



## Ohio Department of Natural Resources DIVISION OF WILDLIFE

### 2024 Furbearer Monitoring Report February 2025

## Introduction

Ohio is home to 16 furbearer species. The Ohio Division of Wildlife conducts annual monitoring to collect information on furbearer populations, including population trends and information on species distribution. The Division also collects information from trappers and hunters on furbearer harvest. This information is used to make management decisions for each species. This report outlines the results of furbearer population and harvest monitoring efforts through the end of 2024 and discusses what these survey results suggest about the status of furbearer populations in Ohio.

## Multispecies Monitoring Methods

### Bowhunter Survey

Since 1990 the Division has used the Ohio Bowhunter Survey to track year-to-year changes in furbearer populations. The survey relies on the participation of volunteer bowhunters who typically spend many hours in the field observing wildlife. This group of conservationists provides some of the best information on certain wildlife species that are difficult to monitor using other survey methods.

The survey is entirely voluntary, and bowhunters sign up to participate by contacting the division. Surveys are distributed annually in September to everyone that responded to the survey in the past three years, as well as to any new volunteers that have signed up. Participants are asked to keep a daily record of their activity in the field, including recording the amount of time spent bowhunting, the county in which they hunted, and the number of individuals observed for each species. The survey period included in the analysis begins on the opening day of the deer archery season and ends on the first day of the deer gun season.

Hunters can elect to receive a paper version, sent through the mail, or an online version, administered using Qualtrics software. The online version of the survey was added in 2018. In 2023 1,364 hunters participated in the bowhunter survey (702 online, 662 mail), and logged 52,114 hours in the field. Hunters were active in every county (Figure 1).

Bowhunter observation information is summarized and reported as the bowhunter index, which is the number of each species seen for every 1,000 hours hunted. Because this measure is standardized by the amount of time spent in the field, it serves as an index to assess trends in the relative abundance of species through time. Prior to analysis, we identified and removed outlier data points and data points that were likely misrecorded (for example, more than 11 hours in the field in one day). To allow for reliable comparison to data from previous years, the bowhunter indices presented in this report will only include results from the mail versions of the bowhunter survey. However, information from the online surveys was combined with data from the mail surveys to assess the distribution of observations for each species.

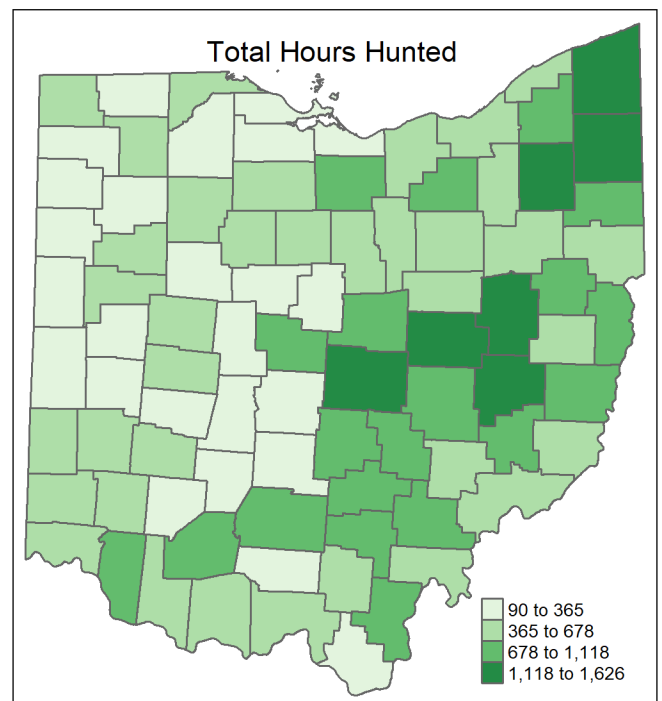


Figure 1. Hours recorded in the field in 2023, by Ohio county, by online and mail Bowhunter Survey respondents

## Roadkill Survey

In 1979, the Division began conducting roadkill surveys for furbearers and small game mammals. Forty-nine 40-mile survey routes are distributed throughout Ohio. Routes are driven three times in March and three times in April, with at least seven days between surveys. Routes are driven at speeds of less than or equal to 40 miles per hour, and the number of road-killed raccoons, opossums, skunks, and groundhogs found along the route are counted by species. The number of roadkills/1,000 miles (roadkill rate) statewide is calculated for each species. Additionally, roadkill rate is calculated for survey routes within each of the following regions: lake plain, till plain, glaciated, and unglaciated.

## Fur Taker Survey

The fur taker survey has been distributed annually to fur taker permit holders since 2012. The voluntary survey is distributed at the end of the season. From 2012 to 2016 surveys were sent to a sample of fur taker permit holders. As the number of permit holders has decreased, surveys are now sent to anyone who purchases a fur taker permit. On the survey, fur taker permittees are asked to provide information on which counties they hunted and/or trapped in, what species they targeted, and how many animals they harvested. The survey also collects information on hunting and trapping effort by asking the number of days spent in the field and the average hours hunted per day (for hunting), or the average number of traps set per day (for trapping). Originally started as a mail survey, since 2020 an online version of the survey, administered using Qualtrics software, is sent to any permittees with a valid email address. Results from the fur taker survey are used to assess trends in fur taker participation and estimate total statewide harvest of furbearer species. These surveys also provide information on distribution of harvest.

In 2024, 9,169 online surveys were sent to fur taker permittees, and mail surveys were sent to the remaining 2,213 permittees. Response rates were lower than in recent years, with 1,446 permittees responding to the survey (12.7%; Table 1).

## Fur Dealer Report

Fur dealer permits are required for anyone who deals in or purchases raw or green (unprocessed) fur, or other furbearer parts. Fur dealers must submit annual reports on the number of furbearer pelts collected and the average price paid per pelt. These reports provide a long-term dataset of total pelts purchased by year. Historically this was used as an indicator of total harvest, however as fur sale trends have changed over the years, this survey has become less reliable for estimating statewide harvest. Nevertheless, it provides important information on fur prices, which can impact harvest effort and total harvest.

## Sightings Reports

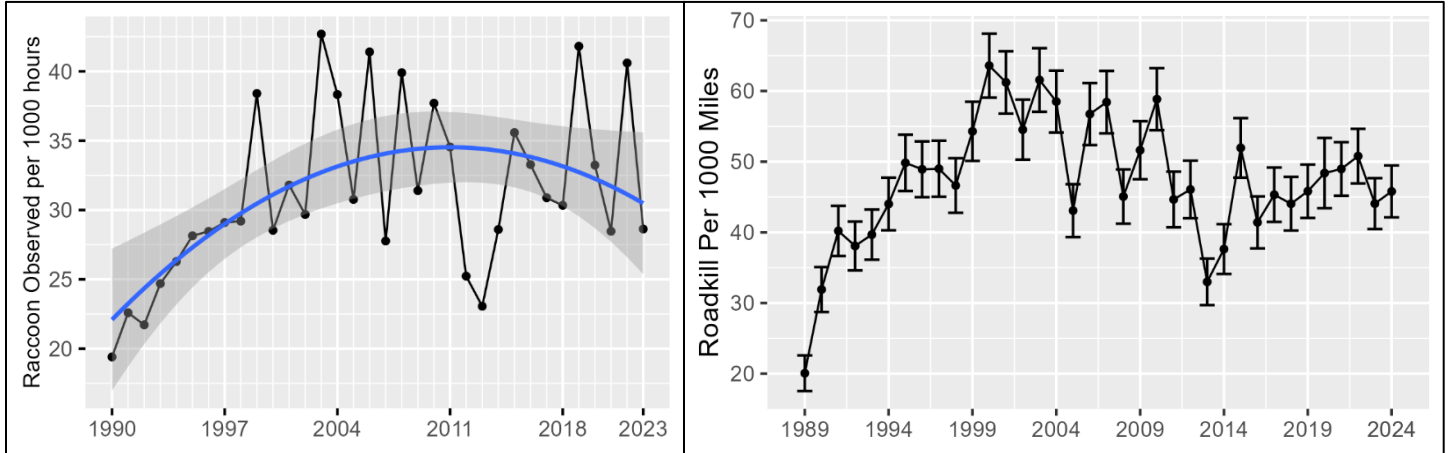
Sighting reports of some furbearer species are collected from Division staff, partners, and the public. These reports are particularly important for tracking less common or difficult to survey species including fishers, weasels, bobcats, gray foxes, and badgers. Sightings are reviewed by Division staff and are considered confirmed if there is evidence such as photos, tracks, or a roadkill animal that can be used to confirm the species. The public are encouraged to report wildlife sightings via the Division's website, [wildohio.gov](http://wildohio.gov).

# Survey Results By Species

## Raccoons

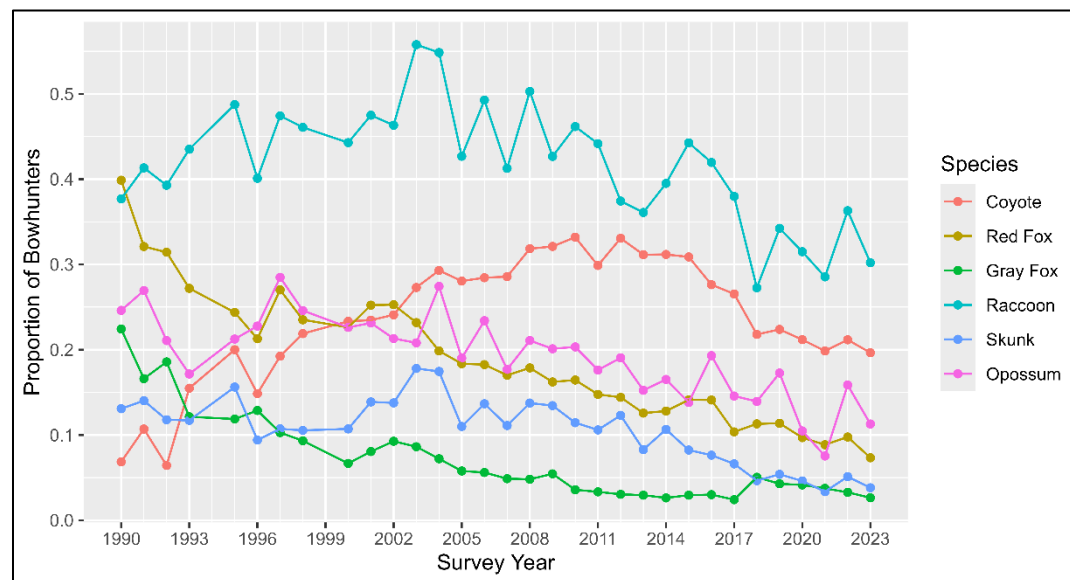
### Population Trends and Distribution

Raccoon (*Procyon lotor*) populations are tracked through the bowhunter survey and roadkill survey. Both of these surveys indicate increasing observation rates throughout the 1990s, reaching a high point in the early 2000s (Figure 2). Since then, long-term trends have remained relatively stable, although the surveys do indicate a good deal of variation from year to year. Raccoon observation rates in fall 2023, based on annual mail bowhunter surveys, were similar to the 10-year average (2023 mean =  $28.63 \pm 1.94$  raccoons observed/1,000 hours; 10-year mean =  $33.14 \pm 3.01$  raccoons observed /1,000 hours). Similarly, spring 2024 roadkill surveys showed observation rates similar to the 10-year average (2024 mean =  $45.79 \pm 3.67$  raccoons observed/1,000 miles driven; 10-year mean =  $46.65 \pm 2.04$  raccoons observed /1,000 miles).



**Figure 2. Raccoon bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to 2023 (left) and roadkill index with 95% confidence interval from 1989 - 2024 (right).**

Bowhunter survey responses confirm that raccoons remain widespread in the state, with 30.21% of online and mail survey respondents observing a raccoon at least once during the 2023 season on hunting excursions in 86 counties (Figure 3, Figure 4). Raccoon observation rates were highest on 2024 roadkill surveys in the Glaciated and Lake Plain regions in northern Ohio (Figure 5).



**Figure 3. Proportion of bowhunter mail and online survey respondents that observed coyote, red fox, gray fox, raccoon, skunk, and opossum at least once during the survey season in Ohio, for each year from 1990 to 2023.**

## Harvest

According to the 2023-24 fur taker survey, raccoons were the species most commonly pursued by fur taker permit holders and have the highest estimated harvest (Table 2). Fifty-four percent of fur taker survey respondents who pursued raccoon did so through trapping, 30% did so through hunting, and the remaining 16% pursued raccoons through both hunting and trapping (Figure 6). While raccoons have remained the most commonly targeted species by fur taker permit holders, as the total number of fur taker permit holders has declined, estimated total harvest has also declined. Harvest was reported throughout the state but was most abundant in northern Ohio.

Surveys indicate that raccoons are abundant and well distributed throughout the state, and despite harvest pressure and annual fluctuations, raccoon population trends have remained stable in recent years.

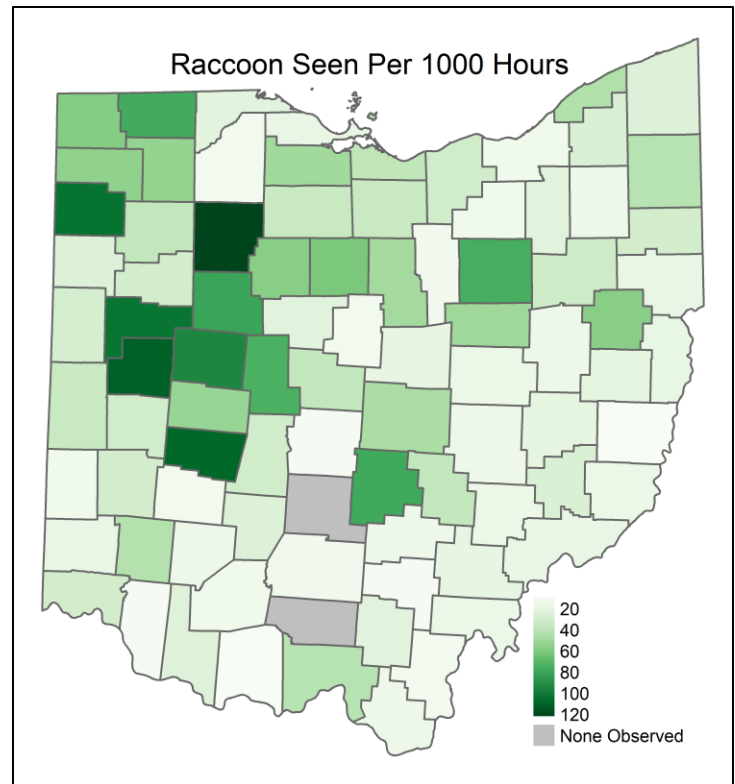


Figure 4. Distribution of raccoon sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.

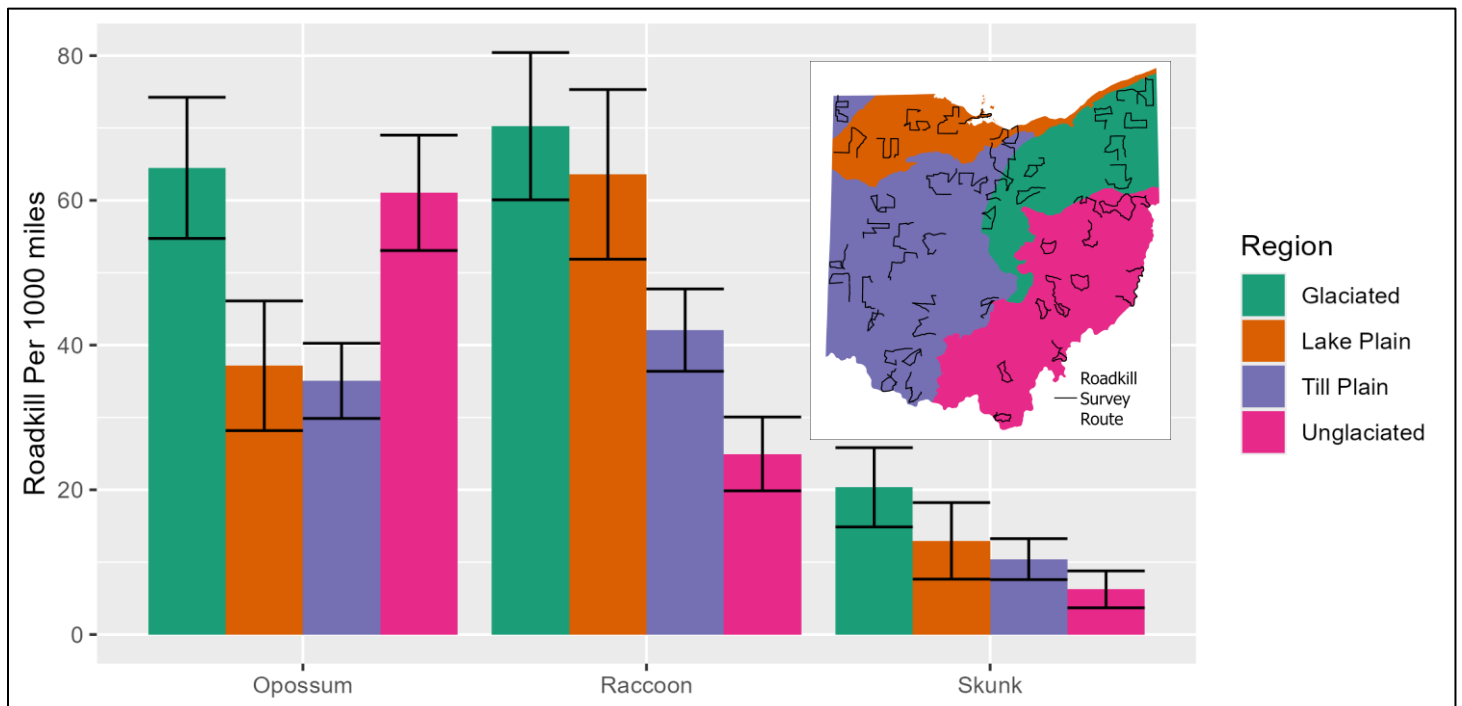
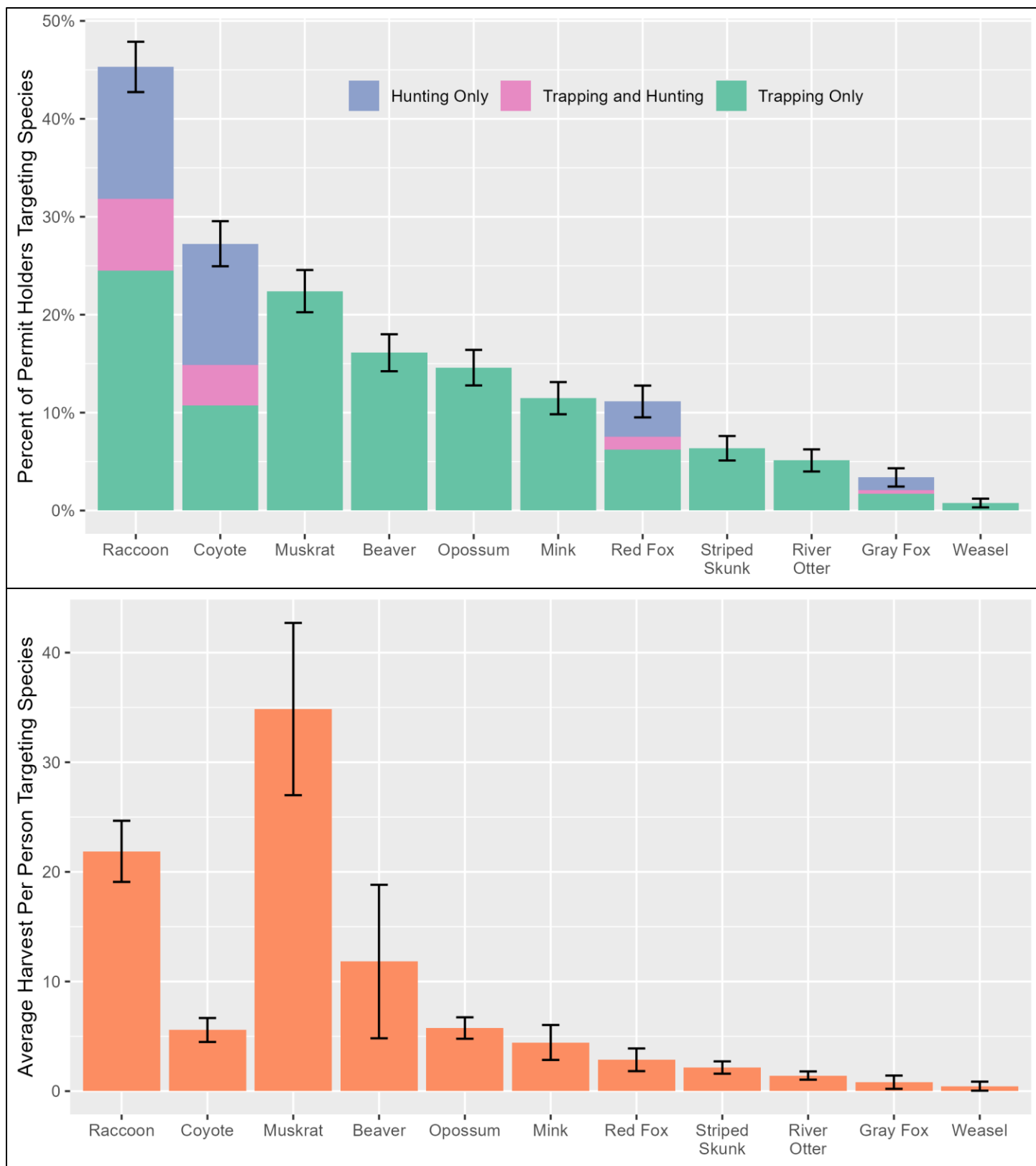


Figure 5. Number of Opossum, Raccoon, and Skunk roadkill observed per 1000 miles driven on the 2024 Ohio roadkill survey by region.



**Figure 6. Percent of fur taker permittees (with 95% confidence interval) that reported targeting each species through hunting, trapping, or both (top), and average harvest (with 95% confidence interval) reported for hunters and trappers targeting each furbearer species during the 2023-2024 season.**

## Striped Skunks

### Population Trends and Distribution

Observation rates of skunks (*Mephitis mephitis*) on the bowhunter and roadkill surveys have declined since the early 2000s. In 2023, skunk observation rates on the bowhunter mail survey were the lowest they have been since the start of the survey and were significantly below the 10-year average (2023 mean =  $0.99 \pm 0.36$  skunks observed/1,000 hours hunted; 10-year mean =  $2.21 \pm 0.39$  skunks observed/1,000 hours). Similar to the bowhunter survey, the spring roadkill survey shows an overall long-term decline in observations, however this survey indicates a relatively stable trend in recent years (2024 mean =  $11.56 \pm 1.84$  skunks observed/1,000 miles driven; 10-year mean =  $13.33 \pm 1.14$  skunks observed/1,000 miles).

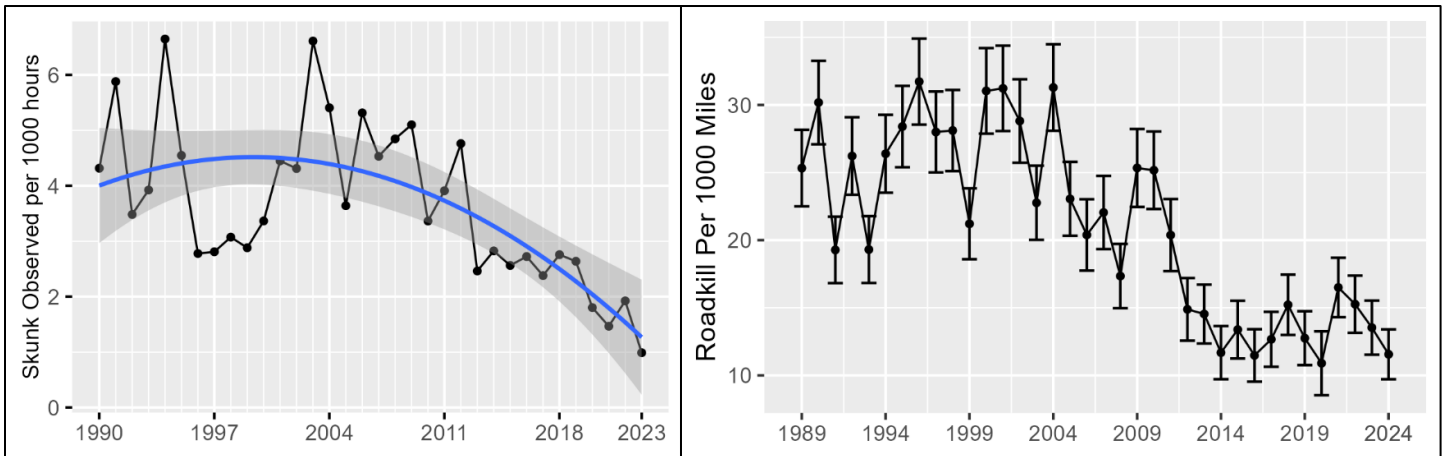


Figure 7. Skunk bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to 2023 (left) and roadkill index with 95% confidence interval from 1989 - 2024 (right).

The proportion of bowhunters who observed a skunk has also declined over time (Figure 7). Skunks were observed by 3.81% of bowhunter survey respondents (online and mail surveys) in 30 counties in 2023 (Figure 8). Skunk observations on roadkill surveys were most common in the Glaciated region in northeast Ohio.

Both the bowhunter and roadkill surveys indicate skunk populations have declined. While observation rates may be impacted by the behavior patterns of the species, so a 1:1 comparison is not advisable, skunk consistently have the lowest number of observations on roadkill surveys, and along with gray fox have the lowest number of observations on the bowhunter survey, suggesting they live at relatively low densities in the areas surveyed.

The reason for the decline in skunk observations is unknown. Diseases such as rabies and distemper can have significant impacts on skunk populations. While rabies is not common in Ohio, distemper is known to occur throughout the state. Populations of other carriers of distemper have increased in recent years (e.g. raccoons and coyotes) and it's possible that

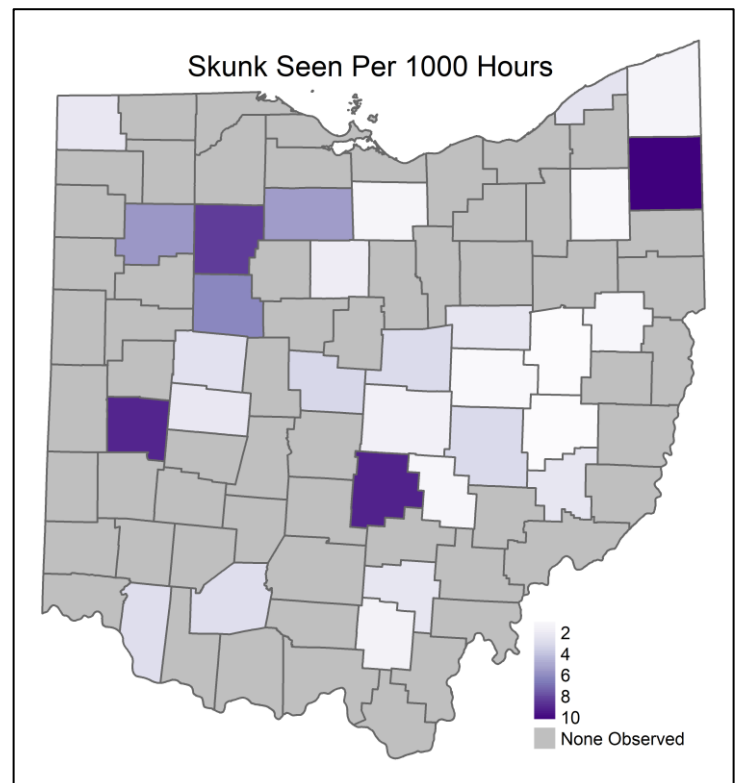


Figure 8. Distribution of skunk sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.

this may be a factor impacting skunk populations in Ohio. Roadkill can also be a major source of mortality in both urban and rural areas. It may also be that the declines observed on these surveys are reflecting shifts in distribution that are not visible on our surveys. Skunks are well adapted to living in urban areas. We expect that bowhunters tend to be more active in rural areas than urban or suburban areas, and similarly our roadkill surveys are largely in rural areas. If the relative distribution of skunks in Ohio has shifted more toward urban areas over the years, this may account for some of the change in observation rates.

### Harvest

Based on results from the fur taker survey, approximately 724 permit holders (6.4%) trapped for skunk in the 2023-24 season and harvested an average of 2.2 skunks per trapper (Figure 6). Total estimated harvest of skunks has exhibited a declining trend in recent years (Table 2).



## Opossums

### Population Trends and Distribution

Observation rates based on annual mail bowhunter surveys indicate large fluctuations from year to year but overall a declining trend for opossums (*Didelphis virginiana*) since the early 2000s, however the 2023 observation rate was similar to the 10-year average (2023 mean =  $5.02 \pm 0.81$  opossums observed/1,000 hours hunted; 10-year mean =  $5.51 \pm 1.23$  opossums observed/1000 hours). While the bowhunter survey shows large fluctuations in opossum observations over the past couple of years, similar large fluctuations were not observed on the roadkill survey (Figure 9). The spring roadkill index also indicates a decline in opossum observations since the start of the survey, but relatively stable trends over the past 10-15 years (2024 mean =  $48.55 \pm 3.78$  opossums observed/1,000 miles driven; 10-year mean =  $45.08 \pm 4.48$  opossums observed /1,000 miles).

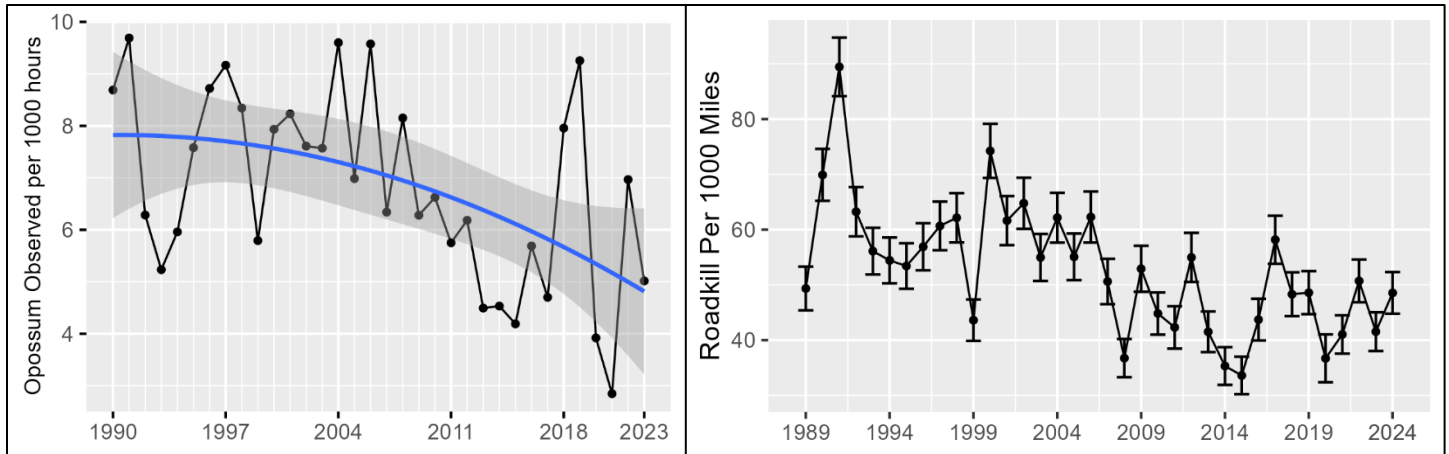


Figure 9. Opossum bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to 2023 (left) and roadkill index with 95% confidence interval from 1989 - 2024 (right).

In 2023, opossums were observed by 11.29% of bowhunter survey respondents (online and mail surveys) in 64 counties (Figure 10). While overall survey trends indicate that opossum may have declined in the state in recent years, we see a great deal of fluctuation in these indices from year to year and differences in the recent observation trends on the bowhunter and roadkill surveys. Despite the suggested long-term decline in opossums, both surveys indicate that opossums are not scarce and are well distributed throughout the state.

### Harvest

Based on results from the fur taker survey, approximately 1,661 fur taker permittees (14.6%) pursued opossum during the 2023-24 season and harvested on average 5.8 opossums per trapper (Figure 6). Total estimated harvest of opossums has exhibited a steadily declining trend in recent years (Table 2).

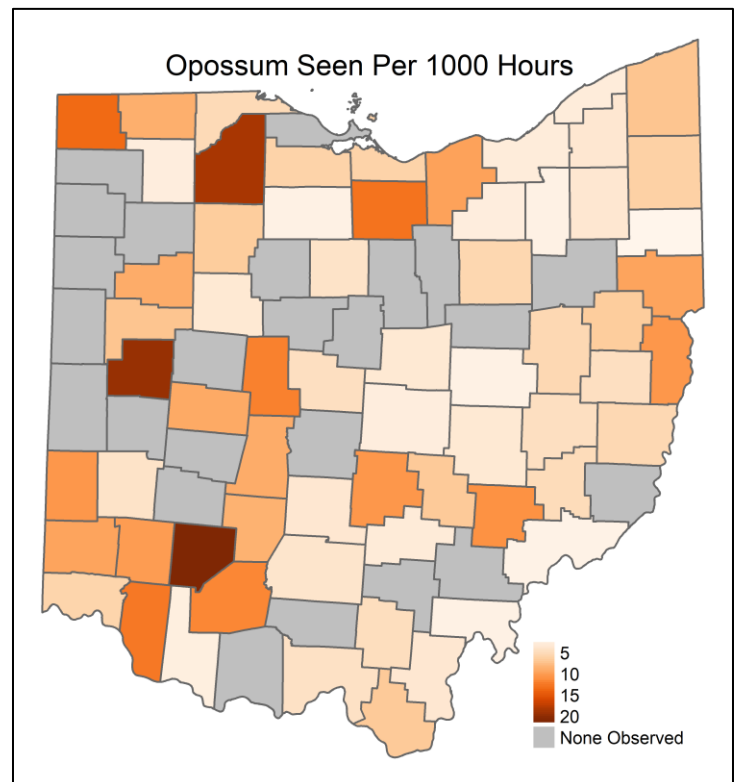


Figure 10. Distribution of opossum sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.



## Coyotes

### Population Trends and Distribution

Observation rates based on annual mail bowhunter surveys show an increasing trend through the early 2010s, with a slightly decreasing to stabilizing trend for coyotes (*Canis latrans*) over the past decade. Coyote observation rates in 2023 were the lowest they've been since 2001 (Figure 11) and were below the 10-year average (2023 mean =  $10.68 \pm 1.18$  coyotes observed/1,000 hours hunted; 10-year mean =  $13.22 \pm 1.20$  coyotes observed/1,000 hours). Bowhunter online and mail survey results show that coyotes are widely distributed in the state. In 2023, coyotes were observed by 19.65% of bowhunter survey respondents in 83 counties (Figure 12).

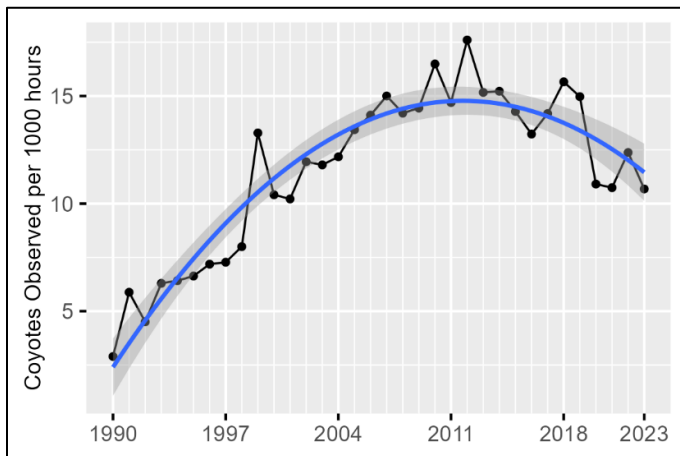


Figure 11. Coyote bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to 2023.

Coyotes did not historically occur in Ohio, and the increasing trend in observations throughout the 1990s and 2000s reflect the process of coyotes colonizing the state during this time. The more recent stabilization in observation rates combined with the statewide distribution of coyotes may indicate that the species has reached the maximum population that the resources of the state can support.

### Harvest

Based on the results of fur taker permit surveys, an estimated 3,101 fur taker permit holders (27.2%) pursued coyotes during the 2023-24 season. Of the survey respondents who pursued coyotes, 39.3%

trapped for coyotes, 45.4% hunted for coyotes, and the remaining 15.2% indicated that they pursued coyotes through both hunting and trapping (Figure 6). On average, fur taker permit holders who pursued coyotes harvested 5.6 coyotes during the 2023-24 season.

While many people with fur taker permits pursue coyotes, a fur taker permit is not required to hunt or trap coyotes. In previous years, surveys of hunting license purchasers have provided additional insight into additional coyote harvest in the state. On the 2021-22 hunter survey, 16.2% of respondents indicated that they targeted coyote (through hunting and/or trapping) in Ohio during the 2021-22 season. Of those respondents who indicated that they targeted coyote, 86.4% did not purchase a fur taker permit for the 2021-22 season. Most (98.4%) of those participants pursued coyotes through hunting, while the remaining 1.6% indicated they pursued coyotes through trapping, or through both hunting and trapping.

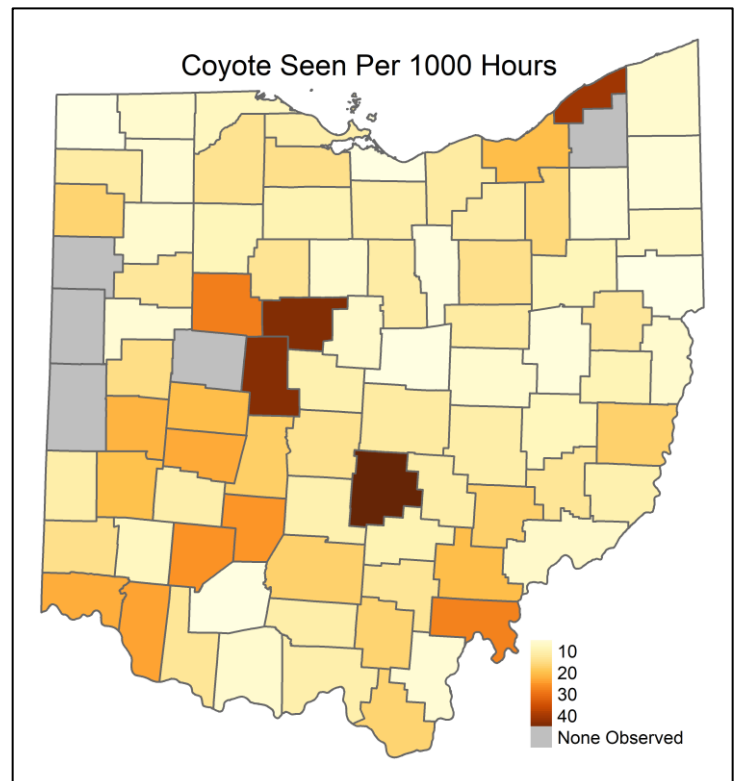


Figure 12. Distribution of coyote sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.

## Research

In 2021, the division began funding a project at Ohio University to evaluate behavioral and ecological aspects of coyote-livestock conflicts in Ohio. This project will provide information on patterns of livestock consumption by coyotes to identify the extent of coyote-livestock conflicts and find if there are locations and/or times of year when livestock may be particularly susceptible. The project will also investigate the use of livestock depredation prevention measures to provide practical recommendations to minimize livestock/coyote conflict in Ohio. More information on the project can be found at [ohiocoyote.org](http://ohiocoyote.org).

## Gray Foxes

### Population Trends and Distribution

Observation rates based on annual mail bowhunter surveys show a long-term declining trend for gray foxes (*Urocyon cinereoargenteus*) (2023 mean =  $0.89 \pm 0.34$  gray fox observed/1,000 hours hunted, 10-year mean =  $2.74 \pm 1.15$  gray fox observed/1,000 hours). While the observation rate for gray foxes was above average in 2021, in 2022 and 2023 the gray fox observation rate was the second and third lowest it has been in the 34 years of bowhunter surveys (Figure 13), and the number of bowhunters observing at least one gray fox during the season has remained low (Figure 3). In 2023, only 36 survey respondents (2.64% of respondents from both mail and online surveys) reported seeing a gray fox while hunting in 29 counties, primarily in eastern and southern Ohio (Figure 14). Due to the low number of observers providing data on gray foxes, year-to-year changes in the observation rate should be interpreted with caution, but it is clear that observations have declined over the long term.

As observations on the bowhunter survey have declined, and information from harvest is limited, sightings reported by Division staff and the public have provided important additional information on gray fox occurrences throughout the state. From 2017 through 2024, we received 271 confirmed gray fox sightings from 54 counties (Figure 14). Most sightings are in forested eastern Ohio, but occasional sightings occur in the western part of the state.

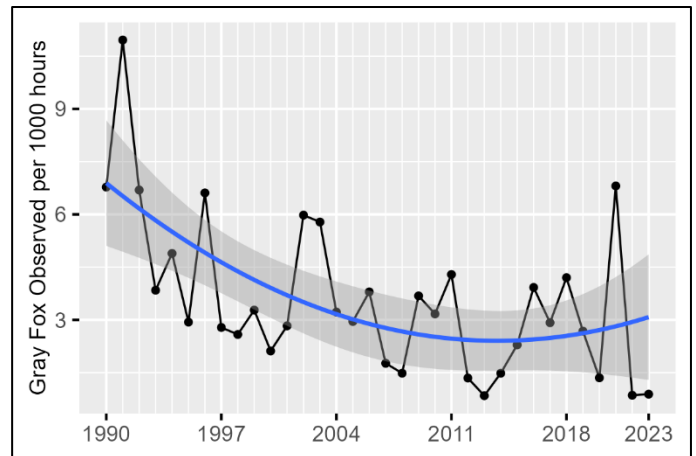


Figure 13. Gray fox bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to

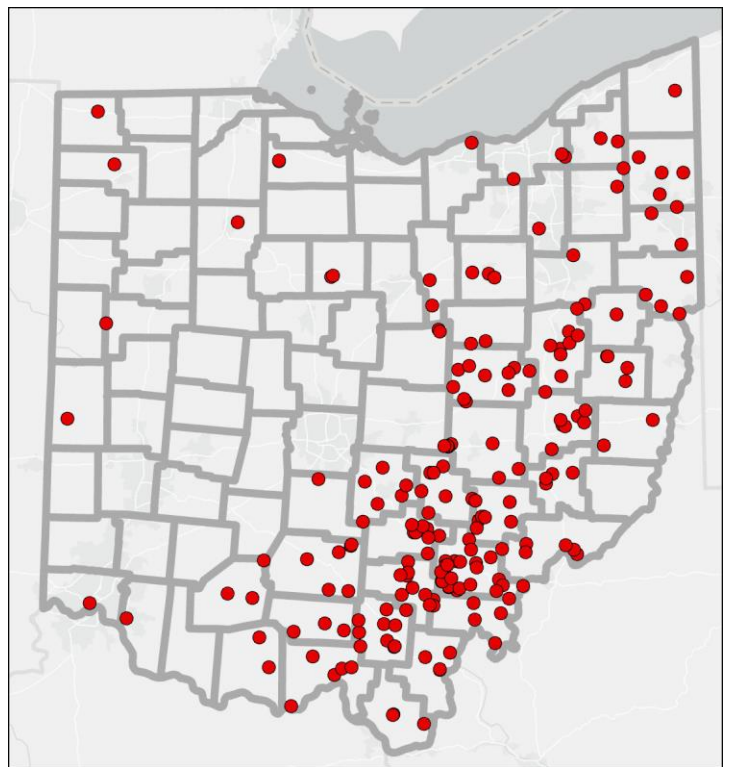
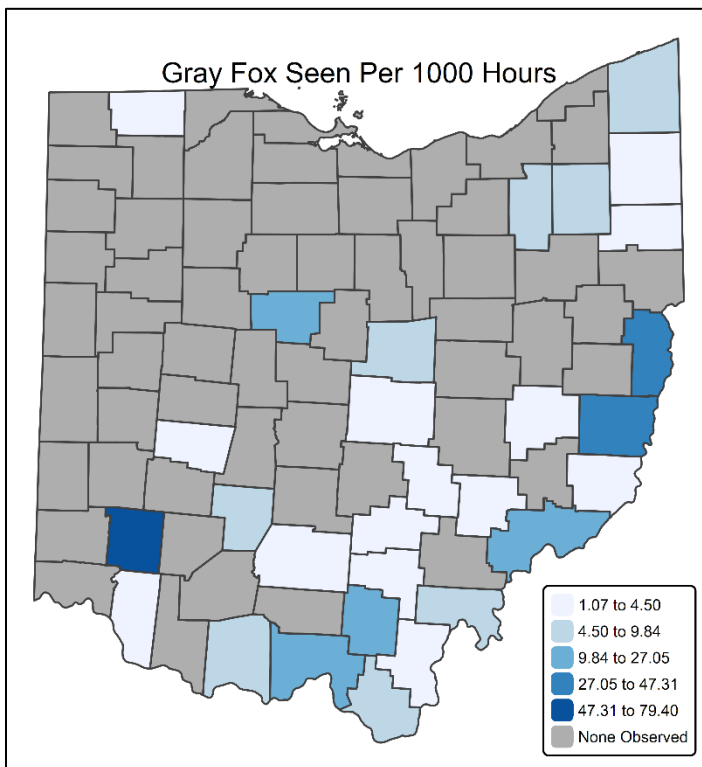


Figure 14. Distribution of gray fox sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023 (left) and locations of confirmed gray fox sightings reported from 2017 to 2024 (right).

## Harvest

According to results from the fur taker survey, the proportion of fur taker permit holders targeting gray foxes has declined overall since at least the 2010-11 season. During the 2023-24 season, 3.4% of fur taker survey respondents pursued gray foxes, below the 10-year average of 4.1.

Combining the trends in the proportion of permit holders targeting each species with the overall declines in the number of fur taker permits sold, the estimated number of permit holders pursuing gray fox and the total estimated harvest has declined overall in the past 13 years (Table 2). In 2023-24, an estimate of 386 fur taker permit holders pursued gray fox and estimated gray fox total harvest was 315.

## Research

Declines in gray fox populations have also been noted in other midwestern and southern states, but reasons for the decline are currently unknown. The Division is currently funding a research project through The Ohio State University to investigate potential causes of this decline. The project includes using GPS monitoring collars (Figure 15) to collect information on gray fox survival, causes of mortality, space use, and movement patterns. Samples collected from collared foxes as well as roadkill foxes are being used to assess disease prevalence, age and sex structure of the population, reproductive rates, and other factors that impact fox health. Tissue samples are being used to determine the genetic structure of the gray fox population and identify potential barriers to gene flow. Lastly, sighting data combined with collar data are being used to create a statewide habitat model for gray fox. This information will be used to guide future management of gray fox in Ohio.



Figure 15. A gray fox with a GPS monitoring collar and its mate.

## Red Foxes

### Population trends and distribution

Observation rates based on annual mail bowhunter surveys show a long-term declining trend for red foxes (*Vulpes vulpes*), that has stabilized over the past decade (2023 mean =  $3.17 \pm 0.64$  red fox observed/1,000 hours hunted; 10-year mean =  $4.48 \pm 0.74$  red fox observed/1,000 hours) (Figure 16). While red fox observation rates and the overall trend in red fox observations is similar to gray fox, red fox observations are more widely distributed than gray fox. In 2023, 7.33% of bowhunter survey respondents reported seeing at least one red fox, and red fox were observed on hunting excursions in 61 counties throughout the state (Figure 17).

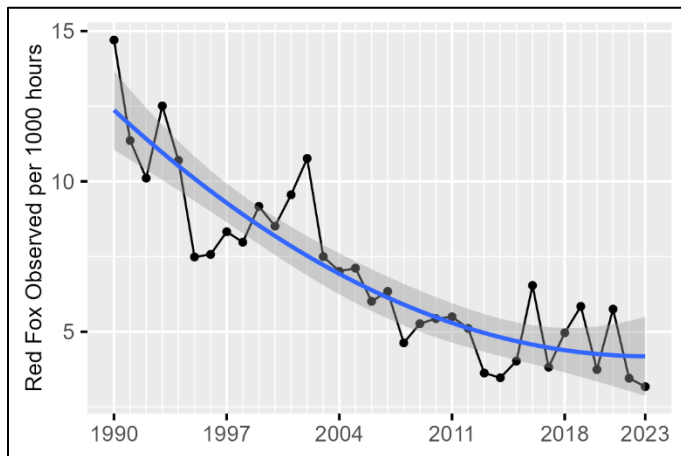


Figure 16. Red fox bowhunter index from mail survey respondents and trendline with 95% confidence interval in Ohio from 1990 to 2023.

Combining the trends in the proportion of permit holders targeting each species with the overall decline in the number of fur taker permits sold, the estimated number of permit holders pursuing red foxes and the total estimated harvest has declined overall in the past 13 years. In 2023-24, an estimate of 1,264 fur taker permit holders pursued red foxes, and estimated red fox total harvest was 3,620.

Similar to skunks, red foxes are adaptable to living in urban areas, and they may shift populations to these areas to avoid competition with coyotes. Therefore, it's possible that some of the observed decline in red fox observations may be due to red fox shifting their distribution to urban areas, where we have less survey effort.

### Harvest

According to results from the fur taker survey, the proportion of fur taker permit holders targeting red foxes has declined overall since at least the 2010-11 season. During the 2023-24 season, 11.1% of fur taker survey respondents pursued red foxes, which was below the 10-year average of 13.3%.

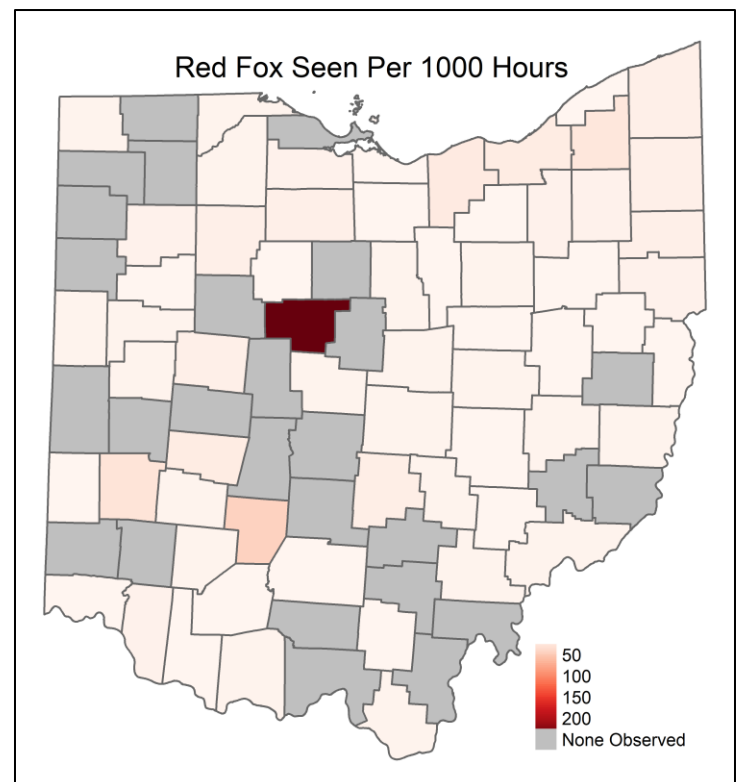


Figure 17. Distribution of red fox sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.

## Bobcat

### Population Trends and Distribution

Bobcats (*Lynx rufus*) historically occurred in Ohio but were extirpated by the mid-1800s due to habitat loss and unregulated harvest. From 1850 through the 1960s, there were occasional reports of bobcats, mainly in eastern Ohio. Bobcat sighting reports provide a means for the Ohio Division of Wildlife to track changes in bobcat occurrence in the state over time. Once received, sightings are screened to eliminate duplicates (i.e., multiple reports from the same location within the same month) or sightings that are confirmed to be a species other than bobcat (e.g., house cat). If evidence confirms that the species observed was a bobcat, it is classified as a confirmed sighting. Otherwise, the sighting is considered unconfirmed.

From 1970 through 2024, there have been 6,284 confirmed reports of bobcats in Ohio. Prior to 2000, the Division of Wildlife never received more than five confirmed sightings in one year. In the early 2000s, bobcat sightings started to become a more frequent occurrence as populations in neighboring states (Pennsylvania, West Virginia, and Kentucky) began expanding into Ohio, and the number of bobcats observed each year accelerated (Figure 18). The number of unconfirmed sightings received each year show a similar increasing trend (Table 6).

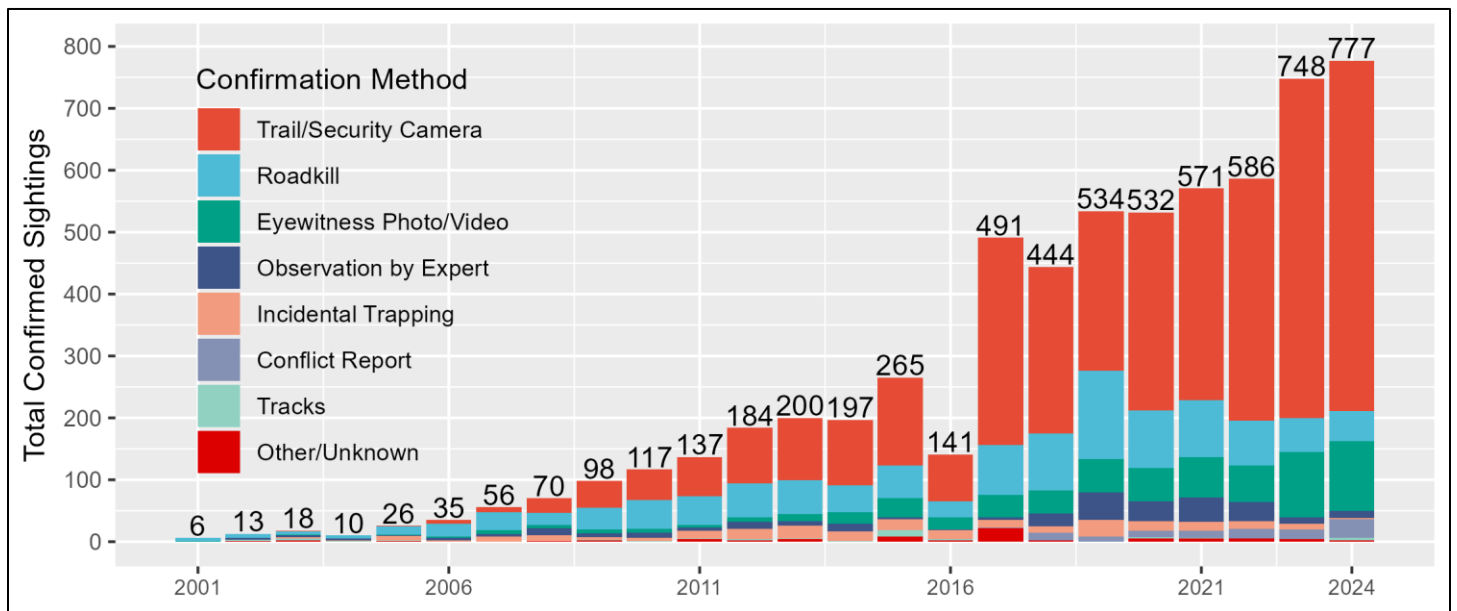


Figure 18. Total number of confirmed bobcat sightings per year in Ohio and method of confirmation for each sighting from 2001 to 2024.

In 2024, 1,465 bobcat sightings were reported to the Division of Wildlife, 777 of which were confirmed (688 unconfirmed). Sightings were confirmed in 395 townships in 69 counties (Figure 19). We used the location of confirmed sightings (address or GPS coordinates) to identify locations where multiple sightings were made within the same year. In 2024, 699 confirmed sightings were at independent locations, while the remaining 78 were sightings at a duplicate location on a different date.

Sightings are reported throughout the year but are most common from September through January (Figure 20). Increased bobcat activity coinciding with this time of year is likely the reason for the increased number of sightings. In the fall, young bobcats are beginning to disperse from their mother's home range to establish their own range, and January is the start of bobcat breeding season in Ohio. This time of year also corresponds with hunting and trapping seasons when people may be more likely to be in the field and encounter a bobcat or have a trail camera set up, which may also account for some of the increase in sightings during this time.

Since 2008, trail cameras have been the primary source of confirmation for bobcat sightings, with anywhere from 33-73% of confirmed sightings coming from trail camera pictures. Roadkill animals and eyewitness photos



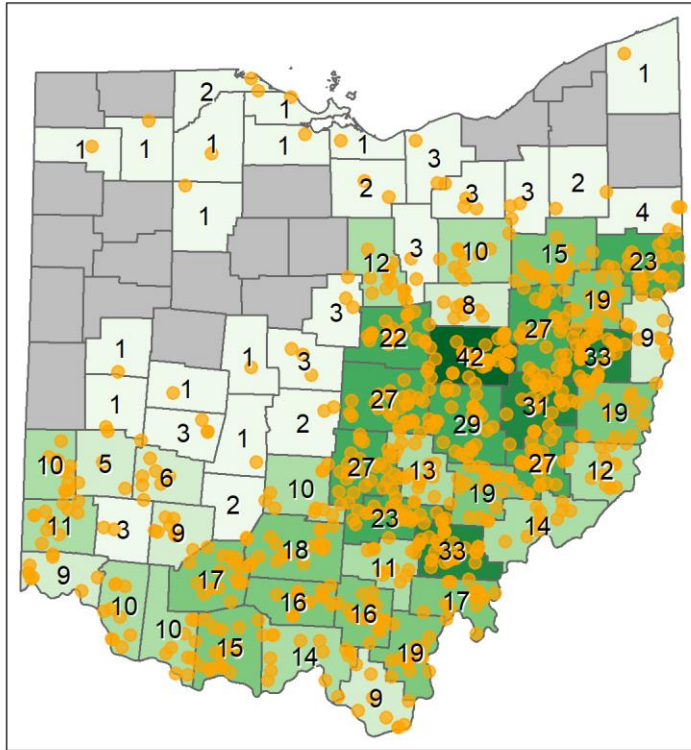


Figure 19. Locations of confirmed bobcat sightings, and total sightings by county in 2024.

or videos are also common sources of sighting confirmations. Other methods of confirmation are less common and include photos of tracks, observation by an expert (e.g., a Division of Wildlife staff member), incidental trapping reports, or evidence from conflict reports (primarily predation on poultry).

Several factors should be considered when assessing the increase in confirmed sightings. As trail cameras have become more prevalent over the past decade, we have seen an increasing trend in the proportion of confirmed sightings that come from trail cameras. It is likely that the growing popularity of trail cameras, as well as the decline in their cost has contributed to the increase in the number of trail camera photos of bobcats. In 2017, the division launched a wildlife reporting website that made it easier for the public to report sightings. Sightings records are incomplete for 2016 because of staff turnover, however, at least some of the increase in sightings observed between 2016 and 2017 may be attributed to the availability of the reporting website. Similarly, there was a notable

increase in the number of confirmed sightings in 2023 when a new sightings website was launched.

Conversely, as bobcat sightings become a more regular occurrence in some areas of the state, people may be less likely to report their sightings to the division. For all of these reasons, changes in the number of sightings reported from year to year should be interpreted with caution, and not as an exact index of abundance.

Since 1970, bobcat sightings have been confirmed in 86 of Ohio's 88 counties (Figure 21). Sightings are most common in southeast and southern Ohio. As confirmed sightings have increased over the past decade, so have the number of townships and counties where sightings occur (Table 6). This suggests populations may be expanding from the core populations in southeast and southern Ohio into new areas.

Bobcats are capable of dispersing long distances, and young cats may pass through areas of less suitable habitat as they search for a place to establish a home range. Therefore, a single confirmed sighting does not necessarily indicate a resident population is present in the area. While sightings are less common in southwest Ohio, females with kittens have been observed in these counties in recent years, indicating that a resident population is present in this area. Sightings in far northeast Ohio are uncommon and evidence of reproduction has not yet been documented in this part of the state; however, research shows that portions of this area may contain sufficient habitat to support a resident population in the future. Sightings are also

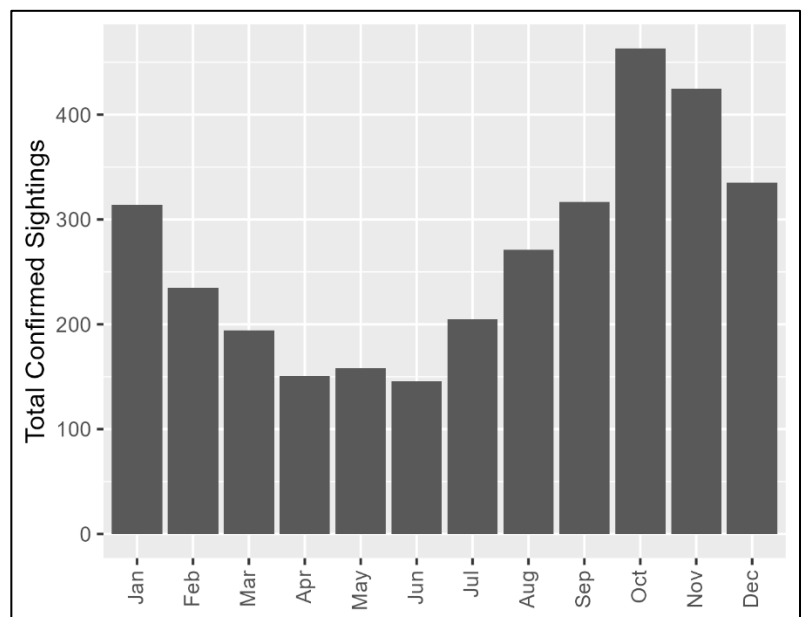
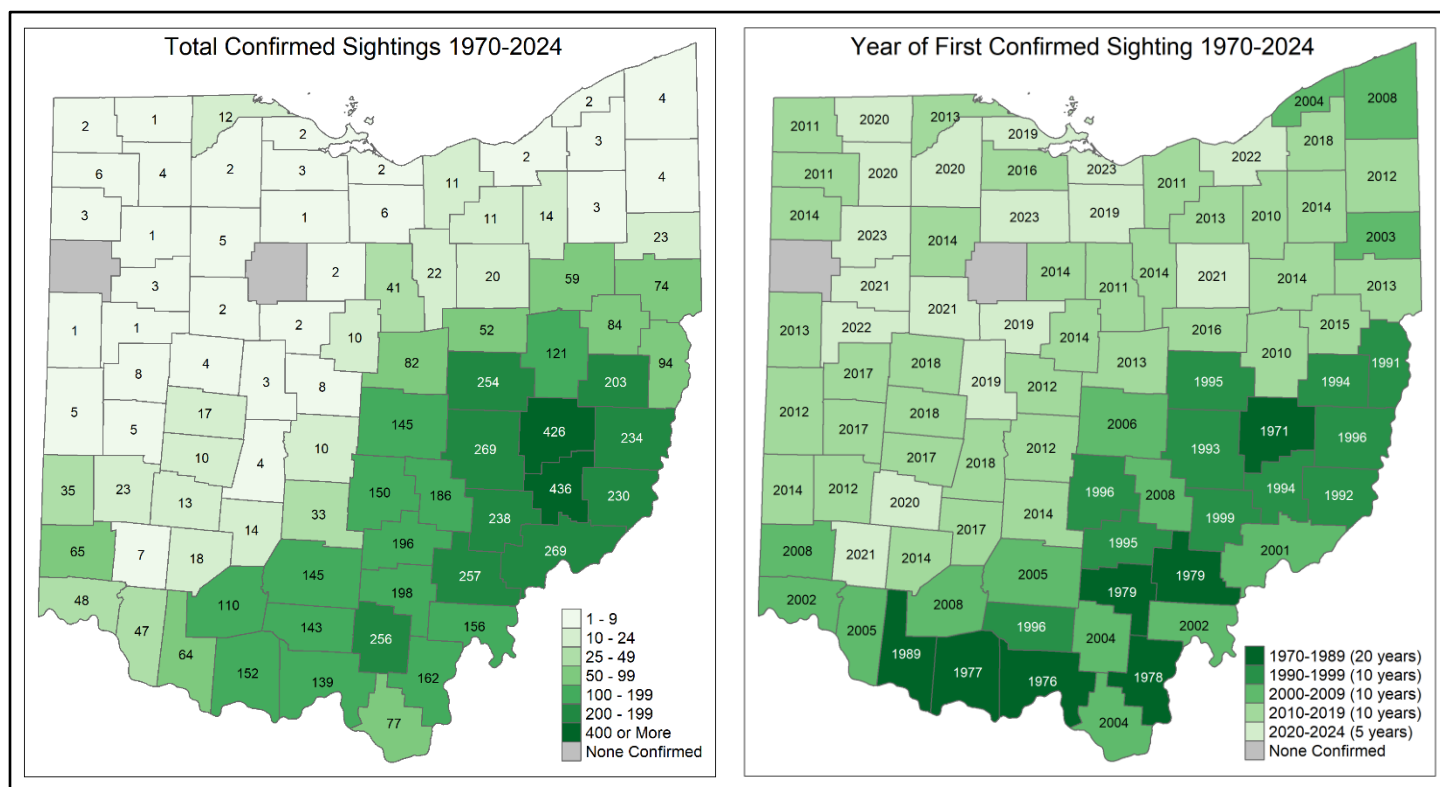


Figure 20. Total confirmed sightings by months from 2020 - 2024



rarely confirmed in counties in central and northwest Ohio that are dominated by agriculture, and evidence of reproduction has not been observed in these areas. Habitat suitability is low in these parts of the state and it is possible that these areas may never support resident populations; however, riparian forest corridors in these areas may provide sufficient habitat for dispersing animals. Division staff expect to continue to see bobcats moving through these areas.



**Figure 21. Total confirmed bobcat sightings (left) and year of first confirmed sighting (right) by county in Ohio from 1970 to 2024.**

Given the numerous confounding factors involved in the use of sighting data as an index to relative abundance, implementing additional monitoring methods that can account for survey effort is warranted for tracking the trajectory of the bobcat population. While the division had asked about bobcat observations in a supplemental portion of the bowhunter survey for several years, they were not added to the main portion of the survey until the fall of 2020. Each year from 2020 to 2023 between 6.2% to 7.8% of bowhunter survey participants reported observing a bobcat on at least one hunting trip.

Statewide, bowhunters reported an average of 2.9 bobcats observed per 1,000 hours hunted in 2023. The rate of observations by bowhunters varies by county and generally shows a similar distribution to that of confirmed sightings (Figure 22). Although observations reported on Ohio's bowhunter survey cannot be confirmed, the inclusion of a measure of effort (hours spent in the field) provides a useful means for standardizing observations to track changes in observation rate over time. The similarity between the distribution of sightings on the bowhunter survey and the distribution of confirmed sighting reports indicates that as more years of data from this survey become available, the Ohio bowhunter survey can provide a reliable method for tracking bobcat populations, while accounting for changes in effort.

More information on bobcats can be found in Ohio's Bobcat Management Plan, which can be found on [wildohio.gov](http://wildohio.gov). You can also report sightings online at [wildohio.gov](http://wildohio.gov) (click on "Report Wildlife Sightings").

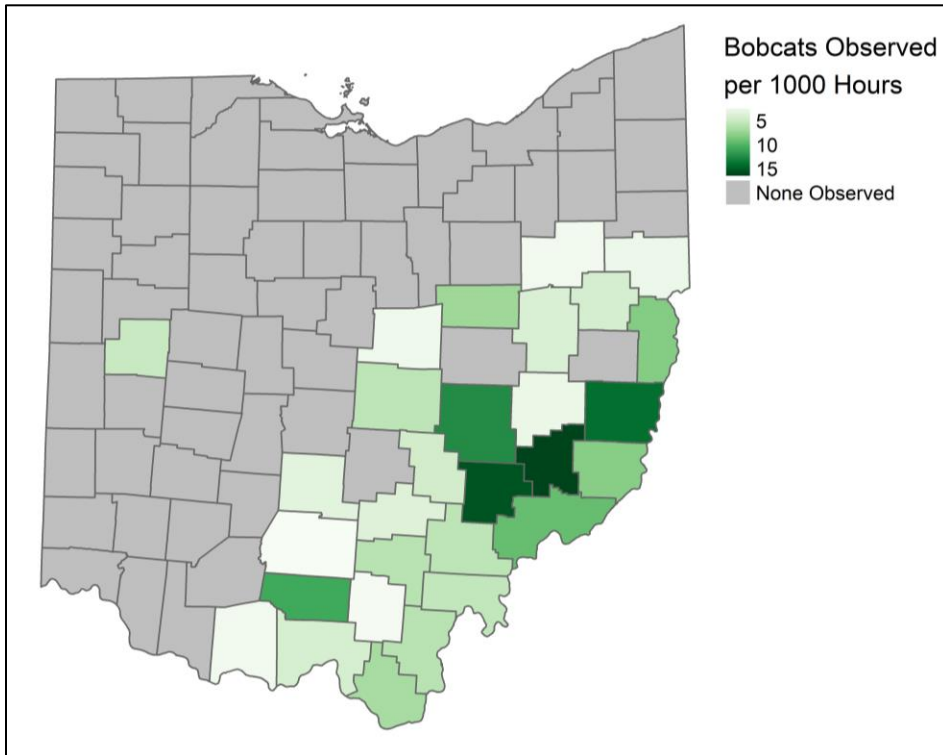


Figure 22. Distribution of bobcat sightings per hour by county, from mail and online bowhunter surveys in Ohio in 2023.

## Fishers

### Sightings

Fishers (*Pekania pennanti*) historically occurred in Ohio but were extirpated (extinct within the state) by the mid-1850s due to loss of forested habitat and unregulated harvest. Fishers historically occurred in, but were also extirpated from, all five states that border Ohio. However, fisher populations have been re-established in Pennsylvania and West Virginia through reintroduction efforts and natural expansion from populations in neighboring states. Populations are currently growing and expanding in both of these states, and Ohio is just starting to see fishers recolonize the state from these expanding populations.

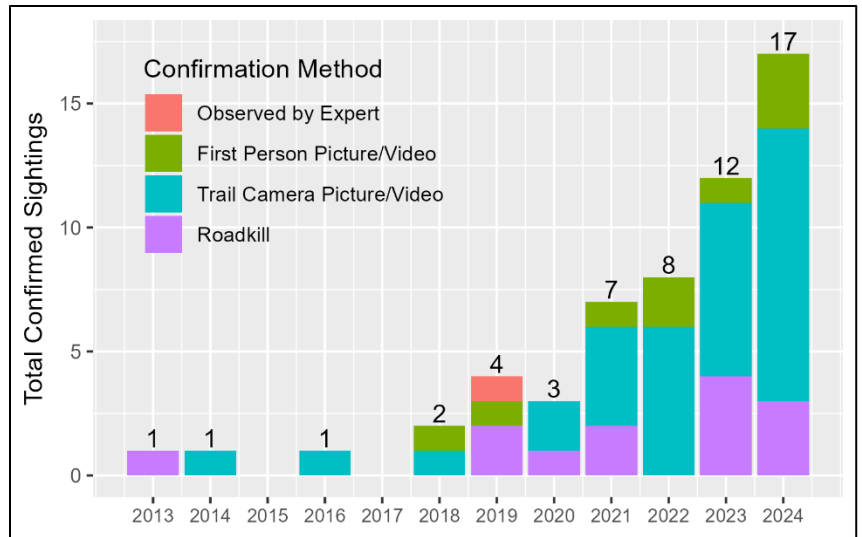


Figure 23. Confirmed fisher sightings in Ohio from 2013 - 2024.

The first modern-day fisher sighting in Ohio was a roadkill fisher in 2013. Since then, the number of confirmed fisher sightings submitted to the Ohio Division of Wildlife has steadily increased (Figure 23). From 2013 to 2024 a total of 56 sightings have been confirmed in eight counties, all in northeast Ohio (Figure 24). Sightings are less common during the summer months but have been documented during every month of the year.

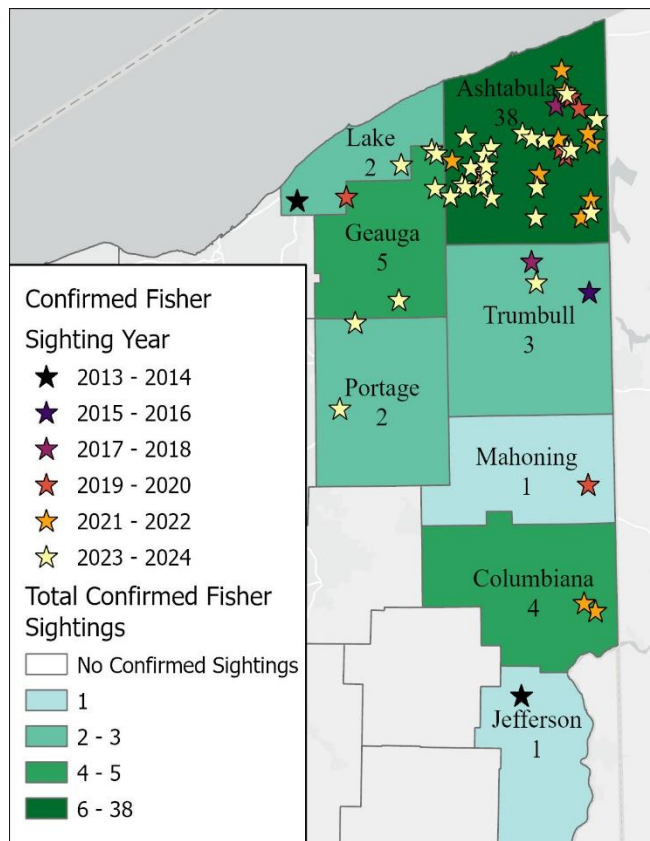


Figure 24. Location and year of confirmed fisher sightings in Ohio from 2013 – 2024, and total confirmed sightings by county.

### What is a fisher?

Fishers are medium-sized carnivores, roughly the size of a house cat with lean, long bodies and long, full tails (Figure 25). Their thick undercoat is covered with long, dark brown fur on their body and black fur on their legs and tails. Part of the mustelid (weasel) family, a fisher could be mistaken for a river otter or mink, also in the same family. Contrary to their name, fishers are a forest dwelling species whose diet consists primarily of small- and medium-sized mammals. You can help the Division of Wildlife track fishers in Ohio by reporting your sightings at [wildohio.gov](http://wildohio.gov).



Figure 25. A fisher trail camera sighting from Geauga

## Badger

### Species Distribution

Ohio is at the eastern edge of the range of badgers (*Taxidea taxus*) in the United States. Badgers have likely occurred in Ohio in limited numbers since before European colonization. There is some evidence that badger populations are expanding east, but it is unclear if populations in Ohio are increasing. The primary method for tracking badgers in the state is through sightings reported by the public.

Records maintained by the Division of Wildlife contain sightings going back to the 1930s. Sightings are uncommon but consistently occur from year to year. Over the past 10 years, 1-7 sightings have been confirmed each year, primarily in western Ohio (Figure 26). Most confirmed sightings are animals that were hit by a vehicle or inadvertently trapped, and occasionally from trail cameras. Sightings of any type can be reported online at [wildohio.gov](http://wildohio.gov).

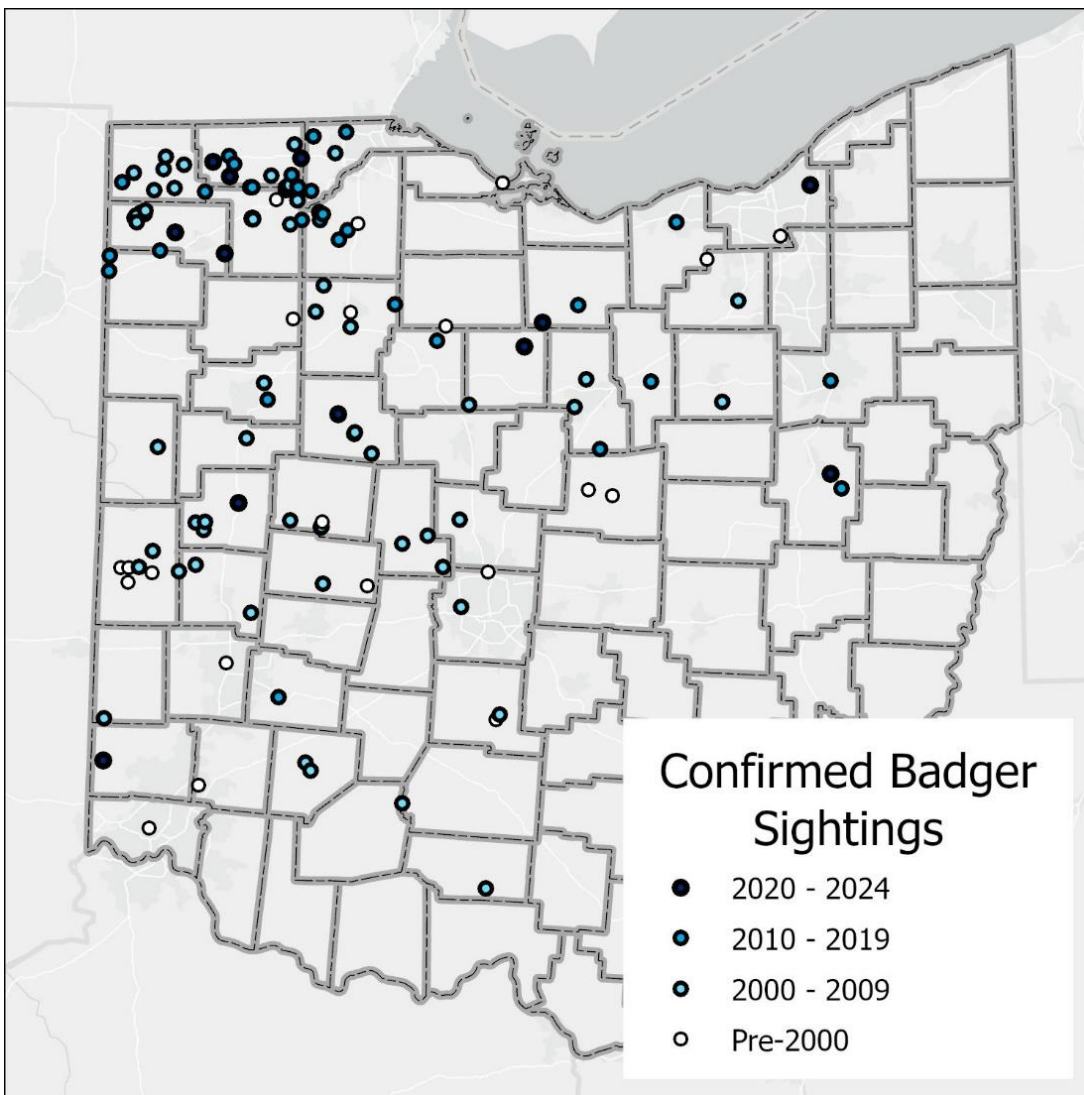


Figure 26. Locations of confirmed badger sightings in Ohio by decade.

## Weasels

### Species Distributions

Three species of weasel are found in Ohio: the long-tailed weasel (*Neogale frenata*), least weasel (*Mustela nivalis*), and the short-tailed weasel (*Mustela richardsonii*; also known as the American ermine). Information on weasel distribution in Ohio historically was obtained primarily through records of museum collections and reports of specimens collected in the course of research. In recent years, sightings reported by the public through the Division's online wildlife reporting portal, and camera trap images from various wildlife research projects have provided additional information on the current distribution of these species. Long-tailed weasels and least weasels are both found throughout the state, while short-tailed weasels are found in the northeast corner of the state (Figure 27).

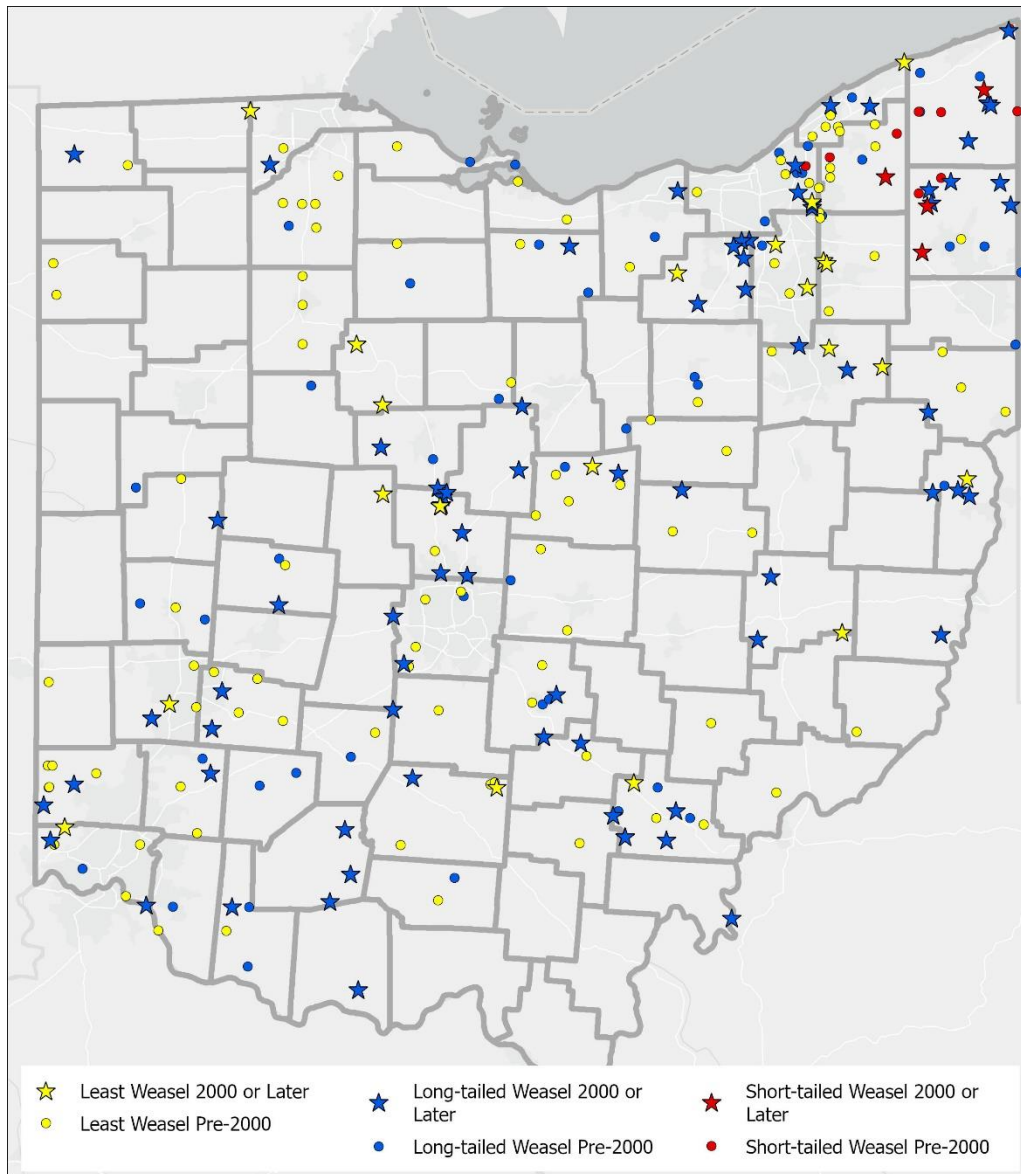


Figure 27. Locations of confirmed weasel sightings in Ohio by species and time period.

### Harvest

According to annual fur taker surveys, weasels are the furbearers least commonly targeted by trappers in Ohio. During the 2023-24 season only 0.8% of fur taker survey respondents pursued weasels. Estimates of total weasel harvest in Ohio have been below 100 over the past 7 seasons.



## Research

Weasels can be difficult to monitor due to their elusive nature and their small size and speed. Historically, harvest trends provided some insight into weasel population trends, however, the small amount of harvest effort in recent years makes it difficult to draw reliable conclusions from these indices. Camera traps provide some potential for monitoring weasel populations; however, weasel detection rates are low using traditional camera trap methods.

To improve monitoring of weasel populations, the Division, in partnership with researchers in Ohio and other states, have been working on evaluating methods for surveying weasels using specialized camera trap methods. This has included conducting bait and lure trials to identify items that can increase weasel detection rates at trail cameras (Figure 28). The Division is also using AHDriFT arrays to collect information on weasels and other small mammals. AHDriFT arrays consist of an entrenched solid fence line which funnels small animals into a bucket with a camera trap at either end of the line. The animal is able to move through the bucket to freedom, but in the meantime the camera captures a picture of the animal (Figure 29). These methods will help us to gather more information on the distribution of weasels throughout the state, and ultimately could be used for monitoring trends in weasel populations over time.



Figure 28. A short-tailed weasel visits a baited camera trap in northeast Ohio.

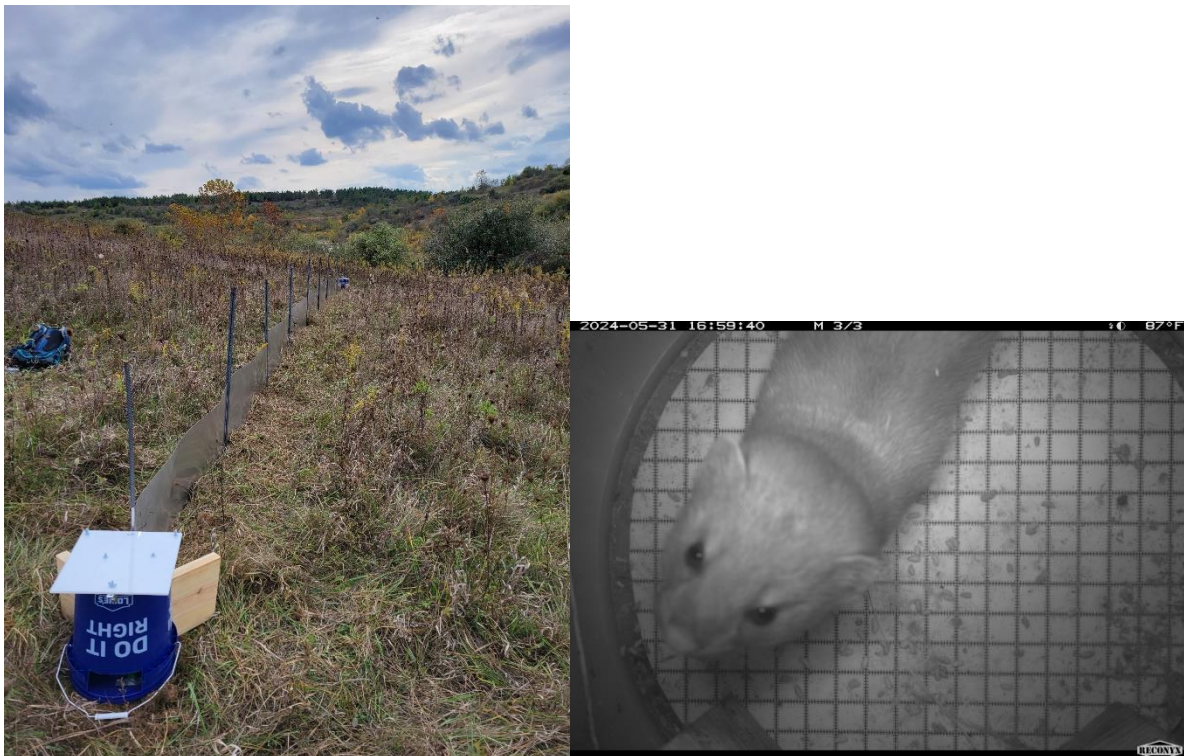


Figure 29. An AHDriFT array set on a wildlife area in southeast Ohio to capture images of weasels and other small terrestrial animals (left) and a long-tailed weasel in an AHDriFT array (right).

## River Otters

### Population trends and distribution

Since they were reintroduced in the state in the late 1980s and early 1990s, Ohio's river otter (*Lontra canadensis*) population has increased rapidly in size and distribution. In 2002 river otters were removed from Ohio's list of endangered species, and the first modern-day trapping season for river otters in Ohio occurred in 2005-06. River otters have now been documented throughout the state.

River otter population trends and distribution are tracked through bridge surveys conducted annually in January or early February. Division of Wildlife personnel survey sites by walking 300 meters upstream and downstream from the bridge while searching for otter sign, including tracks, slides, scat, or latrine sites. From 2000 to 2015, river otter bridge surveys were conducted at 180 bridge sites in eastern Ohio to monitor relative population size and dispersal from reintroduction watersheds. In response to increased sightings outside of eastern Ohio, 242 river otter bridge survey locations were added across the remainder of the state in 2016. A total of 422 survey locations are currently used to monitor otter populations and distribution statewide.

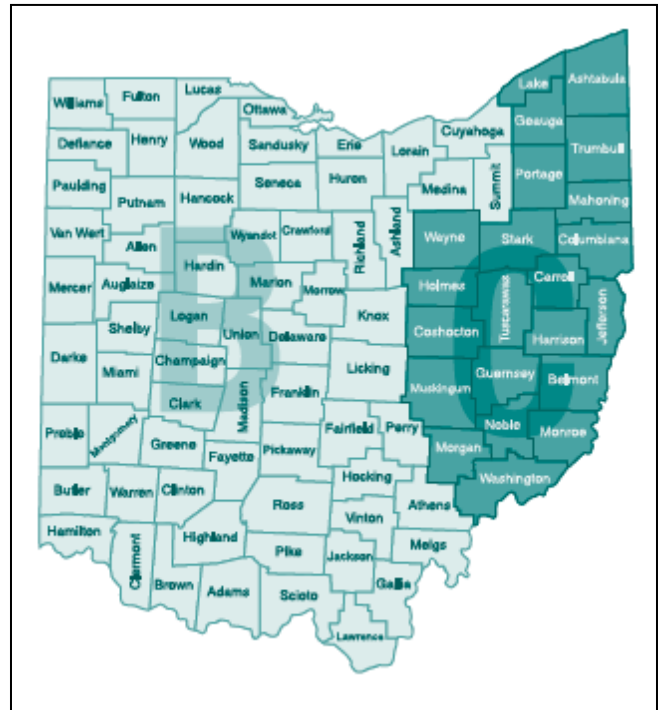


Figure 30. Ohio river otter management zones for the 2018-19 to the 2023-24 seasons.

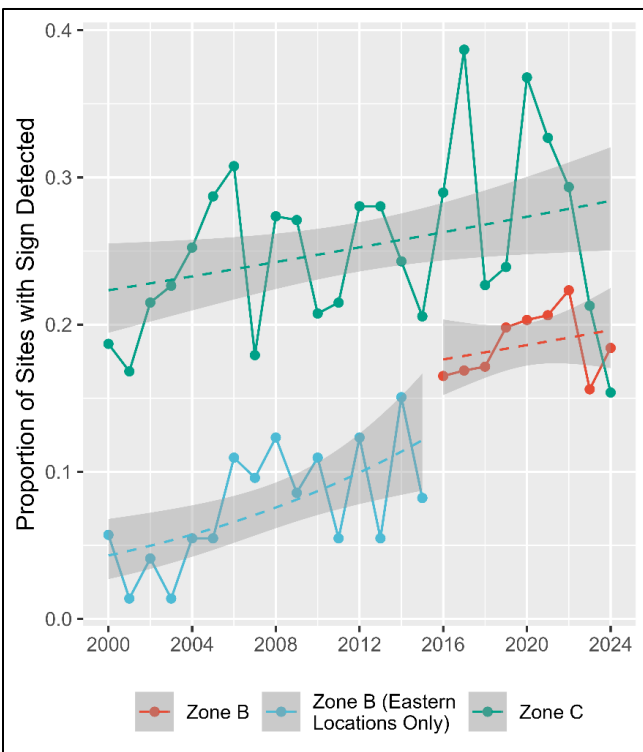


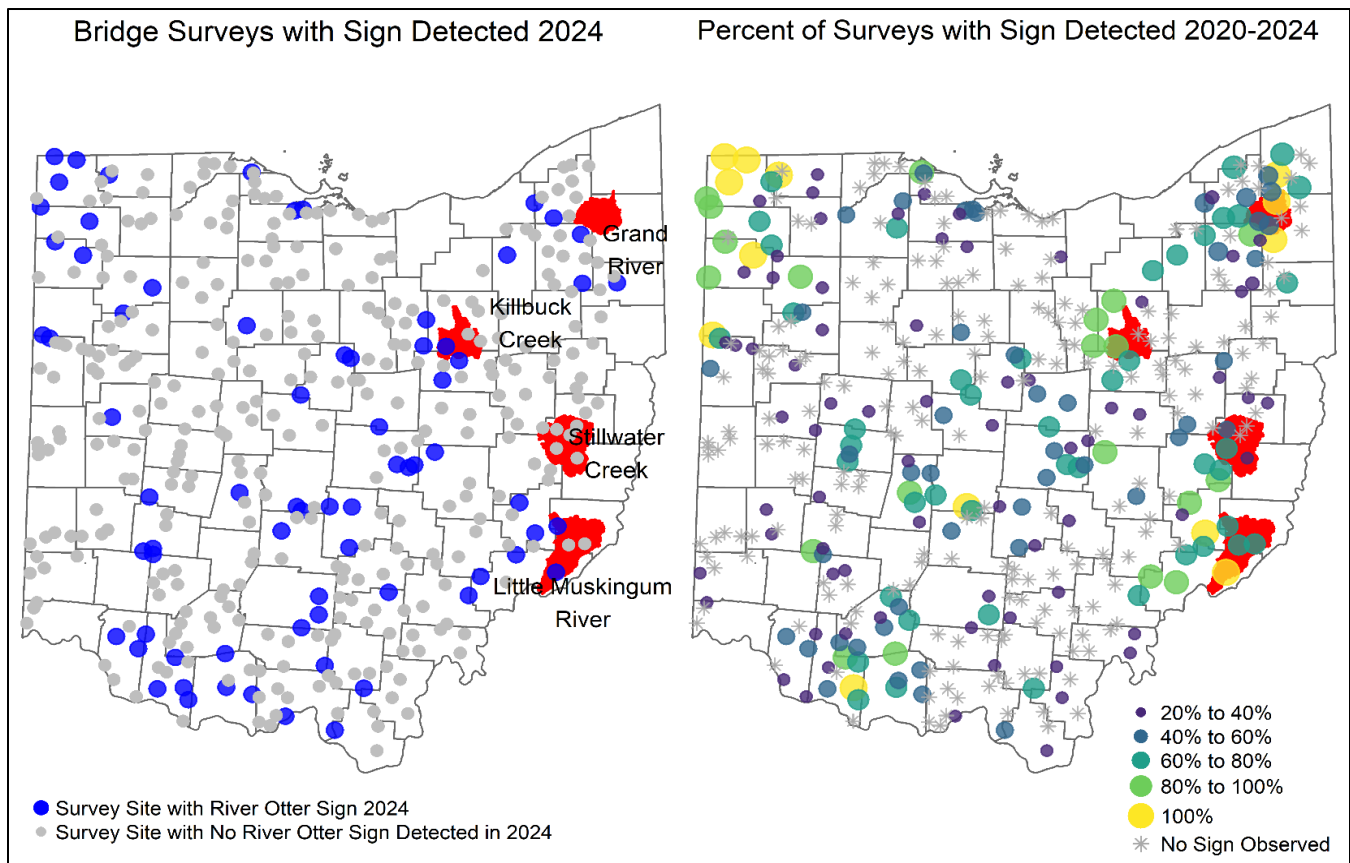
Figure 31. Proportion of river otter bridge survey locations with sign detected from 2000 to 2024 in Ohio's Otter Management Zones B and C, and trendline with 95% confidence interval. Note, prior to 2016, only the eastern portion of Zone B was surveyed.

In 2024, otter sign was detected at 72 of the 406 bridge sites that were surveyed (17.73%). Figure 30 shows the river otter management zones for the 2018-19 to 2023-2024 seasons. The proportion of survey sites with sign in both zones shows increasing trends over the 25 years of surveys, indicating an increase in otter abundance and distribution statewide (Figure 31). Detection rates have been below average the past two years, and were particularly low in Zone C. However, this may be due to a large number of survey sites in northeast Ohio, where sign observation rates are generally very high, not being conducted during those years due to weather and staff turnover. Survey detections remain most common near watersheds where otter were originally reintroduced in northeast Ohio, although since surveys have been expanded statewide, otter sign has also been regularly detected at bridge survey sites in central, northwest, and southwest Ohio (Figure 32).

### Harvest

Ohio implemented its 19<sup>th</sup> river otter trapping season in 2023-2024. This was the sixth modern day otter trapping season where limited harvest was permitted statewide with 22 eastern Ohio counties open to harvest with a bag limit of 3 (Zone C), and the remaining 66 counties open with a bag

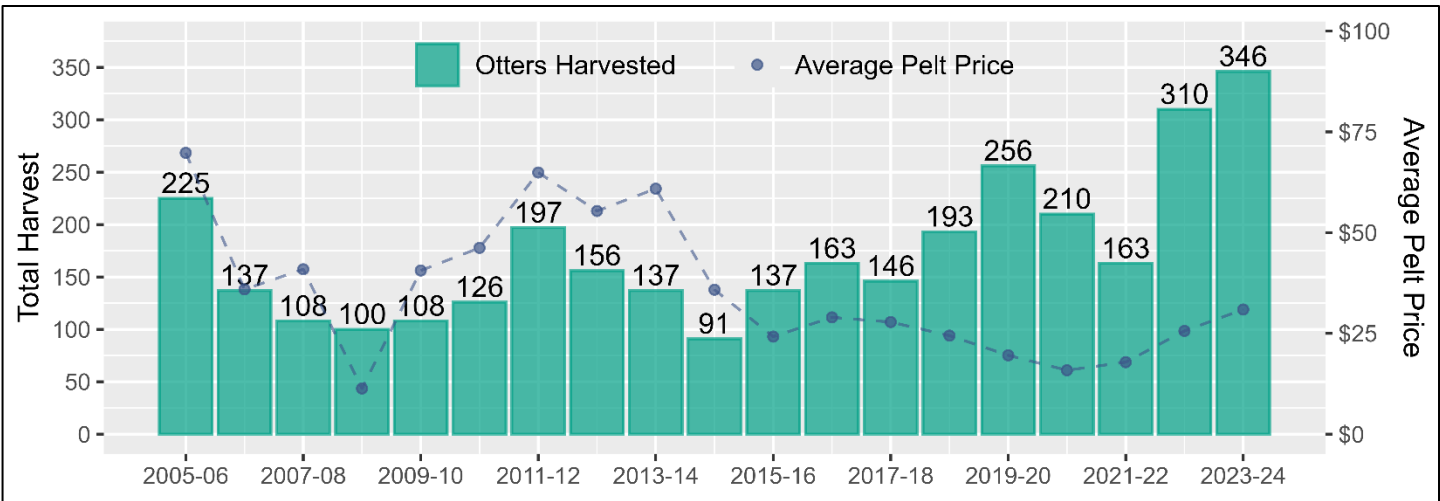




**Figure 32. River otter reintroduction release watersheds, bridge survey locations with and without river otter sign detected in Ohio in 2024, and the percent of times sign was detected at each survey location over the past five years (2020-2024).**

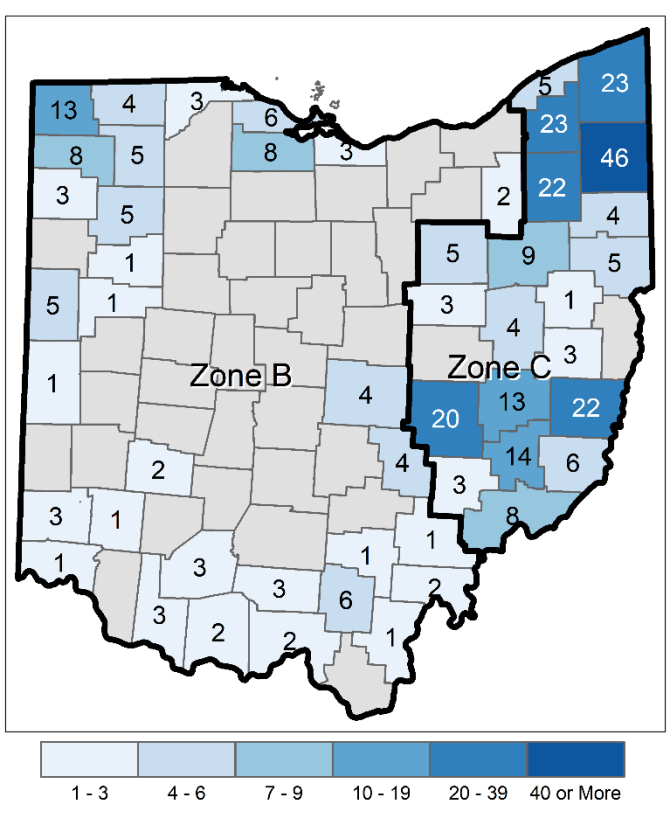
limit of 1 (Zone B). Mandatory checking and tagging of pelts is required for all harvested river otters and provides important information on population trends and distribution.

In the 2023-2024 trapping season a total of 346 river otters were taken from 51 counties (Figure 33; Figure 34). This was the highest harvest has been since the season was established in 2005, following another record high harvest in 2022-23 (310 otters harvested). While the increase in harvest during the 2022-23 season was primarily in Zone C, in the 2023-2024 season, harvest in Zone B was nearly twice as many as the previous season, with a total of 107 otters harvested in 31 counties in Zone B (Table 7). Harvest in Zone B took place along the Maumee River and its tributaries, the Sandusky River, and other tributaries of Lake Erie in northwest Ohio, and in southern Ohio along the Little Miami River, and the Ohio River and its tributaries.



**Figure 33. River otter Harvest in Ohio, and average pelt price by season from 2005-2006 to 2023-2024.**

Age at harvest data collected from harvested otters was used to model the river otter population in Zone C through Statistical Population Reconstruction. The top model indicated an overall increasing trend in population in Zone C. The model indicated that non-harvest-related survival rates were low during the 2017 season, leading to a dip in population and low recruitment during the next couple of years. Since then, the model indicates the population has rebounded, despite increases in harvest in 2018 and 2019. Continuing annual collection of demographic data (through collection of harvested river otter carcasses) to add to the model will continue to assess the impact of harvest.



## Beavers

### Population trends and distribution

Standardized aerial beaver (*Castor canadensis*) colony surveys are conducted annually in the late fall and winter, and the results are used to track beaver population distribution and track trends in population. The fall 2023 aerial beaver colony survey resulted in an estimate of 5,850 beaver colonies across the state. Colony estimates based on this survey fluctuate from year to year but indicate the beaver population has exhibited a stable statewide trend over the past 20-30 years (Figure 35). Long-term increases in beaver populations have occurred statewide but primarily in portions of eastern Ohio where forested wetlands are abundant. Observations of beaver colonies from aerial surveys in western portions of the state are much less common but do occur in areas with sufficient aquatic habitat.

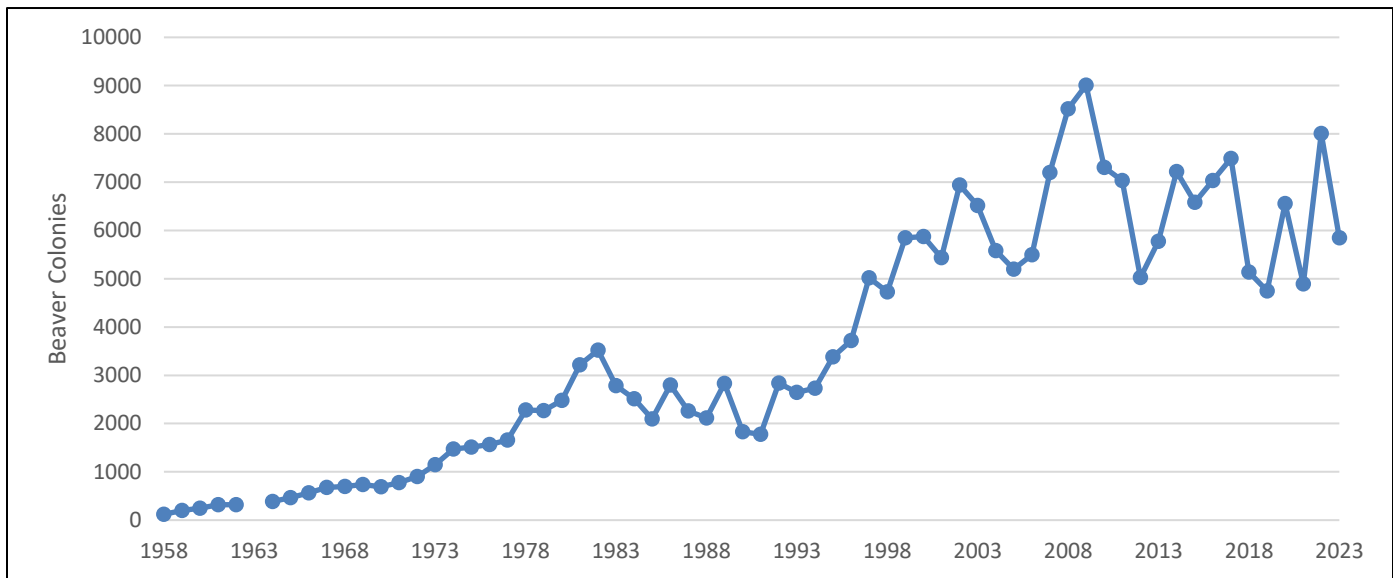


Figure 35. Estimated beaver colonies in Ohio from 1958 to 2023.

### Harvest

In 2023-24, 16.1% of fur taker survey respondents indicated that they targeted beavers, and an average of 11.8 beavers were harvested per trapper. This is the highest proportion of trappers, the highest average harvest per trapper, and the highest estimated total harvest in the 13 years of fur taker surveys (Table 3). This increased trapping effort was likely driven by the high prices for beaver pelts during the 2023-24 season (Table 5).

Harvest reports on annual fur taker surveys show that beavers are found throughout the state, but capture rates are higher in the forested eastern part of the state (Figure 36).

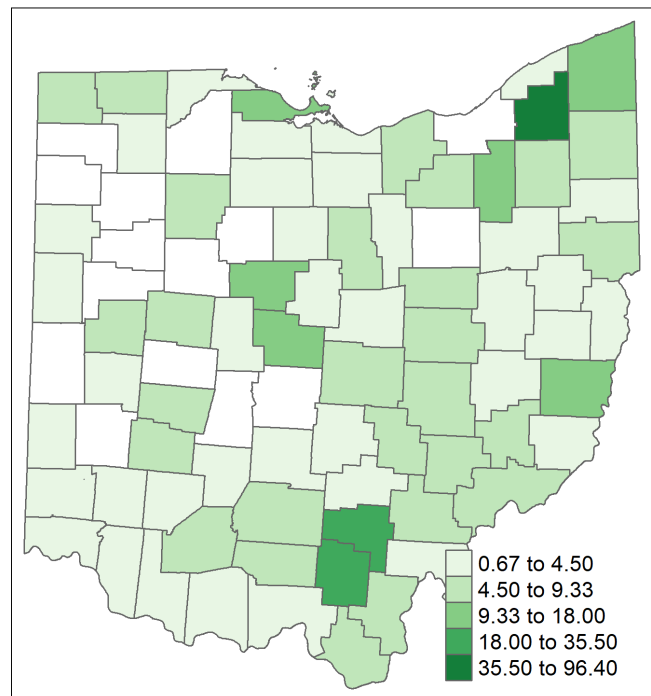


Figure 36. Beaver average harvest per trapper by county during the 2023-2024 season based on fur taker survey results.

## Minks

### Population trends and distribution

Information collected on the annual fur taker survey provides an estimate of average mink (*Neogale vison*) catch per unit effort (CPUE), which can serve as a standardized index for population trends. CPUE can be used as an index for populations based on the assumption that as mink populations increase, less effort will be required to harvest each animal, and therefore the number of minks harvested per trap night will increase. We calculated statewide CPUE by averaging the CPUE of each trapper that targeted minks. In 2023-24, average mink CPUE was 3.0 minks trapped per 100 trap nights. Mink CPUE shows a stable trend over the 13 years of surveys (Figure 37).

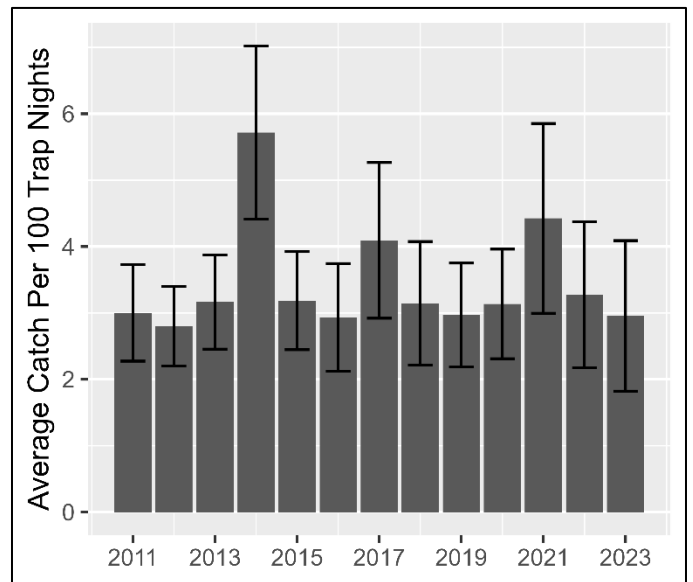


Figure 37. Mink catch per unit effort for 2011 through 2023 trapping seasons based on fur taker survey results.

### Harvest

The proportion of trappers who indicated they pursued minks on the fur taker survey has declined in recent years. In 2023-24, 11.5% of fur taker survey respondents indicated they targeted minks, for an estimate of 1,307 trappers pursuing minks in the 2023-24 season. Trappers targeting minks harvested an average of 4.4 per trapper. Estimated mink harvest based on fur taker surveys has declined overall over 13 years of surveys but has remained relatively stable over the past 7 years.

Reported harvest by county indicates that mink are found throughout the state but are more common in northern Ohio (Figure 38).

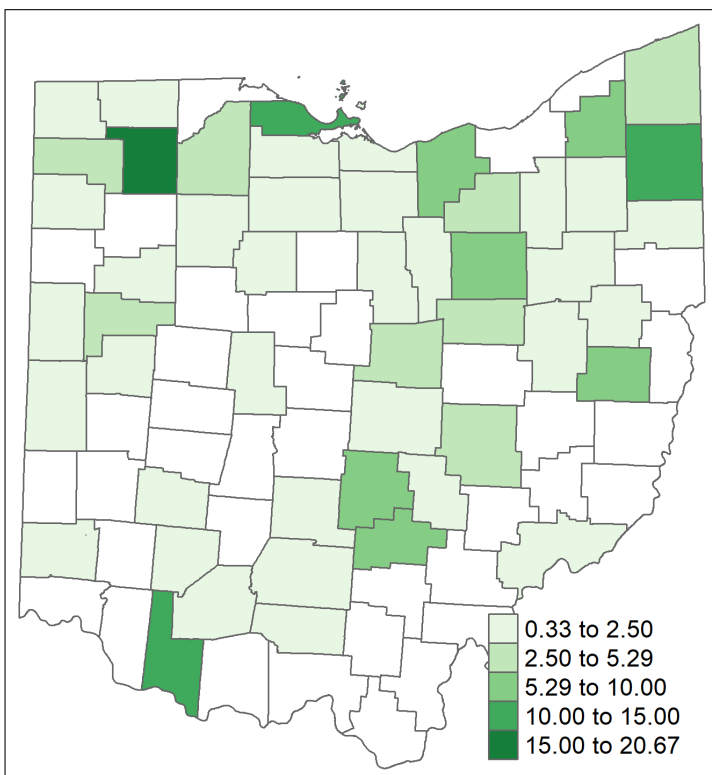


Figure 38. Mink average harvest per trapper by county during the 2023-2024 season based on fur taker survey results.

## Muskrat

### Population trends and distribution

Similar to mink, for muskrats (*Ondatra zibethicus*) we calculated statewide catch per unit effort (CPUE) using data from the annual fur taker survey by averaging the CPUE of each trapper that targeted muskrats. In 2023-24, average muskrat CPUE was 14.3 muskrats trapped per 100 trap nights. Muskrat CPUE shows a slightly increasing trend over the 13 years of surveys.

### Harvest

The proportion of trappers who indicated they pursued muskrats on the fur taker survey has declined in recent years, however muskrats remain the third most frequently pursued furbearer species, after raccoon and coyote. In 2023-24, 22.4% of fur taker survey respondents indicated they targeted muskrats for an estimate of 2,550 trappers pursuing muskrats.

Trappers targeting muskrats harvested an average of 34.9 muskrats per trapper. Estimated muskrat harvest based on fur taker surveys has declined overall over 13 years of surveys but has remained relatively stable over the past eight years.

Reported harvest per trapper by county on the fur taker survey indicates that muskrats are found throughout the state, but capture rates are higher in northern Ohio (Figure 40).

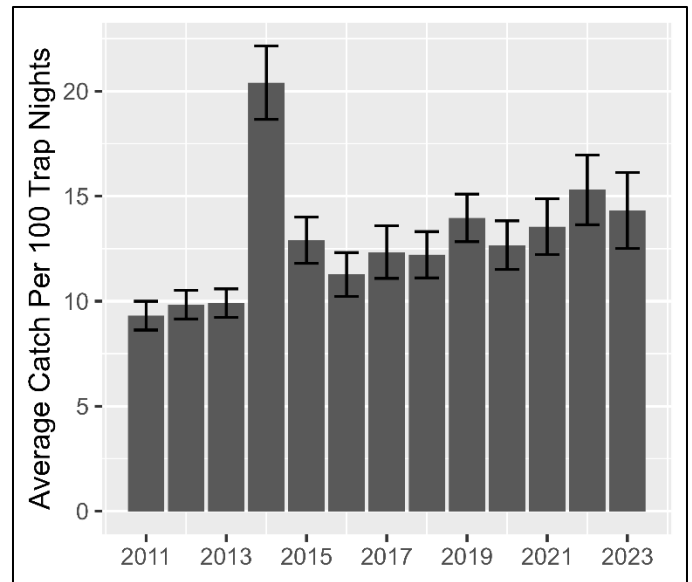


Figure 39. Muskrat catch per unit effort for 2011 through 2023 trapping seasons based on fur taker survey results.

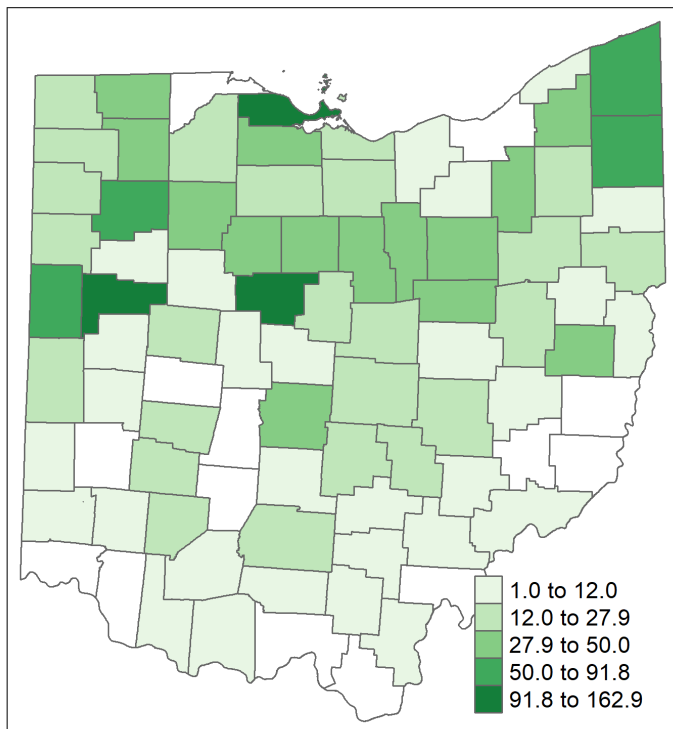


Figure 40. Muskrat average harvest per trapper by county during the 2023-2024 season based on fur taker survey results.

### Research

While muskrats remain abundant and well distributed in Ohio, information from long-term fur dealer datasets suggests that muskrat populations have declined in portions of the eastern U.S., including Ohio, during the past few decades (Table 4). The reason for this observed decline is currently unknown. In 2023, a multistate research project was initiated to investigate muskrat health and how it relates to muskrat population trends. Ohio contributed samples from 50 muskrats, donated from across the state by trappers. All muskrats will be tested for three diseases of concern (Tularemia, Tyzzer's disease, and Toxoplasmosis) and information on parasite load and any other health concerns observed will be noted. Sample testing is being conducted at the Southeastern Cooperative Wildlife Disease Study (SCWDS), and the Division will make results available once we receive them.

## Tables

Table 1. Total number of Ohio fur taker permit holders, number of fur taker surveys distributed, survey response rate and proportion of fur taker survey respondents that actively hunted or trapped for at least one species during the 2011-12 to 2023-24 seasons.

Season	Permit Holders	Surveys Distributed	Respondents	Response Rate	Respondents that Hunted	Respondents that Trapped	Respondents that Hunted and/or Trapped	Percent that Hunted and/or Trapped
2011-12	21,007	14,171	3,285	23.2%	1,389	1,660	2,349	71.51%
2012-13	21,725	16,705	3,490	20.9%	1,370	1,797	2,479	71.03%
2013-14	23,745	18,894	3,844	20.3%	1,453	2,044	2,728	70.97%
2014-15	22,067	17,744	3,020	17.0%	1,045	1,569	2,052	67.95%
2015-16	19,995	14,143	3,669	25.9%	1,221	1,440	2,075	56.55%
2016-17	17,364	17,364	4,799	27.6%	1,273	1,430	2,168	45.18%
2017-18	14,477	14,477	4,001	27.6%	1,200	1,335	2,049	51.21%
2018-19	13,862	13,862	4,267	30.8%	1,420	1,617	2,421	56.74%
2019-20	13,296	13,296	3,532	26.6%	1,373	1,489	2,319	65.66%
2020-21	13,241	13,241	3,858	29.1%	1,439	1,459	2,396	62.10%
2021-22	12,263	12,263	3,239	26.4%	1,135	1,232	1,985	61.28%
2022-23	11,837	11,837	2,465	20.8%	862	977	1,533	62.19%
2023-24	11,382	11,382	1,446	12.7%	443	637	904	62.52%

Table 2. Estimated annual harvest (and 95% confidence interval) of terrestrial furbearer species by fur taker permit holders in Ohio based on results from annual fur taker surveys for the 2014-15 to the 2023-24 seasons.

Season	Raccoon	Opossum	Striped Skunk	Coyote	Red Fox	Gray Fox	Weasel
2014-15	362,176 (337,676 - 386,677)	33,057 (29,374 - 36,739)	5,239 (4,217 - 6,261)	48,774 (40,941 - 56,607)	11,567 (8,607 - 14,527)	1,308 (894 - 1,722)	526 (193 - 859)
2015-16	249,591 (228,622 - 270,561)	17,575 (14,357 - 20,794)	3,014 (2,366 - 3,662)	40,257 (34,450 - 46,064)	6,512 (5,622 - 7,403)	599 (309 - 890)	223 (0 - 490)
2016-17	141,398 (129,824 - 152,971)	13,326 (11,398 - 15,254)	2,554 (1,841 - 3,268)	25,548 (21,657 - 29,440)	4,407 (3,571 - 5,243)	456 (271 - 640)	289 (77 - 502)
2017-18	132,511 (121,515 - 143,507)	11,705 (10,126 - 13,285)	1,983 (1,549 - 2,417)	23,791 (20,533 - 27,048)	3,966 (3,389 - 4,542)	394 (156 - 633)	51 (22 - 80)
2018-19	159,239 (131,485 - 186,993)	15,064 (12,493 - 17,635)	1,611 (1,395 - 1,827)	21,720 (19,313 - 24,128)	3,772 (3,280 - 4,263)	620 (341 - 900)	84 (15 - 153)
2019-20	205,346 (189,638 - 221,055)	16,398 (14,098 - 18,698)	2,127 (1,750 - 2,504)	34,610 (30,037 - 39,184)	4,796 (4,069 - 5,523)	696 (380 - 1,013)	45 (8 - 82)
2020-21	127,609 (117,747 - 137,470)	8,031 (7,029 - 9,033)	1,654 (1,051 - 2,257)	29,561 (25,641 - 33,480)	3,792 (3,272 - 4,313)	378 (204 - 551)	38 (0 - 80)
2021-22	123,364 (110,703 - 136,026)	7,720 (6,422 - 9,018)	1,177 (874 - 1,481)	24,087 (20,395 - 27,779)	3,392 (2,511 - 4,273)	220 (91 - 349)	42 (0 - 109)
2022-23	122,264 (110,523 - 134,006)	10,300 (8,741 - 11,860)	1,714 (1,398 - 2,031)	30,128 (17,920 - 42,336)	3,198 (2,552 - 3,845)	375 (243 - 506)	48 (8 - 88)
2023-24	112,789 (98,410 - 127,168)	9,564 (7,948 - 11,180)	1,559 (1,155 - 1,962)	17,317 (13,928 - 20,706)	3,621 (2,310 - 4,932)	315 (84 - 546)	39 (3 - 75)



Table 3. Total river otter harvest based on required harvest registration and estimated annual harvest (and 95% confidence interval) of muskrat, mink, and beaver by fur taker permit holders in Ohio based on results from annual fur taker surveys for the 2014-15 to the 2023-24 seasons.

Season	Muskrat	Mink	Beaver	River Otter
2014-15	272,498 (241,597 - 303,399)	18,150 (14,758 - 21,543)	13,788 (11,282 - 16,295)	91
2015-16	209,879 (176,258 - 243,501)	13,537 (11,102 - 15,972)	11,842 (10,070 - 13,614)	137
2016-17	91,954 (78,096 - 105,812)	9,505 (6,451 - 12,559)	8,409 (7,074 - 9,743)	163
2017-18	73,713 (62,784 - 84,642)	6,850 (3,597 - 10,102)	5,229 (4,287 - 6,170)	146
2018-19	81,960 (70,396 - 93,524)	5,594 (4,105 - 7,083)	7,673 (6,634 - 8,712)	193
2019-20	127,712 (105,239 - 150,186)	7,386 (5,400 - 9,371)	10,913 (9,049 - 12,778)	256
2020-21	97,650 (78,653 - 116,647)	4,733 (3,472 - 5,994)	8,035 (6,594 - 9,475)	210
2021-22	104,589 (82,454 - 126,725)	7,148 (4,206 - 10,090)	6,667 (5,657 - 7,678)	163
2022-23	86,624 (67,891 - 105,356)	4,812 (3,627 - 5,996)	11,799 (10,016 - 13,581)	310
2023-24	88,884 (68,856 - 108,911)	5,801 (3,716 - 7,887)	21,693 (8,853 - 34,534)	346

Table 4. Total number of furs reported as purchased by Ohio fur dealers during the 2014-15 through the 2023-24 seasons.

Season	Raccoon	Opossum	Striped Skunk	Coyote	Red Fox	Gray Fox	Weasel	Muskrat	Mink	Beaver	River Otter
2014-15	55,879	1,013	85	2,307	1,082	67	36	45,029	2,175	1,055	12
2015-16	27,955	598	103	2,037	1,058	68	1	45,444	1,557	1,100	23
2016-17	19,171	762	76	1,915	532	49	1	23,296	1,162	1,086	12
2017-18	19,331	753	93	1,916	612	13	0	22,251	901	694	39
2018-19	26,134	809	78	2,160	458	45	0	25,415	899	1,349	69
2019-20	19,550	422	71	1,834	413	41	0	25,334	844	1,333	73
2020-21	8,927	233	21	1,548	256	15	74	22,015	718	722	53
2021-22	6,734	168	25	627	322	11	1	14,741	611	1,027	36
2022-23	4,801	116	74	437	245	11	1	11,728	756	1,688	53
2023-24	7,430	165	91	317	229	11	0	14,549	762	2,014	121

Table 5. Average price paid per pelt for furs purchased by Ohio fur dealers during the 2014-15 through the 2023-24 seasons.

Season	Raccoon	Opossum	Striped Skunk	Coyote	Red Fox	Gray Fox	Weasel	Muskrat	Mink	Beaver	River Otter
2014-15	\$5.38	\$1.03	\$3.10	\$12.11	\$16.12	\$14.40	\$10.14	\$4.82	\$7.43	\$10.27	\$35.83
2015-16	\$3.05	\$1.36	\$2.83	\$13.30	\$11.07	\$10.41	\$1.00	\$2.48	\$5.01	\$8.92	\$24.20
2016-17	\$2.70	\$1.01	\$1.95	\$12.21	\$11.10	\$10.82	\$1.00	\$2.94	\$5.10	\$8.82	\$28.98
2017-18	\$3.42	\$0.82	\$2.03	\$12.66	\$10.26	\$8.92	--	\$2.90	\$6.56	\$8.81	\$27.81
2018-19	\$4.33	\$0.61	\$4.60	\$16.47	\$7.91	\$16.60	--	\$3.08	\$5.21	\$7.87	\$24.44
2019-20	\$3.46	\$1.60	\$2.31	\$19.45	\$7.32	\$5.55	--	\$4.26	\$3.85	\$8.62	\$19.56
2020-21	\$2.93	\$0.82	\$3.25	\$15.37	\$21.95	\$7.87	\$4.52	\$3.60	\$4.75	\$7.85	\$15.85
2021-22	\$2.48	\$0.53	\$3.56	\$10.21	\$7.36	\$14.98	--	\$2.69	\$4.51	\$8.31	\$17.86
2022-23	\$2.48	\$0.92	\$6.27	\$8.63	\$6.49	\$18.91	\$0.50	\$2.37	\$5.23	\$19.48	\$25.61
2023-24	\$3.05	\$1.08	\$8.02	\$8.06	\$8.42	\$16.64	--	\$2.62	\$5.43	\$20.78	\$30.92

Table 6. Bobcat Sightings in Ohio from 1976 to 2024.

Year	Confirmed Sightings	Unconfirmed Sightings	Number of Counties with Confirmed Sightings*	Number of Townships with Confirmed Sightings*
1976	1	1	1	1
1977	2	3	1	2
1978	1	--	1	1
1979	2	--	2	0
1980	1	--	1	1
1987	--	1	--	--
1989	1	--	1	0
1990	1	--	1	1
1991	2	1	2	2
1992	1	10	1	1
1993	1	1	1	1
1994	3	1	2	2
1995	4	4	3	1
1996	4	8	4	4
1997	--	29	--	--
1998	1	32	1	1
1999	2	20	1	1
2000	--	35	--	--
2001	6	46	6	6
2002	13	35	10	8
2003	18	44	8	13
2004	10	60	10	10
2005	26	66	14	14
2006	35	29	16	29
2007	56	181	16	38
2008	70	221	23	49
2009	98	270	16	61
2010	117	307	22	80
2011	137	295	25	70
2012	184	244	32	117
2013	200	226	36	127
2014	197	176	39	131
2015	265	Not Available	35	119
2016	141	Not Available	32	79
2017	491	Not Available	46	259
2018	444	518	46	245
2019	534	449	48	284
2020	532	495	58	298
2021	571	651	57	298
2022	586	727	65	321
2023	748	689	61	387
2024	777	688	69	395

\*Note: This information may be incomplete. Some confirmed sighting records do not include township and/or county info.

Table 7. River otter harvest in Ohio by county and season.

County	2023 Zone	Original Zone	Trapping Season									
			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ashtabula	C	C	14	11	15	21	22	34	12	18	32	23
Belmont	C	C	1	8	8	3	2	10	11	3	22	22
Carroll	C	C	0	0	0	1	0	1	3	1	3	1
Columbiana	C	C	0	1	1	2	3	0	1	2	2	5
Coshocton	C	C	6	8	4	3	6	2	4	2	9	0
Geauga	C	C	7	11	16	19	12	21	12	8	43	23
Guernsey	C	C	5	4	7	5	11	20	18	12	7	13
Harrison	C	C	3	11	8	11	3	7	5	2	7	3
Holmes	C	C	2	5	7	6	1	1	4	0	2	3
Jefferson	C	C	0	0	0	0	0	0	0	0	0	0
Lake	C	C	0	1	0	0	0	0	3	2	1	5
Mahoning	C	C	2	0	1	2	1	5	2	3	9	4
Monroe	C	C	7	7	11	10	13	9	7	11	7	6
Morgan	C	C	0	2	1	2	3	2	2	0	1	3
Muskingum	C	C	5	6	9	7	5	7	6	4	17	20
Noble	C	C	7	6	15	21	12	14	10	13	12	14
Portage	C	C	4	12	15	7	31	27	19	21	19	22
Stark	C	C	0	0	0	0	1	0	1	5	5	9
Trumbull	C	C	15	31	34	21	29	41	30	13	43	46
Tuscarawas	C	C	2	4	8	1	0	3	1	6	3	4
Washington	C	C	8	3	0	2	9	8	12	1	4	8
Wayne	C	C	1	1	0	0	3	3	3	2	2	5
Athens	B	C	1	1	0	0	0	0	0	0	2	1
Gallia	B	C	0	1	0	0	0	2	0	1	0	1
Hocking	B	C	0	0	0	0	0	0	0	0	0	0
Jackson	B	C	0	0	0	0	0	0	0	0	2	6
Lawrence	B	C	0	0	0	0	0	0	0	0	0	0
Meigs	B	C	0	0	0	0	0	0	0	0	0	2
Perry	B	C	0	0	0	1	2	4	1	1	3	4
Scioto	B	C	0	0	1	0	0	0	3	0	0	2
Vinton	B	C	0	0	0	0	0	0	0	0	2	1

Table 7 (continued). River otter harvest in Ohio by county and season.

County	2023 Zone*	Original Zone	Trapping Season									
			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Adams	B	B	0	0	0	0	3	1	5	1	0	2
Ashland	B	B	0	0	0	0	2	4	0	1	4	0
Delaware	B	B	0	0	0	0	0	0	0	0	0	0
Fairfield	B	B	0	0	1	0	0	0	0	0	0	0
Franklin	B	B	0	0	0	0	0	0	0	0	0	0
Knox	B	B	0	0	0	0	0	0	0	0	0	0
Licking	B	B	1	3	0	1	2	1	2	0	1	4
Morrow	B	B	0	0	0	0	0	0	0	0	0	0
Pickaway	B	B	0	0	0	0	0	0	0	0	0	0
Pike	B	B	0	0	0	0	0	0	0	0	2	3
Richland	B	B	0	0	0	0	0	0	0	0	0	0
Ross	B	B	0	0	0	0	0	0	0	0	1	0
Allen	B	A	--	--	--	--	1	3	0	0	1	1
Auglaize	B	A	--	--	--	--	0	0	1	0	0	1
Brown	B	A	--	--	--	--	0	2	2	1	0	3
Butler	B	A	--	--	--	--	0	1	0	2	4	3
Champaign	B	A	--	--	--	--	0	0	0	0	0	0
Clark	B	A	--	--	--	--	0	0	0	0	0	0
Clermont	B	A	--	--	--	--	2	2	0	0	0	0
Clinton	B	A	--	--	--	--	0	0	0	0	0	0
Crawford	B	A	--	--	--	--	0	0	0	0	0	0
Cuyahoga	B	A	--	--	--	--	0	0	0	0	0	0
Darke	B	A	--	--	--	--	0	0	0	0	0	1
Defiance	B	A	--	--	--	--	3	1	4	1	3	8
Erie	B	A	--	--	--	--	0	1	0	1	3	3
Fayette	B	A	--	--	--	--	0	0	0	0	0	0
Fulton	B	A	--	--	--	--	0	1	3	3	0	4
Greene	B	A	--	--	--	--	1	0	0	0	0	2
Hamilton	B	A	--	--	--	--	1	3	0	0	0	1
Hancock	B	A	--	--	--	--	0	0	1	0	0	0
Hardin	B	A	--	--	--	--	0	0	0	0	0	0
Henry	B	A	--	--	--	--	1	2	4	2	3	5
Highland	B	A	--	--	--	--	0	0	0	0	2	3

Table 7 (continued). River otter harvest in Ohio by county and season.

County	2023 Zone*	Original Zone	Trapping Season									
			2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Huron	B	A	--	--	--	--	0	0	0	0	0	0
Logan	B	A	--	--	--	--	0	0	0	0	0	0
Lorain	B	A	--	--	--	--	0	0	0	0	0	0
Lucas	B	A	--	--	--	--	0	0	0	0	2	3
Madison	B	A	--	--	--	--	0	0	0	0	0	0
Marion	B	A	--	--	--	--	0	0	0	0	0	0
Medina	B	A	--	--	--	--	0	0	0	0	0	0
Mercer	B	A	--	--	--	--	0	0	1	0	1	5
Miami	B	A	--	--	--	--	0	0	0	0	0	0
Montgomery	B	A	--	--	--	--	0	0	0	0	0	0
Ottawa	B	A	--	--	--	--	0	2	1	3	2	6
Paulding	B	A	--	--	--	--	1	3	6	3	3	3
Preble	B	A	--	--	--	--	0	0	0	0	0	0
Putnam	B	A	--	--	--	--	2	2	3	4	5	5
Sandusky	B	A	--	--	--	--	0	0	1	1	4	8
Seneca	B	A	--	--	--	--	0	0	0	0	0	0
Shelby	B	A	--	--	--	--	0	0	0	0	0	0
Summit	B	A	--	--	--	--	0	0	0	1	1	2
Union	B	A	--	--	--	--	0	0	0	0	0	0
Van Wert	B	A	--	--	--	--	0	0	0	0	1	0
Warren	B	A	--	--	--	--	0	1	1	1	0	1
Williams	B	A	--	--	--	--	5	3	5	6	8	13
Wood	B	A	--	--	--	--	0	2	0	1	0	0
Wyandot	B	A	--	--	--	--	0	0	0	0	0	0
Unknown	U	U	0	0	1	0	0	0	0	0	0	0
Total Counties Open to Harvest			43	43	43	43	88	88	88	88	88	88
Total Counties with at least one harvested otter			18	21	18	20	31	38	38	37	44	51
Total Harvest Zone C (based on Zone Lines for that year)			90	134	162	145	167	215	166	129	250	239
Total Harvest - Zone B			1	3	1	1	26	41	44	34	60	107
Total Harvest			91	137	163	146	193	256	210	163	310	346