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2018 MICHIGAN BLACK BEAR HUNTER SURVEY

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ABSTRACT

We contacted a random sample of bear hunters after the 2018 hunting season to determine hunter participation, hunting methods, bear harvest, and hunter satisfaction. In 2018, an estimated 5,066 hunters spent nearly 35,515 days afield and harvested about 1,521 bears. The estimated number of hunters decreased by 2% and bear harvest decreased by 20% in 2018, both decreasing significantly from 2017. Statewide, 30% of hunters harvested a bear in 2018, which was significantly lower than in 2017 (37%). The average number of days required to harvest a bear statewide was 23.4 days in 2018, which was significantly greater than in 2017 (19.4 days). About 86% of hunters primarily used only bait to hunt bear, and 80% of harvested bears were taken by these hunters. Hunters using dogs had greater hunting success than hunters that only used bait (45% for dog hunters versus 29% for bait-only hunters). Statewide, about 54% of hunters rated their hunting experience as very good or good in 2018 (versus 59% in 2017).

INTRODUCTION

Beginning in 1990, the Michigan Department of Natural Resources (DNR) created black bear (*Ursus americanus*) management units and limited the number of bear hunting licenses issued for each unit. Before 1990, an unlimited number of bear licenses were available, and licenses were valid in all areas open to bear hunting. In 2000, the DNR modified the licensing system by implementing a zone and quota system based on preference points for issuing bear hunting licenses. Under this system, hunters received one preference point if they applied for a hunt but were unsuccessful in the drawing. Hunters also could obtain a preference point by completing an application but forgoing the drawing. Applicants with the greatest number of

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preference points had the greatest chance of being drawn for a hunt, but no more than 5% of the licenses were issued to nonresidents.

In 2018, ten bear management units in Michigan, totaling about 35,360 square miles, were open for bear hunting (Figure 1). Hunters could pursue bears from September 10-October 26 in all of the Upper Peninsula (UP) units, except the Drummond Island Management Unit (September 10-October 21). Hunters could pursue bears from September 14-29 in Benzie, Leelanau, Grand Traverse, and part of Kalkaska counties and during September 16-24 for remaining counties in the Northern Lower Peninsula (LP) units. Hunters could use bait or dogs to hunt bears except during restricted dates. The first day of each hunt period in the LP (September 14 and 16) was restricted to hunting with bait only, and the last two days of the hunt periods in the LP (September 23-24) were restricted to hunters using dogs. The Red Oak Management Unit in the LP also had an archery-only hunt during October 5-11 (i.e., firearms prohibited). The first five days (September 10-14) of the first hunt in the UP were restricted to bait-only hunting.

The number of bear hunting licenses available in the state in 2018 (license quota) was unchanged from 2017. Licenses were valid on all land ownership types and allowed a hunter to take one bear of either sex, excluding cubs and female bears with cubs. Hunters could harvest bears with a firearm, crossbow, or archery equipment, except for the special archery-only hunt in the Red Oak Management Unit. Youth 10 to 13 years old could hunt with a firearm on private land only. Youth 14 years old and older could hunt with a firearm on private or public land.

The Pure Michigan Hunt (PMH) was a unique multi-species hunting opportunity offered for the first time in 2010. Individuals could purchase an unlimited number of applications for the PMH. Three winners, selected by random draw, received elk, bear, spring turkey, fall turkey, and antlerless deer hunting licenses and could participate in a reserved waterfowl hunt on a managed waterfowl area. The bear hunting licenses were valid for all areas open for hunting bear, except Drummond Island, and during all bear hunting periods. Furthermore, the PMH license holder could hunt any bear season until they filled their bear harvest tag.

The DNR and Natural Resources Commission (NRC) 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 by the DNR to accomplish its statutory responsibility. Estimating harvest, hunting effort, and hunter satisfaction are the primary objectives of these surveys. The DNR and NRC use estimates derived from harvest surveys, as well as harvest reported by hunters at mandatory registration stations, and other indices to monitor bear populations and establish harvest regulations.

METHODS

The DNR provided all bear hunters the option to report information about their bear hunting activity voluntarily via an internet survey. The DNR notified hunters of the internet questionnaire by sending an email message to all license buyers that had provided an email address (53% of license buyers) and by posting the questionnaire on the DNR website. Hunters reported whether they hunted, number of days spent afield, whether they harvested a bear, date of harvest, and their hunting methods. Hunters also reported whether other hunters (including bear hunters) caused interference during their hunt. The questionnaire asked successful hunters to report harvest date, sex of the bear taken, and harvest method. The questionnaire asked hunters to report how satisfied they were with the number of bears seen, number of opportunities they had to take a bear, and their overall bear hunting experience. Finally, hunters were asked to report whether they used bait and trail cameras to hunt bear. Following the 2018 bear hunting season, a questionnaire (Appendix A) was mailed to 3,261 randomly selected people (Table 1) that had purchased a bear hunting license (resident, nonresident bear licenses, comprehensive lifetime bear license, and Pure Michigan Hunt) and had not already voluntarily reported harvest information via the internet. The questionnaire sent via mail asked the same questions as the internet version.

We calculated parameter estimates using a stratified random sampling design that included 12 strata (Cochran 1977). We stratified hunters based on the management unit where their license was valid (10 management units). We considered hunters who purchased a license valid in multiple management units (PMH license holders) as a separate stratum (stratum 11). In addition, we treated hunters that had voluntarily reported information about their hunting activity via the internet before our sample was selected as a separate stratum (stratum 12). We calculated the statewide estimate of the mean number of days required to harvest a bear using a different ratio for each stratum (i.e., separate ratio estimator). To improve the precision of ratio estimates, we used the number of bears registered in each stratum as an auxiliary variate.

We calculated a 95% confidence limit (CL) for each parameter estimate. In theory, we can determine the 95% confidence interval by adding and subtracting the CL from the estimate. The confidence interval is a measure of the precision associated with the estimate and implies that the true value would be within this interval 95 times out of 100. Unfortunately, there are several other possible sources of error in surveys that are probably more serious than theoretical calculations of sampling error. They include failure of participants to provide answers (nonresponse bias), question-wording, and question order. It is very difficult to measure these biases; thus, we did not adjust the estimates for these possible biases.

Statistical tests determine the likelihood that the differences among estimates are larger than expected by chance alone. To determine whether estimates differed, we examined the respective 95% confidence intervals for overlapping values. Non-overlapping 95% confidence intervals was equivalent to stating that the difference between the means was larger than would be expected 95 out of 100 times, if the study had been repeated (Payton et al. 2003).

We initially mailed questionnaires during late November 2018 and sent a maximum of two follow-up questionnaires to nonrespondents. Of the 3,261 questionnaires mailed, 47 were undeliverable, resulting in an adjusted sample size of 3,214. We received questionnaires from 2,196 people, yielding a 68% adjusted response rate. In addition, 100 people voluntarily reported information about their hunting activity via the internet before we selected the random sample.

RESULTS

In 2018, hunters purchased 5,591 bear hunting licenses (Table 1), which was a decrease of 3% from 2017 (5,759). Most of the hunters buying a license in 2018 were men (89%), and the average age of the license buyers was 50 years (Figure 2). About 4% of the license buyers (213) were younger than 17 years old.

Compared to 10 years ago, the number of people buying a bear hunting license in 2018 decreased by 45% (10,178 people purchased a license in 2008). Although the overall number of license buyers decreased, hunter numbers among the youngest and oldest age classes were similar or slightly higher in 2018 than in 2008 (Figure 3). The consistency of hunter numbers in the oldest age classes likely represented the rising share of older people in the population as the baby-boom generation aged and life expectancies have increased. The increased participation among the youngest hunters likely reflected the lowering of the minimum age requirements. In 2018, hunters had to be at least 10 years old to participate; while the hunters had to be at least 12 years old to participate in 2008.

Nearly 91 ± 1% of the license buyers hunted bear (Table 2). These hunters spent 35,515 days afield ($\bar{x}$ = 7.0 days/hunter) and harvested 1,521 bears. The number of hunters (-2%) and overall harvest (-20%) decreased significantly between 2017 and 2018 (Figure 4), while hunting effort did not change significantly. Marquette and Ontonagon counties had the greatest number of bear hunters, and these two counties also had the greatest number of bears harvested during 2018 (Table 3).

The average number of days required to harvest a bear statewide was 23.4 days in 2018 (Table 2, Figure 5), which was significantly greater than in 2017 (19.4 days). Mean effort per harvested bear also increased significantly in the Western UP and LP between 2017 and 2018 (Figure 6). Long-term trends are difficult to interpret because of changes to the length of hunting seasons, and the addition of hunt periods and areas open to hunting since 1992; thus, these annual estimates are not directly comparable. In 1994, most early hunt periods were increased from 37 to 42 days and a third hunt period was added in the Gwinn Management Unit. In 1995, a third hunt period was added in the Baraga Management Unit. In 1996, Baldwin and Gladwin management units were created, and a third period was added to Bergland, Amasa, Carney, and Newberry management units. In 2002, the units in the LP were expanded slightly to coincide with county boundaries. In 2007, the area of the Baldwin Unit was increased slightly with the addition of Leelanau County. The units having the highest effort per harvested bear during recent years have been Carney and Gwinn management units, while Amasa, Baldwin, Drummond Island, and Red Oak management units have had the lowest effort per harvested bear (Figure 7).

In 2014, the DNR began estimating the size of the bear population in both the UP and LP (Mayhew 2019). The long-term (1992-2017) changes in the estimates of bear numbers were similar to the changes in the estimated amount of hunting effort required to harvest a bear in both peninsulas (Figure 8). Allen et al. (2018) also reported that changes in bear abundance were similar to changes in hunting effort in Wisconsin. In the UP, the trends suggest that the bear population has been relatively stable since 1992; while, the trends in the LP suggest that the bear population has been increasing steadily. The population estimates and hunting effort indices were significantly correlated in the LP ($r = -0.86$, $P < 0.05$) but were not significantly correlated in the UP ($r = -0.17$, $P = 0.42$) (Figure 9). The lack of a significant correlation in the UP may reflect that the bear population has been relatively stable in the UP.

About 39% of the bear hunters hunted on private lands only in 2018, 43% hunted on public lands only, and 17% hunted on both private and public lands (Table 4). Bear hunters spent 13,981 days afield on private land, 14,348 days hunting on public land only, and 6,709 days hunting on both private and public lands (Table 5). Of the estimated 1,521 bear harvested in 2018, hunters harvested 38 ± 3% of these bears (580 ± 53) on private land. Hunters harvested about 62 ± 3% of the bears (941 ± 70) on public land.

Based on reported harvest dates, hunters took about 26% of these bears during September 10-14 (i.e., the first five days for most units) and 43% during September 10-19 (i.e., the first ten days, Figure 10). Of the bears harvested and their sex known, 58 ± 3% were males (889 ± 68) and 41 ± 3% were females (626 ± 57; Table 6). Statewide, 30% of hunters harvested a bear in 2018 (Table 2), which was significantly lower than in 2017 (37% success in 2017). Hunter success ranged from 25-100% among the bear management units (Table 2).

Most hunters (85%) used firearms while hunting bear, although 11% of the hunters used archery equipment (compound, recurve, or long bows), and 11% used a crossbow (Tables 7 and 8). The total equals more than 100% because hunters could use more than one type of equipment during the season. Most hunters (86%) used a firearm to harvest their bear, while 7% used archery equipment, and 7% used a crossbow (Tables 9 and 10).

Most hunters (86 ± 1%) relied primarily on baiting only as a means of locating and attracting bears (Table 11). About 12% (±1%) of hunters relied primarily on dogs alone or a combination of baiting and dogs to locate bears. About 1% of hunters relied on a hunting method not involving dogs or bait. Among hunters using bait, about 70% of hunters used either bakery products or corn and grains as bait (Tables 12 and 13).

Hunters harvested about 81 ± 2% of the bears with the aid of bait only (Table 14). Hunting success for hunters primarily using bait only was 29 ± 2%, while hunting success for hunters using dogs was 45 ± 5% in 2018. Success among hunters using dogs has usually been greater than among hunters using baits only (Figure 11).

About 35% of bear hunters statewide rated the number of bears seen during the 2018 hunting season as very good or good, and 40% rated bear seen as poor or very poor (Table 15). Similarly, about 29% of hunters statewide rated the number of chances they had to take a bear during the 2018 hunting season as very good or good, and 42% rated their chances as poor or very poor (Table 16).

Statewide, about 54% of hunters rated their hunting experiences as very good or good (versus 57% in 2017), and 25% rated their hunting experiences as poor or very poor (Table 17). Many factors may affect hunter satisfaction; however, satisfaction appeared more closely associated with hunting success than with hunter interference (Figure 12). In 2018, 19% of the hunters reported that other hunters interfered with their hunts (Table 18). Other bear hunters accounted for most of the interference reported; 14% of the hunters reported that other bear hunters interfered with their hunt. Generally, hunters in the UP experienced less interference than hunters in the LP (Table 18, Figure 13).

Only 13% of the hunters (658 hunters) hired a hunting guide in 2018 (Table 19). Furthermore, most hunting guides (79%) relied on baiting only to locate bears for their clients in 2018 (Table 20). Hunting success of hunters using a guide was significantly greater than hunters that did not use a guide (46 ± 5% with a guide versus 28 ± 2% without a guide).

About 81% of the bear hunters using bait also used a trail camera to monitor bear activity in hunt area (Table 21). Among the hunters using a trail camera, 91% reported they took a photograph of a bear (Table 22). An increased proportion of hunters in 2018 captured a photograph of a wolf (17% in 2017 versus 20% in 2018) and fisher (21% versus 26%) than in 2017 (Figure 14).

ACKNOWLEDGEMENTS

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Figure 1. Bear management units open to hunting in Michigan, 2018.

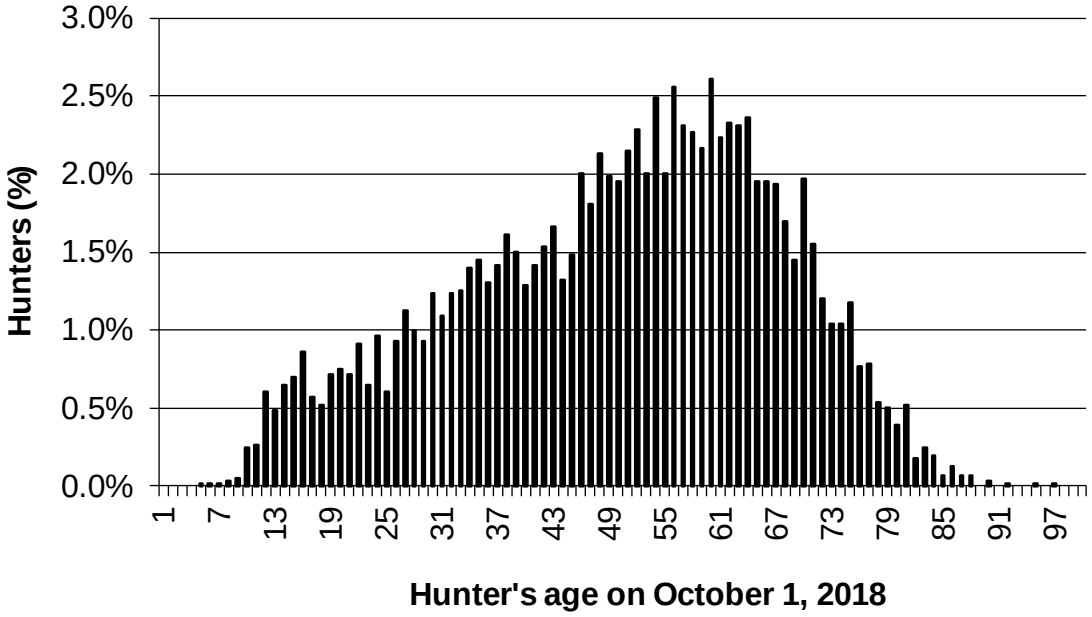

Figure 2. Age of people that purchased a bear hunting license in Michigan for the 2018 hunting season (mean = 50 years). Licenses were purchased by 5,591 people.

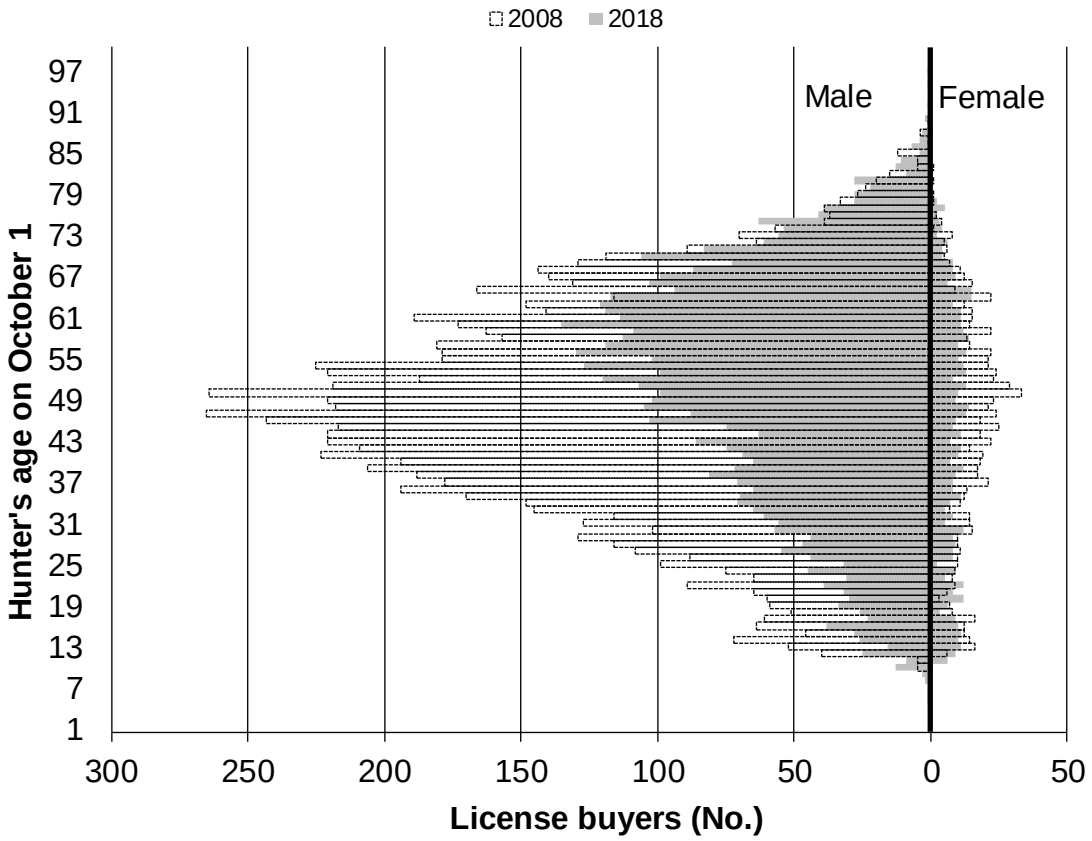

Figure 3. Number of bear hunting license buyers in Michigan by age and sex during 2008 and 2018 hunting seasons. The number of people buying a license was 10,178 in 2008 and 5,591 in 2018.

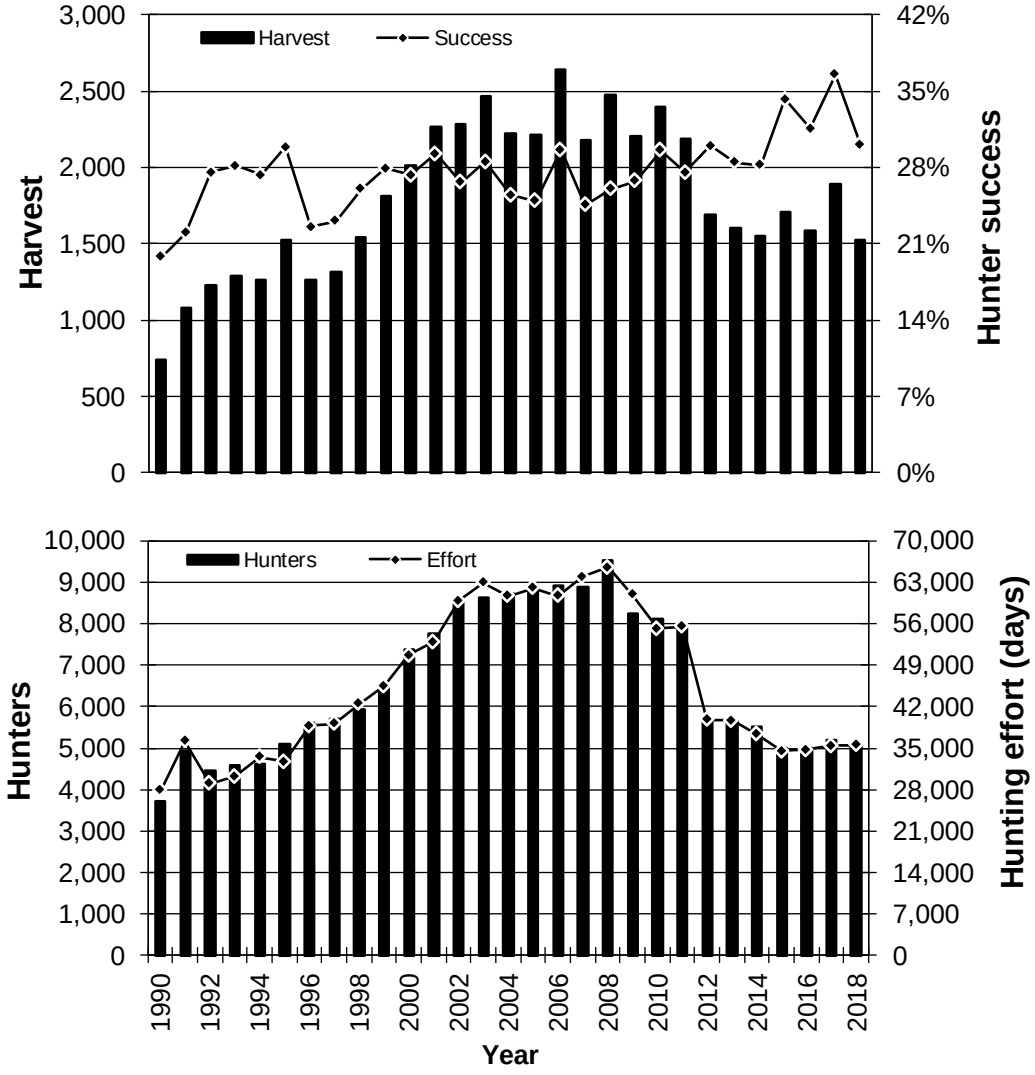

Figure 4. Estimated harvest, hunting success, number of hunters, and hunting effort during bear hunting seasons, 1990-2018.

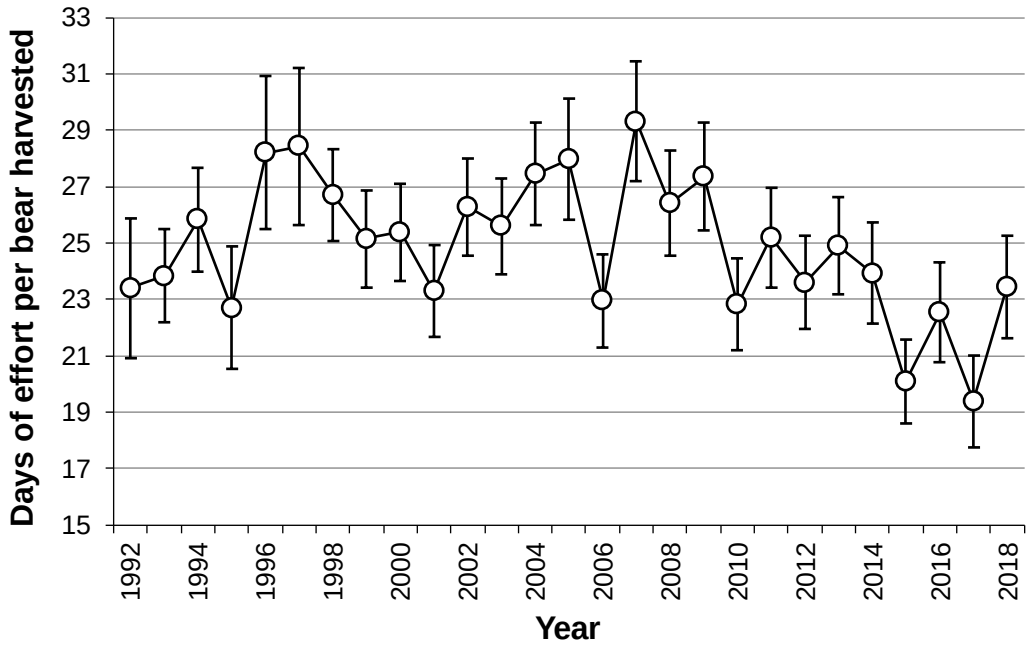

Figure 5. Estimated mean number of days required to harvest a bear statewide in Michigan during 1992-2018. Vertical bars represent the 95% confidence interval.

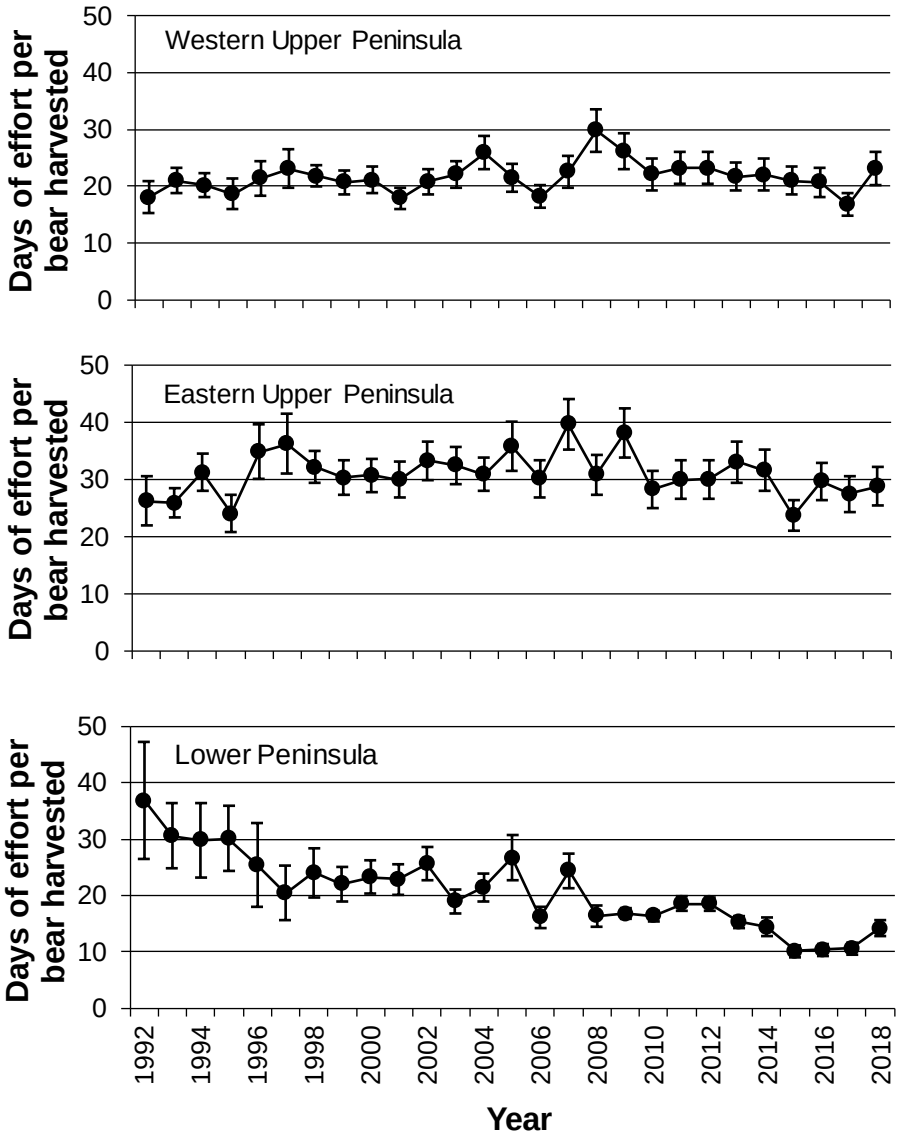

Figure 6. Estimated mean number of days required to harvest a bear in Michigan during 1992-2018, summarized by ecological region. Western UP consisted of Amasa, Baraga, and Bergland units, and Eastern UP consisted of Carney, Gwinn, and Newberry units (Drummond Island Management Unit excluded). Lower Peninsula consisted of Baldwin, Gladwin, and Red Oak management units. Vertical bars represent the 95% confidence interval.

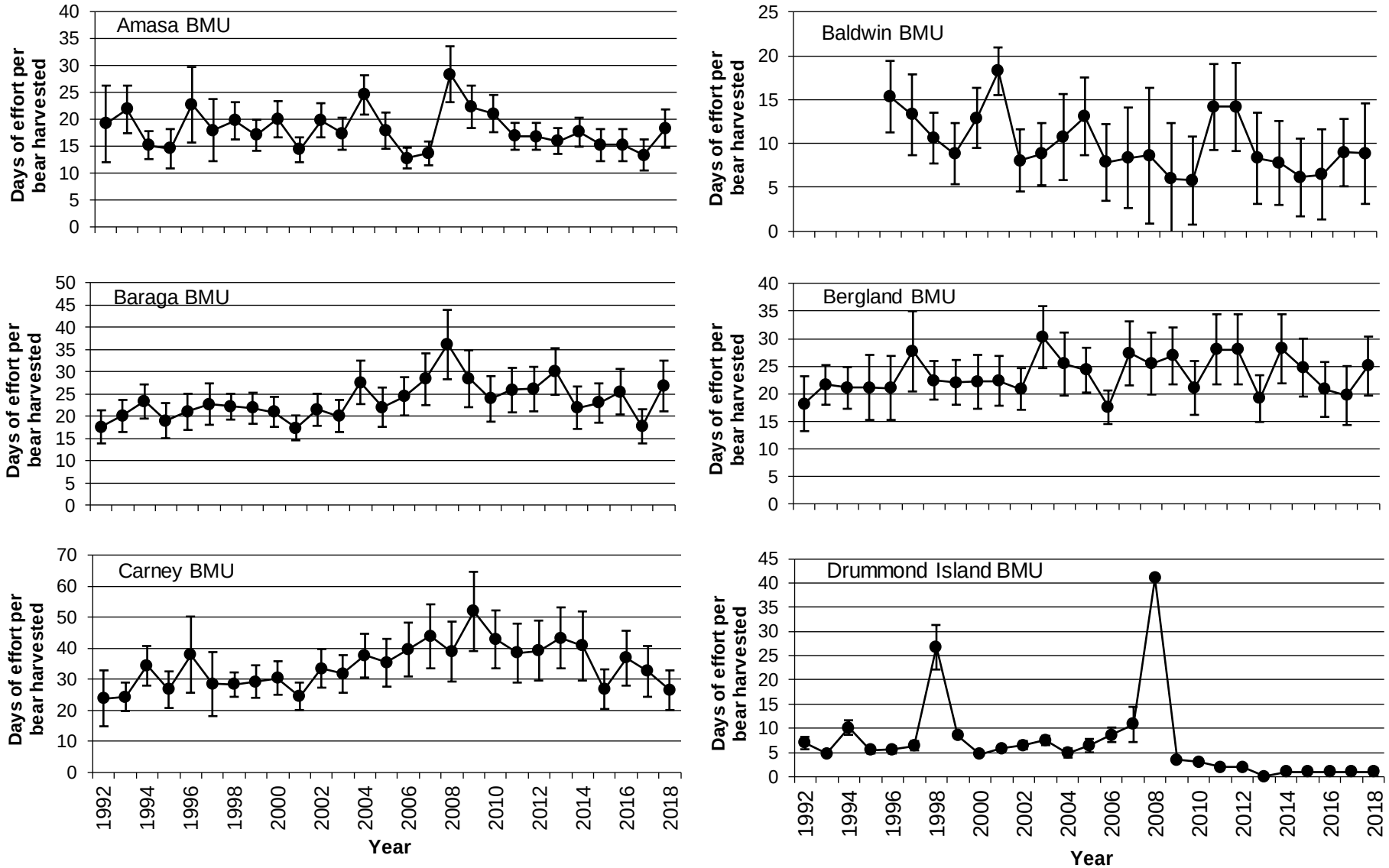

Figure 7. Estimated mean number of days required to harvest a bear in Michigan during 1992-2018, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.

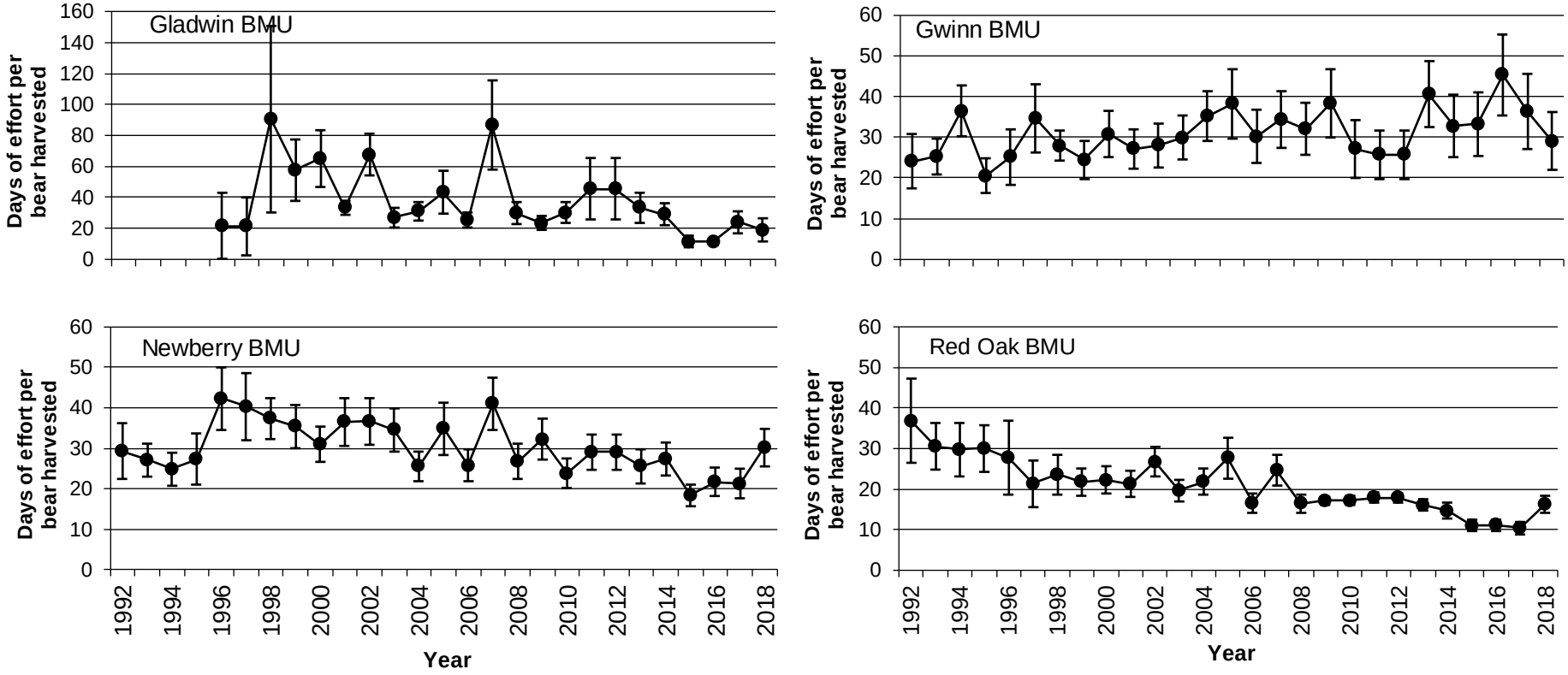

Figure 7 (continued). Estimated mean number of days required to harvest a bear in Michigan during 1992-2018, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.

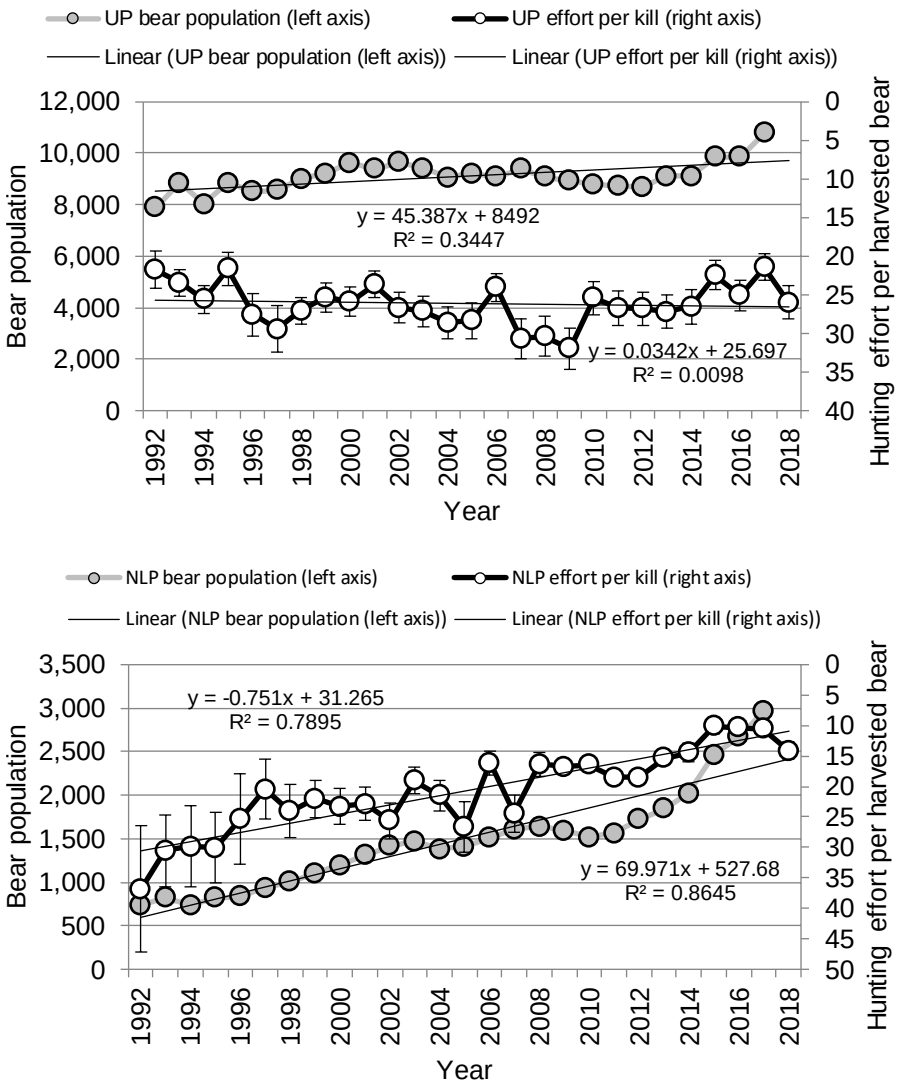

Figure 8. Long-term trends in the estimates of bear abundance (1992-2017) and estimates of effort per bear harvested (1992-2018) in Michigan. The right axes are plotted in reverse order (i.e., plotted from largest to smallest values).

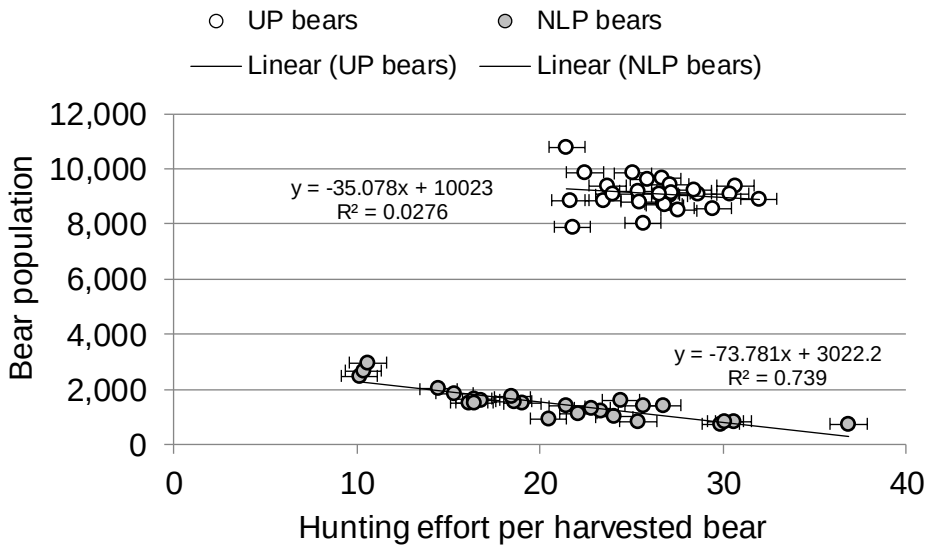

Figure 9. The relationship between estimates of bear abundance and hunting effort required to take a bear in the UP and LP (1992-2017).

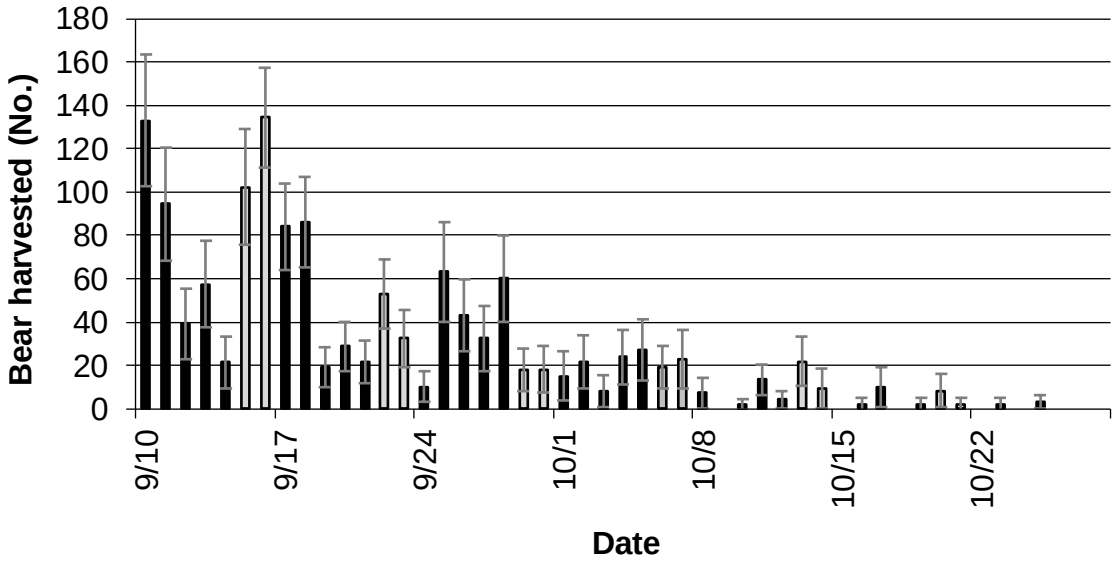

Figure 10. Estimated number of bear harvested by date during the 2018 bear hunting season (includes all hunt periods). Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval. The opening of the bear hunting season was September 10 in the UP and September 16 in the LP (except northern Baldwin Unit). Hunting with dogs in the UP started on September 15.

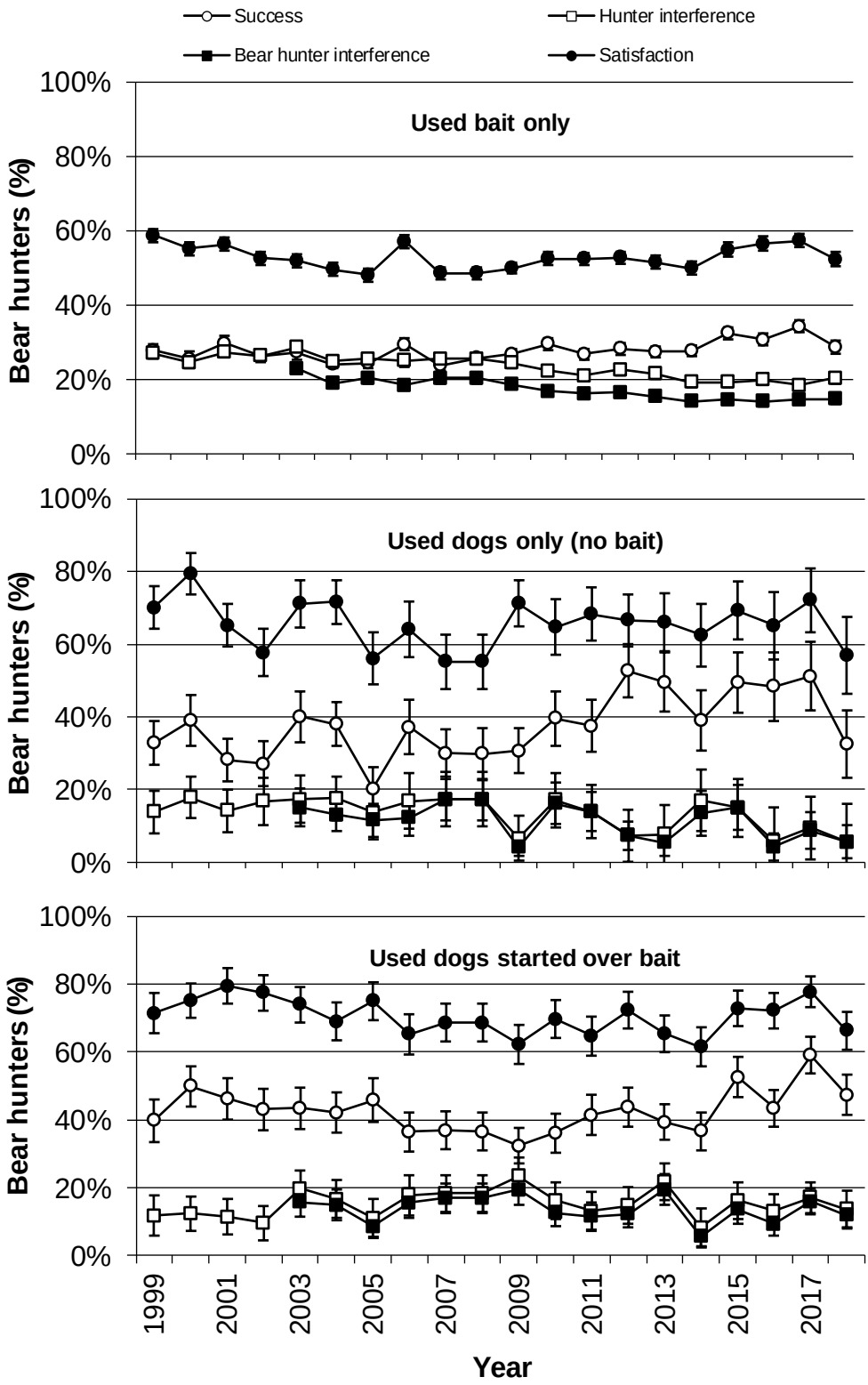

Figure 11. Estimated hunter success, interference, and satisfaction of bear hunters with their hunting experience in Michigan during 1999-2018, summarized by primary method of hunt. Vertical bars represent the 95% confidence interval. Interference was the proportion of hunters indicating they experienced interference from other hunters. Satisfaction was the proportion of hunters rating their hunting experience as very good or good.

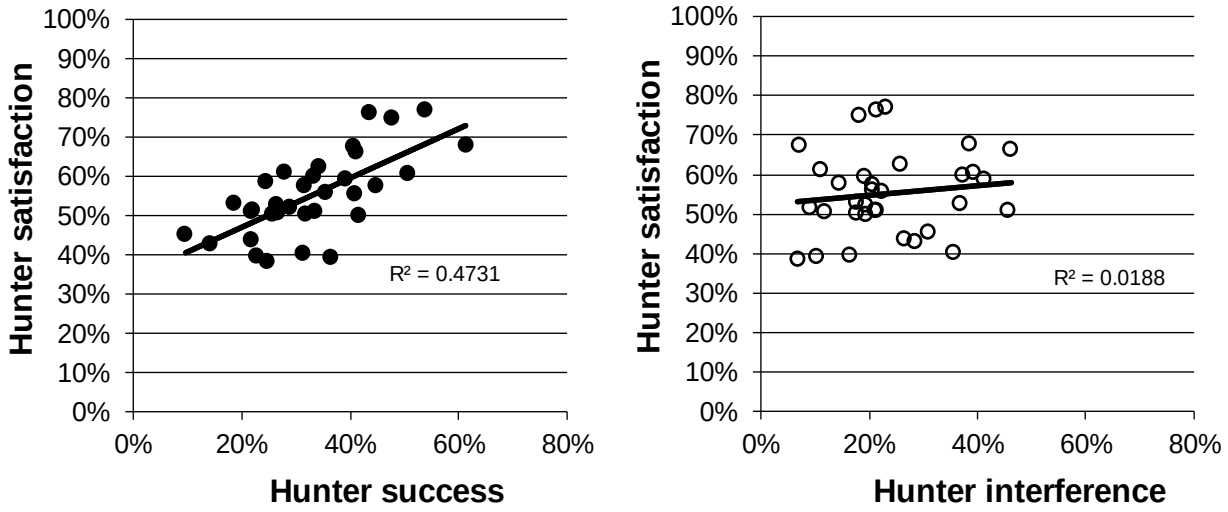

Figure 12. Hunter satisfaction (hunters rating their hunting experience as very good or good) relative to hunter success and hunter interference for 33 counties in Michigan during the 2018 bear hunting season (included only counties with at least 20 hunters).

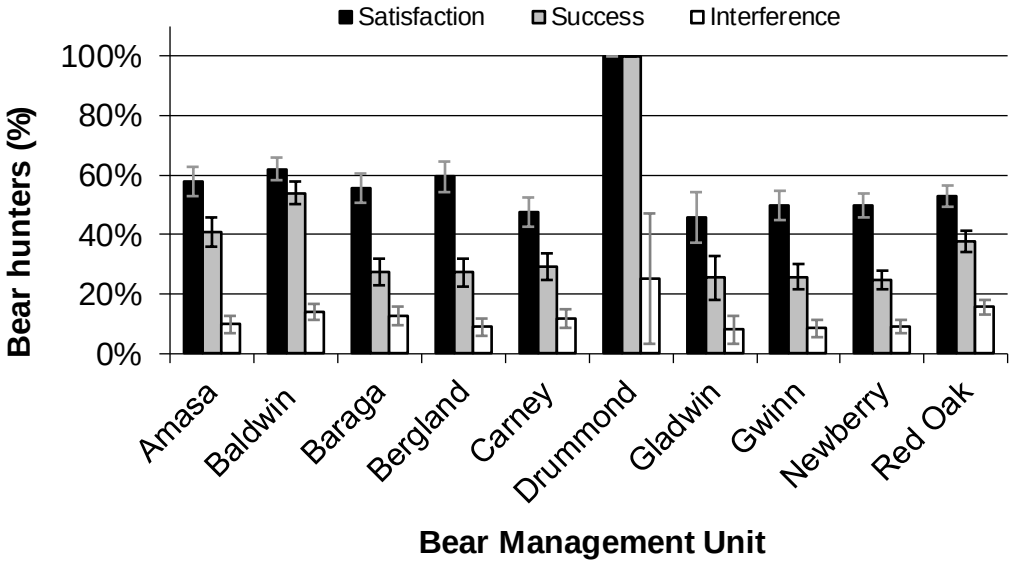

Figure 13. Estimated hunter satisfaction, hunting success, and level of hunter interference in Michigan's bear management units during the 2018 bear hunting season. Satisfaction measures the proportion of hunters rating their hunting experiences as very good or good. Error bars represent the 95% confidence limit. Interference was the proportion of hunters that reported interference from other hunters (all types of hunters).

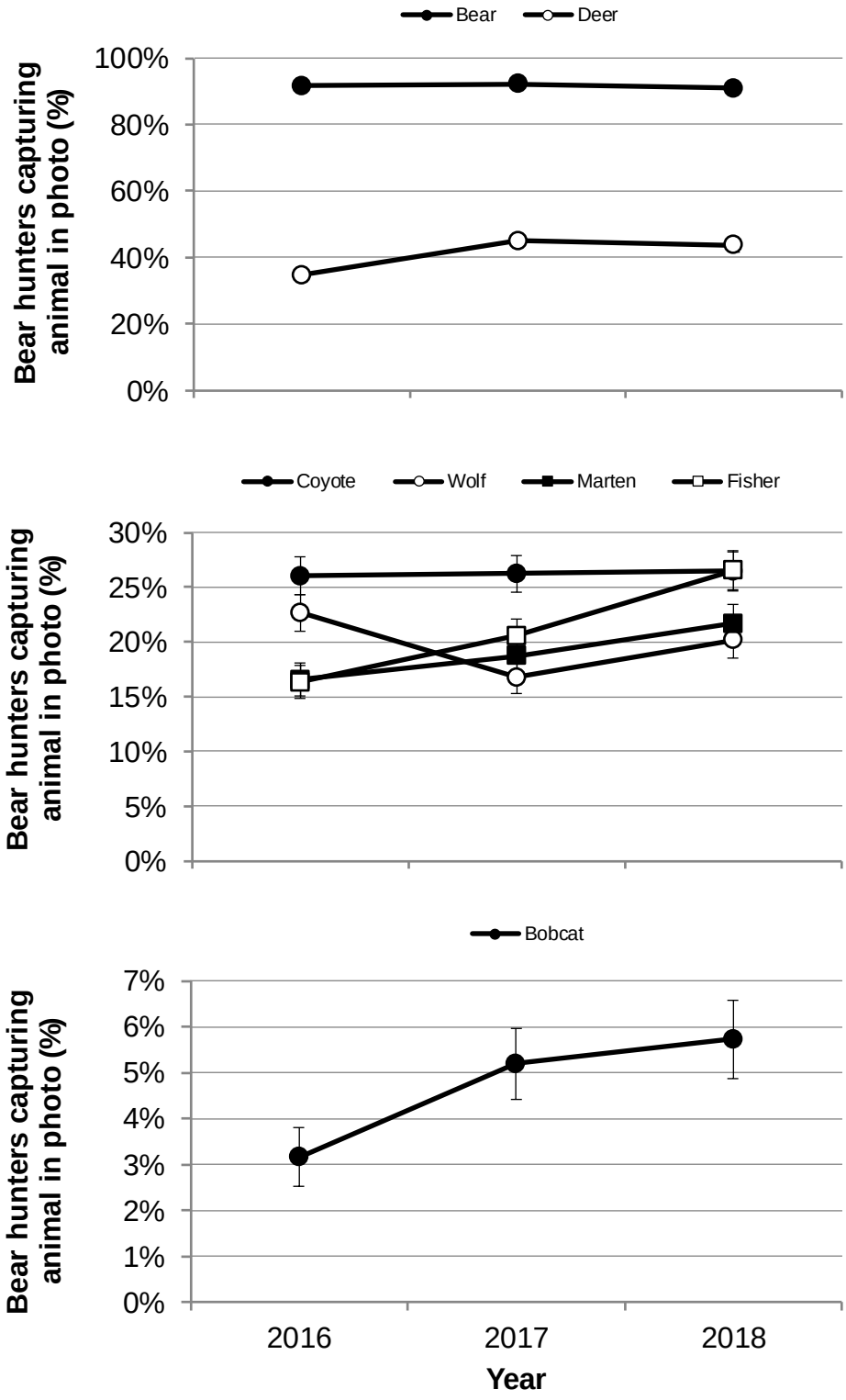

Figure 14. The proportion of bear hunters that used a trail camera and photographed selected carnivores and deer with their camera in 2016-2018.

Table 1. Number of people purchasing hunting licenses for the 2018 Michigan bear hunting seasons and number of people selected for survey sample.

Management unit	Licenses available (quota)	Number of eligible applicants[a]	Licenses sold[b]	Number of people included in mail survey sample[c]
Amasa	530	1,817	450	310
Baldwin	155	3,295	143	136
Baraga	1,490	3,088	1,105	475
Bergland	1,210	1,720	937	444
Carney	615	1,928	478	320
Drummond Island	5	203	5	5
Gladwin	100	1,289	83	82
Gwinn	1,205	2,406	850	429
Newberry	1,130	5,463	905	585
Red Oak	700	9,924	632	472
Pure Michigan Hunt	3	NA	3	3
Statewide	7,143	31,133	5,591	3,261
Applicants opting for Preference Point[d]		22,962		

[a]Number of eligible applicants selecting the management unit as their first choice to hunt.
[b]Fewer licenses were sold than the number available because some successful applicants failed to purchase a license.
[c]An additional 100 hunters responded on the internet before the mail sample was selected; these internet responders were assigned to a separate stratum when calculating survey estimates.
[d]Applicants that chose to receive a preference point rather than enter into the drawing for a hunting license.

Table 2. Estimated number of hunters, harvest, hunter success, hunting effort, mean days hunted, and mean effort per harvested bear during the 2018 Michigan bear hunting season, summarized by area.

	Hunters		Harvest		Hunter success		Hunting effort		Days hunted per hunter ($\bar{x}$)		Days hunted per harvested bear ($\bar{x}$)	
Manage-ment Unit	No.	95% CL[a]	No.	95% CL[a]	%	95% CL[a]	Days	95% CL[a]	Days	95% CL[a]	Days	95% CL[a]
Amasa	420	11	172	21	41	5	3,048	374	7.3	0.9	17.7	3.5
Baldwin	142	1	76	6	54	4	667	40	4.7	0.3	8.7	1.1
Baraga	1,025	27	282	46	27	4	7,487	699	7.3	0.7	26.6	5.6
Bergland	793	32	216	38	27	5	5,437	521	6.9	0.6	25.2	5.1
Carney	417	15	122	19	29	5	3,222	342	7.7	0.8	26.4	6.2
Drummond Is.	5	0	5	0	100	0	13	4	2.5	0.8	2.5	0.8
Gladwin	80	3	20	6	25	7	366	37	4.6	0.4	17.9	7.1
Gwinn	778	23	200	34	26	4	5,865	583	7.5	0.7	29.3	7.1
Newberry	797	21	198	27	25	3	5,795	415	7.3	0.5	29.4	4.5
Red Oak	606	9	228	21	38	3	3,597	196	5.9	0.3	15.8	2.0
Pure MI Hunt	3	0	2	0	67	0	19	0	6.3	0.0	9.5	0.0
Statewide[b]	5,066	56	1,521	82	30	2	35,515	1,253	7.0	0.2	23.4	1.8

[a]95% confidence limits.

[b]Column totals may not equal statewide totals because of rounding error.

Table 3. Estimated number of hunters, harvest, hunter success, hunting effort, hunter satisfaction, and hunt interference during the 2018 Michigan bear hunting season, summarized by county.

	Hunters[a]		Harvest[a]		Hunter success		Hunting effort (days)[a]		Hunter satisfaction[b]		Interfered hunters[c]	
County	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Alcona	107	17	38	11	35	8	623	116	56	9	21	7
Alger	163	31	37	16	23	9	1,094	292	39	10	17	8
Alpena	66	14	28	9	42	11	418	104	50	11	19	9
Antrim	19	8	5	3	24	16	82	39	62	19	28	18
Arenac	3	3	0	0	0	0	14	14	100	0	0	0
Baraga	465	52	101	30	22	6	3,186	541	51	7	21	6
Bay	0	0	0	0	0	0	0	0	0	0	0	0
Benzie	22	4	11	3	51	10	59	14	61	10	39	10
Charlevoix	6	4	2	2	33	36	20	16	67	36	67	36
Cheboygan	24	9	13	6	54	18	127	62	77	15	23	15
Chippewa	168	25	45	13	27	7	1,325	281	51	8	21	7
Clare	24	6	6	3	25	13	110	35	38	15	7	8
Crawford	27	9	7	4	24	14	131	52	59	17	41	17
Delta	249	37	58	20	22	7	1,924	404	52	8	9	4
Dickinson	175	29	50	16	29	8	1,278	323	52	9	19	7
Emmet	18	8	9	5	50	21	64	38	80	17	20	17
Gladwin	34	7	5	3	14	9	162	42	43	13	29	12

[a]Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.
[b]Proportion of hunters that rated their hunting experience as very good or good.
[c]Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2018 Michigan bear hunting season, summarized by county.

	Hunters[a]		Harvest[a]		Hunter success		Hunting effort (days)[a]		Hunter satisfaction[b]		Interfered hunters[c]	
County	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Gogebic	293	42	92	26	32	8	1,998	448	58	8	21	7
Gd. Traverse	16	5	7	3	42	15	106	46	69	12	27	15
Houghton	176	37	72	24	41	11	922	252	68	11	7	5
Iosco	14	6	5	3	34	21	65	40	73	21	0	0
Iron	278	21	124	19	45	6	1,976	288	58	6	14	4
Isabella	0	0	0	0	0	0	0	0	0	0	0	0
Kalkaska	26	8	2	1	10	6	158	69	45	17	31	15
Keweenaw	111	32	48	21	43	15	795	316	76	13	21	12
Lake	43	5	14	3	33	6	148	23	60	7	37	7
Leelanau	4	2	1	1	33	0	9	6	67	23	33	23
Luce	191	27	36	12	19	6	1,420	282	53	8	18	6
Mackinac	144	24	31	12	22	8	962	218	44	9	27	8
Manistee	29	5	12	3	41	8	76	17	66	8	46	9
Marquette	595	58	153	34	26	5	4,647	712	50	6	18	4
Mason	11	3	6	2	56	13	42	14	77	12	0	0
Mecosta	1	1	0	0	0	0	6	5	100	0	100	0
Menominee	265	22	84	17	32	6	2,172	314	50	6	12	4

[a]Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.
[b]Proportion of hunters that rated their hunting experience as very good or good.
[c]Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2018 Michigan bear hunting season, summarized by county.

	Hunters[a]		Harvest[a]		Hunter success		Hunting effort (days)[a]		Hunter satisfaction[b]		Interfered hunters[c]	
County	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Midland	0	0	0	0	0	0	0	0	0	0	0	0
Missaukee	29	9	18	7	61	16	148	69	68	16	39	16
Montmorency	103	16	32	10	31	8	562	112	40	9	36	8
Muskegon	0	0	0	0	0	0	0	0	0	0	0	0
Newaygo	16	3	5	2	30	10	64	16	54	11	62	11
Oceana	0	0	0	0	0	0	0	0	0	0	0	0
Ogemaw	35	10	13	6	36	13	134	41	39	13	10	9
Ontonagon	525	54	180	37	34	6	3,517	497	62	6	26	6
Osceola	13	5	3	3	25	18	57	21	45	18	0	0
Oscoda	33	10	9	5	28	14	139	48	61	15	11	10
Otsego	35	10	9	5	26	13	200	71	53	15	37	15
Presque Isle	74	14	30	9	41	10	353	98	56	10	22	9
Roscommon	52	12	18	7	33	11	326	92	51	12	46	12
Schoolcraft	199	27	78	18	39	8	1,280	242	60	8	19	6
Wexford	41	6	20	4	48	8	134	23	75	7	18	6
Unknown	413	50	5	5	1	1	2,482	403	44	6	18	5

[a]Number of hunters does not add up to statewide total because hunters can hunt in more than one county. Column totals for hunting effort and harvest may not equal statewide totals because of rounding errors.
[b]Proportion of hunters that rated their hunting experience as very good or good.
[c]Proportion of hunters that indicated that they experienced interference from other hunters (all types of hunters).

Table 4. Estimated number and proportion of hunters hunting on private and public lands during the 2018 bear hunting season, summarized by area.

	Land type															
	Private land only				Public land only				Both private and public lands				Unknown land			
Management unit	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL
Amasa	152	21	36	5	169	21	40	5	97	18	23	4	2	3	1	1
Baldwin	48	5	34	4	50	5	35	4	40	5	28	4	4	2	3	1
Baraga	310	47	30	5	527	52	51	5	169	38	17	4	18	13	2	1
Bergland	194	36	25	4	434	45	55	5	154	33	19	4	10	9	1	1
Carney	280	22	67	5	74	16	18	4	54	14	13	3	8	6	2	1
Drummond Is.	1	1	25	22	3	1	50	25	1	1	25	22	0	0	0	0
Gladwin	47	7	58	8	28	7	36	8	3	3	4	3	2	2	2	2
Gwinn	276	38	36	5	366	40	47	5	132	29	17	4	3	5	0	1
Newberry	277	30	35	4	368	32	46	4	137	24	17	3	16	9	2	1
Red Oak	369	22	61	4	156	19	26	3	75	15	12	2	6	4	1	1
Pure MI Hunt	0	0	0	0	2	0	67	0	1	0	33	0	0	0	0	0
Statewide	1,955	86	39	2	2,178	92	43	2	865	68	17	1	68	21	1	0

Table 5. Estimated number of days of hunting effort on private and public lands during the 2018 Michigan bear hunting season, summarized by area.

	Land type							
	Private lands		Public lands		Both private and public lands		Unknown	
Management unit	Total	95% CL	Total	95% CL	Total	95% CL	Total	95% CL
Amasa	1,043	211	994	187	1,000	343	11	15
Baldwin	270	37	248	29	140	26	9	6
Baraga	2,174	548	3,712	554	1,394	401	207	189
Bergland	1,247	304	2,886	447	1,275	373	30	31
Carney	2,290	305	456	164	428	177	48	53
Drummond Is.	1	1	5	3	6	5	0	0
Gladwin	214	42	126	36	16	16	10	12
Gwinn	2,322	467	2,540	467	943	294	60	96
Newberry	2,207	332	2,345	305	1,148	274	94	79
Red Oak	2,207	188	1,023	150	358	101	9	12
Pure MI Hunt	6	0	13	0	0	0	0	0
Statewide[a]	13,981	947	14,348	951	6,709	788	477	236

[a]Column totals may not equal statewide totals because of rounding errors.

Table 6. Number of applicants, licenses sold, estimated number of hunters, harvest, hunting effort (days), and hunting success during Michigan bear hunting seasons, 2012-2018.

	Year						
Region	2012	2013	2014	2015	2016	2017	2018
Upper Peninsula							
Applicants	18,880	18,776	17,510	17,284	17,425	18,380	16,625
Licenses sold	5,323	5,408	5,322	4,729	4,759	4,867	4,730
Hunters	4,782	4,871	4,784	4,280	4,323	4,334	4,235
Harvest	1,376	1,350	1,297	1,387	1,255	1,479	1,194
Males (%)	59	60	63	59	61	58	58
Females (%)	41	40	36	41	38	41	41
Unknown (%)	0	0	0	0	0	1	1
Hunter-days	35,348	35,847	33,702	31,279	31,361	31,094	30,866
Hunter success (%)	29	28	27	32	29	34	28
Lower Peninsula							
Applicants	13,224	13,169	12,641	13,534	13,695	15,722	14,508
Licenses sold	900	806	757	732	721	888	858
Hunters	860	754	715	711	688	843	828
Harvest	314	252	256	323	327	409	325
Males (%)	49	55	55	64	46	55	58
Females (%)	51	45	45	36	54	45	42
Unknown (%)	0	0	0	0	0	0	0
Hunter-days	4,385	3,851	3,548	3,209	3,401	4,330	4,630
Hunter success (%)	37	33	36	45	48	49	39
Statewide							
Applicants[a]	51,152	51,715	48,882	51,077	51,767	56,502	54,095
Licenses sold[b]	6,226	6,217	6,082	5,464	5,483	5,759	5,591
Hunters[c]	5,643	5,626	5,499	4,991	5,011	5,177	5,063
Harvest[c]	1,690	1,602	1,552	1,710	1,582	1,888	1,519
Males (%)	57	59	62	60	58	57	58
Females (%)	43	41	38	40	42	42	41
Unknown (%)	0	0	0	0	0	1	0
Hunter-days[c]	39,733	39,699	37,250	34,488	34,763	35,424	35,496
Hunter success (%)[c]	30	28	28	34	32	36	30

[a]Number of applicants statewide included people that applied for a preference point.
[b]Number of license sold statewide included people that received Pure Michigan Hunt licenses, which were valid in both the UP and LP.
[c]Excluded Pure Michigan Hunt licenses.

Table 7. Estimated proportion of hunters that used firearms, crossbows, and archery equipment while hunting bears in Michigan, 2018, summarized by area.

	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	83	4	10	3	12	3	0	0
Baldwin	85	3	14	3	7	2	0	0
Baraga	83	4	13	3	9	3	1	1
Bergland	85	4	9	3	8	3	1	1
Carney	85	4	12	3	9	3	0	0
Drummond Is.	75	22	25	22	0	0	0	0
Gladwin	86	6	8	5	6	4	0	0
Gwinn	87	3	8	3	7	3	1	1
Newberry	87	3	9	2	7	2	1	1
Red Oak	83	3	16	3	31	3	1	1
Pure MI Hunt	100	0	0	0	33	0	0	0
Statewide[a]	85	1	11	1	11	1	1	0

[a]Row totals equal more than 100% because hunters could use more than one type of equipment during season.

Table 8. Estimated number of hunters that used firearms, crossbows, and archery equipment while hunting bears in Michigan, 2018, summarized by area.

	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
Management unit	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	349	18	41	13	51	14	0	0
Baldwin	121	4	20	4	10	3	0	0
Baraga	849	44	129	34	88	29	7	9
Bergland	672	40	72	23	64	23	10	9
Carney	353	19	50	13	39	12	0	0
Drummond Is.	4	1	1	1	0	0	0	0
Gladwin	69	5	6	4	5	3	0	0
Gwinn	676	33	66	22	57	20	9	8
Newberry	696	28	74	18	56	16	4	5
Red Oak	502	18	95	16	189	21	4	3
Pure MI Hunt	3	0	0	0	1	0	0	0
Statewide[a]	4,292	81	554	56	560	52	34	16

[a]Row totals equal more than the estimated number of hunters in the unit because hunters could use more than one type of equipment during season.

Table 9. Estimated proportion of bears harvested by firearms, crossbows, and archery equipment during the 2018 bear hunting season in Michigan, summarized by area.

	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	85	5	6	3	9	4	0	0
Baldwin	85	4	5	2	10	3	0	0
Baraga	85	7	8	5	6	5	0	0
Bergland	94	5	2	2	5	4	0	0
Carney	85	7	12	6	3	3	0	0
Drummond Is.	75	22	25	22	0	0	0	0
Gladwin	84	12	8	9	8	9	0	0
Gwinn	88	6	9	6	3	3	0	0
Newberry	92	4	7	4	1	2	0	0
Red Oak	76	5	8	3	15	4	0	0
Pure MI Hunt	100	0	0	0	0	0	0	0
Statewide	86	2	7	2	7	1	0	0

Table 10. Estimated number of bears harvested during the 2018 bear hunting season in Michigan, summarized by hunting equipment used to take the bear, summarized by area.

	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
Management unit	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	147	20	9	6	16	8	0	0
Baldwin	65	6	4	2	7	3	0	0
Baraga	241	43	23	15	18	13	0	0
Bergland	203	37	3	5	10	9	0	0
Carney	103	18	15	8	4	4	0	0
Drummond Is.	4	1	1	1	0	0	0	0
Gladwin	17	6	2	2	2	2	0	0
Gwinn	176	33	18	12	6	7	0	0
Newberry	182	26	13	8	2	3	0	0
Red Oak	174	20	19	8	35	10	0	0
Pure MI Hunt	2	0	0	0	0	0	0	0
Statewide	1,314	78	108	25	100	23	0	0

Table 11. Primary hunting methods used to hunt bear in Michigan, 2018.

Method	Number of hunters	95% CL
Bait only	4,360	79
Dogs only	109	23
Dogs and bait	489	55
Other	67	21
Unknown	41	15

Method used (%)

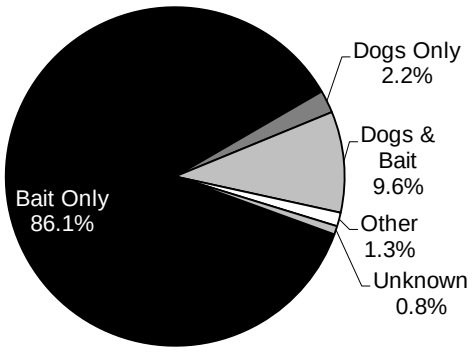

Table 12. Proportion of bait hunters that used various types of bait, summarized by management unit.[a,b,c]

Management unit	Type of bait									
	Fruit or vegetables		Corn, grains, or granola		Bakery products including jams, jellies, or sweeteners		Meat and meat products, including dog food or grease		Fish products, including cat food	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	24	4	69	5	69	5	33	5	11	3
Baldwin	17	3	76	3	77	3	36	4	11	2
Baraga	22	4	60	5	73	4	32	5	13	3
Bergland	13	3	63	5	70	5	26	5	8	3
Carney	17	4	72	5	76	4	19	4	10	3
Drummond Is.	0	0	67	28	67	28	67	28	0	0
Gladwin	17	7	63	8	81	7	46	9	6	4
Gwinn	22	4	73	5	72	5	31	5	8	3
Newberry	19	3	74	4	68	4	31	4	10	2
Red Oak	13	3	60	4	86	3	36	4	11	2
Pure MI Hunt	0	0	33	0	33	0	0	0	0	0
Statewide	19	1	67	2	73	2	30	2	10	1

[a]Bait was allowed from 31 days before the start of the bear hunting season until the end of the season. It was illegal to establish a bait station that attracted bear prior to August 10 and after October 26 in Amasa, Bergland, Baraga, Carney, Gwinn, and Newberry units; prior to August 10 and after October 21 in Drummond Island Unit; prior to August 9 and after September 26 in the Baldwin north area, prior to August 18 and after September 28 in Baldwin, Gladwin, and Red Oak units, and prior to September 7 and after October 13 in the Red Oak bow and arrow-only season.

[b]Excluded hunters that did not use bait.

[c]Row totals equal more than 100% because hunters could use more than one type of bait.

Table 13. Number of bait hunters that used various types of bait, summarized by management unit.[a,b]

Management unit	Type of bait									
	Fruit or vegetables		Corn, grains, or granola		Bakery products including jams, jellies, or sweeteners		Meat and meat products, including dog food or grease		Fish products, including cat food	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	98	18	281	21	284	21	135	20	44	13
Baldwin	23	4	102	5	104	5	49	5	15	3
Baraga	221	42	609	52	738	49	319	48	127	33
Bergland	99	27	484	45	540	44	197	36	61	21
Carney	70	15	289	22	303	21	75	16	39	12
Drummond Is.	0	0	3	1	3	1	3	1	0	0
Gladwin	13	5	48	7	62	6	35	7	5	3
Gwinn	163	32	540	39	528	39	232	36	60	20
Newberry	137	24	542	32	499	33	225	28	74	18
Red Oak	77	15	347	22	495	18	204	21	64	13
Pure MI Hunt	0	0	1	0	1	0	0	0	0	0
Statewide	901	70	3,245	94	3,556	91	1,475	83	488	53

[a]Bait was allowed from 31 days before the start of the bear hunting season until the end of the season. It was illegal to establish a bait station that attracted bear prior to August 10 and after October 26 in Amasa, Bergland, Baraga, Carney, Gwinn, and Newberry units; prior to August 10 and after October 21 in Drummond Island Unit; prior to August 9 and after September 26 in the Baldwin north area, prior to August 18 and after September 28 in Baldwin, Gladwin, and Red Oak units, and prior to September 7 and after October 13 in the Red Oak bow and arrow-only season.

[b]Excluded hunters that did not use bait.

Table 14. Hunting methods used to harvest bear in Michigan, 2018.

Method	Number of hunters	95% CL	Method used (%)
Bait only	1,226	77	
Dogs only	65	16	
Dogs and bait	222	35	
Other	5	3	
Unknown	4	4	

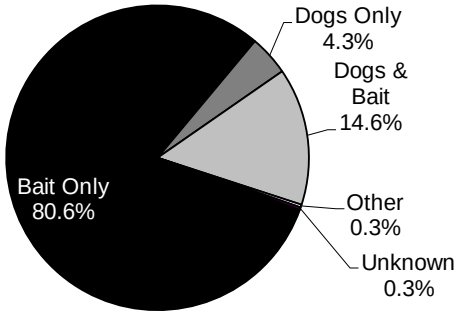

Table 15. Hunters' level of satisfaction with the number of bear seen during the 2018 bear hunting season, summarized by area.

Management unit	Satisfaction level							
	Very good or good		Neutral		Poor or very poor		No answer or not applicable	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	39	5	19	4	33	5	8	3
Baldwin	47	4	12	3	34	4	7	2
Baraga	34	5	17	4	38	5	11	3
Bergland	38	5	21	4	33	5	8	3
Carney	32	5	21	4	37	5	10	3
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	23	7	4	3	60	8	12	6
Gwinn	32	5	14	3	47	5	7	3
Newberry	32	4	17	3	43	4	9	2
Red Oak	36	3	14	3	44	4	5	2
Pure MI Hunt	33	0	0	0	67	0	0	0
Statewide	35	2	17	1	40	2	8	1

Table 16. Hunters' level of satisfaction with the number of opportunities to take a bear during the 2018 bear hunting season, summarized by area.

	Satisfaction level							
	Very good or good		Neutral		Poor or very poor		No answer or not applicable	
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	35	5	13	3	37	5	15	4
Baldwin	36	4	12	2	40	4	12	3
Baraga	27	4	17	4	39	5	18	4
Bergland	31	5	15	4	38	5	16	4
Carney	24	4	13	3	40	5	23	4
Drummond Is.	75	22	25	22	0	0	0	0
Gladwin	21	7	4	3	52	9	22	7
Gwinn	31	5	9	3	46	5	14	3
Newberry	25	3	10	2	49	4	15	3
Red Oak	30	3	14	2	45	4	12	2
Pure MI Hunt	33	0	0	0	67	0	0	0
Statewide	29	2	13	1	42	2	16	1

Table 17. Hunters' level of satisfaction with overall bear hunting experience during the 2018 bear hunting season, summarized by area.

	Satisfaction level							
	Very good or good		Neutral		Poor or very poor		No answer or not applicable	
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	58	5	18	4	20	4	5	2
Baldwin	62	4	12	3	21	3	5	2
Baraga	56	5	18	4	22	4	5	2
Bergland	59	5	15	4	23	4	2	2
Carney	47	5	25	4	25	4	3	2
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	46	9	20	7	30	8	4	3
Gwinn	50	5	18	4	30	5	3	2
Newberry	50	4	19	3	27	3	4	2
Red Oak	53	4	13	2	31	3	3	1
Pure MI Hunt	67	0	0	0	33	0	0	0
Statewide	54	2	17	1	25	2	4	1

Table 18. Number and proportion of hunters that experienced interference with another hunter during the 2018 bear hunting season, summarized by area.

Management unit	Hunters interfered by other hunters (all types of hunters)				Hunters interfered by other bear hunters			
	%	95% CL	No.	95% CL	%	95% CL	No.	95% CL
Amasa	14	4	59	15	10	3	40	13
Baldwin	37	4	53	5	26	3	37	5
Baraga	19	4	199	40	15	4	158	37
Bergland	22	4	174	35	17	4	135	31
Carney	12	3	52	14	9	3	36	12
Drummond Is.	0	0	0	0	0	0	0	0
Gladwin	14	6	11	5	4	3	3	3
Gwinn	13	3	104	26	11	3	83	23
Newberry	21	3	164	25	16	3	126	23
Red Oak	27	3	163	20	16	3	97	16
Pure MI Hunt	0	0	0	0	0	0	0	0
Statewide	19	1	979	71	14	1	715	63

Table 19. Number and proportion of hunters that used a hunting guide during the 2018 bear hunting season, summarized by area.

Management unit	%	95% CL	No.	95% CL
Amasa	17	4	73	16
Baldwin	27	3	38	5
Baraga	11	3	115	32
Bergland	20	4	158	34
Carney	10	3	43	12
Drummond Island	25	22	1	1
Gladwin	11	5	9	4
Gwinn	9	3	70	22
Newberry	15	3	119	22
Red Oak	5	2	30	9
Pure MI Hunt	100	0	3	0
Statewide	13	1	658	61

Table 20. Methods used by guides to hunt bear in Michigan, 2018, summarized by area.

	Hunted over bait only		Used dogs only (no bait)		Used dogs started over bait		Used other method		Unknown method	
Management unit	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	56	14	2	3	11	7	0	0	4	4
Baldwin	17	4	8	3	10	3	0	0	2	1
Baraga	104	31	0	0	7	9	0	0	4	6
Bergland	152	33	0	0	7	8	0	0	0	0
Carney	30	11	0	0	10	6	0	0	2	3
Drummond Island	0	0	0	0	1	1	0	0	0	0
Gladwin	4	3	2	2	3	3	0	0	0	0
Gwinn	48	19	3	5	19	12	0	0	0	0
Newberry	104	21	5	5	9	7	0	0	0	0
Red Oak	14	6	13	6	4	3	0	0	0	0
Pure MI Hunt	1	0	1	0	1	0	0	0	0	0
Statewide	530	56	34	10	82	20	0	0	12	8

Table 21. Proportion and number of bait hunters using a trail camera in 2018, summarized by area.[a]

Management unit	Bait hunters using a trail camera			
	%	95% CL	Total	95% CL
Amasa	84	4	343	19
Baldwin	87	3	117	4
Baraga	80	4	806	47
Bergland	68	5	525	44
Carney	89	3	353	19
Drummond Is.	67	28	3	1
Gladwin	85	6	65	6
Gwinn	81	4	600	37
Newberry	83	3	610	31
Red Oak	92	2	526	17
Pure MI Hunt	67	0	2	0
Statewide	81	1	3,951	87

[a]Excluded hunters that did not use bait.

Table 22. Proportion of bear hunters using a trail camera that photographed the following selected carnivores and deer with their trail camera in 2018, summarized by area.[a]

	Species													
	Bear		Coyote		Deer		Bobcat		Wolf		Marten		Fisher	
Management unit	%	95 CL	%	95 CL	%	95 CL	%	95 CL	%	95 CL	%	95 CL	%	95 CL
Amasa	91	3	25	5	47	6	2	2	32	5	20	4	35	5
Baldwin	95	2	19	3	41	4	14	3	0	0	0	0	1	1
Baraga	91	3	21	4	43	6	2	1	27	5	44	6	37	5
Bergland	89	4	25	6	45	6	8	4	28	6	26	6	40	6
Carney	94	3	30	5	57	5	10	3	9	3	6	3	17	4
Drummond Is.	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Gladwin	85	7	34	9	44	9	12	6	0	0	0	0	0	0
Gwinn	92	3	28	5	50	6	6	3	15	4	22	5	33	5
Newberry	89	3	24	4	36	4	4	2	32	4	24	4	25	4
Red Oak	91	2	38	4	35	4	8	2	0	0	1	1	1	1
Pure MI Hunt	50	0	0	0	0	0	0	0	0	0	0	0	0	0
Statewide	91	1	26	2	44	2	6	1	20	2	22	2	26	2

[a]Excluded hunters that did not use a trail camera.

APPENDIX A

2018 Michigan Bear Harvest Questionnaire

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

2018 MICHIGAN BEAR HARVEST REPORT

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 report even if you did not hunt or harvest a bear. If you want to provide your answers via the internet, visit our website at michigan.gov/bear.

1. Did you hunt bear in Michigan during the 2018 season?

1 ☐ Yes 2 ☐ No; (If you select "No", you are finished. Please return the survey.)

2. Please report the number of days for each county that you hunted bear in the following table.

COUNTY HUNTED (*List each county that you hunted for bear; for example, Marquette County*)	**NUMBER OF DAYS HUNTED**	**TYPE OF LAND**
		1 ☐ Private 2 ☐ Public 3 ☐ Both
		1 ☐ Private 2 ☐ Public 3 ☐ Both
		1 ☐ Private 2 ☐ Public 3 ☐ Both
		1 ☐ Private 2 ☐ Public 3 ☐ Both

3. Did you hunt with a firearm, crossbow, or bow during the 2018 bear season? *(select all that apply)*

1 ☐ Firearm 2 ☐ Crossbow 3 ☐ Bow (recurve, compound, or long bow)

4. What hunting method did you use most often when hunting bear in Michigan during the 2018 bear season? (*Please select only one item.*)

1 ☐ Hunted over bait only 2 ☐ Used dogs only (bait not used)

3 ☐ Used dogs started over bait 4 ☐ Used other methods not involving dogs or bait

5. If you used bait to attract bears, what was the total number of gallons you used during the legal baiting and hunting periods?

_____
Please write in gallons used.

6. If you used bait, select the types of bait you used. *(select all that apply)*

1 ☐ Fruit or vegetables 2 ☐ Corn, grains, or granola

3 ☐ Bakery products including jams, jellies, or sweeteners 4 ☐ Meat and meat products, including dog food or grease 5 ☐ Fish and fish products, including cat food

7. If you used bait, did you use a trail camera to record events at a bait station?

1 ☐ Yes 2 ☐ No (*If no, please skip to question 9.*)

8. If you used a trail camera, what animals did you photograph? *(select all that apply)*

0 ☐ None 1 ☐ Bear 2 ☐ Coyote 3 ☐ Deer 4 ☐ Bobcat

5 ☐ Wolf 6 ☐ Marten 7 ☐ Fisher 8 ☐ Other:_____

Please continue on back

9. At any time during the 2018 season, did you hire a guide's service to hunt bear in Michigan?

1 ☐ Yes 2 ☐ No (*If no, please skip to question 11.)*

10. If yes, what hunting techniques were used most often by the guide? (P*lease select only one item.*)

1 ☐ Hunted over bait only 2 ☐ Used dogs only (bait not used)

3 ☐ Used dogs started over bait 4 ☐ Used other methods not involving dogs or bait

11. Did you kill a bear and place your harvest tag on it?

1 ☐ Yes 2 ☐ No (*If no, please skip to question 13.)*

12. If your harvest tag was put on a bear, please fill in the information below

a. What date was the bear harvested?
(*please check [X] the box for the date of harvest*)

September 2018						
S	M	T	W	T	F	S
	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

October 2018						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	

b. What was the sex of the bear?

1 ☐ Male 2 ☐ Female 3 ☐ Not sure

c. In what county was it harvested? _____
please write in county name

d. On what type of land was the bear harvested?

1 ☐ Private 2 ☐ Public

e. What weapon was used to harvest bear?

1 ☐ Firearm 2 ☐ Crossbow 3 ☐ Bow (recurve, compound, or long bow)

f. What was the method of harvest?

1 ☐ Taken over bait 2 ☐ Used dogs only (bait not used)

3 ☐ Used dogs started over bait 4 ☐ Used other methods not involving dogs or bait

g. If you used a hunting guide, was your hunting guide responsible for your success in taking a bear? (You can skip this question if you did not use a hunting guide.)

1 ☐ Yes 2 ☐ No 3 ☐ Not sure

13. Did other hunters interfere with your bear hunting? 1 ☐ Yes 2 ☐ No *(Skip to question 15.)*

14. If you answered "yes" to the previous question, was the interference caused by other bear hunters? 1 ☐ Yes 2 ☐ No

15. How would you rate the following for your 2018 bear hunting season:
(Select one choice per item.)

	Very Good	Good	Neutral	Poor	Very Poor	Not Applicable
a. Number of bear you saw.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
b. Number of opportunities you had to take a bear.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐
c. Your overall bear hunting experience.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐	6 ☐

Return the completed report in the enclosed postage-paid envelope. Thanks for your help.