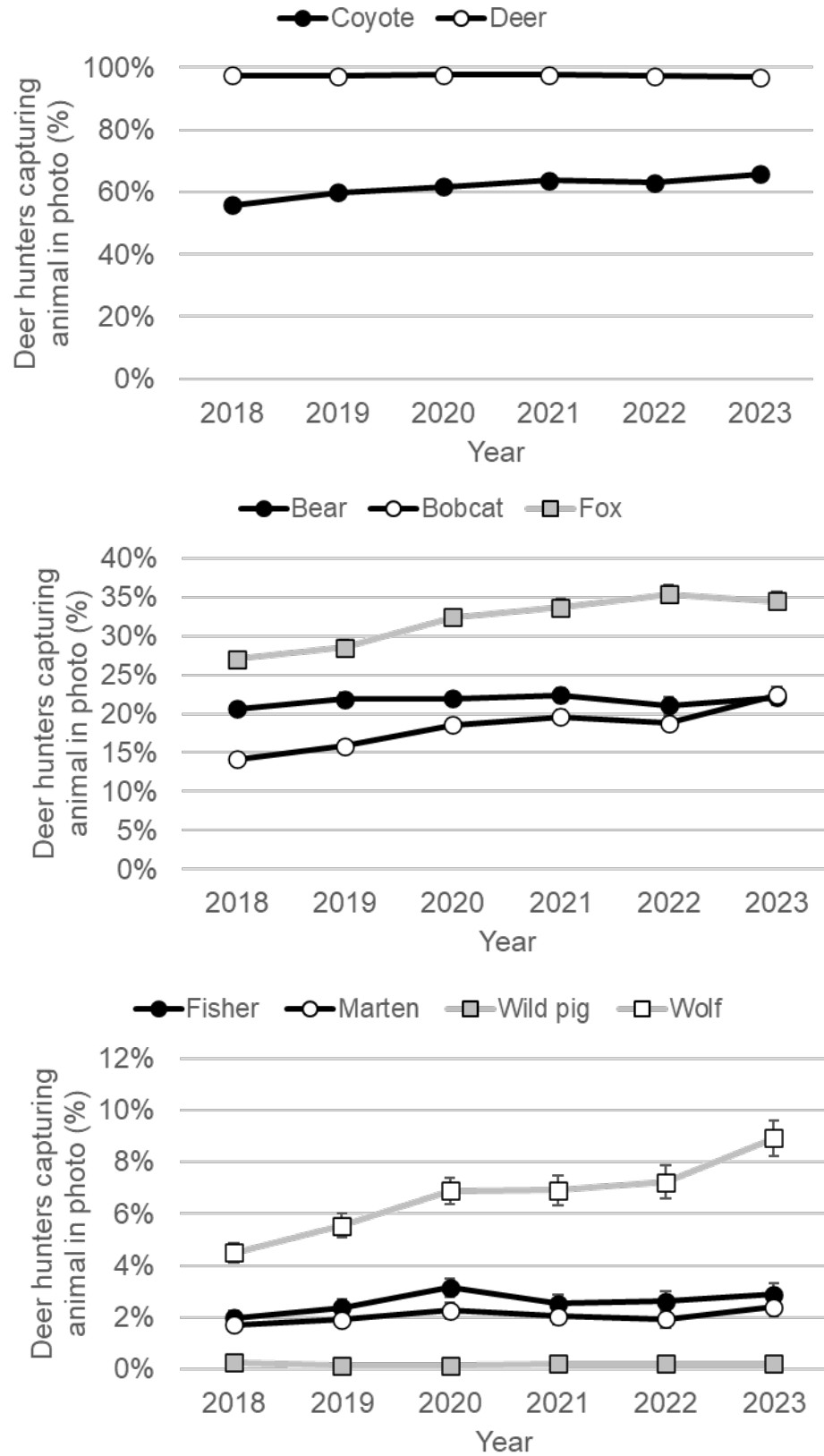


Figure 21. The proportion of deer hunters that used a trail camera and photographed selected carnivores, deer, and wild pigs with their camera in 2018-2023.

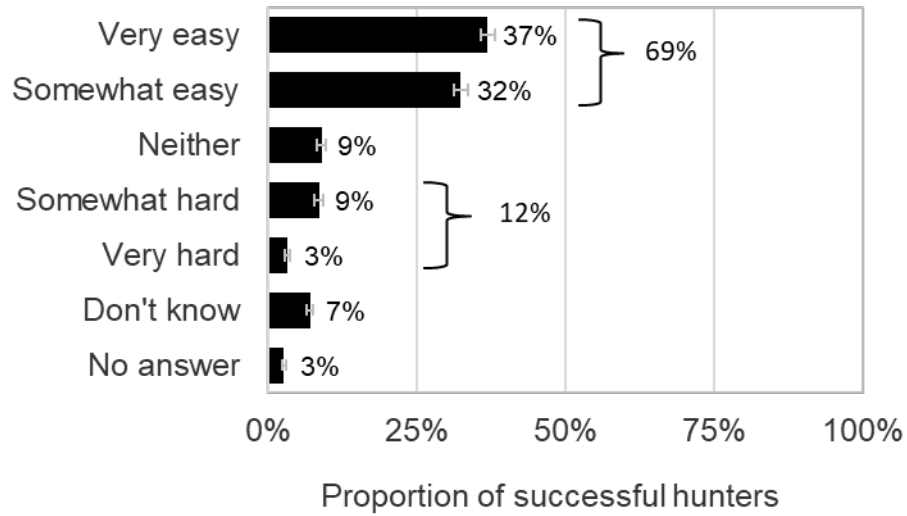


Figure 22. The proportion of successful deer hunters that reported that the website or phone app for reporting their harvested deer easy or hard was it to use.

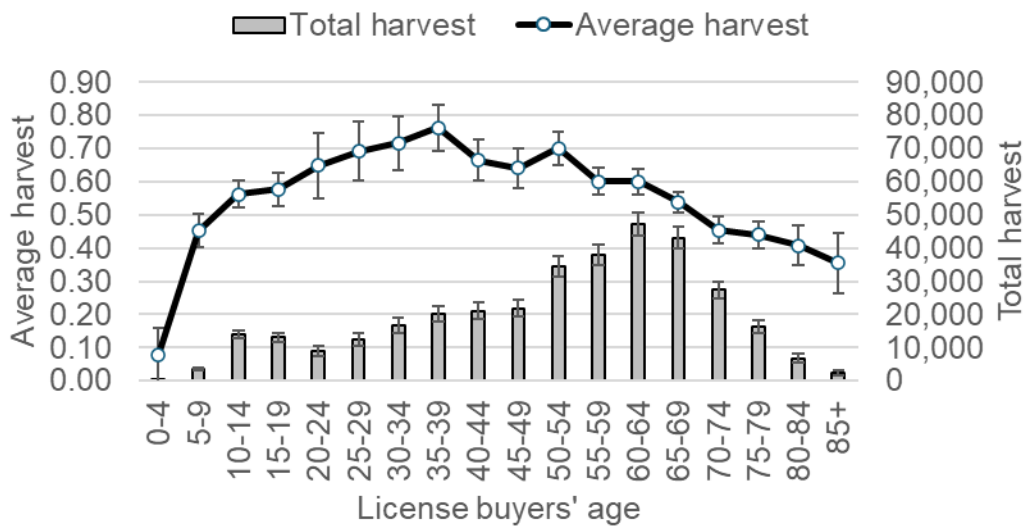


Figure 23. The average and total number of deer harvested in 2023 by individuals purchasing a deer hunting license, categorized by age.

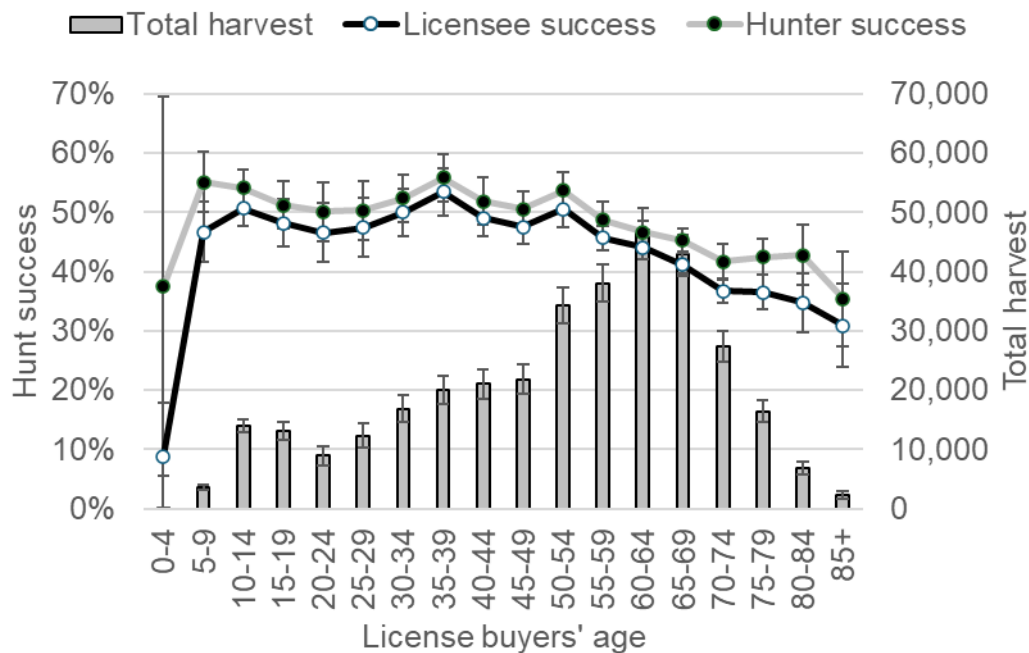


Figure 24. The proportion of deer hunting license buyers and active deer hunters who harvested a deer and the total number of deer harvested in 2023, categorized by age.

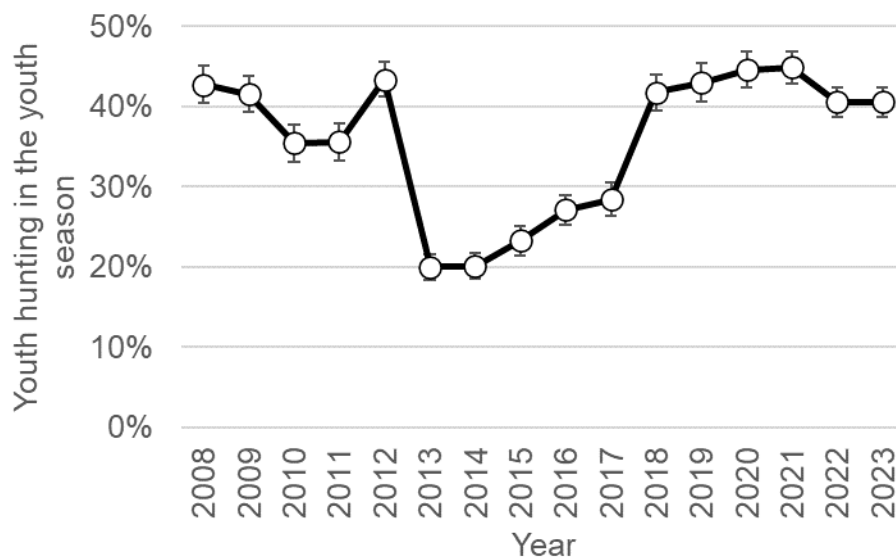


Figure 25. The proportion of young deer hunters who participated in the youth hunting season from 2008 to 2023. The youth eligible to participate in the youth season included those aged 10 to 16 from 2008 to 2011 and those aged 16 or younger from 2012 to 2023.

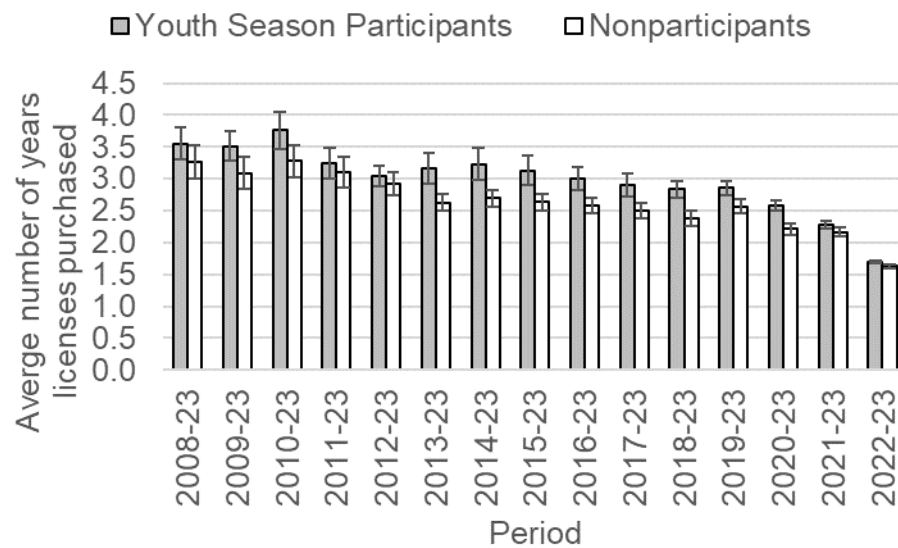


Figure 26. Comparison of the average number of years that youth hunters purchased deer hunting licenses between youth season participants and nonparticipants from 2008 to 2023. The youth hunters were divided into two groups based on their participation in the youth season during the first year of the observation period.

Table 1. Deer hunting seasons in Michigan, 2023-2024.

Season	Bag limit	Area	Dates
Liberty/Youth Hunt	1 per kill tag	Statewide	September 9-10
Early Antlerless Firearm	1 per kill tag	Lower Peninsula ^a	September 16-17
Independence Hunt	1 per hunter	Statewide	October 19-22
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 1-10
Late Antlerless Firearm	1 per kill tag	Lower Peninsula ^a	December 11-January 1
Late Urban Archery	1 per kill tag	Macomb, Oakland, and Wayne counties	January 2-31

^aThe area open to hunting during the early and late antlerless firearm seasons included the entire LP, except for the island DMUs 115, 145, 149, and 245.

Table 2. The types of deer that could be taken during the 2023 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 ^a 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) or antlerless deer. Antlerless deer could not be taken in DMUs 007, 031, 042, 048, 066, 127, and 131. Antler point restrictions did not apply in the Core CWD surveillance area. ^b
Deer license or deer combination regular license	Archery seasons	Lower Peninsula (zones 2 and 3)	Antlerless or antlered deer ^c
Deer license or deer combination regular license	Firearm or Muzzleloader seasons	Upper Peninsula (Zone 1)	Antlered deer. ^c Antler point restrictions did not apply in the core CWD surveillance area. ^b
Deer license or deer combination regular license	Firearm or Muzzleloader seasons	Lower Peninsula (zones 2 and 3)	Antlerless or antlered deer ^c
Deer license or deer combination regular license	Liberty/Youth and Independence seasons	statewide	Antlerless or antlered deer ^c
Combination License ^d (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 007, 031, 042, 048, 066, 127, and 131. Antler point restrictions did not apply in the core CWD surveillance area. ^b
Combination License ^d (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. ^e

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

^bThe Core CWD Surveillance Area included portions of Delta, Dickinson, and Menominee counties in the UP, and the Core CWD Area included Ionia, Kent, Mecosta, Montcalm, and Newaygo counties in the LP.

^cIf 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.

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

^eCWD management zone included Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties.

^fHunters could harvest only 1 deer in the Independence season.

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

Table 2 (continued). The types of deer that could be taken during the 2023 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 ^a
Combination License ^d (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. ^b
Combination License ^d (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. ^e
Combination License ^d (Restricted harvest tag)	Liberty/Youth and Independence seasons	Statewide	Antlerless or antlered deer ^c
Mentored youth deer license	Archery, Regular Firearm, Muzzleloader, or Liberty/Youth seasons	Statewide	Antlerless or antlered deer. Antler point restrictions do not apply.
Universal antlerless deer license, a mentored youth hunting license, a deer license, or a deer combination license	Antlerless seasons	Statewide	Antlerless deer only
Universal antlerless License ^e	All seasons	Any area open to antlerless deer hunting	Antlerless deer only
Deer Management Assistance (DMA) permit ^f	All seasons	Statewide	Antlerless deer only
Managed Deer Hunt permit ^g	Specified season	Limited areas	Specified antlerless or antlered deer ^c

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

^bCore CWD area included Ionia, Kent, Mecosta, Montcalm, and Newaygo counties in the LP and portions of Delta, Dickinson, and Menominee counties in the UP.

^cIf 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.

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

^eCWD management zone included Barry, Calhoun, Clinton, Eaton, Gratiot, Hillsdale, Ingham, Ionia, Isabella, Jackson, Kent, Lenawee, Mecosta, Midland, Montcalm, Muskegon, Newaygo, Ottawa, and Shiawassee counties.

^fHunters could harvest only 1 deer in the Independence season.

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

Table 3. The number of Michigan deer licenses purchased, and harvest tags issued, 2021-2023.

Licenses or Harvest Tags	Number Purchased or Issued in 2021	Number Purchased or Issued in 2022	Number Purchased or Issued in 2023	Change Between 2022 and 2023 (%)
Resident Deer License	78,753	73,383	70,185	-4.4%
Non-resident Deer License	12,648	12,792	13,037	1.9%
Junior Deer License	17,010	16,253	15,728	-3.2%
Senior Deer License	30,913	29,930	29,929	0.0%
Lifetime Deer License	532	530	528	-0.4%
Active Military Deer License	267	235	238	1.3%
Disabled Veteran Deer License	1	1	1	0.0%
Subtotal Deer Licenses	140,124	133,124	129,646	-2.6%
Resident Combination License	323,747	321,274	324,820	1.1%
Non-resident Combination License	5,430	5,646	5,940	5.2%
Junior Combination License	25,289	24,885	26,039	4.6%
Senior Combination License	70,838	74,637	79,713	6.8%
Lifetime Combination License	1,216	1,210	1,211	0.1%
Active Military Combination License	4,261	4,285	4,657	8.7%
Disabled Veteran Combination Lic.	9	8	12	50.0%
Subtotal Combination Licenses ^a	430,790	431,945	442,392	2.4%
Resident Antlerless License	223,607	219,243	223,162	1.8%
Non-resident Antlerless License	8,748	9,541	10,604	11.1%
Junior Antlerless License	11,774	11,109	12,067	8.6%
Senior Antlerless License	46,650	46,518	49,556	6.5%
Lifetime Antlerless License	643	608	620	2.0%
Active Military Antlerless	6,172	6,704	8,054	20.1%
Pure Michigan Hunt License	3	3	3	0.0%
Disabled Veteran Antlerless Lic.	35	20	21	5.0%
Deer Management Assistance	12,203	11,734	13,766	17.3%
Subtotal Antlerless Licenses	309,835	305,480	317,853	4.1%
Mentored Youth Licenses	11,014	10,824	11,650	7.6%
Total Licenses Sold	891,763	881,373	901,541	2.3%

^aCombination 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, 2021-2023.

Licenses or Harvest Tags	Number Purchased or Issued in 2021	Number Purchased or Issued in 2022	Number Purchased or Issued in 2023	Change Between 2022 and 2023 (%)
Deer Tags ^a	140,124	133,124	129,646	-2.6%
Combination Tags ^b	861,580	863,890	884,784	2.4%
Antlerless Tags	309,835	305,480	317,853	4.1%
Mentored Youth Tags ^b	11,014	10,824	11,650	7.6%
Total Harvest Tags	1,322,553	1,313,318	1,343,933	2.3%

^aCombination 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, 2022-2023.

Season and Area	2022 number of hunters ^a	2023 number of hunters ^a	2023 hunter 95% CL ^b	Change from 2022 to 2023 (%)	2022 hunting effort (days)	2023 hunting effort (days)	2023 effort 95% CL ^b	Change from 2022 to 2023 (%)
Archery – W UP	18,949	20,159	1,671	6.4	198,717	239,988	26,381	20.8
Archery – E UP	5,111	5,353	875	4.7	55,594	46,979	10,045	-15.5
Archery - NE LP	40,772	43,312	2,404	6.2	377,531	453,315	38,617	20.1*
Archery - NW LP	53,108	53,844	2,641	1.4	576,342	652,250	44,147	13.2
Archery - Sag. Bay	44,604	47,934	2,502	7.5	488,121	510,666	37,090	4.6
Archery - SW LP	48,184	50,321	2,552	4.4	561,510	631,870	44,702	12.5
Archery - SC LP	56,150	55,634	2,680	-0.9	668,092	674,611	45,272	1.0
Archery - SE LP	27,589	29,829	2,010	8.1	315,611	334,631	31,321	6.0
Archery - UP	23,905	25,469	2,867	6.5	254,311	286,967	28,229	12.8
Archery - NLP	105,906	110,257	4,229	4.1	1,102,364	1,258,285	61,654	14.1*
Archery - SLP	157,638	163,155	4,368	3.5	1,884,844	1,999,057	77,739	6.1
Archery - Statewide ^c	276,501	286,581	4,494	3.6*	3,241,518	3,544,309	103,462	9.3*
Reg Firearm - WUP	51,480	50,500	2,572	-1.9	330,259	348,055	21,034	5.4
Reg Firearm - EUP	14,574	14,102	1,412	-3.2	89,930	86,203	10,548	-4.1
Reg Firearm - NELP	78,532	83,109	3,200	5.8	419,800	481,023	23,328	14.6*
Reg Firearm - NWLP	81,998	84,451	3,205	3.0	419,650	470,569	22,979	12.1*
Reg Firearm - Sag. Bay	66,504	69,590	2,946	4.6	344,666	382,308	20,701	10.9
Reg Firearm - SWLP	61,659	65,507	2,878	6.2	339,215	372,376	20,665	9.8
Reg Firearm - SCLP	74,766	75,225	3,057	0.6	397,460	420,831	22,057	5.9
Reg Firearm - SELP	29,831	30,928	2,045	3.7	159,143	169,785	14,003	6.7
Reg Firearm - UP	65,957	64,433	1,870	-2.3	420,189	434,258	23,531	3.3
Reg Firearm - NLP	179,828	186,342	3,568	3.6	943,241	1,066,843	34,561	13.1*
Reg Firearm - SLP	208,222	215,885	4,071	3.7	1,136,693	1,230,050	37,629	8.2*
Reg Firearm - Statewide ^c	445,151	457,020	3,513	2.7*	2,500,123	2,731,151	56,649	9.2*

^aExcluded people that did not hunt during the season.

^b95 confidence limit for the 2023 estimate. *P<0.05.

^cNumber 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, 2022-2023.

Season and Area	2022 number of hunters ^a	2023 number of hunters ^a	2023 hunter 95% CL ^b	Change from 2022 to 2023 (%)	2022 hunting effort (days)	2023 hunting effort (days)	2023 effort 95% CL ^b	Change from 2022 to 2023 (%)
Muzzleloader – W UP	9,347	9,911	1,183	6.0	43,468	48,995	6,513	12.7
Muzzleloader – E UP	2,683	2,306	576	-14.1	12,721	11,476	3,124	-9.8
Muzzleloader - NE LP	12,482	12,216	1,317	-2.1	47,068	51,736	6,414	9.9
Muzzleloader - NW LP	15,502	17,595	1,565	13.5	55,726	66,548	7,240	19.4
Muzzleloader – Sag Bay	15,562	18,518	1,603	19.0	55,468	70,789	7,410	27.6*
Muzzleloader - SW LP	22,561	24,716	1,842	9.6	80,216	96,833	8,503	20.7*
Muzzleloader - SC LP	24,756	25,659	1,875	3.6	88,915	100,662	8,659	13.2
Muzzleloader - SE LP	10,139	11,652	1,280	14.9	35,851	45,276	5,778	26.3
Muzzleloader - UP	11,988	12,138	1,306	1.2	56,189	60,471	7,223	7.6
Muzzleloader - NLP	30,510	33,761	2,140	10.7	112,432	133,267	10,218	18.5*
Muzzleloader - SLP	68,977	75,075	3,056	8.8*	250,812	298,577	14,991	19.0*
Muzzleloader - Statewide ^c	113,450	123,619	3,721	9.0*	419,432	492,316	19,722	17.4*
Early Antlerless - WUP	0	0	0		0	0	0	
Early Antlerless - EUP	0	0	0		0	0	0	
Early Antlerless - NELP	1,711	2,010	520	17.4	2,354	2,973	835	26.3
Early Antlerless - NWLP	2,210	2,782	601	25.9	2,999	3,562	836	18.8
Early Antlerless - Sag. Bay	2,480	3,365	653	35.7	3,080	4,436	928	44.1
Early Antlerless - SWLP	1,905	2,295	542	20.4	2,235	2,612	709	16.9
Early Antlerless - SCLP	2,360	3,196	645	35.4	3,032	3,934	864	29.8
Early Antlerless - SELP	1,623	2,410	572	48.5	2,334	3,056	791	31.0
Early Antlerless - UP	0	0	0		0	0	0	
Early Antlerless - NLP	4,485	5,858	872	30.6	6,053	7,795	1,268	28.8
Early Antlerless - SLP	7,727	10,022	1,138	29.7*	9,979	12,780	1,589	28.1
Early Antlerless - Statewide ^c	13,375	17,587	872	31.5*	16,033	20,575	2,053	28.3*

^aExcluded people that did not hunt during the season.^b95 confidence limit for the 2023 estimate. *P<0.05.^cNumber of hunters does not add up to 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, 2022-2023.

Season and Area	2022 number of hunters ^a	2023 number of hunters ^a	2023 hunter 95% CL ^b	Change from 2022 to 2023 (%)	2022 hunting effort (days)	2023 hunting effort (days)	2023 effort 95% CL ^b	Change from 2022 to 2023 (%)
Late Antlerless – W UP	0	0	0		0	0	0	
Late Antlerless – E UP	0	0	0		0	0	0	
Late Antlerless - NE LP	6,423	7,979	1,062	24.2	23,315	37,363	6,981	60.3*
Late Antlerless - NW LP	10,611	13,093	1,347	23.4	38,729	56,082	7,494	44.8*
Late Antlerless – Sag Bay	11,399	14,213	1,395	24.7*	43,573	61,573	8,104	41.3*
Late Antlerless - SW LP	15,464	17,894	1,567	15.7	57,586	78,633	9,480	36.5*
Late Antlerless - SC LP	17,620	21,160	1,705	20.1	63,518	90,327	10,032	42.2*
Late Antlerless - SE LP	6,735	8,542	1,096	26.8	26,010	38,105	7,010	46.5*
Late Antlerless - UP	0	0	0		0	0	0	
Late Antlerless - NLP	19,041	24,102	1,808	26.6*	70,130	104,842	10,742	49.5*
Late Antlerless - SLP	48,487	57,963	2,722	19.5*	182,600	257,241	17,171	40.9*
Late Antlerless - Statewide ^c	69,384	84,978	3,205	22.5*	252,731	362,083	20,334	43.3*
Liberty/Youth - WUP	1,025	1,442	286	40.7	1,473	2,165	464	47.0
Liberty/Youth - EUP	280	319	159	13.9	414	608	356	46.7
Liberty/Youth - NELP	2,053	1,939	345	-5.5	2,973	2,894	545	-2.7
Liberty/Youth - NWLP	4,226	4,101	460	-3.0	5,824	5,973	735	2.6
Liberty/Youth - Sag. Bay	3,781	4,524	491	19.6	5,277	6,390	756	21.1
Liberty/Youth - SWLP	3,401	3,427	411	0.8	4,682	4,780	635	2.1
Liberty/Youth - SCLP	3,982	3,956	463	-0.6	5,658	5,576	722	-1.5
Liberty/Youth - SELP	1,713	2,048	349	19.6	2,482	2,977	545	19.9
Liberty/Youth - UP	1,305	1,758	326	34.7	1,887	2,773	585	46.9
Liberty/Youth - NLP	7,255	7,084	598	-2.4	10,108	10,283	969	1.7
Liberty/Youth - SLP	11,804	12,857	739	8.9	16,788	18,307	1,300	9.1
Liberty/Youth - Statewide ^c	21,093	22,532	875	6.8	28,783	31,363	1,740	9.0

^aExcluded people that did not hunt during the season.

^b95 confidence limit for the 2023 estimate. *P<0.05.

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

^dEstimates included results of both youth and disabled hunters.

Table 4 (continued). The number of deer hunters and hunting efforts in Michigan by hunting season, 2022-2023.

Season and Area	2022 number of hunters ^a	2023 number of hunters ^a	2023 hunter 95% CL ^b	Change from 2022 to 2023 (%)	2022 hunting effort (days)	2023 hunting effort (days)	2023 effort 95% CL ^b	Change from 2022 to 2023 (%)
Independence – W UP	133	137	36	2.8	270	352	100	30.5
Independence – E UP	27	62	24	127.9	78	126	58	61.0
Independence - NE LP	288	269	90	-6.6	591	580	139	-1.9
Independence - NW LP	459	430	103	-6.3	922	1,000	330	8.5
Independence – Sag Bay	364	414	128	13.9	725	900	280	24.2
Independence - SW LP	256	321	142	25.5	422	520	194	23.1
Independence - SC LP	434	269	95	-38.1	682	489	136	-28.3
Independence - SE LP	206	169	90	-17.6	322	390	256	21.1
Independence - UP	160	195	43	21.8	348	478	115	37.4
Independence - NLP	833	884	178	6.1	1,727	2,002	439	15.9
Independence - SLP	1,170	978	200	-16.4	1,937	1,877	369	-3.1
Independence - Statewide ^c	2,558	2,193	282	-14.3	4,012	4,357	586	8.6
Urban Archery - WUP	0	0	0		0	0	0	
Urban Archery - EUP	0	0	0		0	0	0	
Urban Archery - NELP	0	0	0		0	0	0	
Urban Archery - NWLP	0	0	0		0	0	0	
Urban Archery - Sag. Bay	0	0	0		0	0	0	
Urban Archery - SWLP	0	0	0		0	0	0	
Urban Archery - SCLP	0	0	0		0	0	0	
Urban Archery - SELP	2,314	2,605	609	14.4	9,578	10,729	3,051	12.0
Urban Archery - UP	0	0	0		0	0	0	
Urban Archery - NLP	0	0	0		0	0	0	
Urban Archery - SLP	2,314	2,605	609	14.4	9,578	10,729	3,051	12.0
Urban Archery - Statewide ^c	2,314	2,605	609	12.6	9,578	10,729	3,051	12.0

^aExcluded people that did not hunt during the season.

^b95 confidence limit for the 2023 estimate. *P<0.05.

^cNumber 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, 2022-2023.

Season and Area	2022 number of hunters ^a	2023 number of hunters ^a	2023 hunter 95% CL ^b	Change from 2022 to 2023 (%)	2022 hunting effort (days)	2023 hunting effort (days)	2023 effort 95% CL ^b	Change from 2022 to 2023 (%)
All Seasons – W UP	57,579	56,615	2,699	-1.7	574,534	639,096	44,031	11.2
All Seasons – E UP	16,409	15,913	1,492	-3.0	158,825	145,243	19,231	-8.6
All Seasons - NE LP	91,580	95,438	3,376	4.2	873,925	1,029,731	60,109	17.8*
All Seasons - NW LP	99,896	100,590	3,425	0.7	1,100,439	1,256,312	65,984	14.2*
All Seasons – Sag Bay	81,928	87,353	3,224	6.6	940,813	1,037,023	60,240	10.2
All Seasons - SW LP	79,591	83,518	3,171	4.9	1,045,378	1,187,743	68,107	13.6*
All Seasons - SC LP	94,529	96,538	3,373	2.1	1,226,924	1,296,508	69,002	5.7
All Seasons - SE LP	43,024	44,836	2,417	4.2	551,373	605,227	47,732	9.8
All Seasons - UP	73,548	72,219	3,003	-1.8	733,359	784,338	48,047	7.0
All Seasons - NLP	212,387	218,113	4,374	2.7	2,246,737	2,583,561	94,224	15.0*
All Seasons - SLP	264,014	274,473	4,491	4.0*	3,492,115	3,828,983	119,982	9.6*
All Seasons - Statewide ^c	516,336	527,292	2,380	2.1*	6,472,210	7,196,882	160,576	11.2*

^aExcluded people that did not hunt during the season.

^b95 confidence limit for the 2023 estimate. *P<0.05.

^cNumber 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, 2023.^a

Area	Archery \bar{x} days	95% CL ^b	Regular Firearm \bar{x} days	95% CL ^b	Muzzle- loader \bar{x} days	95% CL ^b	Early Antlerless \bar{x} days	95% CL ^b
West UP	10.4	0.8	6.0	0.2	4.3	0.3	0.0	0.0
East UP	7.6	1.1	5.4	0.4	4.2	0.5	0.0	0.0
NE LP	9.3	0.6	5.1	0.1	3.8	0.3	1.4	0.1
NW LP	10.7	0.5	4.9	0.1	3.3	0.2	1.2	0.1
Sag. Bay	9.5	0.5	4.9	0.1	3.4	0.2	1.2	0.1
SW LP	11.1	0.5	5.1	0.2	3.5	0.2	1.2	0.1
SC LP	10.8	0.5	5.0	0.1	3.5	0.2	1.2	0.1
SE LP	10.1	0.6	4.9	0.2	3.4	0.2	1.2	0.1
UP	9.8	0.7	5.9	0.2	4.3	0.2	0.0	0.0
NLP	10.1	0.4	5.0	0.1	3.5	0.2	1.3	0.1
SLP	10.9	0.3	5.1	0.1	3.5	0.1	1.2	0.1
Statewide	11.2	0.2	5.4	0.1	3.7	0.1	1.2	0.0

^aExcluded people that did not hunt during the season.

^b95 confidence limit.

Table 5 (continued). The mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2023.^a

Area	Late Antlerless \bar{x} days	95% CL ^b	Liberty (Youth) \bar{x} days	95% CL ^b	Indepen- dence \bar{x} days	95% CL ^b	Urban Archery \bar{x} days	95% CL ^b
West UP	0.0	0.0	1.3	0.1	2.3	0.2	0.0	0.0
East UP	0.0	0.0	1.7	0.5	2.0	0.4	0.0	0.0
NE LP	4.4	0.6	1.4	0.1	1.9	0.4	0.0	0.0
NW LP	4.0	0.3	1.3	0.0	2.1	0.3	0.0	0.0
Sag. Bay	3.9	0.3	1.2	0.0	1.9	0.3	0.0	0.0
SW LP	4.1	0.3	1.2	0.1	1.6	0.3	0.0	0.0
SC LP	4.2	0.3	1.3	0.1	1.7	0.3	0.0	0.0
SE LP	4.3	0.5	1.3	0.1	2.1	0.3	3.8	0.7
UP	0.0	0.0	1.4	0.1	2.3	0.2	0.0	0.0
NLP	4.1	0.3	1.3	0.0	2.0	0.2	0.0	0.0
SLP	4.2	0.2	1.3	0.0	1.8	0.2	3.8	0.7
Statewide	4.2	0.2	1.3	0.0	1.9	0.1	3.8	0.7

^aExcluded people that did not hunt during the season.

^b95 confidence limit.

Table 5 (continued). The mean number of days hunters spent hunting deer (\bar{x} hunting effort) in Michigan by hunting season, 2023.^a

Area	All Seasons \bar{x} days	95% CL ^b
West UP	9.9	0.5
East UP	8.1	0.8
NE LP	9.5	0.4
NW LP	11.1	0.4
Sag. Bay	10.5	0.5
SW LP	12.6	0.5
SC LP	12.0	0.5
SE LP	12.0	0.7
UP	9.6	0.4
NLP	10.4	0.3
SLP	12.4	0.3
Statewide	12.3	0.2

^aExcluded people that did not hunt during the season.

^b95 confidence limit.

Table 6. The number of deer harvested in Michigan, 2021-2023.

Season (or permit) and type of deer	2021	2022	2023	Change from 2022 to 2023 (%)
Archery - Antlerless	43,395	33,399	31,294	-6.3
Archery - Antlered bucks	84,599	71,453	79,045	10.6*
Archery - Sexes combined	127,994	104,852	110,339	5.2
Regular firearm - Antlerless	72,779	62,866	62,015	-1.4
Regular firearm - Antlered bucks	124,032	118,906	115,277	-3.1
Regular firearm - Sexes combined	196,811	181,772	177,292	-2.5
Muzzleloader - Antlerless	14,390	10,810	10,761	-0.5
Muzzleloader - Antlered bucks	8,715	7,891	6,625	-16.1
Muzzleloader - Sexes combined	23,105	18,702	17,385	-7.0
Early antlerless - Antlerless	4,801	3,576	3,836	7.3
Late antlerless - Antlerless	33,620	22,953	29,468	28.4*
Liberty/Youth ^{a,b} - Antlerless	1,982	1,537	1,923	25.1
Liberty/Youth - Antlered bucks	5,559	5,094	5,984	17.5
Liberty/Youth - Sexes combined	7,541	6,631	7,906	19.2*
Independence ^b - Antlerless	190	178	154	-13.7
Independence - Antlered bucks	397	332	410	23.7
Independence - Sexes combined	587	509	564	10.7
Urban Archery - Antlerless	427	126	109	-13.6
Urban Archery - Antlered bucks	172	68	109	59.5
Urban Archery - Sexes combined	600	195	218	12.1
Special permits ^c - Antlerless	8,636	6,577	6,906	5.0
Grand Total - Antlerless	180,219	142,022	146,465	3.1
Grand Total - Antlered bucks	223,476	203,744	207,449	1.8
Grand Total - Sexes combined	403,695	345,766	353,914	2.4

^aEstimates for the Liberty/Youth hunt included results of both youth and hunters with disabilities.

^bHunters with disabilities could hunt in both the Liberty/Youth and Independence seasons.

^cThese permits could be used during any deer hunting season.

*P<0.05.

Table 7. The number of deer harvested in Michigan by hunting season, 2022-2023.^a

Season and Area	2022 Antler- less Harvest	2023 Antler- less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Com- bined Harvest	2023 Sexes Com- bined Harvest	2023 95% CL ^b	Change from 2022 to 2023
Archery - WUP	1,928	1,418	460	-26.5	3,616	3,156	669	-12.7	5,543	4,574	847	-17.5
Archery - EUP	294	398	225	35.3	750	777	332	3.5	1,044	1,175	414	12.5
Archery - NELP	5,509	3,766	795	-31.6	5,629	6,303	955	12.0	11,130	10,072	1,304	-9.5
Archery - NWLP	5,784	5,828	970	0.8	10,899	12,133	1,411	11.3	16,681	17,964	1,849	7.7
Archery - Sag. Bay	4,810	4,799	853	-0.2	11,852	14,062	1,497	18.7	16,664	18,859	1,823	13.2
Archery - SWLP	5,955	5,863	1,103	-1.5	13,795	15,242	1,568	10.5	19,751	21,105	2,085	6.9
Archery - SCLP	6,439	6,453	1,080	0.2	17,999	19,234	1,755	6.9	24,443	25,684	2,202	5.1
Archery - SELP	2,679	2,770	684	3.4	6,914	8,137	1,122	17.7	9,595	10,906	1,422	13.7
Archery - UP	2,222	1,816	512	-18.3	4,366	3,932	747	-9.9	6,588	5,749	943	-12.7
Archery - NLP	12,752	11,235	1,343	-11.9	19,747	22,437	1,888	13.6	32,489	33,677	2,464	3.7
Archery - SLP	18,424	18,244	1,830	-1.0	47,341	52,676	2,894	11.3	65,775	70,914	3,687	7.8
Archery - Statewide	33,399	31,294	2,333	-6.3	71,453	79,045	3,554	10.6*	104,852	110,339	4,554	5.2
Reg Firearm -WUP	2,921	2,761	652	-5.5	15,332	10,489	1,228	-31.6*	18,252	13,251	1,414	-27.4*
Reg Firearm -EUP	240	466	245	94.3	2,887	2,408	582	-16.6	3,126	2,875	631	-8.1
Reg Firearm -NELP	10,061	7,886	1,111	-21.6	18,332	17,961	1,616	-2.0	28,393	25,848	2,039	-9.0
Reg Firearm -NWLP	13,435	10,724	1,349	-20.2	17,250	17,797	1,624	3.2	30,687	28,521	2,229	-7.1
Reg Firearm -Sag. Bay	9,269	10,741	1,322	15.9	19,052	17,776	1,624	-6.7	28,320	28,516	2,241	0.7
Reg Firearm -SW LP	10,656	12,228	1,705	14.7	16,411	19,216	1,720	17.1	27,068	31,443	2,672	16.2
Reg Firearm -SC LP	12,507	13,736	1,753	9.8	22,965	22,649	1,857	-1.4	35,472	36,385	2,793	2.6
Reg Firearm -SE LP	3,776	3,473	765	-8.0	6,676	6,980	1,006	4.6	10,453	10,454	1,324	0.0
Reg Firearm -UP	3,161	3,227	697	2.1	18,219	12,897	1,358	-29.2*	21,378	16,125	1,549	-24.6*
Reg Firearm -NLP	26,736	21,517	1,867	-19.5*	40,948	40,551	2,441	-1.0	67,685	62,068	3,238	-8.3
Reg Firearm -SLP	32,969	37,271	2,807	13.0	59,739	61,829	3,057	3.5	92,708	99,098	4,512	6.9
Reg Firearm - Statewide	62,866	62,015	3,456	-1.4	118,906	115,277	4,159	-3.1	181,772	177,292	5,793	-2.5

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.^b95 confidence limit for the estimate. *P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2022-2023.^a

Season and Area	2022 Antler- less Harvest	2023 Antler- less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Com- bined Harvest	2023 Sexes Com- bined Harvest	2023 95% CL ^b	Change from 2022 to 2023
Muzzleloader - WUP	940	651	375	-30.8	778	611	299	-21.4	1,718	1,262	480	-26.5
Muzzleloader - EUP	156	13	23	-91.9	259	184	157	-28.9	416	197	159	-52.6
Muzzleloader - NELP	1,047	899	345	-14.2	620	568	273	-8.4	1,667	1,467	473	-12.0
Muzzleloader - NWLP	1,082	1,002	383	-7.4	871	614	284	-29.5	1,953	1,616	497	-17.3
Muzzleloader - Sag. Bay	1,633	2,065	568	26.5	1,265	1,243	441	-1.7	2,898	3,308	746	14.2
Muzzleloader - SWLP	2,137	2,396	592	12.1	1,741	1,238	425	-28.9	3,878	3,633	749	-6.3
Muzzleloader - SCLP	3,008	3,302	755	9.8	1,798	1,666	461	-7.3	4,805	4,967	912	3.4
Muzzleloader - SELP	807	434	236	-46.2	560	501	291	-10.6	1,367	935	375	-31.6
Muzzleloader - UP	1,096	663	376	-39.5	1,037	795	338	-23.3	2,133	1,459	505	-31.6
Muzzleloader - NLP	2,203	2,125	544	-3.5	1,816	1,379	436	-24.1	4,020	3,504	732	-12.8
Muzzleloader - SLP	7,511	7,973	1,127	6.1	5,038	4,451	798	-11.7	12,549	12,422	1,423	-1.0
Muzzleloader - Statewide	10,810	10,761	1,318	-0.5	7,891	6,625	976	-16.1	18,702	17,385	1,690	-7.0
Early Antlerless -WUP	0	0	0		0	0	0	0	0	0	0	
Early Antlerless -EUP	0	0	0		0	0	0	0	0	0	0	
Early Antlerless -NELP	483	394	237	-18.6	0	0	0	0	483	394	237	-18.6
Early Antlerless -NWLP	535	322	182	-39.8	0	0	0	0	535	322	182	-39.8
Early Antlerless -Sag. Bay	826	1,206	404	46.0	0	0	0	0	826	1,206	404	46.0
Early Antlerless -SW LP	636	529	256	-16.8					636	529	256	-16.8
Early Antlerless -SC LP	706	999	501	41.4	0	0	0	0	706	999	501	41.4
Early Antlerless -SE LP	389	386	244	-0.7	0	0	0	0	389	386	244	-0.7
Early Antlerless -UP	0	0	0		0	0	0	0	0	0	0	
Early Antlerless -NLP	1,271	995	362	-21.7	0	0	0	0	1,271	995	362	-21.7
Early Antlerless -SLP	2,305	2,840	706	23.2	0	0	0	0	2,305	2,840	706	23.2
Early Antlerless -Statewide	3,576	3,836	806	7.3	0	0	0	0	3,576	3,836	806	7.3

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.^b95 confidence limit for the 2023 estimate. *P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2022-2023.^a

Season and Area	2022 Antler- less Harvest	2023 Antler- less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Com- bined Harvest	2023 Sexes Com- bined Harvest	2023 95% CL ^b	Change from 2022 to 2023
Late Antlerless - WUP	0	0	0		0	0	0		0	0	0	
Late Antlerless - EUP	0	0	0		0	0	0		0	0	0	
Late Antlerless - NELP	2,466	2,794	814	13.3	0	0	0		2,466	2,794	814	13.3
Late Antlerless - NWLP	3,381	4,170	904	23.3	0	0	0		3,381	4,170	904	23.3
Late Antlerless - Sag. Bay	4,131	5,167	945	25.1	0	0	0		4,131	5,167	945	25.1
Late Antlerless - SWLP	4,582	6,427	1,164	40.3	0	0	0		4,582	6,427	1,164	40.3
Late Antlerless - SCLP	6,189	8,762	1,400	41.6	0	0	0		6,189	8,762	1,400	41.6
Late Antlerless - SELP	2,204	2,148	647	-2.5	0	0	0		2,204	2,148	647	-2.5
Late Antlerless - UP	0	0	0		0	0	0		0	0	0	
Late Antlerless - NLP	6,697	7,870	1,269	17.5	0	0	0		6,697	7,870	1,269	17.5
Late Antlerless - SLP	16,256	21,598	2,120	32.9*	0	0	0		16,256	21,598	2,120	32.9*
Late Antlerless - Statewide	22,953	29,468	2,496	28.4*	0	0	0		22,953	29,468	2,496	28.4*
Liberty/Youth ^c -WUP	145	90	133	74	237	295	127	24.3	382	427	147	11.8
Liberty/Youth ^c -EUP	11	20	16	24	71	78	58	8.8	82	94	62	14.2
Liberty/Youth ^c -NELP	119	63	190	92	558	507	147	-9.1	677	697	176	3.0
Liberty/Youth ^c -NWLP	392	129	568	163	996	1,116	225	12.1	1,388	1,681	277	21.2
Liberty/Youth ^c -Sag. Bay	300	119	355	125	1,032	1,535	268	48.7*	1,332	1,893	303	42.0*
Liberty/Youth ^c -SW LP	223	91	219	100	724	1,004	221	38.7	947	1,224	243	29.3
Liberty/Youth ^c -SC LP	265	113	298	111	1,077	1,001	217	-7.0	1,342	1,299	245	-3.2
Liberty/Youth ^c -SE LP	82	53	143	75	399	448	137	12.4	481	591	157	22.9
Liberty/Youth ^c -UP	156	92	149	78	309	372	139	20.7	464	521	159	12.2
Liberty/Youth ^c -NLP	659	162	907	203	1,790	1,822	283	1.8	2,450	2,725	352	11.2
Liberty/Youth ^c -SLP	722	180	866	194	2,995	3,789	422	26.5*	3,716	4,660	469	25.4*
Liberty/Youth ^c -Statewide	1,537	259	1,923	294	5,094	5,984	528	17.5	6,631	7,906	609	19.2*

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.^b95 confidence limit for the 2023 estimate. *P<0.05.^cEstimates included results of both youth and hunters with disabilities.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2022-2023.^a

Season and Area	2022 Antler- less Harvest	2023 Antler- less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Com- bined Harvest	2023 Sexes Com- bined Harvest	2023 95% CL ^b	Change from 2022 to 2023
Independence - WUP	21	3	5	-85.1	26	6	7	-75.5	47	9	9	-79.9*
Independence - EUP	3	6	7	145.4	3	9	9	267.3	5	16	12	206.3
Independence - NELP	31	22	14	-28.4	31	55	72	79.4	62	77	73	25.5
Independence - NWLP	51	16	12	-69.3*	55	91	36	66.8	106	107	38	0.8
Independence - Sag. Bay	18	50	36	178.8	54	82	35	51.3	72	131	51	83.2
Independence - SWLP	29	35	17	19.9	53	95	101	78.0	82	129	102	57.6
Independence - SCLP	18	16	12	-12.4	90	60	24	-33.5	108	75	27	-30.0
Independence - SELP	8	6	7	-18.2	21	13	10	-40.7	29	19	13	-34.7
Independence - UP	24	9	9	-60.2	28	16	12	-44.3	52	25	15	-51.6
Independence - NLP	92	69	32	-25.2	93	165	81	77.4	185	234	88	26.3
Independence - SLP	62	75	33	21.2	210	230	109	9.2	272	305	114	11.9
Independence - Statewide	178	154	47	-13.7	332	410	136	23.7	509	564	144	10.7
Urban Archery -WUP	0	0	0		0	0	0		0	0	0	
Urban Archery -EUP	0	0	0		0	0	0		0	0	0	
Urban Archery -NELP	0	0	0		0	0	0		0	0	0	
Urban Archery -NWLP	0	0	0		0	0	0		0	0	0	
Urban Archery -Sag. Bay	0	0	0		0	0	0		0	0	0	
Urban Archery -SW LP	0	0	0		0	0	0		0	0	0	
Urban Archery -SC LP	0	0	0		0	0	0		0	0	0	
Urban Archery -SE LP	126	109	122	-13.6	68	109	122	59.5	195	218	172	12.1
Urban Archery -UP	0	0	0		0	0	0		0	0	0	
Urban Archery -NLP	0	0	0		0	0	0		0	0	0	
Urban Archery -SLP	126	109	122	-13.6	68	109	122	59.5	195	218	172	12.1
Urban Archery -Statewide	126	109	122	-13.6	68	109	122	59.5	195	218	172	12.1

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.^b95 confidence limit for the 2023 estimate. *P<0.05.

Table 7 (continued). The number of deer harvested in Michigan by hunting season, 2022-2023.^a

Season and Area	2022 Antler- less Harvest	2023 Antler- less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Com- bined Harvest	2023 Sexes Com- bined Harvest	2023 95% CL ^b	Change from 2022 to 2023
All Seasons - WUP	5,965	4,979	935	-16.5	19,988	14,560	1,482	-27.2*	25,978	19,549	1,822	-24.7*
All Seasons - EUP	703	902	335	28.4	3,968	3,457	698	-12.9	4,677	4,362	800	-6.7
All Seasons - NELP	19,745	15,960	1,791	-19.2	25,178	25,402	1,977	0.9	44,913	41,364	2,870	-7.9
All Seasons - NWLP	24,704	22,647	2,127	-8.3	30,079	31,754	2,272	5.6	54,767	54,399	3,409	-0.7
All Seasons - Sag. Bay	20,973	24,363	2,247	16.2	33,256	34,699	2,380	4.3	54,234	59,061	3,631	8.9
All Seasons - SWLP	24,203	27,698	2,742	14.4	32,711	36,791	2,501	12.5	56,906	64,484	4,217	13.3
All Seasons - SCLP	29,093	33,542	3,207	15.3	43,924	44,601	2,770	1.5	73,017	78,137	4,755	7.0
All Seasons - SELP	10,059	9,467	1,476	-5.9	14,639	16,184	1,648	10.6	24,697	25,654	2,416	3.9
All Seasons - UP	6,668	5,881	993	-11.8	23,956	18,018	1,638	-24.8*	30,655	23,910	1,990	-22.0*
All Seasons - NLP	50,497	44,748	2,961	-11.4	64,411	66,362	3,258	3.0	114,881	111,110	4,793	-3.3
All Seasons - SLP	78,280	88,930	4,899	13.6	115,377	123,070	4,556	6.7	193,652	211,988	7,503	9.5*
All Seasons - Statewide	135,445	139,559	5,841	3.0*	203,744	207,449	5,863	1.8	339,189	347,008	9,168	2.3

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.

^b95 confidence limit for the 2023 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, 2022-2023.^a

Land Type and Area	2022 Antler-less Harvest	2023 Antler-less Harvest	2023 95% CL ^b	Change from 2022 to 2023 (%)	2022 Antlered Buck Harvest	2023 Antlered Buck Harvest	2023 95% CL ^b	Change from 2022 to 2023	2022 Sexes Combined Harvest	2023 Sexes Combined Harvest	2023 95% CL ^b	Change from 2022 to 2023
Public - WUP	1,741	997	396	-42.7	5,229	2,975	663	-43.1*	6,947	3,976	798	-42.8*
Public - EUP	215	243	174	13.3	961	826	360	-14.0	1,170	1,071	400	-8.5
Public - NELP	4,717	3,280	717	-30.5	4,896	5,173	913	5.7	9,623	8,454	1,243	-12.1
Public - NWLP	4,176	3,933	820	-5.8	4,545	4,661	855	2.6	8,727	8,591	1,303	-1.6
Public - Sag. Bay	2,504	1,725	511	-31.1	2,849	3,047	694	6.9	5,356	4,773	897	-10.9
Public - SW LP	1,748	1,850	760	5.8	1,603	1,654	543	3.1	3,356	3,501	1,049	4.3
Public - SCLP	2,263	1,757	608	-22.4	1,969	2,511	640	27.5	4,239	4,268	973	0.7
Public - SELP	822	519	299	-36.9	1,224	425	268	-65.3*	2,044	943	401	-53.9*
Public – UP	1,956	1,240	433	-36.6	6,190	3,801	754	-38.6*	8,117	5,047	892	-37.8*
Public - NLP	9,691	7,806	1,124	-19.5	10,638	11,223	1,336	5.5	20,343	19,029	1,894	-6.5
Public - SLP	6,540	5,258	1,105	-19.6	6,448	6,248	1,019	-3.1	13,003	11,501	1,633	-11.5
Public – Statewide	18,187	14,304	1,641	-21.3*	23,276	21,272	1,846	-8.6	41,463	35,576	2,662	-14.2
Private - WUP	4,210	3,982	848	-5.4	14,795	11,578	1,327	-21.7*	19,035	15,567	1,637	-18.2*
Private - EUP	486	659	286	35.5	3,013	2,628	598	-12.8	3,508	3,289	686	-6.2
Private - NELP	14,997	12,702	1,627	-15.3	20,307	20,229	1,750	-0.4	35,294	32,932	2,554	-6.7
Private - NWLP	20,516	18,750	1,945	-8.6	25,548	27,159	2,103	6.3	46,042	45,909	3,135	-0.3
Private - Sag. Bay	18,474	22,791	2,200	23.4*	30,396	31,658	2,273	4.2	48,876	54,446	3,509	11.4
Private - SW LP	22,477	25,884	2,622	15.2	31,082	35,153	2,430	13.1	53,546	61,034	4,044	14.0
Private - SCLP	26,853	32,078	3,151	19.5	41,918	42,283	2,698	0.9	68,773	74,355	4,654	8.1
Private - SELP	9,244	8,947	1,445	-3.2	13,410	15,765	1,623	17.6	22,652	24,715	2,379	9.1
Private - UP	4,696	4,641	894	-1.2	17,808	14,207	1,455	-20.2*	22,543	18,855	1,775	-16.4*
Private - NLP	40,763	37,072	2,722	-9.1	53,814	55,203	2,965	2.6	94,545	92,276	4,370	-2.4
Private - SLP	71,798	84,079	4,770	17.1*	108,846	117,043	4,436	7.5	180,638	201,115	7,297	11.3*
Private - Statewide	117,258	125,792	5,595	7.3	180,468	186,454	5,557	3.3	297,726	312,246	8,732	4.9

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.^b95 confidence limit for the 2023 estimate. *P<0.05.

Table 9. The percentage of deer hunters harvesting deer in Michigan during all seasons, 2023.^a

Sex and Area	≥1 deer	95% CL ^b	≥2 deer	95% CL ^b	≥3 deer	95% CL ^b	≥4 deer	95% CL ^b	≥5 deer	95% CL ^b
Antlerless - WUP	7.0	1.2	1.1	0.5	0.2	0.2	0.1	0.1	0.0	0.0
Antlerless - EUP	5.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Antlerless - NELP	12.4	1.2	2.5	0.6	0.7	0.3	0.3	0.2	0.0	0.0
Antlerless - NWLP	16.5	1.3	3.6	0.7	0.9	0.3	0.3	0.2	0.1	0.1
Antlerless - Sag. Bay	19.3	1.5	5.5	0.9	1.3	0.4	0.4	0.2	0.1	0.1
Antlerless - SWLP	20.9	1.5	6.4	0.9	2.3	0.6	1.1	0.4	0.4	0.3
Antlerless - SCLP	21.0	1.4	6.8	0.9	2.4	0.6	1.2	0.4	0.7	0.3
Antlerless - SELP	15.0	1.9	3.3	1.0	1.0	0.5	0.4	0.3	0.2	0.3
Antlerless - UP	6.7	1.0	0.8	0.4	0.2	0.2	0.1	0.1	0.0	0.0
Antlerless - NLP	15.1	0.8	3.3	0.4	0.8	0.2	0.3	0.1	0.0	0.1
Antlerless - SLP	20.5	0.8	6.3	0.5	2.1	0.3	1.0	0.2	0.5	0.1
Antlerless - Statewide ^d	17.7	0.6	4.9	0.3	1.6	0.2	0.7	0.1	0.3	0.1
Antlered - WUP	22.1	1.9	2.5	0.7	0	0	0	0	0	0
Antlered - EUP	19.5	3.5	1.2	1.0	0	0	0	0	0	0
Antlered - NELP	22.8	1.5	2.6	0.6	0	0	0	0	0	0
Antlered - NWLP	25.9	1.5	4.3	0.7	0	0	0	0	0	0
Antlered - Sag. Bay	32.1	1.7	5.8	0.9	0	0	0	0	0	0
Antlered - SWLP	34.7	1.8	7.4	1.0	0	0	0	0	0	0
Antlered - SCLP	36.3	1.7	7.8	1.0	0	0	0	0	0	0
Antlered - SELP	28.7	2.3	5.8	1.2	0	0	0	0	0	0
Antlered - UP	21.6	1.7	2.2	0.6	0	0	0	0	0	0
Antlered - NLP	25.2	1.0	3.8	0.5	0	0	0	0	0	0
Antlered - SLP	35.4	1.0	7.4	0.6	0	0	0	0	0	0
Antlered - Statewide ^d	31.9	0.7	6.0	0.4	0	0	0	0	0	0

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

^b95 confidence limit.

^cThe season bag limit for antlered deer was two.

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

Table 9 (continued). The percentage of deer hunters harvesting deer in Michigan during all seasons, 2023.^a

Sex and Area	≥1 deer	95% CL ^b	≥2 deer	95% CL ^b	≥3 deer	95% CL ^b	≥4 deer	95% CL ^b	≥5 deer	95% CL ^b
Both sexes - WUP	27.5	2.0	4.6	1.0	0.7	0.4	0.1	0.1	0.0	0.0
Both sexes - EUP	23.9	3.7	2.2	1.3	0.0	0.0	0.0	0.0	0.1	0.1
Both sexes - NELP	31.9	1.6	7.4	0.9	1.4	0.4	0.5	0.2	0.1	0.1
Both sexes - NWLP	37.0	1.6	11.2	1.1	2.5	0.5	0.6	0.3	0.2	0.2
Both sexes - Sag. Bay	44.6	1.8	14.8	1.3	3.7	0.7	1.1	0.4	0.4	0.4
Both sexes - SWLP	46.5	1.8	17.3	1.4	5.7	0.9	2.3	0.6	0.4	0.4
Both sexes - SCLP	49.0	1.7	17.7	1.4	5.4	0.8	2.2	0.5	0.3	0.3
Both sexes - SELP	38.9	2.5	11.5	1.7	2.8	0.9	0.7	0.4	0.0	0.0
Both sexes - UP	26.8	1.8	4.1	0.8	0.5	0.3	0.1	0.1	0.1	0.1
Both sexes - NLP	35.6	1.1	10.2	0.7	2.1	0.3	0.6	0.2	0.2	0.2
Both sexes - SLP	47.6	1.0	17.1	0.8	5.1	0.5	2.0	0.3	0.0	0.0
Both sexes - Statewide ^d	42.7	0.7	14.2	0.5	3.9	0.3	1.5	0.2	0.6	0.1

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

^b95 confidence limit.

^cThe season bag limit for antlered deer was two.

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

Table 10. The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2023.^a

Sex and Area	Archery Success	95% CL ^b	Regular Firearm Success	95% CL ^b	Muzzle-loader Success	95% CL ^b	Early Antlerless Success	95% CL ^b	Late Antlerless Success	95% CL ^b	Liberty (Youth) Success	95% CL ^b
Antlerless - WUP	6.1	1.9	4.7	1.1	5.2	2.4	0.0	0.0	0.0	0.0	8.7	4.8
Antlerless - EUP	7.1	3.9	3.2	1.6	0.5	1.0	0.0	0.0	0.0	0.0	4.7	7.2
Antlerless - NELP	7.2	1.4	8.0	1.1	7.0	2.6	16.3	8.8	23.7	5.3	8.7	4.0
Antlerless - NWLP	9.2	1.4	10.4	1.2	5.0	1.8	10.6	6.0	24.0	4.1	12.2	3.3
Antlerless - Sag. Bay	8.5	1.4	12.7	1.4	9.6	2.4	30.8	8.3	28.7	4.1	7.1	2.4
Antlerless - SWLP	9.3	1.4	13.6	1.5	8.6	2.0	21.3	9.2	25.5	3.6	5.7	2.5
Antlerless - SCLP	9.3	1.4	13.1	1.4	10.3	2.1	21.1	7.7	29.0	3.4	7.1	2.6
Antlerless - SELP	7.8	1.8	9.2	1.8	3.5	1.9	13.3	7.7	19.6	4.8	6.4	3.4
Antlerless - UP	6.3	1.7	4.4	0.9	4.3	2.0	0.0	0.0	0.0	0.0	8.0	4.2
Antlerless - NLP	8.6	0.9	9.6	0.8	5.8	1.4	14.4	4.8	23.9	3.0	11.4	2.4
Antlerless - SLP	9.1	0.8	12.9	0.8	9.0	1.2	23.0	4.5	27.0	2.0	6.1	1.3
Antlerless - Statewide	9.0	0.6	10.7	0.5	7.5	0.8	18.8	3.2	25.6	1.6	7.9	1.1
Antlered – WUP	14.1	2.7	18.7	1.9	5.5	2.6	0.0	0.0	0.0	0.0	19.7	7.4
Antlered – EUP	12.5	5.0	15.8	3.4	7.6	6.3	0.0	0.0	0.0	0.0	23.4	16.7
Antlered – NELP	12.9	1.8	19.5	1.5	4.4	2.1	0.0	0.0	0.0	0.0	25.1	6.6
Antlered – NWLP	18.8	1.9	18.8	1.5	3.3	1.5	0.0	0.0	0.0	0.0	26.2	4.6
Antlered - Sag. Bay	24.9	2.2	22.5	1.7	5.8	1.9	0.0	0.0	0.0	0.0	32.6	4.7
Antlered – SWLP	25.2	2.1	25.5	1.9	4.5	1.5	0.0	0.0	0.0	0.0	27.4	5.1
Antlered – SCLP	29.0	2.1	26.3	1.8	6.2	1.7	0.0	0.0	0.0	0.0	24.0	4.6
Antlered – SELP	23.3	2.7	20.3	2.5	3.5	1.9	0.0	0.0	0.0	0.0	20.5	5.9
Antlered – UP	13.8	2.4	18.1	1.7	5.9	2.4	0.0	0.0	0.0	0.0	20.4	6.8
Antlered – NLP	17.2	1.3	19.5	1.0	3.8	1.2	0.0	0.0	0.0	0.0	24.7	3.4
Antlered – SLP	27.2	1.2	25.1	1.0	5.4	0.9	0.0	0.0	0.0	0.0	27.9	2.7
Antlered – Statewide	23.5	0.9	22.5	0.7	4.9	0.7	0.0	0.0	0.0	0.0	25.4	2.0

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

^b95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2023.^a

Sex and Area	Archery Success	95% CL ^b	Regular Firearm Success	95% CL ^b	Muzzle- loader Success	95% CL ^b	Early Antlerless Success	95% CL ^b	Late Antlerless Success	95% CL ^b	Liberty (Youth) Success	95% CL ^b
Both sexes - WUP	19.3	3.1	22.9	2.1	10.7	3.4	0.0	0.0	0.0	0.0	28.4	8.2
Both sexes - EUP	18.9	5.9	19.0	3.7	8.1	6.3	0.0	0.0	0.0	0.0	28.1	18.1
Both sexes - NELP	19.2	2.1	26.1	1.7	10.6	3.1	16.3	8.8	23.7	5.3	33.2	7.3
Both sexes - NWLP	25.4	2.1	27.2	1.7	7.9	2.3	10.6	6.0	24.0	4.1	38.0	5.0
Both sexes - Sag. Bay	31.3	2.3	32.7	1.9	14.7	2.9	30.8	8.3	28.7	4.1	38.7	4.9
Both sexes - SWLP	31.0	2.2	35.1	2.0	12.7	2.4	21.3	9.2	25.5	3.6	33.0	5.3
Both sexes - SCLP	35.6	2.2	35.8	1.9	15.8	2.5	21.1	7.7	29.0	3.4	30.8	4.9
Both sexes - SELP	28.4	2.9	27.9	2.8	7.0	2.6	13.3	7.7	19.6	4.8	26.7	6.5
Both sexes - UP	19.2	2.7	22.1	1.8	10.2	3.0	0.0	0.0	0.0	0.0	28.4	7.5
Both sexes - NLP	24.0	1.4	27.2	1.1	9.0	1.7	14.4	4.8	23.9	3.0	35.6	3.8
Both sexes - SLP	33.1	1.3	34.7	1.1	13.8	1.4	23.0	4.5	27.0	2.0	33.7	2.8
Both sexes - Statewide	29.9	0.9	30.7	0.7	12.0	1.0	18.8	3.2	25.6	1.6	32.8	2.1

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

^b95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2023.^a

Sex and Area	Independence Success	95% CL ^b	Urban Archery Success	95% CL ^b	All Seasons Success	95% CL ^b
Antlerless - WUP	2.2	3.6	0.0	0.0	7.0	1.2
Antlerless - EUP	9.8	10.9	0.0	0.0	5.4	2.0
Antlerless - NELP	7.9	5.2	0.0	0.0	12.4	1.2
Antlerless - NWLP	3.5	2.6	0.0	0.0	16.5	1.3
Antlerless - Sag. Bay	11.6	8.1	0.0	0.0	19.3	1.5
Antlerless - SWLP	10.4	6.5	0.0	0.0	20.9	1.5
Antlerless - SCLP	5.6	4.4	0.0	0.0	21.0	1.4
Antlerless - SELP	3.6	4.5	4.0	4.4	15.0	1.9
Antlerless - UP	4.7	4.3	0.0	0.0	6.7	1.0
Antlerless - NLP	7.5	3.5	0.0	0.0	15.1	0.8
Antlerless – SLP	7.4	3.3	4.0	4.4	20.5	0.8
Antlerless - Statewide	6.8	2.1	4.0	4.4	17.7	0.6
Antlered – WUP	4.4	5.1	0.0	0.0	22.1	1.9
Antlered – EUP	14.7	12.9	0.0	0.0	19.5	3.5
Antlered – NELP	19.8	20.2	0.0	0.0	22.8	1.5
Antlered – NWLP	19.7	7.5	0.0	0.0	25.9	1.5
Antlered - Sag. Bay	17.5	8.1	0.0	0.0	32.1	1.7
Antlered – SWLP	28.5	22.0	0.0	0.0	34.7	1.8
Antlered – SCLP	20.3	9.3	0.0	0.0	36.3	1.7
Antlered – SELP	7.1	6.6	4.0	4.4	28.7	2.3
Antlered – UP	7.8	5.5	0.0	0.0	21.6	1.7
Antlered – NLP	17.3	7.7	0.0	0.0	25.2	1.0
Antlered – SLP	22.0	8.8	4.0	4.4	35.4	1.0
Antlered – Statewide	17.5	5.2	4.0	4.4	31.9	0.7

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

^b95 confidence limit.

Table 10 (continued). The percentage of deer hunters harvesting at least one deer in Michigan by hunting season, 2023.^a

Sex and Area	Indep- dence Success	95% CL ^b	Urban Archery Success	95% CL ^b	All Seasons Success	95% CL ^b
Both sexes - WUP	6.6	6.1	0.0	0.0	27.5	2.0
Both sexes - EUP	24.6	15.5	0.0	0.0	23.9	3.7
Both sexes - NELP	27.6	18.4	0.0	0.0	31.9	1.6
Both sexes - NWLP	23.2	7.9	0.0	0.0	37.0	1.6
Both sexes - Sag. Bay	29.1	11.2	0.0	0.0	44.6	1.8
Both sexes - SWLP	38.8	20.2	0.0	0.0	46.5	1.8
Both sexes - SCLP	25.9	10.9	0.0	0.0	49.0	1.7
Both sexes - SELP	10.7	8.5	8.1	6.1	38.9	2.5
Both sexes – UP	12.4	6.8	0.0	0.0	26.8	1.8
Both sexes – NLP	24.8	8.0	0.0	0.0	35.6	1.1
Both sexes – SLP	29.4	8.8	8.1	6.1	47.6	1.0
Both sexes – Statewide	24.2	5.3	8.1	6.1	42.7	0.7

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

^b95 confidence limit.

Table 11. Level of satisfaction and dissatisfaction with the number of deer seen among Michigan deer hunters, 2022-2023.

Area	2022 Satisfied hunters (%) ^a	2023 Satisfied hunters (%) ^a	95% CL ^c	Difference from 2022 to 2023 (%)	2022 Dissatisfied hunters (%) ^b	2023 Dissatisfied hunters (%) ^b	95% CL ^c	Difference from 2022 to 2023 (%)
West UP	38	18%	2%	-20*	48	72	2	24*
East UP	35	26%	5%	-8	53	61	5	8
NE LP	38	32%	2%	-6*	45	54	2	9*
NW LP	38	36%	2%	-2	44	49	2	5*
Sag. Bay	53	49%	2%	-4	30	34	2	4*
SW LP	57	54%	2%	-3	25	29	2	4*
SC LP	61	58%	2%	-3	23	27	2	4*
SE LP	49	51%	3%	2	32	30	3	-2
UP	37	20%	2%	-18*	49	70	2	21*
NLP	39	35%	1%	-4*	43	50	1	7*
SLP	57	54%	1%	-3*	26	28	1	3*
Statewide	47	42%	1%	-5*	36	42	1	7*

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

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

^c95 confidence limit for the 2023 estimate.

*P<0.05.

Table 12. Level of satisfaction and dissatisfaction with the number of antlered deer (bucks) seen among Michigan deer hunters, 2022-2023.

Area	2022 Satisfied hunters (%) ^a	2023 Satisfied hunters (%) ^a	95% CL ^c	Difference from 2022 to 2023 (%)	2022 Dissatisfied hunters (%) ^b	2023 Dissatisfied hunters (%) ^b	95% CL ^c	Difference from 2022 to 2023 (%)
West UP	23	15	2	-9*	62	75	2	13*
East UP	22	16	4	-6	64	72	5	8
NE LP	22	23	2	1	58	60	2	2
NW LP	26	26	2	0	54	57	2	3
Sag. Bay	36	35	2	-1	43	47	2	3
SW LP	40	41	2	1	40	40	2	0
SC LP	46	44	2	-1	34	36	2	2
SE LP	34	36	3	2	46	44	3	-2
UP	23	15	2	-8*	62	74	2	12*
NLP	25	25	1	0	55	58	1	3*
SLP	41	41	1	0	39	40	1	1
Statewide	32	31	1	-1	48	51	1	3*

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

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

^c95 confidence limit for the 2023 estimate.

*P<0.05.

Table 13. Level of satisfaction and dissatisfaction with the size of the antlers on antlered deer (bucks) among Michigan deer hunters, 2022-2023.

Area	2022 Satisfied hunters (%) ^a	2023 Satisfied hunters (%) ^a	95% CL ^c	Difference from 2022 to 2023 (%)	2022 Dissatisfied hunters (%) ^b	2023 Dissatisfied hunters (%) ^b	95% CL ^c	Difference from 2022 to 2023 (%)
West UP	17	12	2	-5*	59	66	2	6*
East UP	17	12	3	-5	57	61	5	3
NE LP	19	19	2	0	49	52	2	3
NW LP	24	24	2	1	46	47	2	1
Sag. Bay	29	27	2	-2	44	47	2	3
SW LP	32	33	2	2	39	38	2	-1
SC LP	36	36	2	-1	35	38	2	3
SE LP	28	29	3	1	43	43	3	0
UP	17	12	2	-5*	59	65	2	6*
NLP	22	22	1	0	47	50	1	2
SLP	33	33	1	0	39	41	1	1
Statewide	26	26	1	-1	45	47	1	2*

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

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

^c95 confidence limit for the 2023 estimate.

*P<0.05.

Table 14. Level of satisfaction and dissatisfaction with overall deer hunting experience among Michigan deer hunters, 2022-2023.

Area	2022 Satisfied hunters (%) ^a	2023 Satisfied hunters (%) ^a	95% CL ^c	Difference from 2022 to 2023 (%)	2022 Dissatisfied hunters (%) ^b	2023 Dissatisfied hunters (%) ^b	95% CL ^c	Difference from 2022 to 2023 (%)
West UP	46	30	2	-17*	31	52	3	22*
East UP	41	35	5	-6	38	46	5	8
NE LP	47	44	2	-4	29	34	2	4*
NW LP	49	46	2	-4	27	33	2	5*
Sag. Bay	57	54	2	-3	21	24	2	3
SW LP	60	59	2	-1	18	19	2	1
SC LP	63	61	2	-2	16	19	2	4*
SE LP	56	56	3	0	21	22	3	1
UP	45	31	2	-14*	32	51	2	19*
NLP	49	45	1	-4*	27	33	1	5*
SLP	60	59	1	-1	18	20	1	2
Statewide	54	50	1	-4*	24	29	1	5*

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

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

^c95 confidence limit for the 2023 estimate.

*P<0.05.

Table 15. Level of satisfaction and dissatisfaction with the number of deer harvested among Michigan deer hunters, 2022-2023.

Area	2022 Satisfied hunters (%) ^a	2023 Satisfied hunters (%) ^a	95% CL ^c	Difference from 2022 to 2023 (%)	2022 Dissatisfied hunters (%) ^b	2023 Dissatisfied hunters (%) ^b	95% CL ^c	Difference from 2022 to 2023 (%)
West UP	33	22	2	-12*	28	44	3	16*
East UP	24	19	4	-6	35	41	5	6
NE LP	31	29	2	-2	31	35	2	4
NW LP	33	31	2	-2	29	33	2	4*
Sag. Bay	41	40	2	-2	22	25	2	3
SW LP	43	40	2	-3	22	24	2	3
SC LP	45	44	2	-2	19	23	2	4*
SE LP	39	37	3	-2	24	28	3	4
UP	32	21	2	-10*	29	43	2	14*
NLP	33	31	1	-2	29	33	1	4*
SLP	43	41	1	-2	21	24	1	3*
Statewide	37	35	1	-3*	25	30	1	5*

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

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

^c95 confidence limit for the 2023 estimate.

*P<0.05.

Table 16. Level of satisfaction and dissatisfaction with the number of deer seen among Michigan deer hunters in 2023. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Preferred hunt area	2023 Satisfied private land hunters (%) ^a	95% CL	2023 Satisfied public land hunters (%) ^a	95% CL	Difference between land types (%)	2023 Dissatisfied private land hunters (%) ^b	95% CL	2023 Dissatisfied public land hunters (%) ^b	95% CL	Difference between land types (%)
West UP	22	3	17	5	-5	66	3	75	5	9
East UP	32	6	18	9	-14	55	7	69	10	14
NE LP	36	2	23	4	-13*	49	3	62	4	13*
NW LP	43	2	24	4	-19*	42	2	63	5	22*
Sag. Bay	52	2	32	7	-20*	31	2	51	7	20*
SW LP	57	2	28	8	-29*	26	2	50	9	24*
SC LP	60	2	39	8	-21*	25	2	50	8	25*
SE LP	53	3	23	11	-30*	28	3	58	12	30*
UP	24	3	17	4	-7*	64	3	73	5	10*
NLP	40	2	24	3	-17*	45	2	62	3	17*
SLP	57	1	33	4	-24*	26	1	50	5	24*
Statewide	48	1	24	2	-24*	36	1	62	2	25*

Table 17. Level of satisfaction and dissatisfaction with the number of antlered deer (bucks) seen among Michigan deer hunters in 2023. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Preferred hunt area	2023 Satisfied private land hunters (%) ^a	95% CL	2023 Satisfied public land hunters (%) ^a	95% CL	Difference between land types (%)	2023 Dissatisfied private land hunters (%) ^b	95% CL	2023 Dissatisfied public land hunters (%) ^b	95% CL	Difference between land types (%)
West UP	19	3	15	4	-4	70	3	73	5	4
East UP	17	5	15	8	-2	70	6	72	10	2
NE LP	27	2	16	3	-11*	56	3	65	4	9*
NW LP	30	2	17	4	-13*	53	2	67	4	14*
Sag. Bay	37	2	20	6	-17*	44	2	58	7	15*
SW LP	43	2	20	7	-23*	38	2	54	9	16*
SC LP	46	2	29	8	-17*	35	2	50	8	15*
SE LP	38	3	13	8	-25*	42	3	66	12	25*
UP	18	2	15	4	-3	70	3	73	5	3
NLP	29	1	17	2	-12*	54	2	66	3	12*
SLP	43	1	22	4	-21*	38	1	54	5	16*
Statewide	36	1	18	2	-18*	46	1	64	2	18*

Table 18. Level of satisfaction and dissatisfaction with the size of the antlers seen on antlered deer (bucks) by Michigan deer hunters in 2023. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Preferred hunt area	2023 Satisfied private land hunters (%) ^a	95% CL	2023 Satisfied public land hunters (%) ^a	95% CL	Difference between land types (%)	2023 Dissatisfied private land hunters (%) ^b	95% CL	2023 Dissatisfied public land hunters (%) ^b	95% CL	Difference between land types (%)
West UP	14	2	14	4	0	64	3	60	6	-4
East UP	15	5	11	7	-4	56	7	58	11	3
NE LP	22	2	15	3	-7*	52	3	49	4	-3
NW LP	26	2	19	4	-7*	45	2	52	5	7
Sag. Bay	29	2	16	6	-13*	45	2	51	8	6
SW LP	35	2	20	7	-15*	38	2	40	9	2
SC LP	37	2	27	7	-9	38	2	40	8	2
SE LP	31	3	14	9	-16*	42	3	51	12	9
UP	14	2	14	4	0	62	3	60	5	-3
NLP	24	1	17	2	-7*	48	2	50	3	2
SLP	34	1	20	4	-14*	40	1	45	5	5
Statewide	29	1	17	2	-11*	45	1	51	2	6*

Table 19. Level of satisfaction and dissatisfaction with overall deer hunting experience among Michigan deer hunters in 2023. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Preferred hunt area	2023 Satisfied private land hunters (%) ^a	95% CL	2023 Satisfied public land hunters (%) ^a	95% CL	Difference between land types (%)	2023 Dissatisfied private land hunters (%) ^b	95% CL	2023 Dissatisfied public land hunters (%) ^b	95% CL	Difference between land types (%)
West UP	35	3	31	6	-4	47	3	52	6	5
East UP	38	6	29	10	-8	42	7	53	11	12
NE LP	47	3	39	4	-8*	31	2	36	4	5
NW LP	50	2	37	5	-13*	29	2	41	5	13*
Sag. Bay	57	2	38	7	-19*	21	2	39	7	18*
SW LP	61	2	35	8	-26*	17	2	38	8	21*
SC LP	62	2	45	8	-17*	18	2	35	8	17*
SE LP	57	3	43	12	-14	21	3	30	12	9
UP	35	3	30	5	-5	46	3	52	5	7
NLP	49	2	38	3	-12*	29	2	39	3	9*
SLP	60	1	41	5	-19*	18	1	36	5	18*
Statewide	54	1	37	2	-17*	25	1	41	2	16*

Table 20. Level of satisfaction and dissatisfaction with the number of deer harvested by Michigan deer hunters in 2023. Estimates are provided separately for hunters hunting on private land only and public land only within the hunter's preferred hunt area.

Preferred hunt area	2023 Satisfied private land hunters (%) ^a	95% CL	2023 Satisfied public land hunters (%) ^a	95% CL	Difference between land types (%)	2023 Dissatisfied private land hunters (%) ^b	95% CL	2023 Dissatisfied public land hunters (%) ^b	95% CL	Difference between land types (%)
West UP	27	3	21	5	-6	38	3	45	6	6
East UP	24	6	10	7	-14*	37	7	48	11	11
NE LP	33	3	19	4	-14*	33	3	35	4	2
NW LP	35	2	19	4	-16*	29	2	44	5	15*
Sag. Bay	42	2	27	7	-15*	23	2	38	7	16*
SW LP	43	2	17	7	-26*	22	2	43	9	21*
SC LP	45	2	28	8	-17*	22	2	37	8	14*
SE LP	39	3	13	9	-26*	27	3	39	12	12
UP	26	3	18	4	-8*	38	3	45	6	8
NLP	35	2	20	3	-15*	30	2	39	3	9*
SLP	43	1	22	4	-21*	23	1	39	5	16*
Statewide	39	1	20	2	-19*	27	1	40	2	13*

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

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

*P<0.05.

Table 21. The estimated proportion and number of archers that used a crossbow during 2023 archery season in Michigan, summarized by region.

Region	Archers using a crossbow (%)	95% CL	Archers using a crossbow (No.)	95% CL
UP	72.3	3.6	16,310	1,506
NLP	78.3	1.6	73,415	3,025
SLP	73.8	1.4	107,454	3,516
Unknown ^a	67.4	3.6	16,620	1,521
Statewide	74.6	1.0	213,800	4,357

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

Table 22. The estimated hunter success of archers hunting with a crossbow during 2023 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless (%) ^a	95% CL	Antlered Bucks (%) ^a	95% CL	Sexes Combined (%) ^a	95% CL
UP	6.3	2.3	18.0	3.6	23.5	4.0
NLP	10.2	1.3	20.9	1.8	29.1	2.0
SLP	9.8	1.1	31.0	1.7	38.0	1.8
Unknown ^b	10.3	2.8	24.1	4.0	31.3	4.3
Statewide	9.7	0.8	26.0	1.1	33.3	1.2

^aPercentage of crossbow hunters harvesting at least one deer.

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

Table 23. The estimated number of deer harvested by archers with a crossbow during 2023 archery season in Michigan, summarized by type of deer and region.

Region	Antlerless (No.)	95% CL	Antlered Bucks (No.)	95% CL	Sexes Combined (No.)	95% CL
UP	1,017	388	2,830	629	3,847	765
NLP	7,552	1,085	15,411	1,525	22,962	1,969
SLP	11,359	1,411	34,944	2,338	46,303	2,883
Unknown ^a	1,908	585	3,947	768	5,855	1,057
Statewide	21,836	1,895	57,131	2,884	78,967	3,605

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

Table 24. The estimated proportion and number of deer hunters that used a trail camera to hunt deer in Michigan, summarized by area.^a

Area	Deer hunters using a trail camera (%)	95% CL	Deer hunters using a trail camera (No.)	95% CL
West UP	63	2	35,120	2,209
East UP	58	5	8,225	1,103
NE LP	44	2	38,444	2,313
NW LP	45	2	41,849	2,382
Sag. Bay	41	2	33,040	2,119
SW LP	44	2	34,684	2,170
SC LP	40	2	36,218	2,223
SE LP	45	3	16,935	1,544
UP	62	2	43,345	2,438
NLP	44	1	90,800	3,363
SLP	42	1	110,370	3,605
Statewide	45	1	247,856	4,597

^aExcluded license buyers that did not hunt.

Table 25. The estimated number of trail cameras used by deer hunters and the number of days these cameras were operated in Michigan during 2023, summarized by area.

Area	Mean trail cameras used	95% CL	Total trail cameras used	95% CL	Mean days trail cameras operated	95% CL	Total days trail cameras operated	95% CL
West UP	2.7	0.2	93,329	9,742	58.3	4.6	1,917,118	196,541
East UP	2.3	0.2	18,434	3,068	62.6	10.5	503,249	108,903
NE LP	2.8	0.2	105,672	8,730	79.8	5.8	2,849,270	272,900
NW LP	3.0	0.2	124,320	10,597	86.0	5.4	3,315,469	285,715
Sag. Bay	2.8	0.2	91,947	8,169	86.5	6.0	2,625,620	252,798
SW LP	3.2	0.2	110,592	10,678	101.9	6.4	3,236,948	293,024
SC LP	3.1	0.2	109,651	9,132	100.8	6.3	3,217,131	290,893
SE LP	2.7	0.4	44,433	8,576	85.4	8.2	1,296,308	175,294
UP	2.6	0.2	111,763	10,170	59.2	4.3	2,420,366	223,603
NLP	2.9	0.1	261,870	14,214	83.2	3.7	6,986,227	413,658
SLP	3.0	0.1	324,745	17,228	96.0	3.5	9,554,519	477,439
Statewide	2.9	0.1	708,428	23,121	84.6	2.2	19,205,420	633,848

^aExcluded license buyers that did not hunt and hunters that failed to report the number of cameras used and days of observation.

Table 26. The proportion of deer hunters using a trail camera that photographed the following selected carnivores, deer, and wild pig with their trail camera in 2023, summarized by area.^a

Area	Bear %	95% CL	Bobcat %	95% CL	Coyote %	95% CL	Deer %	95% CL	Fisher %	95% CL
West UP	55	3	23	3	54	3	94	2	16	2
East UP	39	7	15	5	46	7	94	3	12	4
NE LP	36	3	35	3	67	3	97	1	0.0	0.0
NW LP	32	3	43	3	68	3	97	1	0.4	0.4
Sag. Bay	12	2	19	3	61	3	98	1	0.4	0.4
SW LP	1	0.5	9	2	74	3	98	1	0.4	0.4
SC LP	1	0.5	10	2	71	3	97	1	0.3	0.4
SE LP	1	1	3	1	73	4	99	1	0.2	0.5
UP	52	3	22	2	52	3	94	1	15	2
NLP	33	2	39	2	68	2	97	1	0.2	0.2
SLP	1	0.4	9	1	70	2	98	1	0.4	0.2
Statewide	22	1	22	1	66	1	97	0.4	3	0.4

^aExcluded hunters that did not use a trail camera.

Table 26 (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 2023, summarized by area.^a

Preferred hunt area	Fox %	95% CL	Marten %	95% CL	Wild pig %	95% CL	Wolf %	95% CL
West UP	22	3	11	2	0.0	0.0	49	3
East UP	17	5	12	4	0.0	0.1	44	7
NE LP	28	3	1	0.5	0.1	0.2	1	1
NW LP	32	3	1	1	0.5	0.4	0.4	0.4
Sag. Bay	38	3	0.2	0.3	0.3	0.3	0.3	0.4
SW LP	46	3	0.2	0.3	0.2	0.3	1	0.5
SC LP	40	3	0.5	0.4	0.0	0.1	0.0	0.0
SE LP	46	5	0.2	0.5	0.2	0.5	1	1
UP	21	2	11	2	0.0	0.0	48	3
NLP	31	2	1	0.3	0.3	0.2	1	0.3
SLP	43	2	0.3	0.2	0.2	0.1	0.4	0.2
Statewide	35	1	2	0.4	0.2	0.1	9	1

^aExcluded hunters that did not use a trail camera.

Table 27. Comparison of estimated harvest and number of deer harvest reports submitted in 2023, summarized by season.^a

Season	Reports submitted	Estimated harvest	How much estimates differed from reports (%)
Archery	82,881	110,339	-25%
Early Antlerless Firearm	3,597	3,836	-6%
Independence Hunt	416	564	-26%
Late Antlerless Firearm	23,579	29,468	-20%
Late Urban Archery	261	218	20%
Liberty/Youth Hunt	6,145	7,906	-22%
Muzzleloader	16,126	17,385	-7%
Regular Firearm	134,388	177,292	-24%
Total	267,393	347,008	-23%

^aHarvest estimates and counts did not include deer taken with DMA permits.

Table 28. Comparison of the differences between estimated deer harvest and mandatory harvest reporting by states that have conducted both surveys and mandatory harvest reporting concurrently.^a

State	Period	Number of years in the comparison	How much estimates differed from reports (%)
Alabama	2020-2022	3	52
Florida	2019-2020	2	72
Illinois	2001-2011	11	22
Indiana	2010	1	16
Louisiana	2008-2011	4	48
Louisiana	2012-2022	11	128
Michigan	2022-2023	2	22
North Carolina	2010-2022	13	27
Oklahoma	2001-2014	14	46

^aInformation summarized from unpublished reports located on various state agency websites.

Table 29. The proportion of successful deer hunters that reported that the website or phone application for reporting their harvested deer was easy or hard to use in 2023.^a

Preferred hunt area	Easy to use %	Easy to use 95% CL	Neither %	Neither 95% CL	Hard to use %	Hard to use 95% CL	Not sure %	Not sure 95% CL	No answer %	No answer 95% CL
West UP	64	4	10	3	14	3	8	2	4	2
East UP	62	9	7	5	14	6	9	5	8	5
NE LP	67	3	10	2	13	2	7	2	3	1
NW LP	67	3	8	2	13	2	8	2	3	1
Sag. Bay	67	3	9	2	14	2	7	2	2	1
SW LP	73	3	8	2	9	2	7	1	2	1
SC LP	73	2	8	1	10	2	6	1	3	1
SE LP	72	4	10	3	12	3	5	2	1	1
UP	64	4	9	2	14	3	8	2	5	2
NLP	66	2	9	1	14	1	8	1	3	1
SLP	72	1	9	1	11	1	6	1	2	0
Statewide	69	1	9	1	12	1	7	1	3	0

^aThe “easy to use” category combined respondents that reported the system was very easy to use or somewhat easy to use. The “hard to use” category included respondents that reported that the system was somewhat hard to use or very hard to use.

Table 30. The proportion of successful deer hunters that reported that the website or phone application for reporting their harvested deer was easy or hard to use in 2023.^a

Group	Easy to use %	Easy to use 95% CL	Neither %	Neither 95% CL	Hard to use %	Hard to use 95% CL	Not sure %	Not sure 95% CL	No answer %	No answer 95% CL
Successful hunters	69	1	9	1	12	1	7	1	3	0
Male hunters	69	1	9	1	12	1	7	1	3	0
Female hunters	69	4	10	2	11	2	9	2	2	1
Completely rural hunters	62	6	11	4	15	4	8	3	3	2
Mostly rural hunters	68	2	9	1	12	1	8	1	3	1
Mostly urban hunters	71	1	9	1	12	1	6	1	3	1
New hunters ^b	64	5	11	3	10	3	12	3	2	1
Repeat hunters	70	1	9	1	12	1	7	1	3	0
Ages 0-9	75	6	10	5	7	4	8	3	0	1
Ages 10-19	69	3	9	2	11	2	9	2	2	1
Ages 20-29	71	5	11	3	8	3	8	3	1	1
Ages 30-39	78	3	8	2	7	2	5	2	2	1
Ages 40-49	79	3	7	2	6	2	6	2	1	1
Ages 50-59	74	2	8	1	9	2	7	1	1	1
Ages 60-69	68	2	8	1	14	2	7	1	3	1
Ages 70-79	55	3	11	2	20	3	8	2	6	1
Ages 80+	42	7	10	4	22	6	11	4	14	5

^aThe “easy to use” category combined respondents that reported the system was very easy to use or somewhat easy to use. The “hard to use” category included respondents that reported that the system was somewhat hard to use or very hard to use.

^bNew license buyers were defined as people that had not purchased a license during the previous 11 years (2011-2022).

Table 31. The proportion of active deer hunters summarized by the maximum number of deer desired to meet their venison needs in 2023.

Preferred hunt area	None	None 95% CL	One deer %	One deer 95% CL	Two deer %	Two deer 95% CL	Three deer %	Three deer 95% CL	Four deer %	Four deer 95% CL	Five or more deer %	Five or more deer 95% CL	Un- known of deer %	Un- known 95% CL
West UP	3	1	47	3	38	3	8	1	2	1	1	<1	2	1
East UP	3	2	44	5	39	5	10	3	1	1	1	1	2	1
NE LP	4	1	34	2	44	2	11	1	3	1	2	1	1	<1
NW LP	3	1	28	2	45	2	16	1	5	1	2	1	2	1
Sag. Bay	3	1	26	2	44	2	16	2	6	1	3	1	2	1
SW LP	2	1	22	2	42	2	19	2	8	1	5	1	2	1
SC LP	2	1	20	2	44	2	18	2	7	1	6	1	2	1
SE LP	2	1	24	3	45	3	18	2	5	1	4	1	2	1
UP	3	1	46	2	38	2	8	1	2	1	1	<1	2	1
NLP	3	<1	31	1	45	1	14	1	4	1	2	<1	2	<1
SLP	2	<1	22	1	44	1	18	1	7	1	5	1	2	<1
Statewide	3	<1	28	1	43	1	15	1	5	<1	4	<1	2	<1

Table 32. The proportion of deer hunting license buyers summarized by the maximum number of deer desired to meet their venison needs in 2023.

Group	None	None 95% CL	One deer %	One deer 95% CL	Two deer %	Two deer 95% CL	Three deer %	Three deer 95% CL	Four deer %	Four deer 95% CL	Five or more deer %	Five or more deer 95% CL	Un- known number of deer %	Un- known 95% CL
All license buyers	3	0	29	1	43	1	15	1	5	0	3	0	2	0
Males buyers	3	0	29	1	42	1	15	1	5	0	3	0	2	0
Female buyers	2	1	27	2	45	3	14	2	5	1	5	1	3	1
Completely rural buyers	3	1	34	3	43	4	11	2	3	1	4	1	2	1
Mostly rural buyers	3	0	27	1	42	1	16	1	6	1	4	1	2	0
Mostly urban buyers	3	0	30	1	43	1	14	1	4	0	3	0	2	0
New buyers ^c	5	1	28	3	37	3	16	2	5	1	6	1	3	1
Repeat buyers	3	0	29	1	43	1	15	1	5	0	3	0	2	0
Ages 0-9	3	1	24	4	40	4	17	4	6	2	7	2	3	2
Ages 10-19	3	1	24	2	41	2	18	2	6	1	6	1	2	1
Ages 20-29	1	1	18	3	43	3	20	3	8	2	8	2	1	1
Ages 30-39	2	1	14	2	40	3	23	2	11	2	9	2	1	1
Ages 40-49	2	1	19	2	43	2	22	2	8	1	5	1	2	1
Ages 50-59	2	1	24	2	48	2	16	1	5	1	3	1	2	1
Ages 60-69	3	1	32	1	45	2	12	1	3	1	2	0	2	0
Ages 70-79	6	1	44	2	38	2	7	1	1	0	1	0	3	1
Ages 80+	9	2	53	4	30	4	3	1	1	1	1	1	5	2

Table 33. The proportion of deer hunters active in 2023 who supported or opposed the universal antlerless deer license.^a

Preferred hunt area	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
West UP	37	2	31	2	30	2	2	1
East UP	47	5	23	4	29	5	1	1
NE LP	60	2	21	2	18	2	1	<1
NW LP	58	2	20	2	22	2	1	<1
Sag. Bay	66	2	20	2	14	1	1	<1
SW LP	66	2	19	2	14	2	1	<1
SC LP	68	2	21	2	10	1	1	<1
SE LP	65	3	21	3	12	2	1	1
UP	39	2	30	2	30	2	2	1
NLP	59	1	20	1	20	1	1	<1
SLP	67	1	20	1	12	1	1	<1
Statewide	60	1	21	1	17	1	1	<1

^aThe universal antlerless deer license was introduced in 2021 and allowed hunters to take antlerless deer in any open unit in the Lower Peninsula and parts of the Upper Peninsula on public and private land without specific quotas.

^bThe support category combined respondents who either strongly supported or supported the license, while the oppose category included respondents who reported they opposed or strongly opposed.

Table 34. The proportion of deer hunting license buyers in 2023 who supported or opposed the universal antlerless deer license.^a

Group	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
All license buyers	60	1	21	1	17	1	1	0
Males buyers	60	1	21	1	17	1	1	0
Female buyers	57	3	23	2	17	2	3	1
Completely rural buyers	49	4	22	3	27	3	2	1
Mostly rural buyers	60	1	21	1	17	1	1	0
Mostly urban buyers	62	1	21	1	16	1	1	0
New buyers ^c	58	3	28	3	11	2	3	1
Repeat buyers	60	1	21	1	17	1	1	0
Ages 0-9	60	4	20	4	15	3	5	2
Ages 10-19	59	2	30	2	10	1	2	1
Ages 20-29	62	3	26	3	10	2	1	1
Ages 30-39	68	3	21	2	10	2	1	1
Ages 40-49	66	2	20	2	13	2	1	0
Ages 50-59	63	2	20	1	17	1	1	0
Ages 60-69	59	2	20	1	19	1	2	0
Ages 70-79	54	2	21	2	23	2	2	1
Ages 80+	48	4	21	3	27	3	4	1

^aThe universal antlerless deer license was introduced in 2021 and allowed hunters to take antlerless deer in any open unit in the Lower Peninsula and parts of the Upper Peninsula on public and private land without specific quotas.

^bThe support category combined respondents who either strongly supported or supported the license, while the oppose category included respondents who reported they opposed or strongly opposed.

^cNew license buyers were defined as people who had not purchased a license during the previous 11 years (2012-2022).

Table 35. The proportion of deer hunters active in 2023 who supported or opposed allowing hunters in the southern Lower Peninsula to use any legal firearm, rather than only muzzleloaders, during the muzzleloader season.^a

Preferred hunt area	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
West UP	18	2	40	3	40	3	3	1
East UP	31	5	31	5	36	5	2	1
NE LP	39	2	26	2	35	2	1	<1
NW LP	42	2	25	2	32	2	1	<1
Sag. Bay	53	2	18	2	28	2	1	<1
SW LP	63	2	12	1	25	2	1	<1
SC LP	62	2	13	1	25	2	1	<1
SE LP	60	3	14	2	24	3	1	1
UP	21	2	38	2	39	2	2	1
NLP	40	1	25	1	34	1	1	<1
SLP	61	1	13	1	25	1	1	<1
Statewide	48	1	21	1	30	1	1	<1

^aThis change was implemented in 2020.

^bThe support category combined respondents who indicated that they strongly supported or supported the regulation, while the oppose category included respondents who reported they opposed or strongly opposed.

Table 36. The proportion of deer hunting license buyers in 2023 who supported or opposed allowing hunters in the southern Lower Peninsula to use any legal firearm, rather than only muzzleloaders, during the muzzleloader season.^a

Group	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
All license buyers	48	1	21	1	30	1	1	0
Males buyers	48	1	20	1	30	1	1	0
Female buyers	45	3	24	2	29	2	1	1
Completely rural buyers	28	3	31	3	39	4	2	1
Mostly rural buyers	48	1	20	1	31	1	1	0
Mostly urban buyers	51	1	19	1	28	1	1	0
New buyers ^c	50	3	24	3	23	3	3	1
Repeat buyers	48	1	21	1	30	1	1	0
Ages 0-9	47	5	15	3	33	4	6	3
Ages 10-19	51	2	24	2	24	2	1	1
Ages 20-29	50	4	22	3	26	3	1	1
Ages 30-39	55	3	20	2	25	2	0	0
Ages 40-49	51	2	19	2	29	2	1	0
Ages 50-59	51	2	19	1	29	2	1	0
Ages 60-69	47	2	21	1	31	1	1	0
Ages 70-79	41	2	22	2	35	2	2	1
Ages 80+	38	4	22	3	37	4	3	1

^aThis change was implemented in 2020.

^bThe support category combined respondents who indicated that they strongly supported or supported the regulation, while the oppose category included respondents who reported they opposed or strongly opposed.

^cNew license buyers were defined as people that had not purchased a license during the previous 11 years (2012-2022).

Table 37. The proportion of deer hunters active in 2023 who supported or opposed allowing hunters in the Lower Peninsula to take any type of deer with a combination and deer hunting licenses during the firearms and muzzleloading seasons.^a

Preferred hunt area	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
West UP	27	2	47	3	24	2	3	1
East UP	44	5	33	5	23	4	1	1
NE LP	68	2	19	2	12	1	0	0
NW LP	68	2	17	2	14	1	1	<1
Sag. Bay	76	2	15	1	9	1	1	<1
SW LP	78	2	13	1	9	1	1	<1
SC LP	79	2	12	1	7	1	1	<1
SE LP	74	3	16	2	9	2	1	1
UP	30	2	44	2	23	2	2	1
NLP	68	1	18	1	13	1	1	<1
SLP	78	1	13	1	8	1	1	<1
Statewide	68	1	19	1	12	1	1	<1

^aPreviously, an antlerless license was required to take an antlerless deer during these seasons. This change was implemented in 2020.

^bThe support category combined respondents who indicated that they strongly supported or supported the regulation, while the oppose category included respondents who reported they opposed or strongly opposed.

Table 38. The proportion of deer hunting license buyers in 2023 who supported or opposed allowing hunters in the Lower Peninsula to take any type of deer with a combination and deer hunting licenses during the firearms and muzzleloading seasons.^a

Group	Support % ^b	Support 95% CL	Neither %	Neither 95% CL	Oppose % ^b	Oppose 95% CL	No answer %	No answer 95% CL
All license buyers	68	1	19	1	12	1	1	0
Males buyers	68	1	19	1	12	1	1	0
Female buyers	64	2	22	2	12	2	2	1
Completely rural buyers	57	4	24	3	16	3	2	1
Mostly rural buyers	69	1	18	1	12	1	1	0
Mostly urban buyers	69	1	18	1	12	1	1	0
New buyers ^c	64	3	25	3	9	2	2	1
Repeat buyers	68	1	19	1	12	1	1	0
Ages 0-9	64	4	19	4	13	3	4	2
Ages 10-19	67	2	25	2	8	1	1	0
Ages 20-29	66	3	23	3	9	2	1	1
Ages 30-39	73	2	18	2	9	2	0	0
Ages 40-49	71	2	17	2	11	2	1	0
Ages 50-59	70	2	18	1	11	1	1	0
Ages 60-69	68	1	18	1	13	1	1	0
Ages 70-79	63	2	20	2	15	1	2	0
Ages 80+	60	4	21	3	17	3	2	1

^aPreviously, an antlerless license was required to take an antlerless deer during these seasons. This change was implemented in 2020.

^bThe support category combined respondents who indicated that they strongly supported or supported the regulation, while the oppose category included respondents who reported they opposed or strongly opposed.

^cNew license buyers were defined as people that had not purchased a license during the previous 11 years (2012-2022).

Table 39. The proportion of deer hunters active in 2023 who agreed or disagreed with the regulations for the youth hunting season.^a

Preferred hunt area	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
West UP	30	2	30	2	31	2	9	1
East UP	34	5	33	5	27	5	7	3
NE LP	32	2	30	2	29	2	9	1
NW LP	34	2	28	2	31	2	7	1
Sag. Bay	36	2	27	2	29	2	7	1
SW LP	42	2	31	2	18	2	8	1
SC LP	40	2	30	2	21	2	9	1
SE LP	37	3	31	3	24	3	8	2
UP	31	2	30	2	30	2	9	1
NLP	33	1	29	1	30	1	8	1
SLP	40	1	30	1	22	1	8	1
Statewide	36	1	29	1	26	1	8	<1

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

Table 40. The proportion of deer hunting license buyers active in 2023 who agreed or disagreed with the regulations for the youth hunting season.^a

Group	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
All license buyers	37	1	29	1	26	1	9	0
Males buyers	36	1	29	1	26	1	9	0
Female buyers	44	2	27	2	22	2	7	1
Completely rural buyers	29	3	26	3	39	4	6	2
Mostly rural buyers	36	1	28	1	28	1	8	1
Mostly urban buyers	37	1	30	1	24	1	9	1
New buyers ^c	49	3	33	3	10	2	8	2
Repeat buyers	36	1	29	1	27	1	9	0
Ages 0-9	67	4	16	3	9	3	7	3
Ages 10-19	61	2	24	2	10	1	5	1
Ages 20-29	38	3	35	3	17	3	11	2
Ages 30-39	42	3	33	3	15	2	10	2
Ages 40-49	39	2	31	2	22	2	8	1
Ages 50-59	34	2	32	2	26	2	8	1
Ages 60-69	32	1	29	1	31	1	8	1
Ages 70-79	31	2	27	2	33	2	10	1
Ages 80+	28	3	24	3	34	4	14	3

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

^cNew license buyers were defined as people that had not purchased a license during the previous 11 years (2012-2022).

Table 41. The proportion of deer hunters active in 2023 who agreed or disagreed that the youth season should last longer than two days.^a

Preferred hunt area	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
West UP	22	2	25	2	44	3	10	2
East UP	25	4	25	4	41	5	8	3
NE LP	24	2	23	2	44	2	9	1
NW LP	21	2	21	2	50	2	8	1
Sag. Bay	22	2	18	2	52	2	8	1
SW LP	27	2	24	2	40	2	9	1
SC LP	23	2	24	2	42	2	11	1
SE LP	26	3	22	3	42	3	10	2
UP	23	2	25	2	43	2	9	1
NLP	23	1	21	1	48	1	8	1
SLP	24	1	23	1	44	1	10	1
Statewide	24	1	22	1	45	1	9	<1

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

Table 42. The proportion of deer hunting license buyers in 2023 who agreed or disagreed that the youth season should last longer than two days.^a

Group	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
All license buyers	24	1	22	1	44	1	9	0
Males buyers	24	1	22	1	44	1	10	0
Female buyers	30	2	21	2	41	3	8	1
Completely rural buyers	19	3	18	3	56	4	7	2
Mostly rural buyers	22	1	21	1	49	1	9	1
Mostly urban buyers	25	1	23	1	42	1	10	1
New buyers ^c	45	3	27	3	19	2	9	2
Repeat buyers	23	1	22	1	45	1	10	0
Ages 0-9	54	5	12	3	25	4	9	3
Ages 10-19	48	2	19	2	28	2	4	1
Ages 20-29	22	3	29	3	38	3	11	2
Ages 30-39	28	2	25	2	38	3	10	2
Ages 40-49	29	2	20	2	42	2	9	1
Ages 50-59	20	1	24	2	47	2	8	1
Ages 60-69	19	1	22	1	49	2	9	1
Ages 70-79	21	2	21	2	47	2	11	1
Ages 80+	17	3	18	3	47	4	18	3

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

^cNew license buyers were defined as people that had not purchased a license during the previous 11 years (2012-2022).

Table 43. The proportion of deer hunters active in 2023 who agreed or disagreed that youth should be restricted to taking only antlerless deer in the youth season.^a

Preferred hunt area	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
West UP	36	2	25	2	30	2	8	1
East UP	36	5	24	4	33	5	6	3
NE LP	42	2	22	2	28	2	8	1
NW LP	44	2	21	2	29	2	7	1
Sag. Bay	45	2	19	2	29	2	7	1
SW LP	32	2	23	2	36	2	9	1
SC LP	36	2	23	2	31	2	9	1
SE LP	40	3	22	3	30	3	8	2
UP	36	2	25	2	30	2	8	1
NLP	44	1	21	1	28	1	7	1
SLP	37	1	22	1	32	1	8	1
Statewide	40	1	22	1	30	1	8	<1

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

Table 44. The proportion of deer hunting license buyers in 2023 who agreed or disagreed that youth should be restricted to taking only antlerless deer in the youth season.^a

Group	Agree % ^b	Agree 95% CL	Neither %	Neither 95% CL	Disagree % ^b	Disagree 95% CL	No answer %	No answer 95% CL
All license buyers	39	1	22	1	31	1	8	0
Males buyers	40	1	22	1	30	1	8	0
Female buyers	32	2	21	2	40	2	7	1
Completely rural buyers	50	4	20	3	24	3	7	2
Mostly rural buyers	44	1	19	1	30	1	7	1
Mostly urban buyers	38	1	24	1	30	1	9	1
New buyers ^c	19	2	29	3	43	3	10	2
Repeat buyers	40	1	22	1	30	1	8	0
Ages 0-9	13	3	13	3	65	4	9	3
Ages 10-19	19	2	18	2	58	2	5	1
Ages 20-29	28	3	26	3	35	3	11	2
Ages 30-39	29	3	24	2	37	3	10	2
Ages 40-49	34	2	21	2	37	2	9	1
Ages 50-59	40	2	24	2	28	2	8	1
Ages 60-69	46	2	23	1	24	1	8	1
Ages 70-79	48	2	22	2	22	2	8	1
Ages 80+	48	4	18	3	22	3	12	3

^aIn 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only one antlered deer.

^bThe agree category combined respondents who indicated that they strongly agreed or somewhat agreed with the regulation, while the disagree category included respondents who somewhat disagreed or strongly disagreed.

^cNew license buyers were defined as people that had not purchased a license during the previous 11 years (2012-2022).

Appendix A. The questionnaire that was used to collect data for the 2023 Michigan deer harvest survey.

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

2023 MICHIGAN DEER HARVEST STUDY

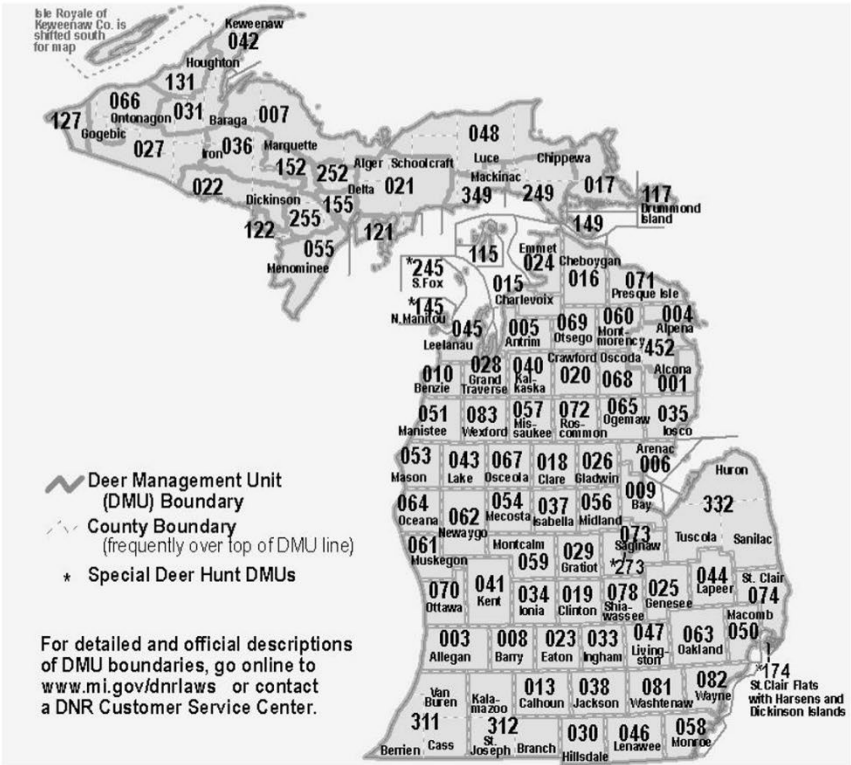
This information is requested under the authority of Part 435, 1994 PA 451, M.C.L. 324.43539.



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 2023 seasons?

1 ☐ Yes. 2 ☐ No. Skip to Question #13.



Appendix A (continued). The questionnaire that was used to collect data for the 2023 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"/> Example	1041	Kent	12	0	1	0	0
<input type="checkbox"/> Archery Oct 1-Nov 14 and Dec 1-Jan 1 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Regular Firearm Nov 15-30 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Muzzleloader Dec 1-10 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Early Firearm Sept 16-17 (Lower Peninsula)	1			Only antlerless deer could be taken on private land during the early firearm season.			
	2						
	3						
<input type="checkbox"/> Late Firearm Dec 11-Jan 1 (Lower Peninsula)	1			Only antlerless deer could be taken on private land during the late firearm season.			
	2						
	3						
<input type="checkbox"/> Liberty/Youth Hunt Sept 9-10 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Independence Hunt Oct 19-22 (Statewide)	1						
	2						
	3						
<input type="checkbox"/> Late Urban Archery Hunt Jan 2-31 (Macomb, Oakland, & Wayne counties only)	1						
	2						
	3						

Appendix A (continued). The questionnaire that was used to collect data for the 2023 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)?
- 1 ☐ Yes 2 ☐ 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 2023?
- _____ 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 2023, 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.
- 5a. To what extent do you agree or disagree that it more difficult than usual to locate a meat processor to butcher a deer in 2023?
- 1 ☐ Strongly Agree 2 ☐ Agree 3 ☐ Neither 4 ☐ Disagree 5 ☐ Strongly disagree 6 ☐ Not sure
6. What is your preferred county to hunt deer in Michigan? Please select one county from the counties you reported hunting during the 2023 seasons in Question #2.
-
- Please write county name
7. On what type of land did you hunt deer in your preferred county in 2023?
- 1 ☐ Public 2 ☐ Private 3 ☐ Both private and public lands
8. Please indicate how satisfied or dissatisfied you were with the following for the 2023 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 2023?
- 1 ☐ Yes 2 ☐ No (If no, please skip to question 12.)
10. If you used a trail camera in 2023, 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.

Appendix A (continued). The questionnaire that was used to collect data for the 2023 Michigan deer harvest survey.

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 2023? (Select all that apply.)

- ☐ None ☐ Bear ☐ Bobcat ☐ Coyote ☐ Deer
☐ Fisher ☐ Fox ☐ Marten ☐ Wild pig ☐ Wolf

12. If you reported taking a deer in 2023, how easy or hard was it to use the website or phone app for reporting your harvested deer? (Select one choice.)

- ☐ Very easy ☐ Somewhat easy ☐ Neither ☐ Somewhat hard ☐ Very hard ☐ Don't know

13. What is the maximum number of deer, regardless of sex, you would harvest in a year to meet your desired amount of venison?

- ☐ None ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

14. How much do you support or oppose the universal antlerless deer license introduced in 2021, which allows hunters to take antlerless deer in any open unit in the Lower Peninsula and parts of the Upper Peninsula on public and private land without specific quotas?

- ☐ Strongly Support ☐ Support ☐ Neither ☐ Oppose ☐ Strongly Oppose

15. How much do you support or oppose allowing hunters in the southern Lower Peninsula to use any legal firearm, rather than only muzzleloaders, during the muzzleloader season? This change was implemented in 2020.

- ☐ Strongly Support ☐ Support ☐ Neither ☐ Oppose ☐ Strongly Oppose

16. How much do you support or oppose allowing hunters in the Lower Peninsula to take any type of deer with a combination and deer hunting licenses during the firearms and muzzleloading seasons? Previously, an antlerless license was required to take an antlerless deer during these seasons. This change was implemented in 2020.

- ☐ Strongly Support ☐ Support ☐ Neither ☐ Oppose ☐ Strongly Oppose

17. During the 2-day youth season, an adult aged 18 or older must accompany young hunters. Have you ever supervised youth hunters during the youth season since its start in 2000?

- ☐ Yes ☐ No

18. In 2023, young hunters in the youth season (Sept 9-10) could harvest multiple antlerless deer (one per kill tag) and only ONE antlered deer. How much do you agree or disagree with the following statements about the youth season: (Select one choice per item.)

- | | Strongly Agree | Somewhat Agree | Neither | Somewhat Disagree | Strongly Disagree |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Overall, I liked the 2023 youth hunting season regulations. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. I would prefer that the youth season last longer than two days. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. I would prefer that youth be restricted to taking only antlerless deer in the youth season. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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

Appendix B. The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2023, summarized by Deer Management Unit.^a

DMU ^d	Hunters ^{b,c}	95% CL ^e	Hunting effort (days) ^b	95% CL	Antlerless deer taken	95% CL	Antlered bucks taken	95% CL	All deer taken	95% CL
001	6,552	965	64,371	13,104	1,197	485	2,018	543	3,215	805
003	12,078	1,292	161,143	24,194	3,337	796	3,921	808	7,258	1,296
004	3,718	733	41,120	13,419	655	463	1,208	457	1,863	658
005	5,130	853	51,666	15,146	727	375	834	354	1,561	554
006	6,048	914	71,710	14,786	1,050	409	2,465	662	3,515	817
007	5,608	895	64,105	13,765	6	7	1,509	474	1,515	474
008	10,084	1,191	119,221	19,970	2,503	762	3,775	808	6,278	1,234
009	4,222	759	55,374	15,954	783	353	1,597	505	2,380	694
010	3,123	660	38,285	12,057	693	411	800	343	1,493	572
013	7,979	1,055	103,692	18,874	3,040	896	4,129	855	7,169	1,378
015	3,314	683	43,645	13,032	733	355	1,220	412	1,953	587
016	6,288	944	63,128	13,445	503	242	1,666	546	2,169	637
017	3,951	750	31,688	8,129	367	214	1,006	397	1,373	463
018	11,456	1,259	116,627	18,470	2,808	695	3,243	744	6,051	1,106
019	7,990	1,060	85,008	15,670	1,744	617	3,882	823	5,626	1,156
020	7,029	997	66,368	13,630	805	367	1,519	453	2,324	631
021	5,662	898	56,374	12,259	170	174	882	348	1,052	402
022	6,103	929	64,335	13,503	522	252	1,573	508	2,095	604
023	7,641	1,033	107,914	20,319	2,835	1,017	3,222	734	6,057	1,343
024	4,257	775	41,642	10,965	736	413	1,126	402	1,862	636
025	7,168	1,001	104,870	21,370	864	375	2,017	544	2,881	711
026	10,472	1,207	110,478	18,748	2,322	619	3,526	743	5,848	1,109
027	2,041	543	19,015	7,863	157	173	227	173	384	244
028	5,017	843	55,799	13,138	1,252	479	1,310	475	2,562	711
029	6,776	977	75,586	15,592	2,804	955	3,678	833	6,482	1,479
030	8,209	1,068	105,540	19,743	2,894	831	3,048	707	5,942	1,242
031	3,480	699	32,481	8,852	3	5	533	257	536	258
033	6,850	986	105,142	20,444	2,428	730	3,323	768	5,751	1,171
034	9,794	1,160	113,957	20,215	2,483	777	4,550	853	7,033	1,286
035	7,482	1,030	96,418	25,905	1,563	632	1,825	516	3,388	880
036	5,274	869	45,025	10,519	325	225	980	394	1,305	465
037	8,313	1,040	92,320	16,228	2,845	536	4,002	689	6,847	950
038	12,119	1,255	152,054	22,441	3,424	886	5,178	926	8,602	1,447

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.

Appendix B (continued). The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2023, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}	95% CL ^e	Hunting effort (days) ^b	95% CL	Antlerless deer taken	95% CL	Antlered bucks taken	95% CL	All deer taken	95% CL
040	6,117	929	58,688	12,679	919	378	1,455	484	2,374	646
041	12,380	1,303	147,020	22,136	2,776	937	5,339	947	8,115	1,488
042	1,498	453	19,629	8,577	26	33	200	159	226	163
043	11,728	1,279	126,851	19,570	1,658	600	2,005	562	3,663	880
044	13,682	1,377	179,819	26,623	3,625	956	5,119	953	8,744	1,487
045	3,650	722	44,582	13,902	804	384	1,199	453	2,003	650
046	6,913	990	92,161	19,398	2,941	1,063	2,752	680	5,693	1,452
047	8,757	1,105	110,958	19,751	2,592	818	2,886	694	5,478	1,162
048	2,864	646	25,646	7,760	37	70	443	263	480	273
050	3,903	733	46,048	11,565	834	353	1,419	491	2,253	654
051	8,061	1,062	101,535	20,230	1,525	508	1,973	544	3,498	801
053	8,792	1,110	109,074	19,508	2,011	615	2,912	705	4,923	1,040
054	11,192	1,243	146,424	23,377	3,067	862	4,077	800	7,144	1,280
055	9,850	1,175	110,332	18,867	1,854	580	3,748	736	5,602	982
056	8,869	1,112	126,406	23,574	2,402	752	2,641	651	5,043	1,067
057	8,387	1,086	100,019	18,605	1,431	541	2,580	655	4,011	937
058	3,865	734	55,604	14,862	735	401	1,235	465	1,970	684
059	12,251	1,301	152,808	23,334	4,425	1,382	5,454	953	9,879	1,817
060	7,685	1,047	77,403	15,936	981	434	1,539	483	2,520	708
061	7,503	1,015	106,857	21,453	2,531	787	2,187	595	4,718	1,122
062	15,286	1,451	173,810	23,279	3,765	779	4,700	891	8,465	1,362
063	6,857	985	85,069	17,626	841	360	2,175	597	3,016	764
064	8,354	1,077	108,450	20,566	2,730	760	3,241	737	5,971	1,204
065	9,821	1,178	106,345	18,416	1,858	580	2,976	682	4,834	995
066	2,734	622	24,525	6,910	13	23	478	246	491	247
067	9,834	1,161	112,188	18,987	2,038	705	3,512	735	5,550	1,078
068	6,611	970	57,908	12,244	605	293	920	341	1,525	471
069	4,954	839	53,543	14,641	571	291	997	382	1,568	520
070	7,709	1,020	95,371	17,383	1,668	571	2,766	643	4,434	949
071	7,989	1,068	70,749	12,260	1,468	592	2,479	607	3,947	904
072	8,664	1,113	94,855	17,105	1,186	425	1,520	509	2,706	699
073	8,138	1,059	108,677	20,534	2,407	742	3,691	792	6,098	1,244
074	10,299	1,192	116,753	19,658	2,462	830	3,692	771	6,154	1,232
078	7,442	1,014	90,630	17,342	2,677	976	3,110	752	5,787	1,419
081	8,409	1,089	115,576	20,005	2,505	739	3,643	781	6,148	1,187
082	1,112	400	14,297	6,726	37	70	466	283	503	291
083	8,023	1,055	83,592	16,855	758	314	2,083	568	2,841	664

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.

Appendix B (continued). The estimated number of deer hunters, hunting effort, and deer harvested in Michigan during 2023, summarized by Deer Management Unit.

DMU ^d	Hunters ^{b,c}	95% CL ^e	Hunting effort (days) ^b	95% CL	Antlerless deer taken	95% CL	Antlered bucks taken	95% CL	All deer taken	95% CL
115	410	244	3,937	3,059	37	70	62	85	99	110
117	781	336	3,697	1,777	74	100	261	186	335	234
121	2,761	625	28,313	8,559	435	235	750	354	1,185	437
122	1,641	487	19,273	7,665	375	264	298	199	673	386
127	1,141	406	17,139	8,540	3	5	148	141	151	141
131	2,464	575	27,900	8,238	26	33	352	228	378	230
145	79	109	878	1,272	0	0	0	0	0	0
149	724	326	4,964	3,341	0	0	225	173	225	173
152	3,065	658	36,617	10,172	62	85	567	267	629	280
155	4,103	765	49,273	13,480	648	393	1,457	468	2,105	657
174	225	175	2,945	2,772	74	100	37	70	111	122
245	0	0	0	0	0	0	0	0	0	0
249	1,698	493	17,297	7,133	40	71	461	265	501	274
252	2,074	549	23,341	8,593	40	71	522	315	562	323
255	2,093	542	24,777	8,832	140	126	699	345	839	370
273	1,900	506	19,238	8,898	484	307	922	370	1,406	539
311	15,369	1,458	249,716	35,919	4,856	1,090	7,170	1,120	12,026	1,774
312	16,090	1,487	216,508	28,120	7,246	1,590	7,717	1,149	14,963	2,289
332	31,135	2,031	326,578	32,173	9,531	1,454	12,647	1,394	22,178	2,252
349	2,022	536	19,758	7,558	198	159	473	246	671	325
452	8,835	1,125	89,197	16,415	1,936	640	3,264	740	5,200	1,047

^aHarvest estimates do not include deer taken with DMA permits. An additional 6,906 deer were taken with these permits.

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

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

^dSee Figure 2 for the locations of DMUs.

^e95 confidence limit.