



## 2016 BOBCAT HUNTER AND TRAPPER HARVEST IN MICHIGAN

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### ABSTRACT

A survey was completed to determine the number of people hunting and trapping bobcats in Michigan, the number of days spent afield (effort), and the number of bobcats registered. In 2016, 7,480 people obtained a bobcat harvest tag for the hunting and trapping seasons (16% more than in 2015). About 36% (2,693) of these tag-holders attempted to hunt or trap bobcats, and 14% of these furtakers (hunters and trappers combined) registered at least one bobcat. An estimated 1,846 people attempted to hunt bobcats, and they spent 15,136 days hunting and registered 260 bobcats. Nearly 1,129 people attempted to trap bobcats and spent 14,570 days trapping and registered 161 bobcats. The number of furtakers and the number of bobcats registered by these furtakers declined significantly by 9% and 38%, respectively, between 2015 and 2016. The number of furtakers participating in bobcat hunting and trapping seasons has declined during the last two years. This decrease was primarily driven by a decreased number of trappers. The estimated effort per registered bobcat in 2016 was not significantly different from 2015 for hunters but was significantly greater for trappers. The amount of effort per bobcat registered was a measure of how difficult it was to capture a bobcat and may be an indirect measure of the abundance of bobcats. Similar estimates among hunters during the last two years suggested that bobcat numbers were similar in both 2015 and 2016; however, the increased effort required to take a bobcat among trappers suggested conditions changed. Other population indices measured for trappers (i.e., proportion of trappers that released a bobcat and the proportion of trappers that caught an incidental bobcat) did not decline significantly between 2015 and 2016; thus, the change in effort per registered bobcat by trappers may not accurately reflect a decline in bobcat numbers.



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

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## INTRODUCTION

The Natural Resources Commission (NRC) and the Michigan Department of Natural Resources (DNR) have the authority and responsibility to protect and manage the wildlife resources of the state of Michigan. Harvest surveys are one of the management tools used to accomplish this statutory responsibility. Estimating hunter and trapper participation, harvest, and days afield (effort) are the primary objectives of these surveys. Estimates derived from harvest surveys, as well as information from mandatory registration reports, field surveys, and population modeling are used to monitor bobcat (*Lynx rufus*) populations and establish harvest regulations.

During 2016, bobcats could be harvested during both hunting and trapping seasons in six management units (Tables 1 and 2). The dates of the hunting and trapping seasons were the same as in 2015. In order to hunt or trap bobcats, resident furtakers were required to obtain a free bobcat harvest tag, in addition to a fur harvester license. Nonresidents were not permitted to harvest bobcat. Starting in 2016, bobcat harvest tags were only available from May 1 through November 30 (i.e., before the start of the earliest bobcat season). In previous years, harvest tags were available during September 15 through the last day of the hunting and trapping seasons. The total statewide bag limit was 2 bobcats per furharvester regardless of method of take. In the Upper Peninsula (UP), except Drummond Island, furtakers could legally take and register two bobcats in the hunting and trapping seasons combined. Only one bobcat could be taken from Drummond Island (Unit B), and only one bobcat could be legally taken and registered from all Lower Peninsula (LP) units combined (Figure 1). Successful furtakers were required to immediately attach their harvest tag to the bobcat and were required to register bobcats within 10 days of the end of the season in which the bobcat was taken. Furtakers were not allowed to keep bobcats that were beyond the legal limit of bobcats per person or bobcats taken outside the area open for harvest (incidental catches). Furtakers were required to bring incidental catches to a registration station if they could not be released alive. Although all furtakers harvesting a bobcat were required to present their animals at a DNR office for registration, this survey does not present the information collected from registered bobcats.

Beginning in 2016, trapping was allowed on public lands in BMUs C and D, in addition to private land. Thus, hunting and trapping was allowed on both public and private lands in all open management units in 2016. Trappers could use body-gripping (e.g., conibear) traps, foothold traps, and live restraining cage traps to capture bobcats in the UP but only foothold traps in the LP.

## METHODS

A questionnaire (Appendix A) was sent to everyone who obtained a bobcat harvest tag in 2016 (7,480 tag holders). Furtakers receiving the questionnaire reported whether they attempted to hunt or trap a bobcat, number of days spent afield, and number of bobcats they registered. Hunters were also asked to report their hunting method (e.g., dogs, calls) and the number of bobcats that were within range to take but they chose not to harvest. Hunters that used dogs were asked to report who owned the dogs, number of occasions the dogs chased a bobcat, and whether they hired a guide. Trappers were asked to report the number of bobcats caught

in traps and the number of bobcats released alive. Trappers also were asked to report the types of traps used, their preferred trap type, and whether they caught any bobcats in a trap set for another animal during the open seasons for taking bobcats. All furtakers were asked the ownership of lands where they pursued bobcats and their opinion of the status of the bobcat population in the county where they preferred to hunt or trap.

Questionnaires were mailed initially during late March 2017, and nonrespondents were mailed up to two follow-up questionnaires. Although 7,480 people were sent a questionnaire, 120 questionnaires were undeliverable, resulting in an adjusted sample size of 7,360. Questionnaires were returned by 4,081 people, yielding a 55% adjusted response rate.

Although all harvest tag holders had an opportunity to report information about their hunting and trapping activity, not everybody reported. To extrapolate from the tag holders that completed their questionnaire to all people obtaining harvest tags, estimates were calculated using a simple random sampling design (Cochran 1977). The 95% confidence limit (CL) was also calculated for all estimates. This CL can be added and subtracted from the estimate to calculate the 95% confidence interval. The confidence interval is a measure of the precision associated with the estimate and implies the true value would be within this interval 95 times out of 100. Estimates were not adjusted for possible response or nonresponse bias. The 95% CL for ratio estimates (i.e., mean days of effort required per registered bobcat) were calculated using the Taylor series linearization method (survey package in R, Lumley 2004).

Statistical tests are used routinely to determine the likelihood that the differences among estimates are larger than expected by chance alone. The overlap of the 95% confidence intervals was used to determine whether estimates differed significantly. Non-overlapping 95% confidence intervals was equivalent to stating the difference between the means was larger than would be expected 95 out of 100 times ( $P < 0.05$ ), if the study had been repeated (Payton et al. 2003).

## RESULTS

### Hunting and Trapping Combined

In 2016, 7,480 people obtained a bobcat harvest tag for the bobcat hunting and trapping seasons, which was 16% greater than in 2015 (6,451 people obtained a tag in 2015). About  $36 \pm 1\%$  (2,693) of these tag holders attempted to hunt or trap bobcats (Table 3). Furthermore, about  $4 \pm 1\%$  ( $282 \pm 29$ ) of the tag holders attempted both hunting and trapping bobcats. Among the 2,693 tag holders that attempted to take a bobcat, 58% only hunted, 31% only trapped, and 10% both hunted and trapped (Figure 2).

Furtakers spent 29,706 days afield ( $\bar{x} = 11.0 \pm 0.5$  days/furtaker) and registered 422 bobcats ( $\bar{x} = 0.16 \pm 0.01$  bobcats/furtaker). Furtakers spent about 14,711 days afield pursuing bobcats in the UP and 14,562 days in the LP (Table 3). About 14% of the furtakers registered at least one bobcat (Table 4). Nearly  $13 \pm 1\%$  of the furtakers registered only one bobcat and 1% registered two bobcats. About 18% of the furtakers in the UP registered at least one bobcat (Table 4). Nearly  $14 \pm 2\%$  of the UP furtakers registered only one bobcat and  $4 \pm 1\%$  registered two bobcats. An estimated 13% of furtakers in the LP registered a bobcat.

The number of furtakers seeking bobcats statewide declined significantly by 9%, and the number of days devoted to taking a bobcat declined significantly by 15% between 2015 and 2016 (Table 3, Figure 3). Regionally, furtaker numbers and their effort declined significantly in the UP but were unchanged in the LP. The number of bobcats registered declined statewide (-38%) and in both the UP (-41%) and LP (-34%) between 2015 and 2016 (Table 4). In addition, the proportion of furtakers registering a bobcat also declined significantly statewide and in both the UP or the LP.

Counties with 110 or more furtakers that pursued bobcats included Montmorency, Newaygo, Marquette, and Menominee (Table 5). Counties with 20 or more registered bobcats taken within that county included Menominee, Chippewa, Delta, and Alcona.

About  $27 \pm 1\%$  of furtakers reported the bobcat population was stable in the county where they preferred to hunt or trap bobcats, which was similar to the 2015 estimate (Figures 4-6). About  $14 \pm 1\%$  reported bobcat numbers were improving but  $8 \pm 1\%$  reported fewer bobcats. Nearly  $44 \pm 1\%$  of the furtakers were uncertain of the status of bobcats.

## Hunting

About  $25 \pm 1\%$  (1,846 hunters) of the tag-holders attempted to hunt bobcats during the 2016 seasons (Table 6). About 420 people hunted in the UP and 1,442 hunted in the LP. The hunters statewide had hunted bobcats an average of 8.6 years ( $\pm 0.5$  year). Bobcat hunters most frequently hunted on public land ( $58 \pm 2\%$ ). About  $47 \pm 2\%$  hunted bobcats on their own land or land owned by their family, while  $39 \pm 2\%$  of the hunters hunted on private land not owned by themselves or their family. Nearly  $25 \pm 2\%$  of the hunters hunted on public land only,  $42 \pm 2\%$  hunted on private land only, and  $33 \pm 2\%$  hunted on both public and private lands.

Hunters spent about 15,136 days afield hunting bobcats ( $\bar{x} = 8.2 \pm 0.4$  days/hunter) and registered an estimated 260 bobcats ( $\bar{x} = 0.14 \pm 0.01$  bobcats/hunter, Table 7). Hunters spent about 4,606 days afield hunting bobcats in the UP and 10,156 days hunting bobcats in the LP. The estimated number of days of effort per bobcat registered by hunters statewide was 58.2 days in 2016 (Table 8).

Hunters registered about 62% of the bobcats registered by furtakers (Figure 7). About 14% of the bobcat hunters statewide harvested at least one bobcat (Table 7). Nearly  $13 \pm 1\%$  of hunters registered only one bobcat and  $<1\%$  registered two bobcats. An estimated 17% of the hunters in the UP registered at least one bobcat;  $16 \pm 3\%$  of UP hunters registered one bobcat and  $1 \pm 1\%$  registered two bobcats. An estimated 12% of hunters in the LP registered a bobcat.

Counties with 80 or more hunters pursuing bobcats included Montmorency, Newaygo, Alcona, Mason, Missaukee, and Oscoda (Table 9). Counties with at least 15 hunter-registered bobcats originating from that county included Alcona and Menominee.

The number of hunters statewide and their hunting effort did not change significantly between 2015 and 2016 (Table 6). In addition, the number of times hunters passed up an opportunity to

take a bobcat, the number of bobcats registered, and hunter success did not change significantly statewide between 2015 and 2016 (Table 7).

The number of days of effort per bobcat registered by hunters statewide (58.2) was not statistically different from estimates for 2015 (52.3). In addition, hunting effort per bobcat was not significantly different in any of the management units between 2015 and 2016 (Table 8, Figure 8).

Hunters most frequently used calls ( $64 \pm 2\%$ ) or dogs ( $33 \pm 2\%$ ) to hunt bobcats (Table 10). Hunters using calls were responsible for 50% of the days spent hunting bobcats, and hunters using dogs were responsible for 37% of the effort (Figure 9). The estimated number of people hunting bobcats with dogs statewide in 2016 and their hunting effort was not significantly different from 2015 (Table 11). In addition, hunter success, the number of bobcats passed, and the number of bobcats registered by hunters using dogs statewide did not change significantly between 2015 and 2016 (Tables 11 and 12). Among hunters using calls, the estimated number of people hunting bobcats statewide and their hunting effort did not change significantly between 2015 and 2016 (Table 13). In addition, the number of bobcats passed and the proportion of hunters that registered a bobcat were not significantly different between 2015 and 2016 (Table 14). In contrast, the number of bobcats registered by hunters using calls declined significantly by 28% (154 bobcats in 2015 versus 110 bobcats in 2016). Among hunters using calls, less than 1% used a guide service ( $4 \pm 3$  hunters).

Bobcat hunters using dogs participated in an estimated  $2,744 \pm 338$  chases of bobcats statewide in 2016, which was not significantly different from 2015 (Figure 10). About  $26 \pm 2\%$  of the bobcat hunters had an opportunity to harvest a bobcat but chose not to harvest the bobcat, which was not significantly different from 2015. An estimated  $475 \pm 38$  hunters chose not to harvest bobcats on  $1,380 \pm 172$  occasions in 2016 (Figure 10). Among those hunters that passed up an opportunity to take a bobcat,  $42 \pm 4\%$  passed one bobcat,  $24 \pm 3\%$  passed two bobcats,  $12 \pm 3\%$  passed three bobcats,  $6 \pm 2\%$  passed four bobcats, and  $17 \pm 3\%$  passed five or more bobcats. The estimate of the number of bobcats passed by hunters should be viewed cautiously because hunting partners may have reported passing the same bobcat; thus, the estimate will be inflated by an unknown amount. An estimated  $7 \pm 2\%$  bobcat hunters that hunted with dogs hired a guide service to assist with their hunting ( $44 \pm 12$  hunters).

About  $35 \pm 2\%$  of bobcat hunters reported the bobcat population was stable in the county where they preferred to hunt, which was similar to the 2015 estimate (Figures 4-6). About  $20 \pm 2\%$  reported bobcat numbers were increasing but  $13 \pm 1\%$  reported fewer bobcats. Nearly  $26 \pm 2\%$  of bobcat hunters were uncertain of the status of bobcats.

The mean value of bobcat pelts was positively correlated with the number of days of effort per registered bobcat during 1997-2016 in the LP but not in the UP (Table 15). In addition, pelt prices were not significantly correlated with hunter numbers, hunting effort, or bobcats registered in either region.

## Trapping

An estimated  $15 \pm 1\%$  (1,129 trappers) of the tag-holders trapped bobcats during the 2016 season (Table 16), and these trappers had trapped bobcats an average of 7.2 years

( $\pm 0.6$  year). Most trappers trapped bobcats on private land owned by themselves or their family ( $52 \pm 3\%$ ). About  $38 \pm 3\%$  of trappers trapped on private lands not owned by themselves or their family and about  $37 \pm 3\%$  trapped on public land. About  $63 \pm 3\%$  trapped on private land only,  $17 \pm 2\%$  of the trappers trapped on public land only, and  $19 \pm 2\%$  trapped on both public and private lands.

Trappers spent about 14,570 days afield trapping bobcats ( $\bar{x} = 12.9 \pm 0.8$  days/trapper), caught 363 bobcats, registered 161 bobcats ( $\bar{x} = 0.14 \pm 0.02$  bobcats/trapper), and released 202 bobcats from their traps during the 2016 bobcat season (Table 16, Figure 11).

The number of trappers statewide declined significantly by 16% between 2015 and 2016. Additionally, trapping effort, the number of bobcats captured, and the number of bobcats registered by trappers declined significantly (Tables 16 and 17). The proportion of trappers registering a bobcat also declined significantly between 2015 and 2016 (24% in 2015 versus 12% in 2016, Table 18). The estimated number of days of effort per bobcat registered by trappers statewide in 2016 increased significantly from 2015 (50.1 days in 2015 versus 90.3 days in 2016; Table 19 and Figure 8). Regionally, trapper numbers and their effort declined significantly in the UP but were unchanged in the LP. The number of bobcats captured, the number of bobcats registered, and the proportions of trappers capturing and registering a bobcat declined significantly among trappers in both the UP and LP between 2015 and 2016. In addition, the estimated number of days of effort per bobcat registered by trappers in 2016 increased significantly from 2015 in both the UP and LP.

Trappers captured about 39% of the bobcats registered by furtakers (Figure 7). About 19% of bobcat trappers captured at least one bobcat and 12% registered at least one bobcat (Table 18). Nearly  $10 \pm 2\%$  of the trappers registered only one bobcat and  $2 \pm 1\%$  registered two bobcats. Nearly  $11 \pm 2\%$  of the bobcat trappers released a bobcat that they caught. They released 202 bobcats from their traps, which was not significantly different from the number released in 2015. About  $9 \pm 2\%$  of bobcat trappers caught a bobcat in a trap set for another furbearer during the open bobcat seasons (Figure 11).

Counties with 50 or more trappers pursuing bobcats included Marquette, Menominee, and Iron (Table 20). Chippewa, Ontonagon, and Dickinson were the only counties with more than 10 registered bobcats originating from that county.

Most trappers used foothold traps (86%), while 26% of the trappers used body gripping traps (e.g., conibears) (Table 21). Most trappers preferred to use foothold traps (61%), while 17% preferred to use conibears (Table 22). An estimated 17% of trappers did not have a preferred trap type.

About  $41 \pm 3\%$  of bobcat trappers reported the bobcat population was stable in the county where they preferred to trap bobcats (Figures 4-6). About  $21 \pm 2\%$  reported bobcat numbers were increasing but  $9 \pm 2\%$  reported fewer bobcats. Nearly  $26 \pm 2\%$  of bobcat trappers were uncertain of the status of bobcats.

The mean value of bobcat pelts was positively correlated with the number of trappers and their days spent afield during 1997-2016 in the UP, but not in the LP (Table 23). In contrast, the

mean value of bobcat pelts was not significantly correlated with the number of bobcats registered and effort per bobcat registered in either region.

## DISCUSSION

Furtakers could obtain harvest tags earlier in 2016 than in 2015 (starting on May 1 in 2016 versus September 1 in 2015). In addition, tags were not available once the earliest bobcat season had begun in 2016 (i.e., December 1), while the tags were available during the entire season in 2015. The DNR emphasized these changes to furtakers during 2016 which may have contributed to the 16% increase in tags distributed in 2016.

Many factors influence bobcat harvest trends including furtaker numbers, bobcat numbers, harvest regulations, habitat conditions, weather, and fur prices; thus, any interpretations of trends should be viewed cautiously. Moreover, estimates of events that occur infrequently (e.g., harvesting a bobcat) are difficult to estimate precisely using common sampling designs (Cochran 1977). Relatively few furtakers harvest bobcat; thus, estimates from the statewide fur harvesters survey from previous years often have been imprecise (Frawley 2001). Beginning with the 2004-2005 bobcat season, however, all licensed furtakers attempting to harvest a bobcat in Michigan were required to obtain a free bobcat harvest tag from the DNR. Beginning with the 2004 season, the DNR has used these lists of tag holders to design surveys that result in more precise estimates.

Using indices to monitor wildlife populations is a standard practice in wildlife management, and most states use a variety of indices for evaluating furbearer populations. The DNR considers the logistics of data collection, data reliability, ability of the index to detect population change, and cost when selecting an index. Historical, long-term data sets are also valuable for evaluating changes in harvest regulations over time. The DNR uses several indices to monitor the bobcat populations and to recommend changes in bobcat harvest regulations to the NRC. Each of these indices measures an attribute of the bobcat population and independently can be used to monitor changes in population status. Use of multiple indices strengthens the assessment of population status.

Bobcat hunting seasons in the UP were shortened by 31 days (34% reduction) and trapping seasons in the UP were shortened by 65 days (51% reduction) in 2009 (Tables 1 and 2); thus, hunting and trapping effort also declined in 2009 statewide (Figure 3). The number of furtakers participating in bobcat hunting and trapping seasons and their days afield also declined during the last two years (Figure 3). This decrease was primarily driven by a decreased number of trappers.

In 2016, the estimated number of bobcats registered by both hunters and trappers combined was the lowest recorded during 2003-2016 (Figure 3). In addition, trapper success (i.e., registered at least one bobcat) was the lowest recorded during 2003-2016.

The estimated effort per registered bobcat in 2016 was not significantly different from 2015 for hunters but was significantly greater for trappers (Figure 8). The amount of effort per bobcat registered was a measure of how difficult it was to capture a bobcat and may be an indirect measure of the abundance of bobcats. Similar estimates among hunters during the last two

years suggested that bobcat numbers were similar in both 2015 and 2016; however, the increased effort required to take a bobcat among trappers suggested conditions had changed. Other population indices measured by trappers (i.e., proportion of trappers that released a bobcat and the proportion of trappers that caught an incidental bobcat) did not decline significantly between 2015 and 2016; thus, the change in effort per registered bobcat may not be directly related to differences in bobcat numbers.

The numbers of bobcat harvested by trappers in Minnesota (Erb 2017), Michigan, and Pennsylvania (Lovallo 2017) declined sharply between 2015 and 2016; however, harvest by hunters in each state was relatively unchanged. This pattern may reflect the effect of declining fur prices because trappers appear more sensitive to changing fur prices than hunters (Tables 15 and 23).

The number of furtakers pursuing bobcats in the LP was about 2.2 times the number in the UP. In contrast, the number of days devoted to pursuing bobcats was about the same in both the UP and LP (Table 3).

About 3.4 times more people attempted to hunt bobcats in the LP than in the UP in 2016 (Table 6), although the season was shorter in the LP (Table 1). Hunters in the LP spent 2.2 times as many days hunting bobcats than their counterparts in the UP. Hunters in the LP had more occasions where they chose not to harvest a bobcat than hunters in the UP (Table 7); however, the proportion of hunters registering at least one bobcat was about the same (17% and 12%) in the both the UP and LP.

About 1.2 times more people attempted to trap bobcats in the LP than in the UP in 2016 (Table 16); however, trappers in the UP spent 2.3 times more days trapping bobcats than their counterparts in the LP. Trappers in the UP spent more days trapping bobcats than in the LP because the UP season was longer (Table 2).

Since 2003, the number of bobcats registered by trappers has usually been greater than or equal to the number of bobcats registered by hunters (Figure 3). In 2016, however, hunters registered more than trappers (260 bobcats registered by hunters versus 161 registered by trappers). Bobcat hunters devoted an average of 58.2 days of effort per bobcat registered, which was significantly less than the 90.3 days of effort per bobcat registered by trappers.

A higher proportion of hunters that used dogs were successful than hunters using calls, and the difference was significant (18% of hunters using dogs registered a bobcat versus 9% of hunters using calls, Table 10). Hunters using dogs normally have had significantly higher success than hunters using calls in Michigan (Frawley 2017). Lovallo (2011) reported a mean success rate of 39% for hunters using dogs in Pennsylvania during 2000-2008, while the mean success rate for hunters using calls in Pennsylvania was 14%. Kitchell and Olson (2005, 2006, 2007) and Dhuey and Olson (2008, 2009) reported 42-79% ( $\bar{x} = 59\%$ ) of hunters using dogs registered a bobcat in Wisconsin during 2004-2008, while 18-48% ( $\bar{x} = 28\%$ ) of hunters not using dogs registered a bobcat.

About 10.6% of the bobcat trappers in Michigan released a bobcat from their traps set during the 2016 season, which was not significantly different from 2015 (11.4% in 2015,



Frawley 2017). In comparison, 6-27% ( $\bar{x} = 11\%$ ) of Wisconsin bobcat trappers released a bobcat from their traps during 2006-2016 in Wisconsin (e.g., Lohr et al. 2016).

## **ACKNOWLEDGEMENTS**

We thank all the hunters and trappers that provided information. Theresa Riebow completed data entry. Marshall Strong prepared the figure of bobcat management units. Adam Bump, Mike Donovan, and Dwayne Etter reviewed a draft version of this report.

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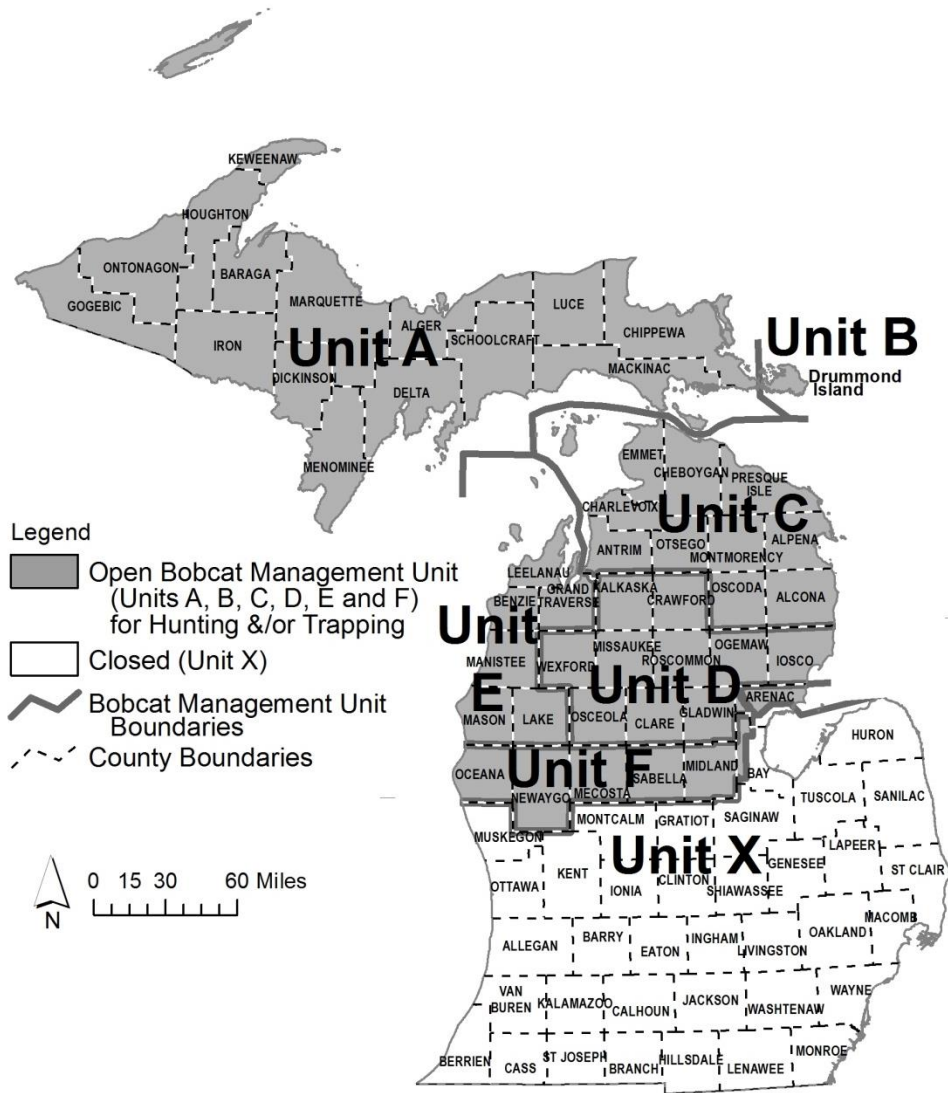
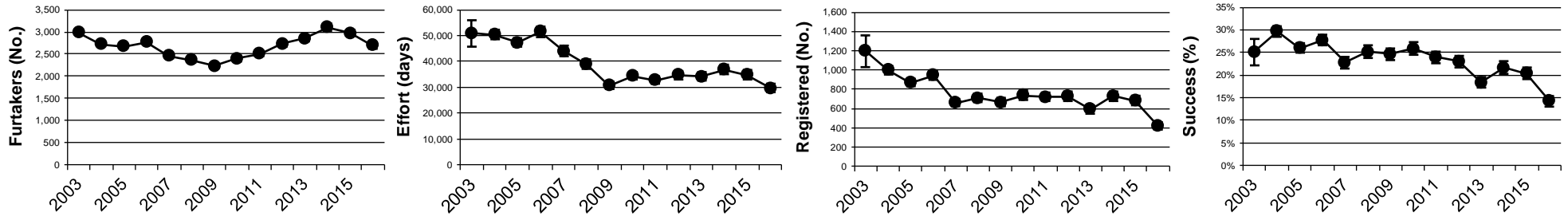


Figure 1. Bobcat Management Units in Michigan for the 2016 hunting and trapping seasons.

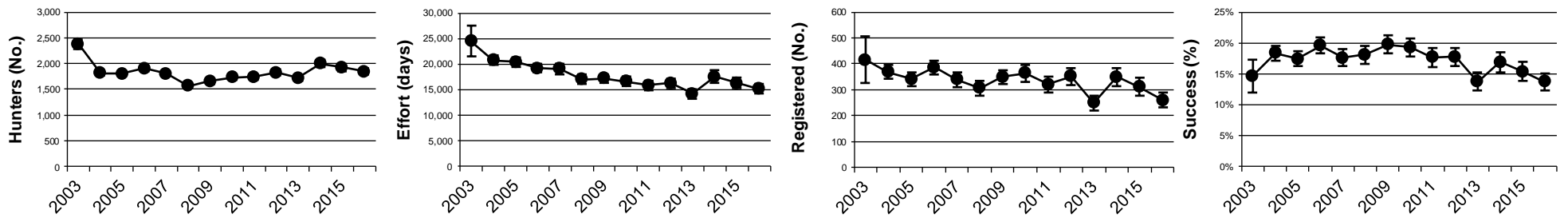


Figure 2. Proportion of active furtakers that attempted to take a bobcat via hunting or trapping methods in Michigan during 2016.

### Hunting and trapping combined



### Hunting



### Trapping

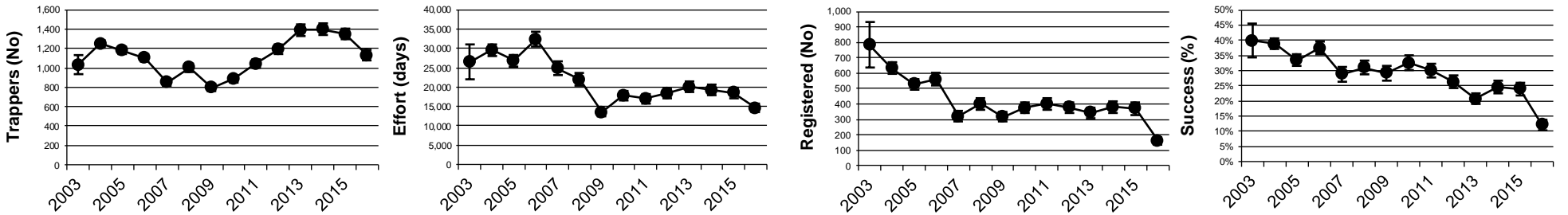


Figure 3. Number of furtakers pursuing bobcats, number of days of effort, number of bobcats registered, and proportion of furtakers registering a bobcat in Michigan during 2003-2016, summarized by method of take. Number of hunters and trappers does not add up to statewide total of hunters and trappers combined because a person could both hunt and trap bobcats. Vertical bars represent the 95% CL.

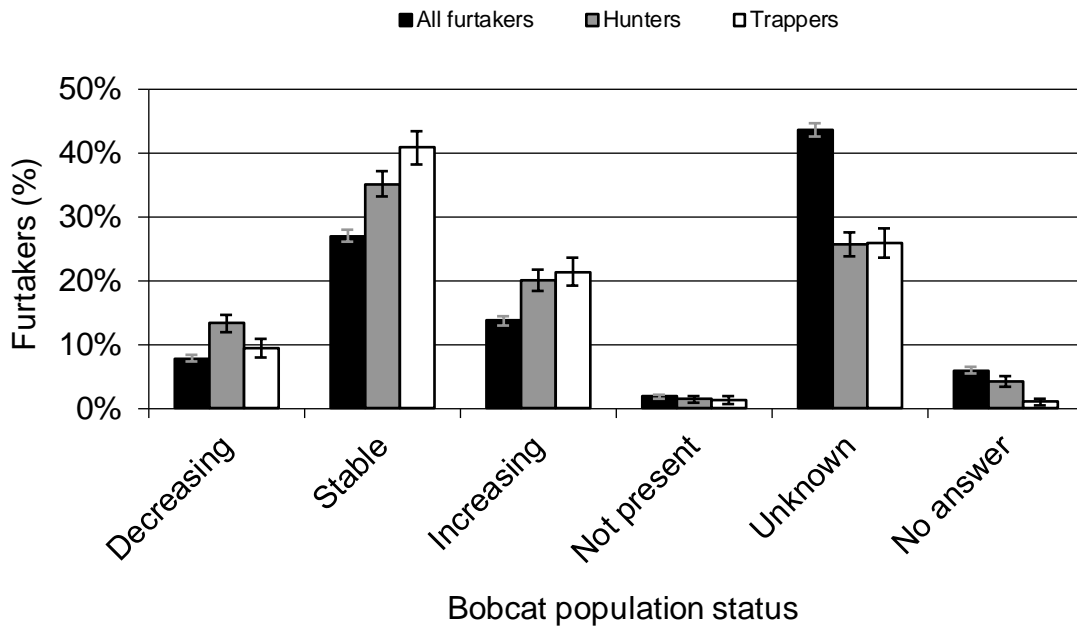


Figure 4. Status of bobcats in Michigan during 2016 as described by bobcat hunters and trappers. Vertical bars represent the 95% CL.

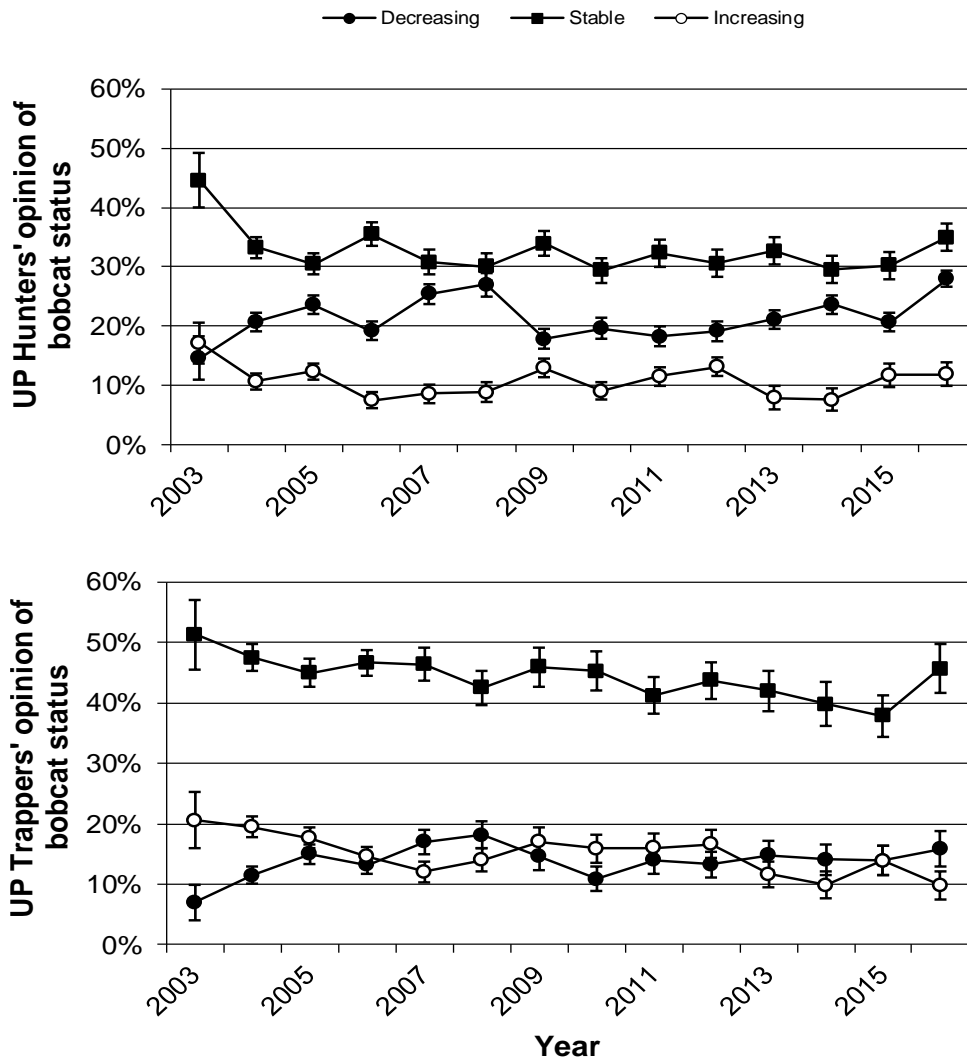


Figure 5. Status of bobcat population in Michigan as described by bobcat hunters and trappers in the Upper Peninsula, 2003-2016. Vertical bars represent the 95% CL.

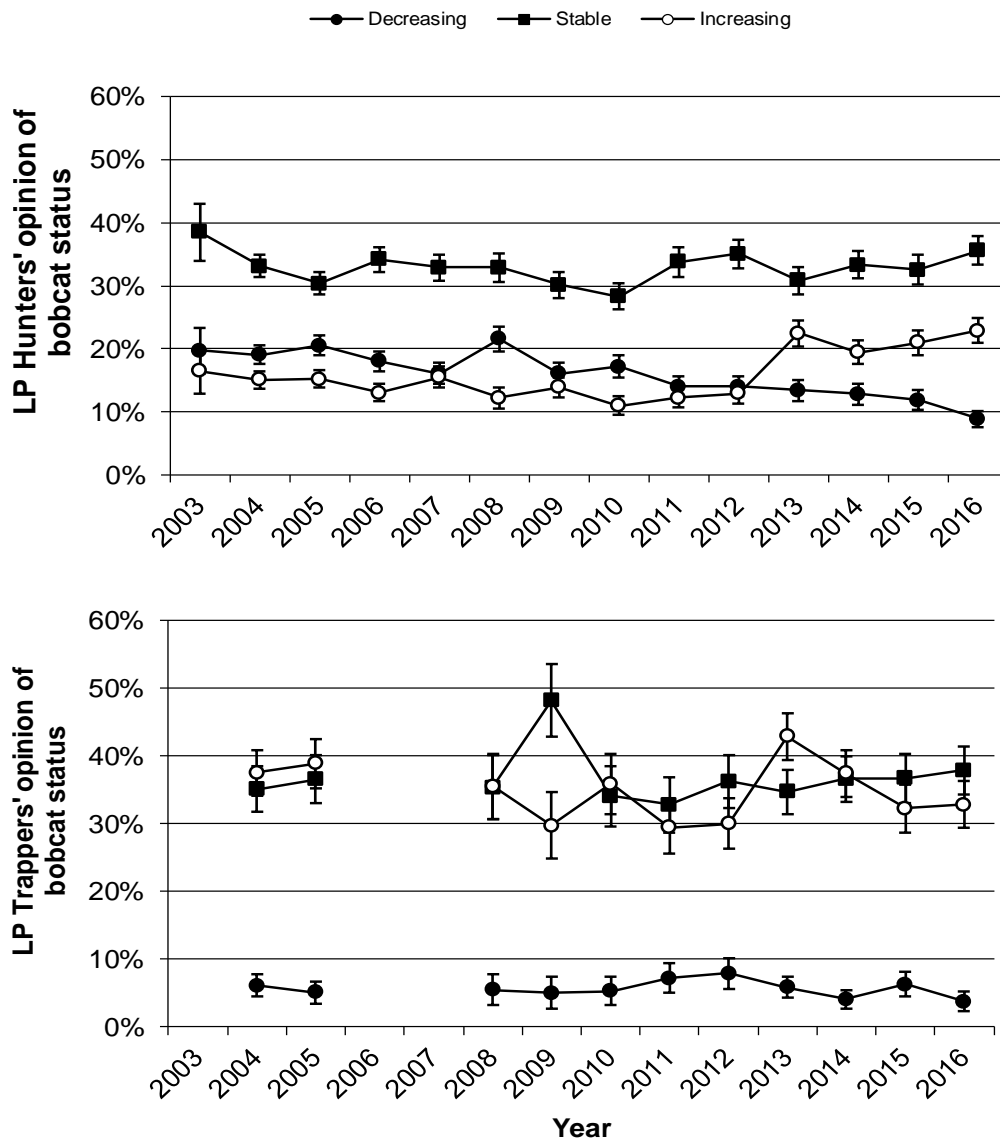


Figure 6. Status of bobcat population in Michigan as described by bobcat hunters and trappers in the Lower Peninsula, 2003-2016. Vertical bars represent the 95% CL. Bobcat could be harvested by trappers in portions of the LP during 2004-2005 and 2008-2016 only.



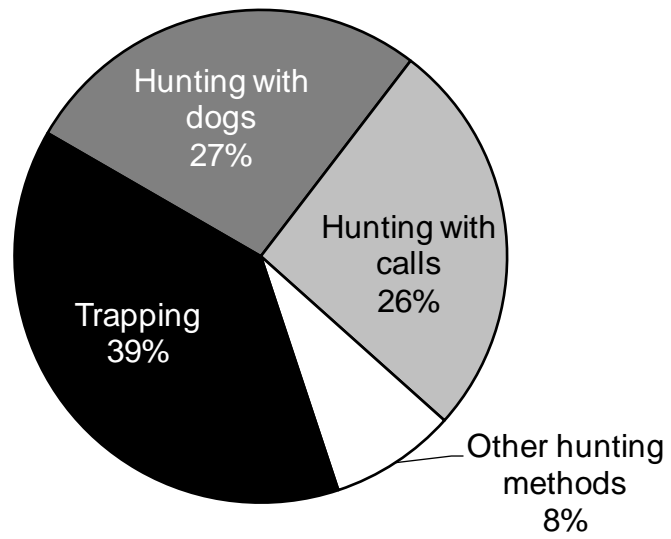


Figure 7. Proportion of bobcats registered in Michigan during 2016, summarized by method of take.

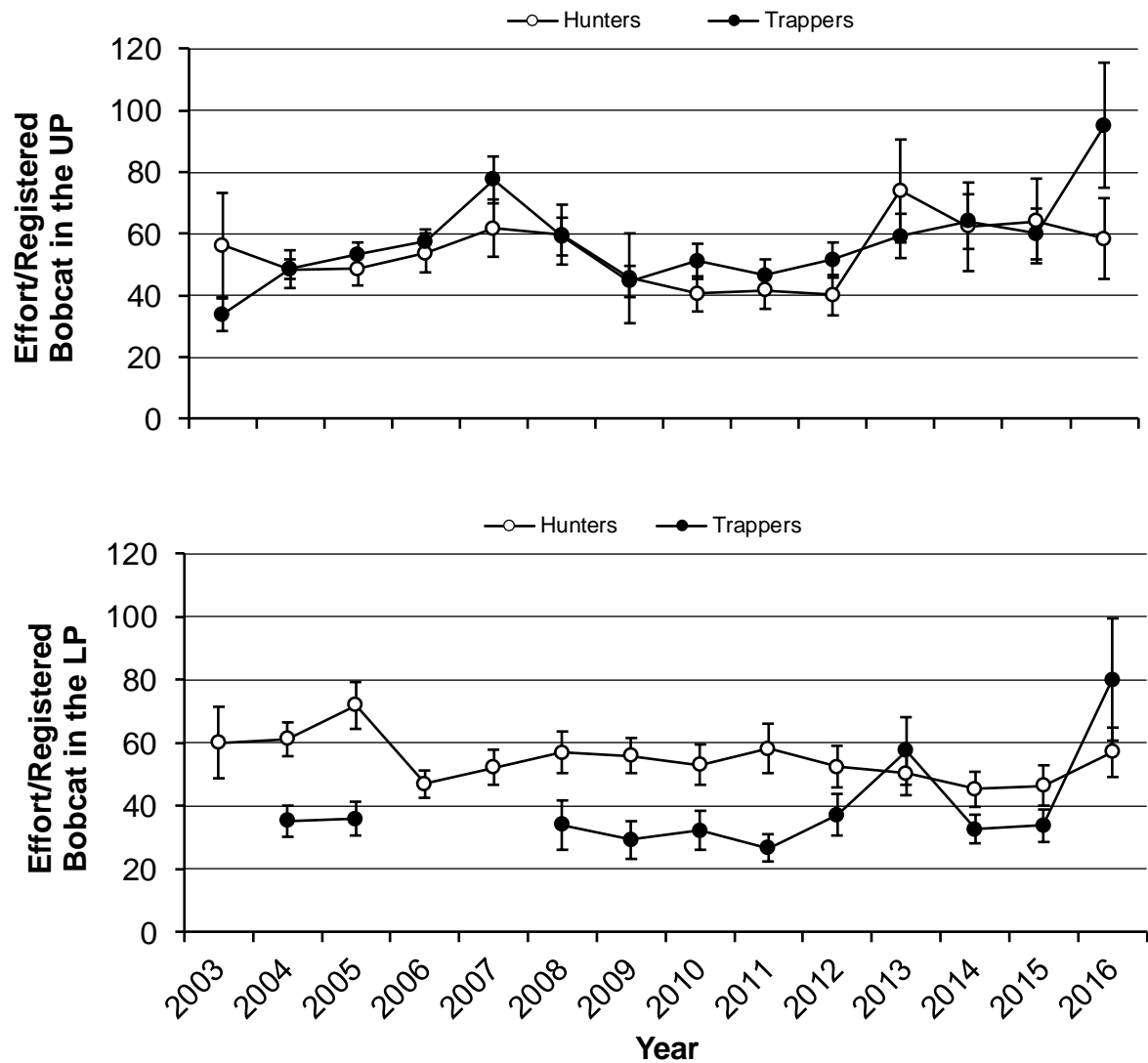


Figure 8. Estimated number of days of effort per bobcat registered in Michigan by hunters and trappers for the 1997-2016 seasons, summarized by region. Vertical error bars represent the 95% CL. Bobcat could be harvested by trappers in portions of the LP during 2004-2005 and 2008-2016 only.

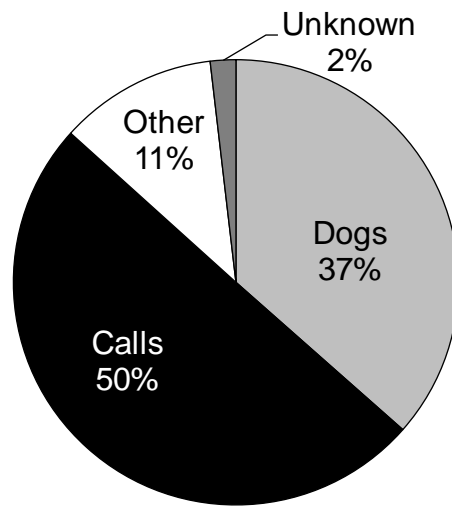


Figure 9. The proportion of hunting effort among the various hunting methods used in Michigan during 2016.

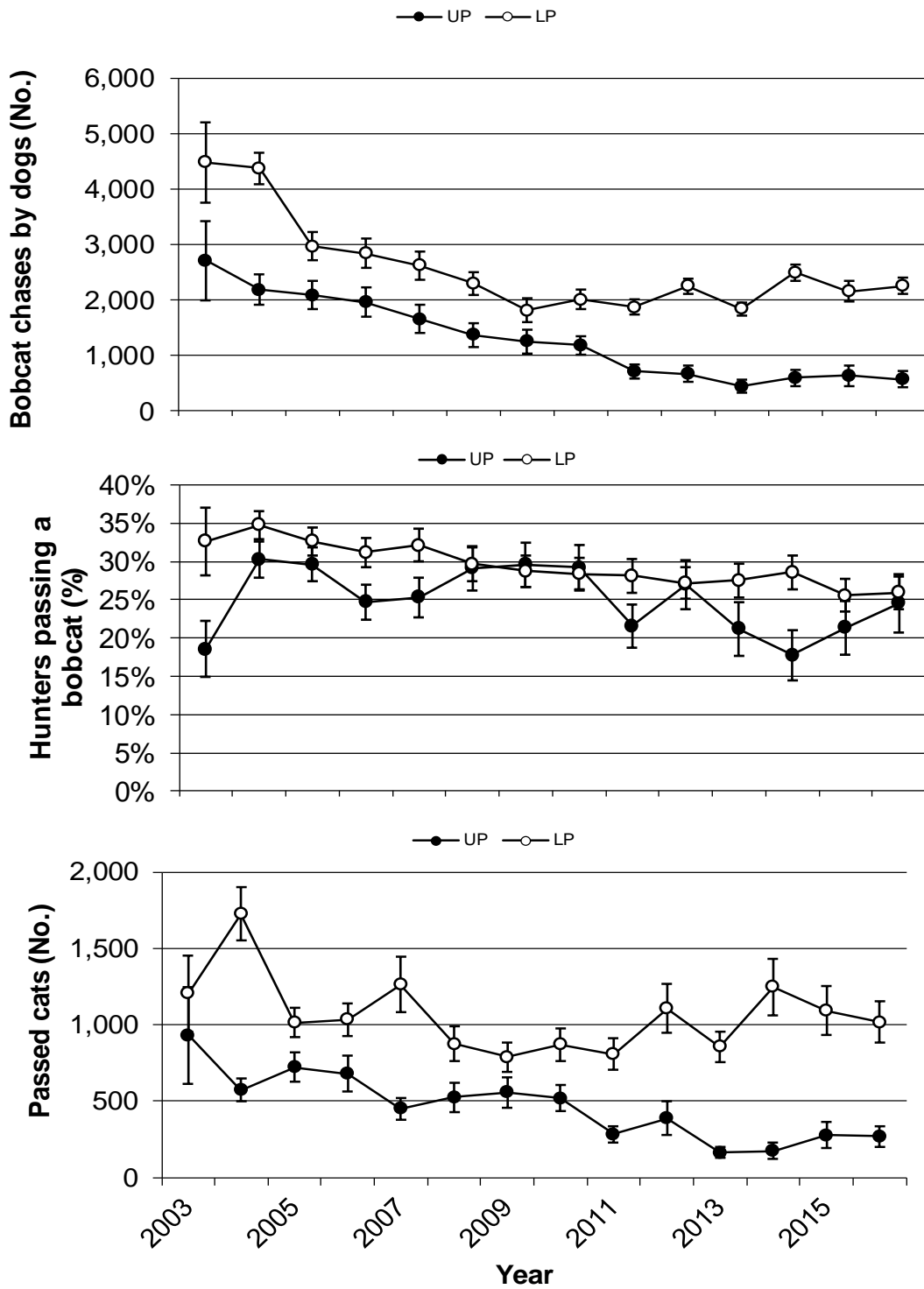


Figure 10. Number of bobcat chases by dogs, proportion of hunters passing a bobcat (bobcats within range or treed but not harvested), and number of bobcats passed by hunters (all types of hunting) in Michigan, 2003-2016. Vertical bars represent the 95% CL.

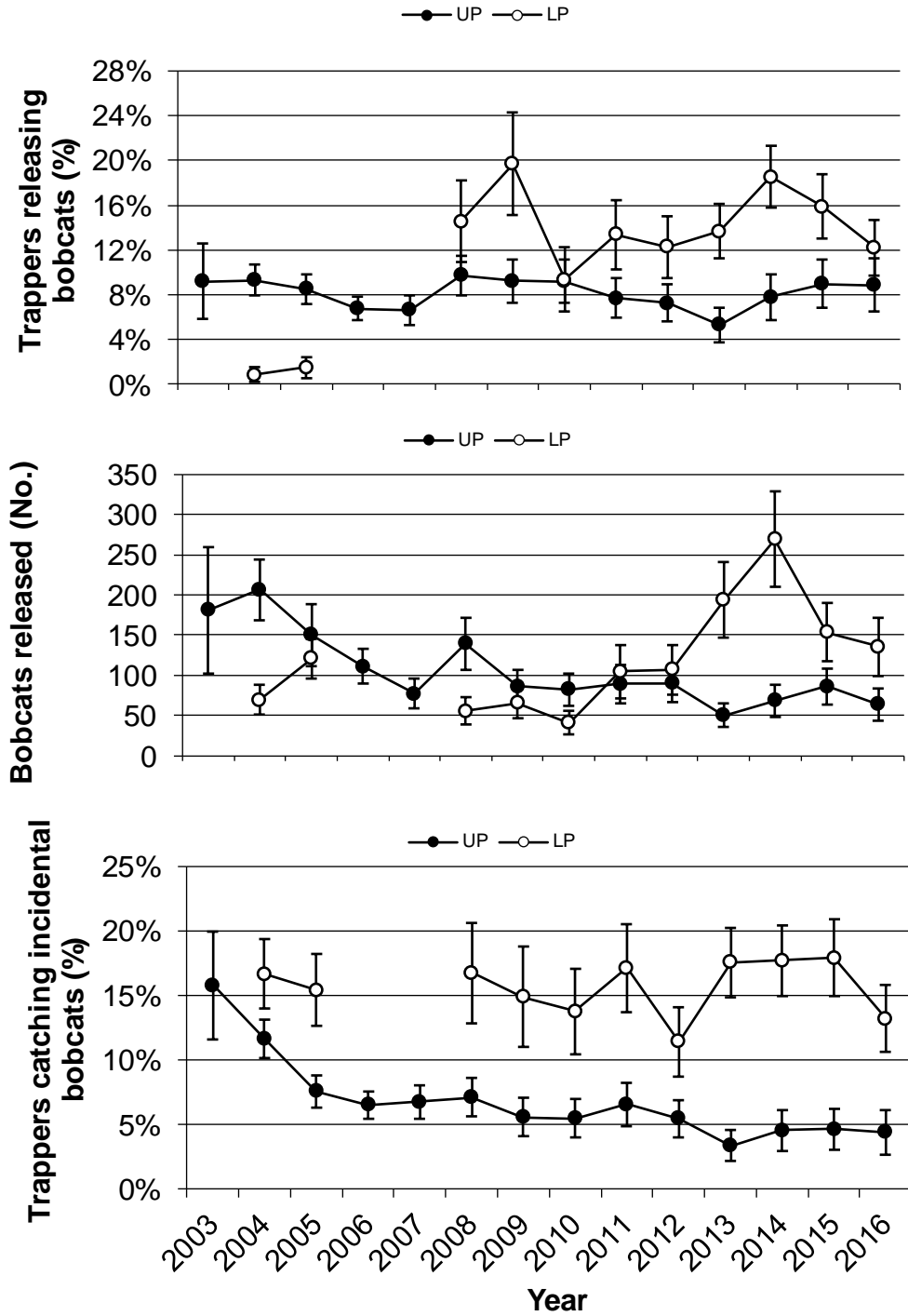


Figure 11. Number of trappers releasing bobcats from their traps, number of bobcats released from traps, and proportion of trappers that caught a bobcat in a trap set for another species (incidental catch) in Michigan, 2003-2016. Trapping of bobcat in the LP was permitted in 2004-2005 and 2008-2016 only. Vertical bars represent the 95% CL.

Table 1. Resident bobcat **hunting** season dates and seasonal bag limits in Michigan, 1989-2016.

Year	Bobcat management unit									
	State-wide bag limit <sup>a</sup>	Upper Peninsula				Lower Peninsula				
		Unit A <sup>b</sup>		Unit B <sup>c</sup>		Unit C <sup>d</sup>	Unit D <sup>e</sup>	Unit E <sup>f</sup>	Unit F <sup>g</sup>	
	Season dates	Bag limit <sup>a</sup>	Season dates	Bag limit <sup>a</sup>	Season dates	Season dates	Season dates	Season dates	Season dates	Bag limit <sup>a</sup>
1989	1	10/25-3/1	1	Closed	0	1/1-3/1	1/1-2/1	Closed	Closed	1
1990	1	10/25-3/1	1	Closed	0	1/1-3/1	1/1-2/1	Closed	Closed	1
1991	1	10/25-3/1	1	Closed	0	1/1-3/1	1/15-2/16	Closed	Closed	1
1992	1	10/25-3/1	1	Closed	0	1/1-3/1	1/15-2/16	Closed	Closed	1
1993	1	10/25-3/1	1	Closed	0	1/1-3/1	1/15-2/16	Closed	Closed	1
1994	2	10/25-3/1	2	Closed	0	1/1-3/1	1/15-2/16	Closed	Closed	1
1995	2	10/25-3/1	2	10/25-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
1996	3	10/25-3/1	3	10/25-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
1997	3	10/25-3/1	3	10/25-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
1998	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
1999	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
2000	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
2001	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
2002	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
2003	3	12/1-3/1	3	12/1-3/1	1	1/1-3/1	1/15-2/16	Closed	Closed	1
2004	2	12/1-3/1	2	12/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2005	2	12/1-3/1	2	12/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2006	2	12/1-3/1	2	12/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2007	2	12/1-3/1	2	12/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2008	2	12/1-3/1	2	12/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2009	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2010	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2011	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2012	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	Closed	Closed	1
2013	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	1/1-11	1/1-11	1
2014	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	1/1-11	1/1-11	1
2015	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	1/1-11	1/1-11	1
2016	2	1/1-3/1	2	1/1-3/1	1	1/1-3/1	1/1-2/1	1/1-11	1/1-11	1

<sup>a</sup>The statewide bag limit was the maximum number of bobcats that could be taken per person from all zones (hunting and trapping combined), and the bag limit for each zone was the maximum number that could be taken within a zone (hunting and trapping combined).

<sup>b</sup>Excluded Drummond Island in the Upper Peninsula.

<sup>c</sup>Drummond Island only.

<sup>d</sup>During 1989-2016, Unit C included Alpena, Antrim, Charlevoix, Cheboygan, Emmet, Montmorency, Otsego, and Presque Isle. Alcona and Oscoda counties were added during 1991-2016.

<sup>e</sup>During 1989-2016, Unit D included Clare, Crawford, Gladwin, Iosco, Kalkaska, Missaukee, Ogemaw, Osceola, Roscommon, and Wexford counties, and Arenac County west of Highway I-75 and north of Highway M-61. Unit D also included Alcona and Oscoda counties during 1989-1990.

<sup>f</sup>Unit E included Leelanau, Benzie, Grand Traverse, Manistee, Mason, and Lake counties.

<sup>g</sup>Unit F included the counties of Oceana, Newaygo, Mecosta, Isabella, Midland, and portions of Bay and Arenac.

Table 2. Resident bobcat **trapping** season dates and seasonal bag limits in Michigan, 1989-2016.

Year	Bobcat management unit									
	State-wide bag limit <sup>a</sup>	Upper Peninsula				Lower Peninsula				
		Unit A <sup>b</sup>		Unit B <sup>c</sup>		Unit C <sup>d</sup>	Unit D <sup>e</sup>	Unit E <sup>f</sup>	Unit F <sup>g</sup>	
	Season dates	Bag limit <sup>a</sup>	Season dates	Bag limit <sup>a</sup>	Season dates	Season dates	Season dates	Season dates	Season dates	Bag limit <sup>a</sup>
1989	1	10/25-3/1	1	Closed	0	Closed	Closed	Closed	Closed	1
1990	1	10/25-3/1	1	Closed	0	Closed	Closed	Closed	Closed	1
1991	1	10/25-3/1	1	Closed	0	Closed	Closed	Closed	Closed	1
1992	1	10/25-3/1	1	Closed	0	Closed	Closed	Closed	Closed	1
1993	1	10/25-3/1	1	Closed	0	Closed	Closed	Closed	Closed	1
1994	2	10/25-3/1	2	Closed	0	Closed	Closed	Closed	Closed	1
1995	2	10/25-3/1	2	10/25-3/1	1	Closed	Closed	Closed	Closed	1
1996	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
1997	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
1998	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
1999	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2000	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2001	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2002	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2003	3	10/25-3/1	3	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2004	2	10/25-3/1	2	10/25-3/1	1	12/10-20	12/10-20	Closed	Closed	1
2005	2	10/25-3/1	2	10/25-3/1	1	12/10-20	12/10-20	Closed	Closed	1
2006	2	10/25-3/1	2	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2007	2	10/25-3/1	2	10/25-3/1	1	Closed	Closed	Closed	Closed	1
2008	2	10/25-3/1	2	10/25-3/1	1	12/10-20	12/10-20	Closed	Closed	1
2009	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	Closed	Closed	1
2010	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	Closed	Closed	1
2011	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	Closed	Closed	1
2012	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	Closed	Closed	1
2013	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	12/10-20	12/10-20	1
2014	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	12/10-20	12/10-20	1
2015	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	12/10-20	12/10-20	1
2016	2	12/1-2/1	2	12/1-2/1	1	12/10-20	12/10-20	12/10-20	12/10-20	1

<sup>a</sup>The statewide bag limit was the maximum number of bobcats that could be taken per person from all zones (hunting and trapping combined), and the bag limit for each zone was the maximum number that could be taken within a zone (hunting and trapping combined).

<sup>b</sup>Excluded Drummond Island in the Upper Peninsula.

<sup>c</sup>Drummond Island only.

<sup>d</sup>During 1989-2016, Unit C included Alpena, Antrim, Charlevoix, Cheboygan, Emmet, Montmorency, Otsego, and Presque Isle. Alcona and Oscoda counties were added during 1991-2016.

<sup>e</sup>During 1989-2016, Unit D included Clare, Crawford, Gladwin, Iosco, Kalkaska, Missaukee, Ogemaw, Osceola, Roscommon, and Wexford counties, and Arenac County west of Highway I-75 and north of Highway M-61. Unit D also included Alcona and Oscoda counties during 1989-1990.

<sup>f</sup>Unit E included Leelanau, Benzie, Grand Traverse, Manistee, Mason, and Lake counties.

<sup>g</sup>Unit F included the counties of Oceana, Newaygo, Mecosta, Isabella, Midland, and portions of Bay and Arenac.

Table 3. Estimated number of furtakers (hunters and trappers combined) pursuing bobcat and their hunting and trapping effort (days combined) in Michigan for 2015 and 2016, summarized by area.

Area	Furtakers <sup>a</sup>					Hunting and trapping effort				
	Year		Change (%)	Year		Change (%)				
	2015	2016		2015	2016					
No.	95 CL	No.	95 CL	Days	95 CL	Days	95 CL			
Upper Peninsula	1,005	53	816	48	-19*	19,248	1,535	14,711	1,386	-24*
Lower Peninsula	1,851	67	1,816	66	-2	14,650	901	14,562	813	-1
Unit C	653	44	629	43	-4	6,179	686	5,640	604	-9
Unit D	658	45	720	46	9	4,454	452	5,273	455	18
Unit E	324	32	293	30	-10	1,678	217	1,611	209	-4
Unit F	396	35	361	33	-9	2,338	268	2,038	241	-13
Unspecified	176	24	108	18	-39*	874	285	433	190	-51
Statewide	2,969	73	2,693	74	-9*	34,772	1,722	29,706	1,572	-15*

<sup>a</sup>Number of furtakers does not add up to statewide total because furtakers could hunt in more than one area.

\*P<0.005.

Table 4. Estimated number of bobcats registered by furtakers (hunters and trappers combined) and proportion of furtakers registering at least one bobcat in Michigan during 2015 and 2016, summarized by area.

Area	Bobcats registered <sup>a</sup>					Furtakers registering a bobcat				
	Year		Change (%)	Year		Difference (%)				
	2015	2016		2015	2016					
No.	95 CL	No.	95 CL	%	95 CL	%	95 CL			
Upper Peninsula	315	38	185	28	-41*	25	3	18	2	-7*
Lower Peninsula	351	34	233	27	-34*	18	2	13	1	-6*
Unit C	103	19	86	17	-16	15	3	14	2	-2
Unit D	101	18	84	16	-17	15	3	12	2	-4
Unit E	77	16	27	9	-64*	24	4	9	3	-14
Unit F	69	15	35	11	-50*	18	4	10	3	-8*
Unspecified	15	9	4	3	-76	6	3	3	3	-3
Statewide	681	51	422	39	-38*	20	1	14	1	-6*

<sup>a</sup>Although all furtakers harvesting a bobcat were required to present their animals at a DNR office for registration, this survey does not present information collected from registered bobcats.

\*P<0.005.



Table 5. Estimated number of furtakers (hunters and trappers combined) attempting to capture a bobcat, days spent afield (effort), bobcats registered, and proportion of furtakers that registered a bobcat during 2016 in Michigan, summarized by county.

County	Furtakers <sup>a</sup>		Hunting and trapping effort (days)		Bobcats registered		Furtakers that registered a bobcat	
	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL
Alcona	101	18	753	178	20	8	20	7
Alger	37	11	433	171	2	2	5	6
Alpena	84	16	821	211	15	7	17	7
Antrim	26	9	200	116	2	2	7	9
Arenac	22	8	143	77	2	2	8	11
Baraga	42	12	499	156	4	3	9	8
Bay	4	3	20	19	0	0	0	0
Benzie	27	9	123	48	2	2	7	9
Charlevoix	42	12	449	163	2	2	4	6
Cheboygan	71	15	658	217	5	4	8	6
Chippewa	62	14	1,080	348	24	11	29	10
Clare	86	17	654	179	7	5	9	5
Crawford	68	15	464	134	4	3	5	5
Delta	104	18	1,620	396	20	9	16	6
Dickinson	70	15	1,078	328	15	8	16	8
Emmet	31	10	236	94	5	4	18	12
Gladwin	70	15	563	168	2	2	3	3
Gogebic	48	12	1,010	338	15	9	19	10
Gd. Traverse	44	12	233	82	2	2	4	5
Houghton	29	10	328	135	7	6	19	13
Iosco	64	14	422	122	2	2	3	4
Iron	93	17	2,069	546	13	6	14	6
Isabella	31	10	130	53	2	2	6	8
Kalkaska	57	13	341	132	16	7	29	11
Keweenaw	2	2	18	24	0	0	0	0

<sup>a</sup>Number of furtakers does not add up to statewide total because furtakers could hunt and trap in more than one county.

Table 5 (Continued). Estimated number of furtakers (hunters and trappers combined) attempting to capture a bobcat, days spent afield (effort), bobcats registered, and proportion of furtakers that registered a bobcat during 2016 in Michigan, summarized by county.

County	Furtakers <sup>a</sup>		Hunting and trapping effort (days)		Bobcats registered		Furtakers that registered a bobcat	
	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL
Lake	70	15	319	83	9	5	13	7
Leelanau	26	9	81	38	2	2	7	9
Luce	38	11	517	182	11	8	19	11
Mackinac	84	16	1,048	398	18	8	22	8
Manistee	62	14	334	93	5	4	9	6
Marquette	110	19	1,301	284	9	7	5	4
Mason	97	18	522	126	7	5	8	5
Mecosta	108	18	565	117	7	5	7	4
Menominee	110	19	2,154	453	24	9	20	7
Midland	22	8	150	67	2	2	8	11
Missaukee	104	18	552	117	15	7	14	6
Montmorency	137	21	828	184	11	6	8	4
Newaygo	119	19	726	149	13	6	11	5
Oceana	101	18	447	101	11	6	11	6
Ogemaw	82	16	488	116	13	6	16	7
Ontonagon	53	13	757	282	13	7	21	10
Osceola	93	17	664	154	15	7	16	7
Oscoda	95	17	592	156	5	4	6	4
Otsego	57	13	313	99	9	5	16	9
Presque Isle	82	16	788	235	11	6	13	7
Roscommon	97	18	495	117	4	3	4	3
Schoolcraft	66	14	799	261	11	7	14	8
Wexford	84	16	489	114	5	4	7	5
Unspecified	108	18	433	190	4	3	3	3

<sup>a</sup>Number of furtakers does not add up to statewide total because furtakers could hunt and trap in more than one county.

Table 6. Estimated number of bobcat hunters and hunting effort (days) in Michigan for 2015 and 2016, summarized by area.

Area	Hunters <sup>a</sup>					Hunting effort				
	Year		Year		Change (%)	Year		Year		Change (%)
	2015	2016	2015	2016		2015	2016	2015	2016	
No.	95% CL	No.	95% CL	Days	95% CL	Days	95% CL			
Upper Peninsula	465	38	420	36	-10	5,414	706	4,606	606	-15
Lower Peninsula	1,433	61	1,442	61	1	10,205	805	10,156	706	0
Unit C	553	41	539	40	-3	5,136	649	4,694	568	-9
Unit D	527	40	559	41	6	3,004	353	3,545	361	18
Unit E	246	28	236	27	-4	983	146	1,003	138	2
Unit F	257	29	255	28	-1	1,082	168	915	125	-15
Unspecified	84	17	40	11	-52*	658	232	374	182	-43
Statewide	1,926	67	1,846	67	-4	16,278	1,080	15,136	941	-7

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

\*P<0.005.

Table 7. Estimated number of bobcats passed, bobcats registered by hunters, and proportion of hunters that registered at least one bobcat in Michigan for 2015 and 2016, summarized by area.

Area	Bobcats passed					Bobcats registered					Hunters that registered a bobcat				
	Year		Year		Change (%)	Year		Year		Change (%)	Year		Year		Difference (%)
	2015	2016	2015	2016		2015	2016	2015	2016		2015	2016			
No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL	%	95% CL		
Upper Peninsula	278	84	269	67	-3	84	18	79	17	-7	17	3	17	3	1
Lower Peninsula	1,091	160	1,017	134	-7	219	27	178	24	-19	15	2	12	2	-3
Unit C	375	71	440	95	17	73	16	71	15	-2	13	3	13	3	0
Unit D	326	66	258	51	-21	81	16	62	14	-23	15	3	11	2	-4
Unit E	171	63	163	52	-4	36	11	22	8	-38	15	4	9	3	-5
Unit F	219	72	156	52	-29	30	10	22	8	-27	12	4	9	3	-3
Unspecified	158	87	93	73	-41	8	5	4	3	-51	9	6	9	8	0
Statewide	1,526	205	1,380	172	-10	311	33	260	29	-16	15	2	14	1	-2

P<0.005.

Table 8. Estimated number of days of effort per bobcat registered by hunters in Michigan during 2014-2016, summarized by year and area.

Area	Year						Change between 2015 and 2016 (%)
	2014		2015		2016		
	Effort per registered bobcat	95% CL	Effort per registered bobcat	95% CL	Effort per registered bobcat	95% CL	
Upper Peninsula	62.4	14.3	64.2	13.7	58.4	13.1	-9
Lower Peninsula	45.4	5.4	46.5	6.2	57.1	7.8	23
Unit C	48.6	9.0	70.2	15.9	65.7	14.3	-6
Unit D	42.5	7.9	37.3	7.8	56.9	13.0	53
Unit E	46.5	17.4	27.6	8.3	45.6	17.3	65
Unit F	39.7	15.4	36.1	12.0	41.6	15.5	15
Unspecified	108.5	111.3	87.8	57.2	102.0	69.8	16
Statewide	50.2	5.5	52.3	5.9	58.2	6.8	11

\*P<0.005. Comparison between 2015 and 2016.

Table 9. Estimated number of hunters, hunting effort (days), bobcats passed, bobcats registered, and proportion of hunters that registered a bobcat in Michigan during 2016, summarized by county.

County	Hunters <sup>a</sup>		Hunting effort (days)		Bobcats passed by hunters <sup>b</sup>		Bobcats registered by hunters		Hunters that registered at least one bobcat	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL
Alcona	90	17	649	165	46	20	16	7	18	7
Alger	22	8	170	105	0	0	2	2	8	11
Alpena	75	15	706	195	68	36	13	6	17	8
Antrim	20	8	174	113	11	8	2	2	9	11
Arenac	18	8	97	58	13	17	2	2	10	13
Baraga	16	7	128	65	16	16	0	0	0	0
Bay	0	0	0	0	0	0	0	0	0	0
Benzie	16	7	59	31	11	12	0	0	0	0
Charlevoix	38	11	422	160	49	26	2	2	5	6
Cheboygan	64	14	574	207	51	29	5	4	9	6
Chippewa	20	8	134	66	9	7	4	3	18	15
Clare	53	13	378	138	5	4	4	3	7	6
Crawford	51	13	301	99	15	9	4	3	7	6
Delta	70	15	742	246	75	43	13	7	16	8
Dickinson	42	12	390	134	31	15	4	3	9	8
Emmet	22	8	172	83	49	48	4	3	17	14
Gladwin	62	14	462	145	15	9	2	2	3	4
Gogebic	13	6	86	46	2	2	5	5	29	23
Gd. Traverse	33	10	147	56	7	8	2	2	6	7
Houghton	9	5	49	32	0	0	2	2	20	24
Iosco	51	13	268	98	15	8	2	2	4	5
Iron	51	13	588	225	11	7	7	5	14	9
Isabella	20	8	46	22	2	2	0	0	0	0
Kalkaska	49	13	249	101	42	21	13	6	26	11
Keweenaw	0	0	0	0	0	0	0	0	0	0

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

<sup>b</sup>Bobcats that hunter could have harvested but chose not to take.

Table 9. (Continued) Estimated number of hunters, hunting effort (days), bobcats passed, bobcats registered, and proportion of hunters that registered a bobcat in Michigan during 2016, summarized by county.

County	Hunters <sup>a</sup>		Hunting effort (days)		Bobcats passed by hunters <sup>b</sup>		Bobcats registered by hunters		Hunters that registered at least one bobcat	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL
Lake	57	13	194	52	44	20	7	5	13	8
Leelanau	22	8	73	36	7	10	2	2	8	11
Luce	20	8	251	135	9	9	4	3	18	15
Mackinac	55	13	425	196	35	25	13	6	23	10
Manistee	46	12	161	52	22	14	5	4	12	9
Marquette	55	13	438	146	13	9	5	5	7	6
Mason	90	17	368	84	71	43	5	4	6	5
Mecosta	71	15	247	64	81	45	4	3	5	5
Menominee	73	15	874	222	37	16	15	7	20	8
Midland	13	6	31	18	0	0	0	0	0	0
Missaukee	84	16	405	99	29	12	11	6	13	7
Montmorency	126	20	695	167	40	25	11	6	9	4
Newaygo	93	17	376	87	46	20	11	6	12	6
Oceana	70	15	214	52	27	14	7	5	11	7
Ogemaw	71	15	346	86	38	20	9	5	13	7
Ontonagon	24	9	174	75	2	2	0	0	0	0
Osceola	73	15	416	108	27	13	11	6	15	7
Oscoda	82	16	491	147	37	17	5	4	7	5
Otsego	31	10	108	49	15	8	4	3	12	10
Presque Isle	77	16	704	223	73	35	9	5	12	7
Roscommon	70	15	306	83	5	5	2	2	3	3
Schoolcraft	29	10	154	69	29	22	5	4	19	13
Wexford	68	15	317	89	53	26	4	3	5	5
Unspecified	40	11	374	182	93	73	4	3	9	8

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

<sup>b</sup>Bobcats that hunter could have harvested but chose not to harvest.

Table 10. Estimated number of hunters, hunting effort (days), bobcats passed, bobcats registered, and proportion of hunters that registered a bobcat in Michigan during 2016, summarized by hunting method and area.

Variable and area	Hunting method							
	Dogs		Calls		Other		Unknown	
	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL
<b>Hunters (No.)<sup>a</sup></b>								
UP	123	20	258	28	84	16	15	7
LP	484	38	924	51	148	22	29	10
Unit C	220	26	323	31	51	13	15	7
Unit D	194	25	330	32	57	13	11	6
Unit E	66	14	169	23	18	8	0	0
Unit F	71	15	167	23	27	9	5	4
Unspecified	26	9	5	4	2	2	7	5
Statewide	601	42	1,175	56	233	27	49	13
<b>Hunting effort (Days)</b>								
UP	1,274	316	2,348	392	885	271	99	52
LP	3,946	504	5,200	441	828	172	181	77
Unit C	2,139	418	2,102	325	359	124	93	56
Unit D	1,248	215	1,923	262	299	104	75	50
Unit E	304	77	631	103	68	30	0	0
Unit F	255	65	544	93	103	46	13	10
Unspecified	306	175	46	39	22	29	0	0
Statewide	5,526	624	7,594	585	1,736	332	280	97
<b>Bobcats passed by hunters (No.)</b>								
UP	126	49	125	43	11	8	7	8
LP	616	115	352	57	40	19	9	6
Unit C	282	86	134	36	16	11	7	6
Unit D	145	37	110	32	4	5	0	0
Unit E	86	41	57	21	20	15	0	0
Unit F	103	43	51	19	0	0	2	2
Unspecified	86	73	5	5	2	2	0	0
Statewide <sup>b</sup>	828	151	482	71	53	21	16	10

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

Table 10 (Continued). Estimated number of hunters, hunting effort (days), bobcats passed, bobcats registered, and proportion of hunters that registered a bobcat in Michigan during 2016, summarized by hunting method and area.

Variable and area	Hunting method							
	Dogs		Calls		Other		Unknown	
	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL
Bobcats registered by hunters (No.)								
UP	44	13	24	9	11	6	0	0
LP	66	14	86	17	24	9	2	2
Unit C	26	9	35	11	9	5	2	2
Unit D	24	9	27	9	11	6	0	0
Unit E	4	3	16	7	2	2	0	0
Unit F	13	6	7	5	2	2	0	0
Unspecified	4	3	0	0	0	0	0	0
Statewide	114	20	110	19	35	11	2	2
Hunters that registered at least one bobcat (%)								
UP	33	8	9	3	13	7	0	0
LP	14	3	9	2	16	5	6	8
Unit C	12	4	11	3	18	10	13	15
Unit D	12	4	8	3	19	9	0	0
Unit E	6	5	10	4	10	13	0	0
Unit F	18	8	4	3	7	9	0	0
Unspecified	14	12	0	0	0	0	0	0
Statewide	18	3	9	2	15	4	4	5

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



Table 11. Estimated number of bobcat hunters using dogs and their hunting effort (days) in Michigan for 2015 and 2016, summarized by area.

Area	Hunters using dogs <sup>a</sup>					Hunting effort				
	2015		2016		Change (%)	2015		2016		Change (%)
	No.	95% CL	No.	95% CL		Days	95% CL	Days	95% CL	
Upper Peninsula	137	21	123	20	-10	1,765	432	1,274	316	-28
Lower Peninsula	523	40	484	38	-8	4,608	634	3,946	504	-14
Unit C	231	27	220	26	-5	2,487	511	2,139	418	-14
Unit D	236	28	194	25	-18	1,399	243	1,248	215	-11
Unit E	71	15	66	14	-7	317	92	304	77	-4
Unit F	68	15	71	15	6	405	116	255	65	-37
Unspecified	51	13	26	9	-49*	450	212	306	175	-32
Statewide	677	45	601	42	-11	6,822	806	5,526	624	-19

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

\*P<0.005.

Table 12. Estimated number of bobcats passed, bobcats registered by hunters using dogs, and proportion of these hunters that registered at least one bobcat in Michigan for 2015 and 2016, summarized by area.

Area	Bobcats passed <sup>a</sup>					Bobcats registered					Hunters that registered a bobcat				
	2015		2016		Change (%)	2015		2016		Change (%)	2015		2016		Difference (%)
	No.	95% CL	No.	95% CL		No.	95% CL	No.	95% CL		%	95% CL	%	95% CL	
Upper Peninsula	163	76	126	49	-22	30	11	44	13	47	19	6	33	8	14
Lower Peninsula	741	148	616	115	-17	90	17	66	14	-27	17	3	14	3	-4
Unit C	253	61	282	86	11	32	10	26	9	-20	14	4	12	4	-2
Unit D	227	61	145	37	-36	43	12	24	9	-45	18	5	12	4	-6
Unit E	105	58	86	41	-18	9	6	4	3	-61	13	7	6	5	-8
Unit F	156	68	103	43	-34	6	4	13	6	128	8	6	18	8	10
Unspecified	139	84	86	73	-38	6	4	4	3	-35	11	8	14	12	3
Statewide	1,043	191	828	151	-21	126	21	114	20	-10	18	3	18	3	0

\*P<0.005.

Table 13. Estimated number of bobcat hunters using calls and their hunting effort (days) in Michigan for 2015 and 2016, summarized by area.

Area	Hunters using calls <sup>a</sup>					Hunting effort				
	Year		Change (%)	Year		Change (%)				
	2015	2016		2015	2016					
No.	95% CL	No.	95% CL	Days	95% CL	Days	95% CL			
Upper Peninsula	291	31	258	28	-11	2,852	458	2,348	392	-18
Lower Peninsula	880	51	924	51	5	4,868	475	5,200	441	7
Unit C	324	32	323	31	-1	2,350	376	2,102	325	-11
Unit D	287	30	330	32	15	1,354	226	1,923	262	42*
Unit E	156	23	169	23	8	559	96	631	103	13
Unit F	171	24	167	23	-2	606	110	544	93	-10
Unspecified	28	10	5	4	-80*	178	91	46	39	-74*
Statewide	1,183	57	1,175	56	-1	7,899	657	7,594	585	-4

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

\*P<0.005.

Table 14. Estimated number of bobcats passed, bobcats registered by hunters using calls, and proportion of these hunters that registered at least one bobcat in Michigan for 2015 and 2016, summarized by area.

Area	Bobcats passed					Bobcats registered					Hunters that registered a bobcat				
	Year		Change (%)	Year		Change (%)	Year		Change (%)	Year		Difference (%)			
	2015	2016		2015	2016		2015	2016		2015	2016				
No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	%	95% CL	%	95% CL				
Upper Peninsula	90	33	125	43	38	39	12	24	9	-39	13	4	9	3	-4
Lower Peninsula	289	53	352	57	22	113	20	86	17	-23	12	2	9	2	-3
Unit C	111	35	134	36	21	28	10	35	11	24	8	3	11	3	3
Unit D	84	25	110	32	30	36	11	27	9	-23	12	4	8	3	-4
Unit E	45	17	57	21	26	24	9	16	7	-32	16	5	10	4	-6
Unit F	49	19	51	19	5	24	9	7	5	-70*	14	5	4	3	-10*
Unspecified	19	25	5	5	-71	2	3	0	0	-100	7	9	0	0	-7
Statewide	398	67	482	71	21	154	24	110	19	-28*	12	2	9	2	-3

\*P<0.005.

Table 15. Correlation between average bobcat pelt prices and number of hunters, days of effort, bobcats registered, and effort per registered bobcat in Michigan during 1997-2016, summarized by region.<sup>a</sup>

Estimate and region	Correlation <sup>b</sup>	Significance (P-value) <sup>c</sup>
Number of hunters		
UP	0.37	0.10
LP	0.12	0.62
Days of effort		
UP	0.42	0.07
LP	0.36	0.11
Bobcats registered <sup>d</sup>		
UP	-0.26	0.27
LP	-0.09	0.69
Effort per bobcats registered		
UP	0.33	0.15
LP	0.52	0.02

<sup>a</sup>Mean pelt prices were the average paid in Minnesota and Wisconsin (e.g., Abraham and Dexter 2016, Lohr 2016). Pelt prices were reported in 2016 dollars by adjusting for inflation using the Consumer Price Index (Bureau of Labor Statistics 2016).

<sup>b</sup>Pearson product moment correlation coefficient.

<sup>c</sup>P-value is the probability of obtaining this correlation result (2-sided test).

<sup>d</sup>The tally of bobcats registered by furtakers at DNR registration stations, rather than estimate from survey.

Table 16. Estimated number of bobcat trappers and their trapping effort (days) in Michigan for 2015 and 2016, summarized by area.

Area	Trappers <sup>a</sup>					Trapping effort				
	2015		2016		Change (%) <sup>b</sup>	2015		2016		Change (%) <sup>b</sup>
	No.	95% CL	No.	95% CL		Days	95% CL	Days	95% CL	
Upper Peninsula	673	45	486	38	-28*	13,834	1,282	10,105	1,108	-27*
Lower Peninsula	593	43	581	41	-2	4,444	376	4,406	360	-1
Unit C	143	22	134	21	-6	1,043	185	946	170	-9
Unit D	180	24	233	27	29*	1,450	221	1,728	223	19
Unit E	109	19	86	17	-21	696	145	609	127	-13
Unit F	173	24	143	21	-17	1,256	199	1,124	186	-11
Unspecified	94	18	70	15	-26	216	159	59	54	-73
Statewide	1,350	60	1,129	55	-16*	18,494	1,320	14,570	1,150	-21*

<sup>a</sup>Number of trappers does not add up to statewide total because trappers could trap in more than one area.

\*P<0.005.

Table 17. Estimated number of bobcats captured, bobcats released alive, and bobcats registered by trappers in Michigan for 2015 and 2016, summarized by area.

Area	Bobcats captured					Bobcats released alive					Bobcats registered				
	2015		2016		Change (%) <sup>a</sup>	2015		2016		Change (%) <sup>a</sup>	2015		2016		Change (%) <sup>a</sup>
	No.	95% CL	No.	95% CL		No.	95% CL	No.	95% CL		No.	95% CL	No.	95% CL	
Upper Peninsula	317	43	170	35	-46*	86	23	64	20	-26	231	32	106	22	-54*
Lower Peninsula	285	48	191	42	-33*	154	36	136	36	-12	131	21	55	13	-58*
Unit C	73	23	51	21	-30	43	17	37	17	-15	30	10	15	7	-51
Unit D	45	15	60	23	34	24	11	38	19	58	21	8	22	8	7
Unit E	68	24	22	13	-67*	26	16	16	12	-37	41	12	5	4	-87*
Unit F	99	32	57	26	-43	60	25	44	23	-27	39	11	13	6	-67*
Unspecified	11	11	2	2	-84	4	5	2	2	-51	8	7	0	0	-100*
Statewide	613	65	363	55	-41*	244	43	202	41	-17	369	39	161	26	-56*

\*P<0.005.

Table 18. Estimated proportion of bobcat trappers that captured at least one bobcat and proportion that registered at least one bobcat in Michigan for 2015 and 2016, summarized by area.

Area	Trappers that captured a bobcat					Trappers that registered a bobcat				
	2015		2016		Difference (%)	2015		2016		Difference (%) <sup>a</sup>
	%	95% CL	%	95% CL		%	95% CL	%	95% CL	
Upper Peninsula	32	3	21	3	-12*	28	3	17	3	-11*
Lower Peninsula	30	3	19	3	-11*	22	3	9	2	-13*
Unit C	30	7	22	6	-8	21	6	11	5	-10
Unit D	20	5	16	4	-4	11	4	9	3	-2
Unit E	41	9	15	7	-26*	38	9	6	5	-32*
Unit F	33	7	23	6	-10	23	6	9	4	-14*
Unspecified	4	4	3	3	-1	4	4	0	0	-4*
Statewide	30	2	19	2	-11*	24	2	12	2	-12*

<sup>a</sup>P<0.005.

Table 19. Estimated number of days of effort per bobcat registered in Michigan by trappers for the 2014-2016, summarized by year and area.

Area	Year						Change between 2015 and 2016 (%)
	2014		2015		2016		
	Effort per registered bobcat	95% CL	Effort per registered bobcat	95% CL	Effort per registered bobcat	95% CL	
Upper Peninsula	64.0	9.0	60.0	8.2	95.1	20.3	58*
Lower Peninsula	32.6	4.5	33.9	5.2	80.1	19.3	137*
Unit C	27.5	6.7	34.8	11.2	64.5	30.5	86
Unit D	46.3	13.8	70.3	28.2	78.6	29.9	12
Unit E	29.8	9.4	16.9	4.6	110.7	85.1	556*
Unit F	29.3	7.6	31.9	8.7	87.6	42.7	174*
Unspecified	84.0	98.9	28.8	30.6	0.0	0.0	-100
Statewide	50.5	5.2	50.1	5.3	90.3	14.8	80*

<sup>a</sup>P<0.005. Comparison between 2015 and 2016.

Table 20. Estimated number of trappers, trapping effort (days), bobcats captured, bobcats released, bobcats registered, and proportion of trappers that captured and registered a bobcat in Michigan during 2016, summarized by county.

County	Trappers <sup>a</sup>		Trapping effort (days)		Bobcats captured by trappers		Bobcats released alive by trappers		Bobcats registered by trappers		Trappers that captured at least one bobcat		Trappers that registered at least one bobcat	
	No.	95%	No.	95%	No.	95%	No.	95%	No.	95%	%	95%	%	95%
		CL		CL		CL		CL		CL		CL		
Alcona	23	9	152	67	13	10	8	6	6	4	33	18	25	17
Alger	34	11	510	203	4	4	0	0	4	4	11	10	11	10
Alpena	30	10	219	80	13	10	9	9	4	4	25	14	13	11
Antrim	6	4	54	42	0	0	0	0	0	0	0	0	0	0
Arenac	4	4	39	37	0	0	0	0	0	0	0	0	0	0
Baraga	36	11	525	213	13	7	4	4	9	6	37	15	26	14
Bay	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Benzie	8	5	53	37	6	8	4	5	2	3	25	29	25	29
Charlevoix	6	4	32	29	2	3	0	0	2	3	33	36	33	36
Cheboygan	19	8	124	61	6	6	2	3	4	4	20	17	20	17
Chippewa	62	14	1,005	322	32	14	11	7	21	10	33	11	27	10
Clare	34	11	270	93	2	3	0	0	2	3	6	7	6	7
Crawford	6	4	47	38	0	0	0	0	0	0	0	0	0	0
Delta	64	15	1,178	336	34	14	15	11	19	9	35	11	24	10
Dickinson	66	15	1,241	351	21	10	2	3	19	9	26	10	26	10
Emmet	9	6	90	54	2	3	0	0	2	3	20	24	20	24
Gladwin	8	5	58	40	0	0	0	0	0	0	0	0	0	0
Gogebic	58	14	1,406	431	36	14	2	3	34	13	42	12	42	12
Gd. Traverse	15	7	109	55	8	6	4	4	4	4	38	23	25	21
Houghton	41	12	480	195	13	12	8	7	6	6	14	10	9	8
Iosco	17	8	129	60	2	3	2	3	0	0	11	14	0	0
Iron	79	16	1,941	506	47	17	13	9	34	12	40	10	36	10
Isabella	15	7	94	55	0	0	0	0	0	0	0	0	0	0
Kalkaska	24	9	186	76	9	7	4	4	6	4	31	17	23	16
Keweenaw	21	8	321	151	2	3	2	3	0	0	9	12	0	0

<sup>a</sup>Number of trappers does not add up to statewide total because trappers could trap in more than one county.

Table 20. (Continued) Estimated number of trappers, trapping effort (days), bobcats captured, bobcats released, bobcats registered, and proportion of trappers that captured and registered a bobcat in Michigan during 2016, summarized by county.

County	Trappers <sup>a</sup>		Trapping effort (days)		Bobcats captured by trappers		Bobcats released alive by trappers		Bobcats registered by trappers		Trappers that captured at least one bobcat		Trappers that registered at least one bobcat	
	No.	95%	No.	95%	No.	95%	No.	95%	No.	95%	%	95%	%	95%
		CL		CL		CL		CL		CL		CL		
Lake	16	7	125	59	9	10	7	10	2	2	22	18	11	14
Leelanau	4	3	7	10	0	0	0	0	0	0	0	0	0	0
Luce	24	9	266	113	15	15	7	10	7	7	15	13	15	13
Mackinac	37	11	623	254	11	8	5	4	5	4	20	12	15	11
Manistee	24	9	172	68	2	2	2	2	0	0	8	10	0	0
Marquette	64	14	863	233	5	7	2	2	4	5	3	4	3	4
Mason	24	9	154	63	7	6	5	5	2	2	23	15	8	10
Mecosta	40	11	317	93	7	5	4	3	4	3	18	11	9	8
Menominee	57	13	1,279	358	16	7	7	5	9	5	29	11	16	9
Midland	13	6	119	60	2	2	0	0	2	2	14	17	14	17
Missaukee	20	8	147	63	9	7	5	5	4	3	27	18	18	15
Montmorency	18	8	134	59	2	2	2	2	0	0	10	13	0	0
Newaygo	44	12	350	101	27	23	26	21	2	2	21	11	4	5
Oceana	38	11	233	75	15	8	11	8	4	3	29	13	10	8
Ogemaw	20	8	141	62	5	5	2	2	4	3	18	15	18	15
Ontonagon	33	10	583	249	16	9	4	5	13	7	39	15	33	15
Osceola	35	11	247	87	16	15	13	15	4	3	21	12	11	9
Oscoda	15	7	101	49	2	2	2	2	0	0	13	15	0	0
Otsego	29	10	205	78	16	10	11	7	5	4	38	16	19	13
Presque Isle	13	6	84	46	7	6	5	5	2	2	43	25	14	17
Roscommon	33	10	189	69	7	8	5	5	2	2	11	10	6	7
Schoolcraft	40	11	645	251	9	6	4	3	5	4	18	11	14	10
Wexford	22	8	172	69	2	2	0	0	2	2	8	11	8	11
Unspecified	70	15	59	54	2	2	2	2	0	0	3	3	0	0

<sup>a</sup>Number of trappers does not add up to statewide total because trappers could trap in more than one county.

Table 21. Trap type used by bobcat trappers in Michigan during 2016.

Trap type	Trappers (%)	95% CL	Trappers (No.)	95% CL
Foothold traps	86	2	973	52
Conibears	26	2	291	30
Other <sup>a</sup>	2	1	27	9

<sup>a</sup>Included snares and live traps, although snares were not legal to use to capture bobcats.

Table 22. Preferred trap type of bobcat trappers in Michigan during 2016.

Trap type	Trappers (%)	95% CL	Trappers (No.)	95% CL
Foothold traps	61	3	691	45
Conibears	17	2	194	25
No preference	17	2	194	25
Other <sup>a</sup>	2	1	26	9
No answer	2	1	24	9

<sup>a</sup>Snares were not legal to use to capture bobcats.

Table 23. Correlation between average bobcat pelt prices and number of trappers, days of effort, bobcats registered, and effort per registered bobcat in Michigan during 1997-2016, summarized by region.<sup>a</sup>

Estimate and region	Correlation <sup>b</sup>	Significance (P-value) <sup>c</sup>
Number of trappers		
UP	0.64	<0.01
LP <sup>d</sup>	-0.09	0.79
Days of effort		
UP	0.61	<0.01
LP <sup>d</sup>	-0.09	0.80
Bobcats registered <sup>e</sup>		
UP	0.14	0.56
LP <sup>d</sup>	0.23	0.32
Effort per bobcats registered		
UP	0.19	0.42
LP <sup>d</sup>	-0.23	0.50

<sup>a</sup>Mean pelt prices were the average paid in Minnesota and Wisconsin (e.g., Abraham and Dexter 2016, Lohr 2016). Pelt prices were reported in 2016 dollars by adjusting for inflation using the Consumer Price Index (Bureau of Labor Statistics 2016).

<sup>b</sup>Pearson product moment correlation coefficient.

<sup>c</sup>P-value is the probability of obtaining this correlation result (2-sided test).

<sup>d</sup>Bobcat could be harvested by trappers in the LP during 2004-2005 and 2008-2016 only.

<sup>e</sup>The tally of bobcats registered by furtakers at DNR registration stations, rather than estimate from survey.



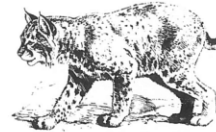
Appendix A. The questionnaire sent to people that obtained a bobcat harvest tag in Michigan for the 2016 bobcat hunting and trapping seasons.



MICHIGAN DEPARTMENT OF NATURAL RESOURCES, WILDLIFE DIVISION  
 PO BOX 30030 LANSING MI 48909-7530

## BOBCAT HUNTER AND TRAPPER SURVEY

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



- It is important that you complete and return this questionnaire even if you did not harvest a bobcat during the 2016-17 hunting and trapping seasons (December 1, 2016, through March 1, 2017).
- Only the person this questionnaire was addressed to should answer these questions. Do not report results for another person.

### PART A: Hunting Questions (Questions about trapping are on reverse side)

1. Did you hunt bobcats during the 2016-17 season?

- <sup>1</sup>  Yes      <sup>2</sup>  No (Skip to Question #9)

2. How many years have you hunted bobcats? \_\_\_\_\_ Years

3. If you hunted bobcats during the 2016-17 season, please complete the following table.

HUNTING METHOD (Select hunting method used.)	COUNTY HUNTED (For each hunting method used, list the county that you hunted on separate lines.)	NUMBER OF DAYS HUNTED (Count all days hunted even if you did not have an opportunity to take a bobcat)	NUMBER OF BOBCAT REGISTERED (Count only bobcat where a seal was attached to the pelt, and the animal was returned to you.)	NUMBER OF BOBCATS NOT TAKEN (Count the number of bobcats you called within range or treed but chose <u>not</u> to harvest.)
<sup>1</sup> <input type="checkbox"/> Dogs <sup>2</sup> <input type="checkbox"/> Calls <sup>3</sup> <input type="checkbox"/> Other				
<sup>1</sup> <input type="checkbox"/> Dogs <sup>2</sup> <input type="checkbox"/> Calls <sup>3</sup> <input type="checkbox"/> Other				
<sup>1</sup> <input type="checkbox"/> Dogs <sup>2</sup> <input type="checkbox"/> Calls <sup>3</sup> <input type="checkbox"/> Other				
<sup>1</sup> <input type="checkbox"/> Dogs <sup>2</sup> <input type="checkbox"/> Calls <sup>3</sup> <input type="checkbox"/> Other				

4. On what lands did you hunt bobcats during the 2016-17 season? (You may check more than one.)

- <sup>1</sup>  Property owned by me or my family      <sup>2</sup>  Private land, with permission  
<sup>3</sup>  Private land open to public hunting (For example, Commercial Forests, Hunter Access Program)      <sup>4</sup>  Public land (State Game Area, State or National Forest, etc.)

5. Did you hire a guide to assist with hunting bobcats at any time during the 2016-17 season? <sup>1</sup>  Yes <sup>2</sup>  No

6. Did you hunt bobcats with dogs during the 2016-17 season?

- <sup>1</sup>  Yes      <sup>2</sup>  No (Skip to Question #9)

7. Report the number of bobcat chases with dogs you participated in during the 2016-17 season. \_\_\_\_\_ Chases

8. Who owned the dogs that you used to hunt bobcats during the 2016-17 season? (Check one)

- 1  Normally use dogs that I own.      2  Normally use dogs owned by someone else.
- 3  Normally use a combination of my dogs and dogs owned by someone else.

**PART B: Trapping Questions**

9. Did you attempt to harvest a bobcat while trapping in the 2016-17 season?

- 1  Yes      2  No (Skip to Question #16)

10. How many years have you trapped bobcats? \_\_\_\_\_ Years

11. If you trapped bobcats during the 2016-17 season, please complete the following table.

COUNTY TRAPPED (List each county that you trapped for bobcat.)	NUMBER OF DAYS TRAPPED	NUMBER OF BOBCAT CAUGHT AND RELEASED (Count only bobcats you released alive from your traps.)	NUMBER OF BOBCAT REGISTERED (Count only bobcat where a seal was attached to the pelt, and the animal was returned to you.)

12. On what lands did you trap bobcats during the 2016-17 season? (You may check more than one.)

- 1  Property owned by me or my family      2  Private land, with permission
- 3  Private land open to public hunting (For example, Commercial Forests, Hunter Access Program)      4  Public land (State Game Area, State or National Forest, etc.)

13. How many of the following traps did you set for bobcat in the 2016-17 season?

- (For each type, record the average number used per day.)
- \_\_\_\_\_ Foothold traps
- \_\_\_\_\_ Conibears
- \_\_\_\_\_ Other (Please specify \_\_\_\_\_)

14. Which capture method do you prefer to catch bobcats? (Check one.)

- 1  Foothold traps      2  Conibears      3  No preference      4  Other (please specify \_\_\_\_\_)

15. Did you catch any bobcats in traps that were set for another species in the 2016-17 season?

- 1  Yes      2  No

**PART C: General Questions**

16. Compared to the previous three years, what is the status of bobcats in the county that you prefer to hunt or trap bobcats in the 2016-17 season?

- 1  Increasing      2  Decreasing      3  Stable      4  Not present      5  Unknown

17. Do you have any comments or suggestions about bobcat management in Michigan? Also describe any other incidental bobcats you may have captured but have not reported on this report (report county captured and whether it was released alive or registered as an accidental take).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please return questionnaire in the enclosed postage-paid envelope.  
Thank you for your help.