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2019 MICHIGAN BLACK BEAR HUNTER SURVEY

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ABSTRACT

We contacted a random sample of bear hunters after the 2019 hunting season to determine hunter participation, hunting methods, bear harvest, and hunter satisfaction. In 2019, an estimated 5,076 hunters spent nearly 33,899 days afield and harvested about 1,786 bears. The estimated number of hunters in 2019 was similar to the number in 2018; however, bear harvest increased significantly by 17% in 2019. Statewide, 35% of hunters harvested a bear in 2019, which was significantly greater than in 2018 (30%). The average number of days required to harvest a bear statewide was 19.1 days in 2019, which was significantly less than in 2018 (23.4 days). About 85% 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 (55% for dog hunters versus 33% for bait-only hunters). Statewide, about 57% of hunters rated their hunting experience as very good or good in 2019 (versus 54% in 2018).

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 2019, 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 11-October 26 in all of the Upper Peninsula (UP) units, except the Drummond Island Management Unit (September 11-October 21). Hunters could pursue bears from September 15-23 for 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 15) was restricted to hunting with bait only, and the last two days of the hunt periods in the LP (September 22-23) 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 and hunting with dogs prohibited). The first five days (September 11-15) of the first hunt in the UP were restricted to bait-only hunting.

The number of bear hunting licenses available in the state in 2019 (license quota) was reduced by 60 licenses from 2018 (i.e., <1% difference). 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 hunters 9 years of age and younger could hunt bear with a mentored youth hunting license. These youth hunters had to be accompanied while hunting by a qualified mentor. Youth less than 14 years old could hunt with a firearm on private land only, while youth 14 years old and older could hunt with a firearm on either private or public land.

The Pure Michigan Hunt (PMH) was a 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 (55% 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 the 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, the 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 2019 bear hunting season, a questionnaire (Appendix A) was mailed to 3,181 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). Also, 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 the 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 2019 and sent a maximum of two follow-up questionnaires to nonrespondents. Of the 3,181 questionnaires mailed, 52 were undeliverable, resulting in an adjusted sample size of 3,129. We received questionnaires from 2,052 people, yielding a 66% adjusted response rate. In addition, 480 people voluntarily reported information about their hunting activity via the internet before we selected the random sample.

RESULTS

In 2019, hunters purchased 5,613 bear hunting licenses (Table 1), which was an increase of 0.4% from 2018 (5,591). Most of the hunters buying a license in 2019 were men (90%), and the average age of the license buyers was 50 years (Figure 2). About 4% of the license buyers (229) were younger than 17 years old.

Compared to 10 years ago, the number of people buying a bear hunting license in 2019 decreased by 37% (8,953 people purchased a license in 2009). Although the overall number of license buyers decreased, hunter numbers among the youngest and oldest age classes were similar or slightly higher in 2019 than in 2009 (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. The increased participation among the youngest hunters reflected the elimination of an age requirement. In 2019, there was no minimum age requirement to participate; while the hunters had to be at least 10 years old to participate in 2009.

Nearly $90 \pm 1\%$ of the license buyers hunted bear (Table 2). These hunters spent 33,899 days afield ($\bar{x}$ = 6.7 days/hunter) and harvested 1,786 bears. The number of hunters in 2019 and their hunting effort were not significantly different from 2018, but the overall harvest increased significantly by 17% (Figure 4). Baraga and Ontonagon counties had the greatest number of bear hunters, and these two counties also had the greatest number of bears harvested during 2019 (Table 3).

The average number of days required to harvest a bear statewide was 19.1 days in 2019 (Table 2, Figure 5), which was significantly fewer days than in 2018 (23.4 days). Mean effort per harvested bear also decreased significantly in the LP between 2018 and 2019 (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 to 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, Gwinn, and Newberry 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 (1992-2018) 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 = -0.09, P = 0.66) (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 2019, 44% hunted on public lands only, and 16% hunted on both private and public lands (Table 4). Bear hunters spent 12,785 days afield on private land, 13,887 days hunting on public land only, and 7,000 days hunting on both private and public lands (Table 5). Of the estimated 1,786 bears harvested in 2019, hunters harvested 40 ± 3% of these bears (719 ± 53) on private land. Hunters harvested about 60 ± 3% of the bears (1,066 ± 71) on public land.

Based on reported harvest dates, hunters took about 38% of these bears during September 11-15 (i.e., the first five days for most units) and 51% during September 11-20 (i.e., the first ten days, Figure 10). Of the bears harvested and their sex known, 61 ± 3% were males (1,084 ± 70) and 39 ± 3% were females (699 ± 55; Table 6). Statewide, 35% of hunters harvested a bear in 2019 (Table 2), which was significantly greater than in 2018 (30% success in 2018). Hunter success ranged from 25-100% among the bear management units (Table 2).

Most hunters (87%) used firearms while hunting bear, although 11% of the hunters used archery equipment (compound, recurve, or longbows), and 9% 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 (85 ± 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 80 ± 2% of the bears with the aid of bait only (Table 14). Hunting success for hunters primarily using bait only was 33 ± 2%, while hunting success for hunters using dogs was 55 ± 5% in 2019. Success among hunters using dogs has usually been greater than among hunters using baits only (Figure 11).

About 40% of bear hunters statewide rated the number of bears seen during the 2019 hunting season as very good or good, and 36% rated bear seen as poor or very poor (Table 15). Similarly, about 32% of hunters statewide rated the number of chances they had to take a bear during the 2019 hunting season as very good or good, and 40% rated their chances as poor or very poor (Table 16).

Statewide, about 57% of hunters rated their hunting experiences as very good or good (versus 57% in 2018), and 21% 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 2019, 18% of the hunters reported that other hunters interfered with their hunts (Table 18). Other bear hunters accounted for most of the interference reported; 13% 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 14% of the hunters (711 hunters) hired a hunting guide in 2019 (Table 19). Most hunting guides (80%) relied on baiting only to locate bears for their clients in 2019 (Table 20). Hunting success of hunters using a guide was significantly greater than hunters that did not use a guide (47 ± 5% with a guide versus 33 ± 2% without a guide).

About 82% of the bear hunters using bait also used a trail camera to monitor bear activity in hunt areas (Table 21). Among the hunters using a trail camera, 93% reported they took a photograph of a bear (Table 22). An increased proportion of hunters in 2019 captured a photograph of a wolf (20% in 2018 versus 26% in 2019), but fewer hunters took a picture of a deer than in 2018 (44% in 2018 versus 39% in 2019) (Figure 14).

ACKNOWLEDGEMENTS

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Figure 1. Bear management units open to hunting in Michigan, 2019.
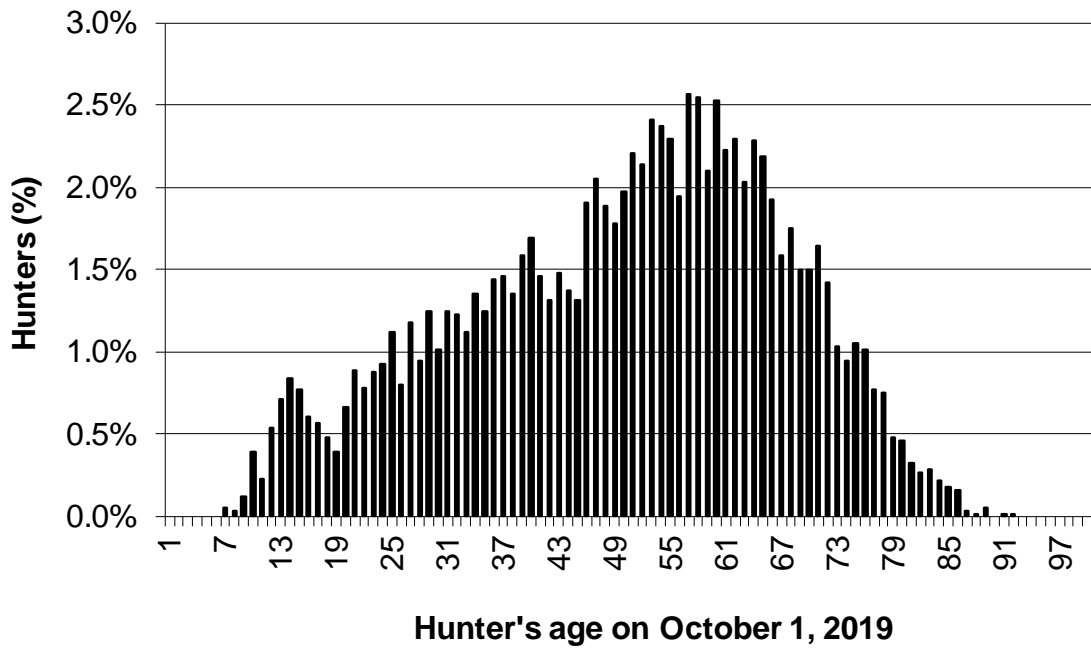
Figure 2. Age of people that purchased a bear hunting license in Michigan for the 2019 hunting season (mean = 50 years). Licenses were purchased by 5,613 people.
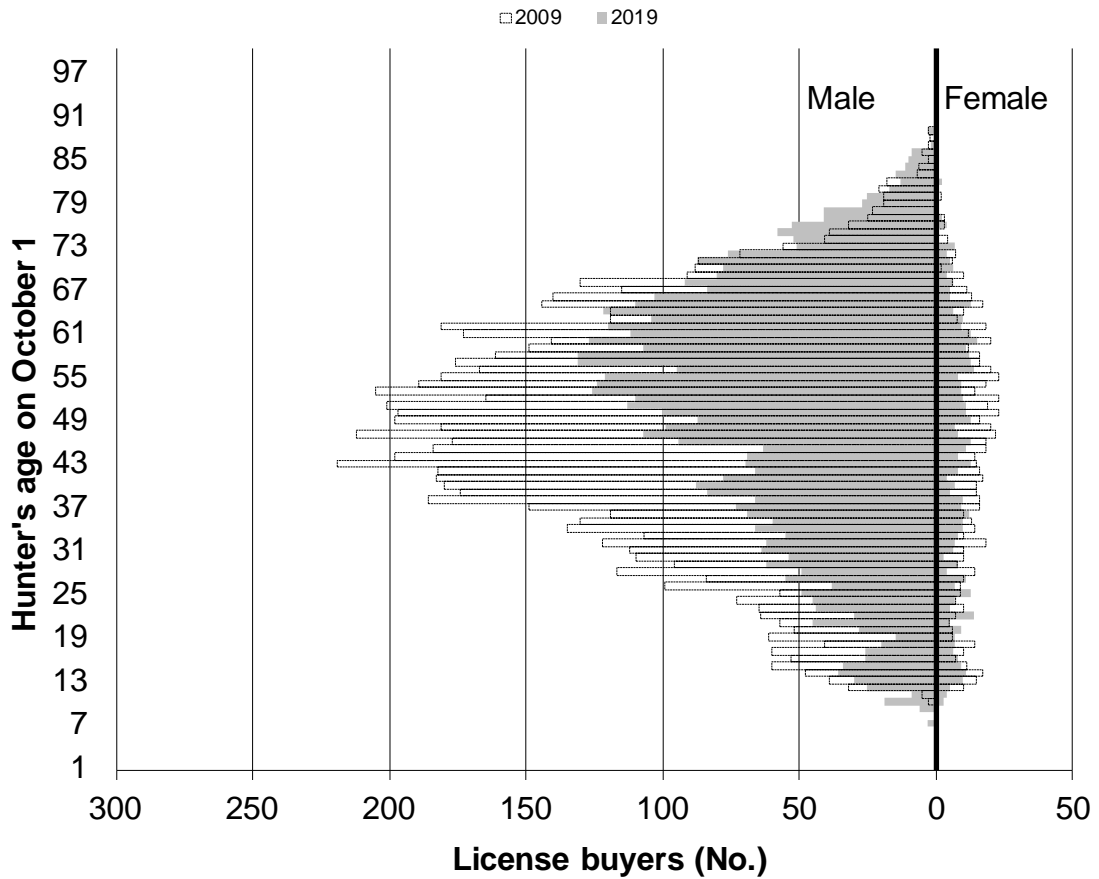
Figure 3. Number of bear hunting license buyers in Michigan by age and sex during 2009 and 2019 hunting seasons. The number of people buying a license was 8,953 in 2009 and 5,613 in 2019.
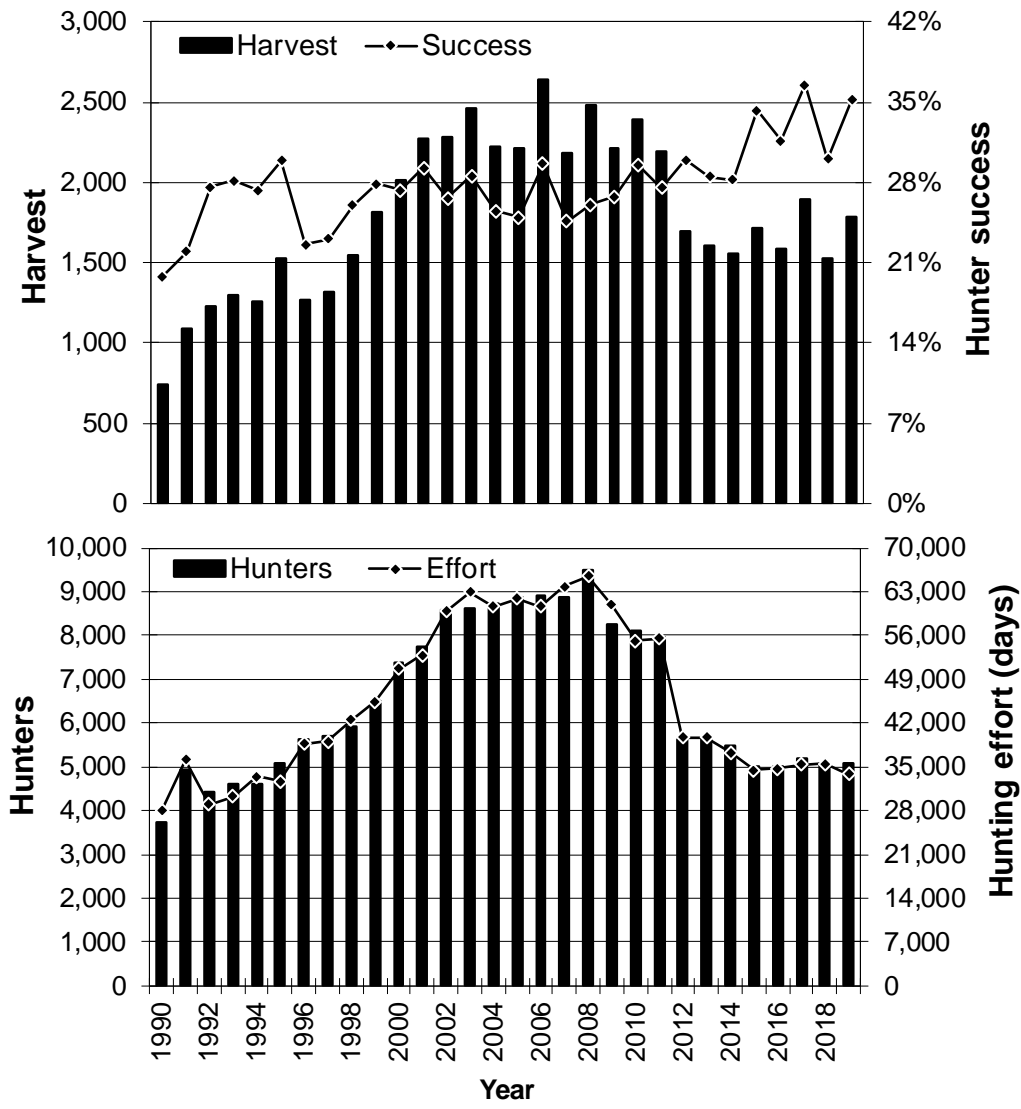
Figure 4. Estimated harvest, hunting success, number of hunters, and hunting effort during bear hunting seasons, 1990-2019.
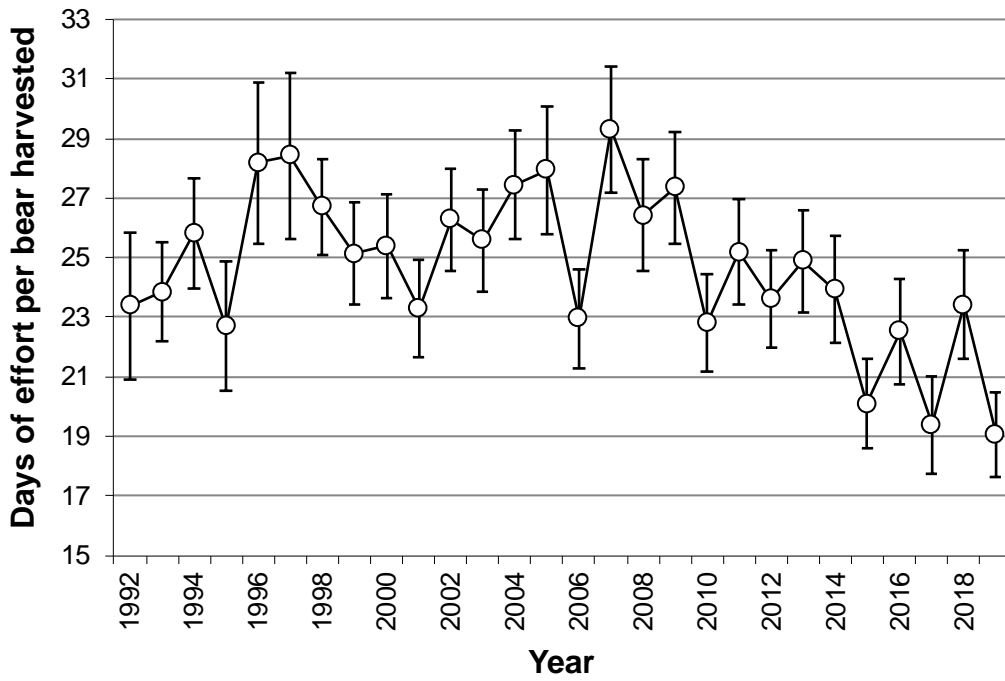
Figure 5. Estimated mean number of days required to harvest a bear statewide in Michigan during 1992-2019. Vertical bars represent the 95% confidence interval.
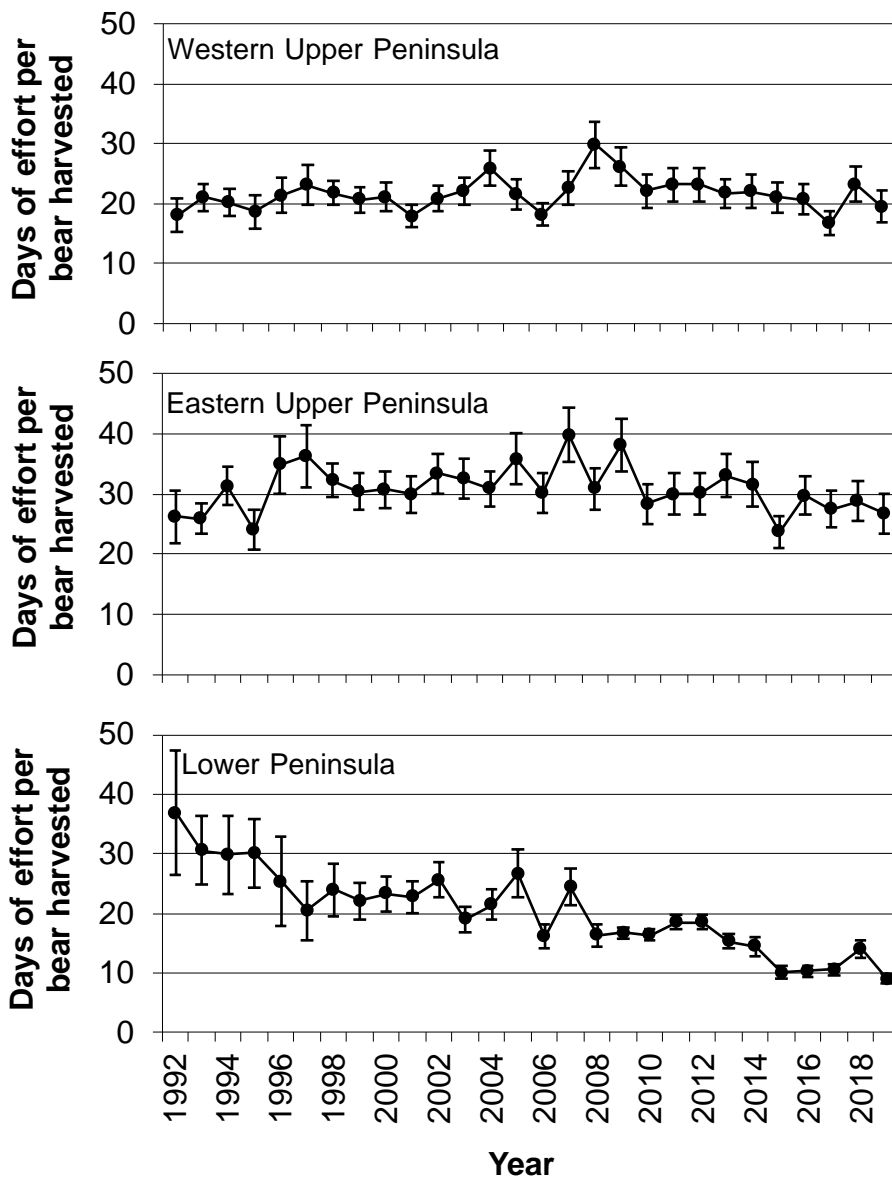
Figure 6. Estimated mean number of days required to harvest a bear in Michigan during 1992-2019, summarized by ecological region. Western UP consisted of Amasa, Baraga, and Bergland units, and Eastern UP consisted of Carney, Gwinn, and Newberry units (Drummond Island Management Unit excluded). Lower Peninsula consisted of Baldwin, Gladwin, and Red Oak management units. Vertical bars represent the 95% confidence interval.
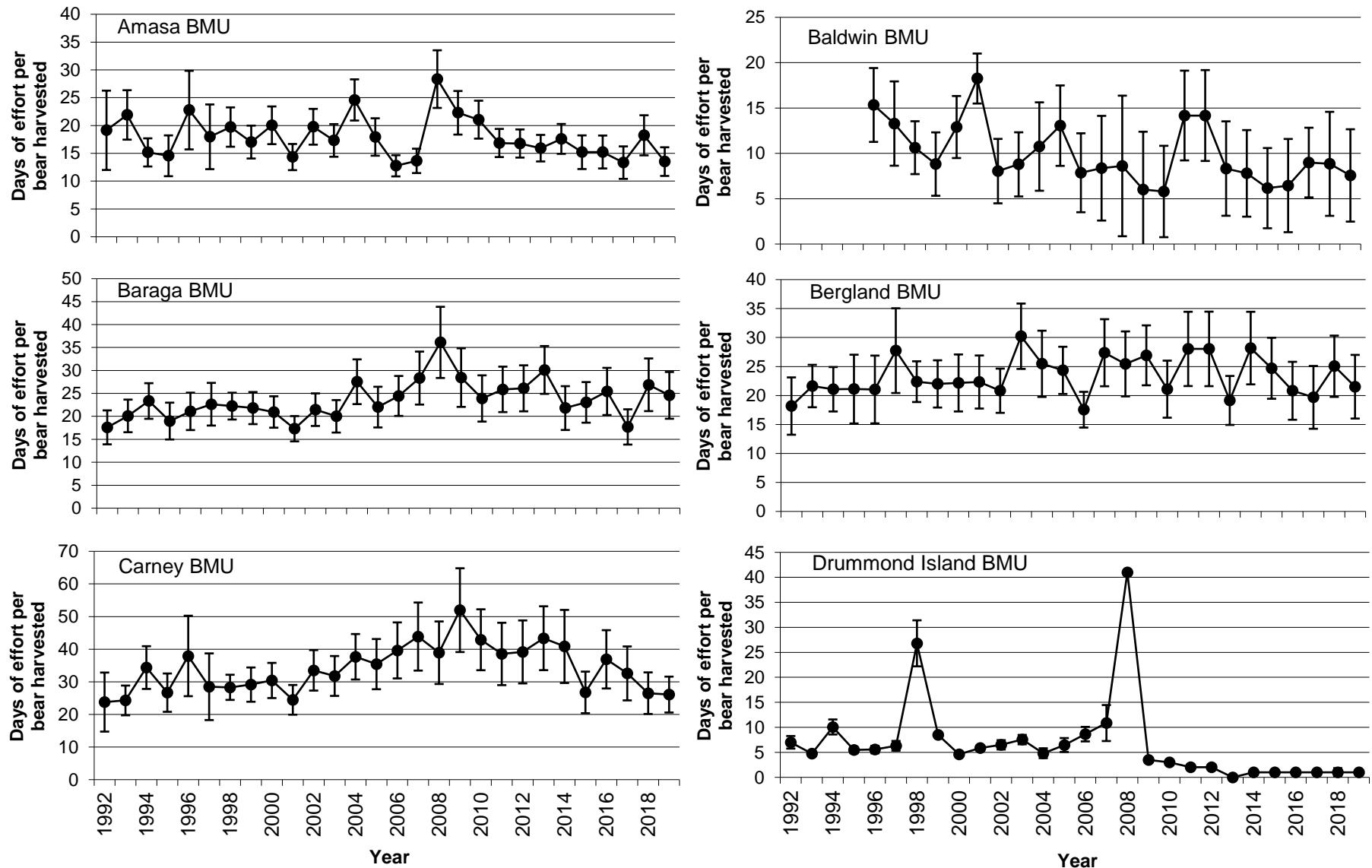
Figure 7. Estimated mean number of days required to harvest a bear in Michigan during 1992-2019, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.

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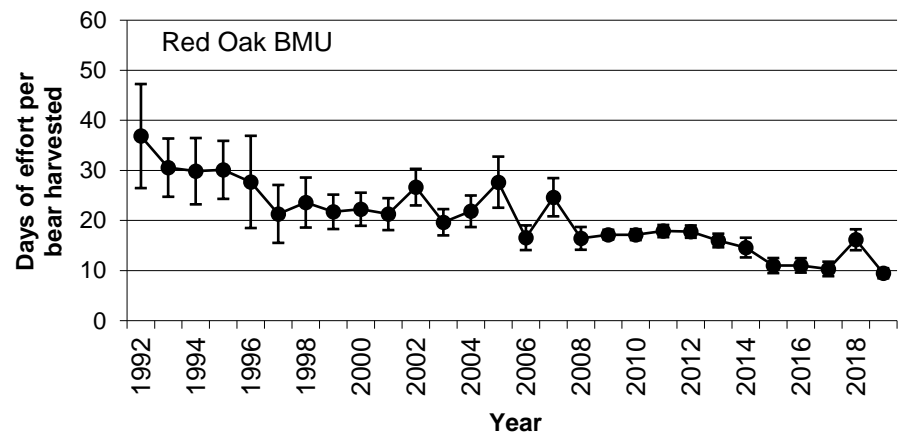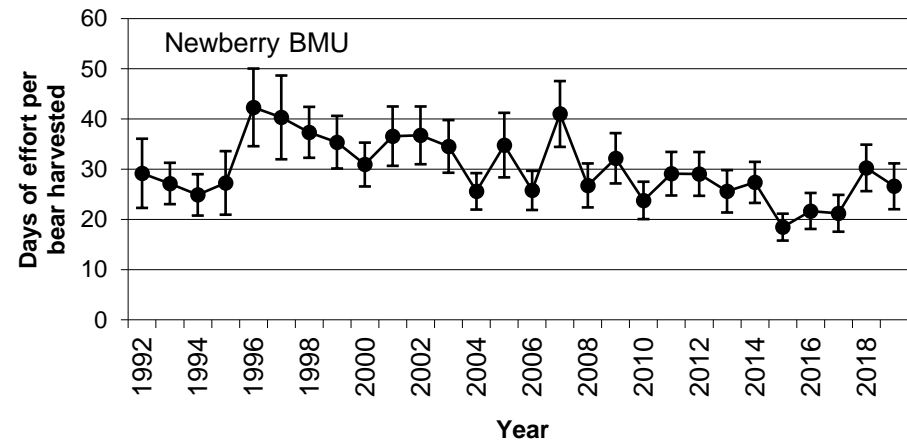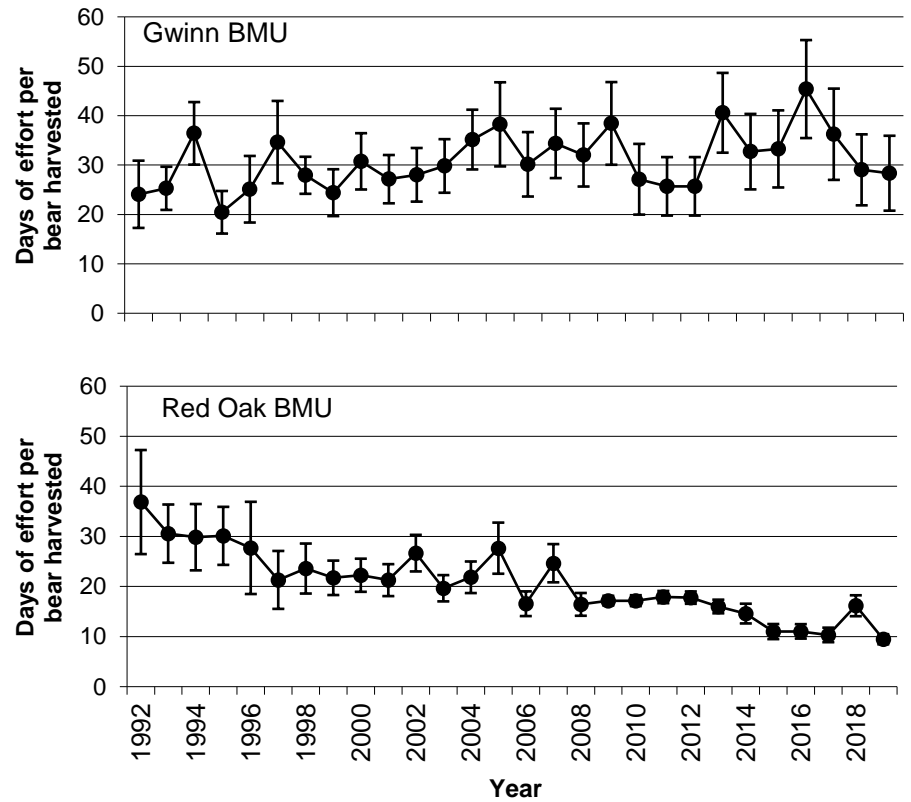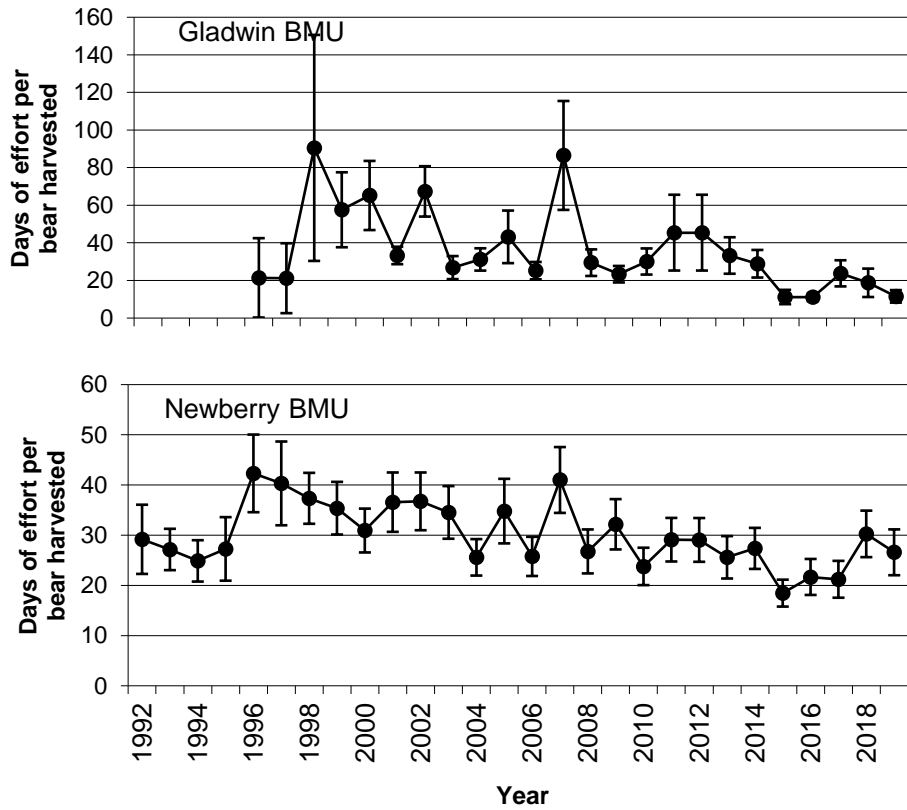
Figure 7 (continued). Estimated mean number of days required to harvest a bear in Michigan during 1992-2019, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.
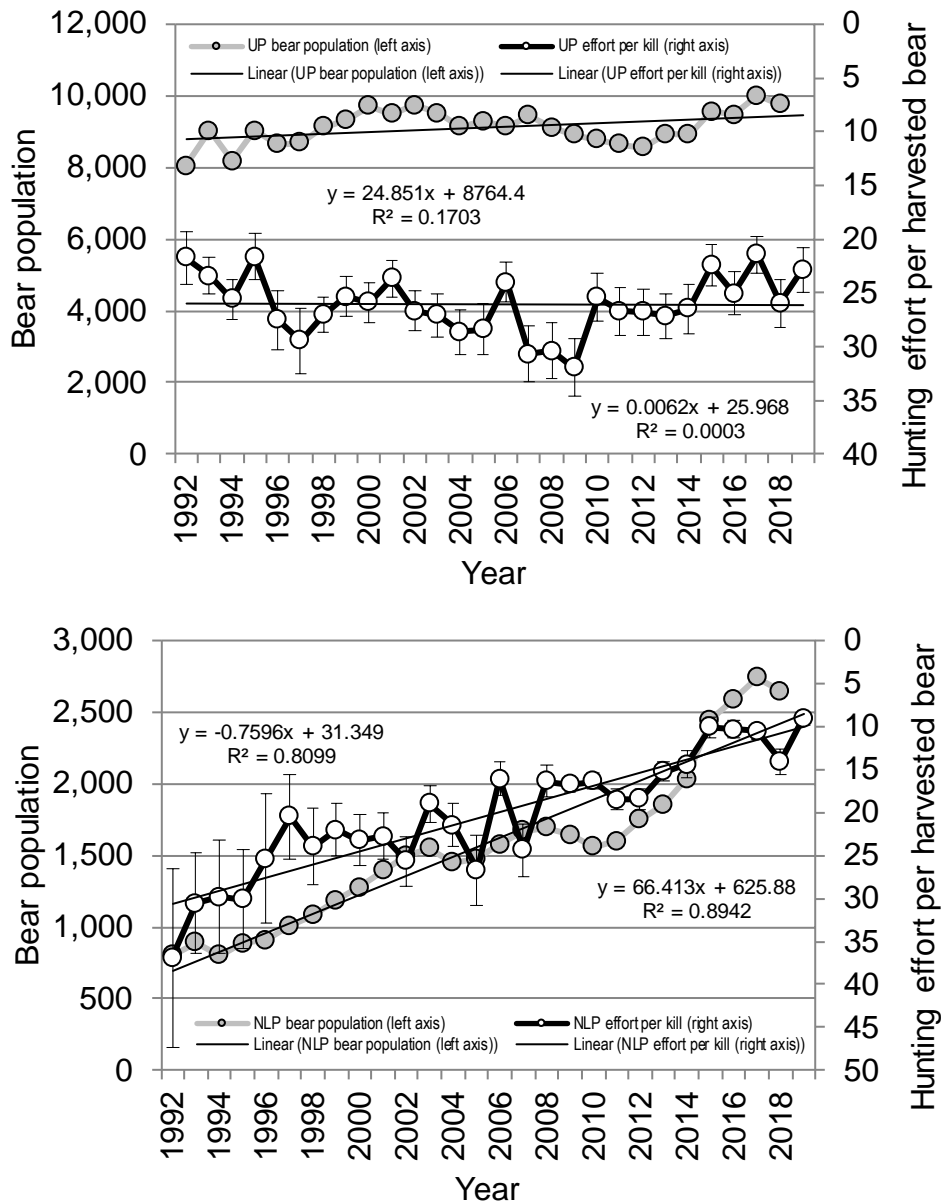
Figure 8. Long-term trends in the estimates of bear abundance (1992-2018) and estimates of effort per bear harvested (1992-2019) in Michigan. The right axes are plotted in reverse order (i.e., plotted from largest to smallest values).
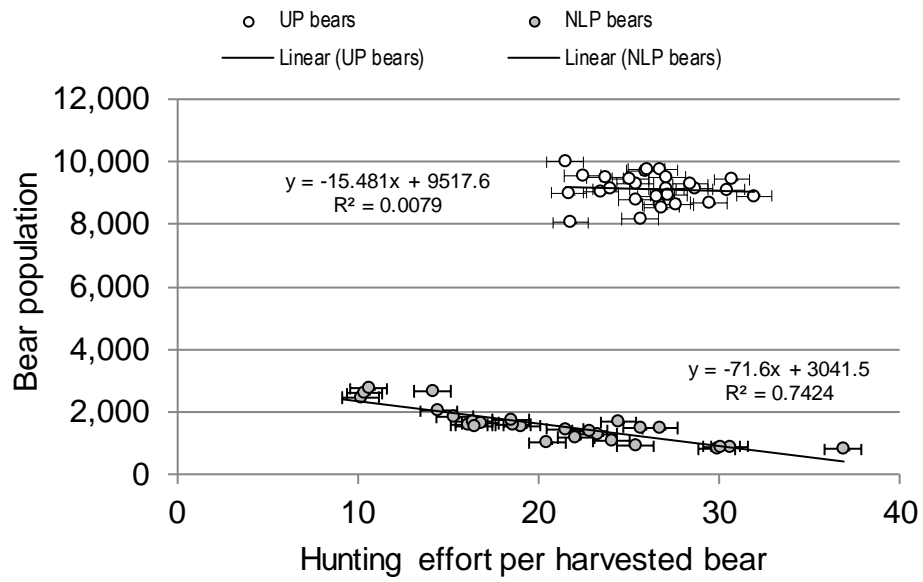
Figure 9. The relationship between estimates of bear abundance and hunting effort required to take a bear in the UP and LP (1992-2018).
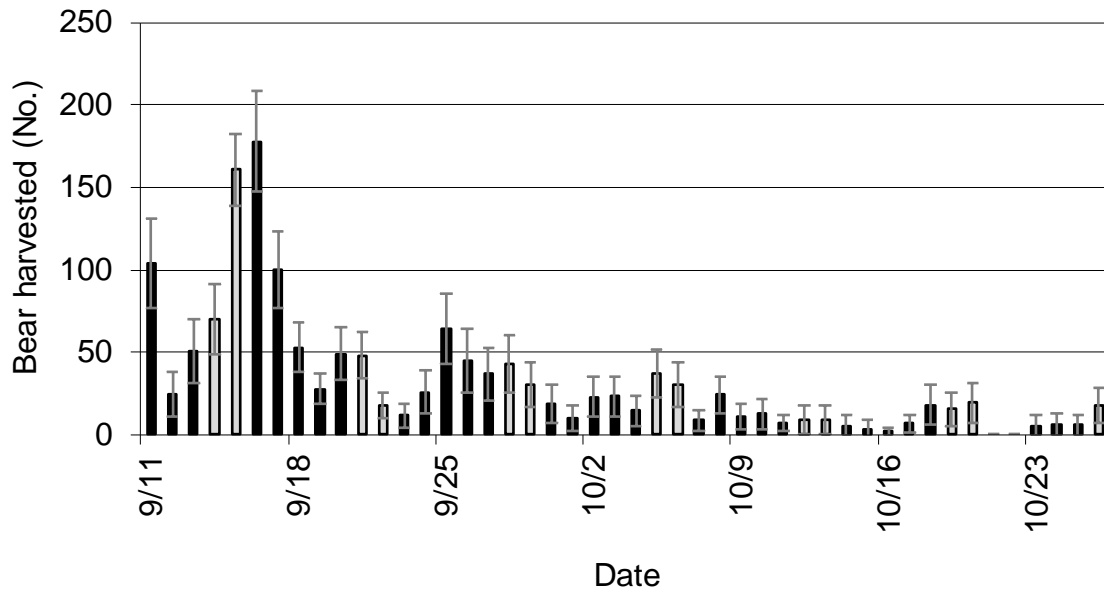
Figure 10. Estimated number of bear harvested by date during the 2019 bear hunting season (includes all hunt periods). Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval. The opening of the bear hunting season was September 11 in the UP and September 15 in the LP. Hunting with dogs in the UP and LP started on September 16.
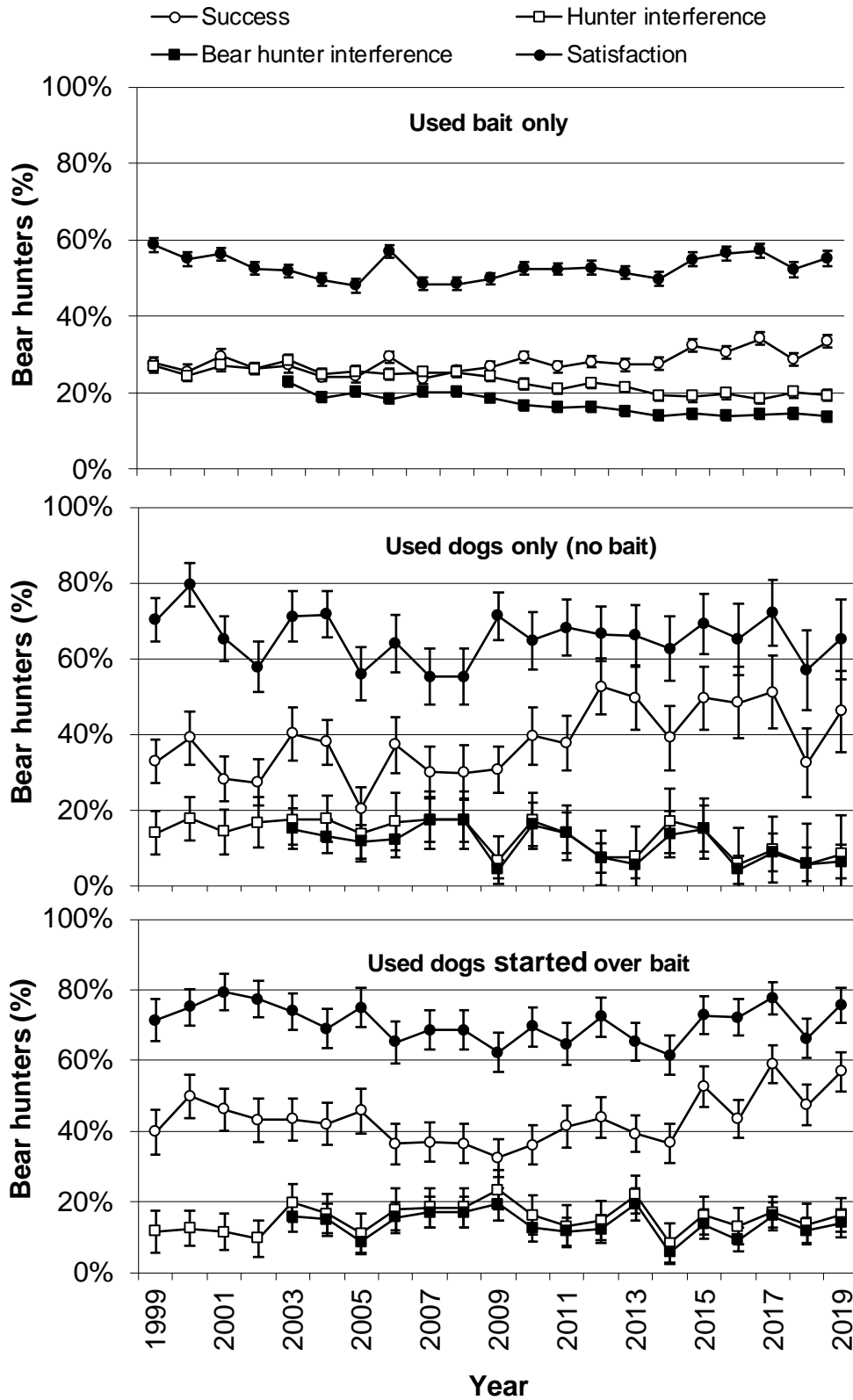
Figure 11. Estimated hunter success, interference, and satisfaction of bear hunters with their hunting experience in Michigan during 1999-2019, summarized by primary method of hunt. Vertical bars represent the 95% confidence interval. Interference was the proportion of hunters indicating they experienced interference from other hunters. Satisfaction was the proportion of hunters rating their hunting experience as very good or good.
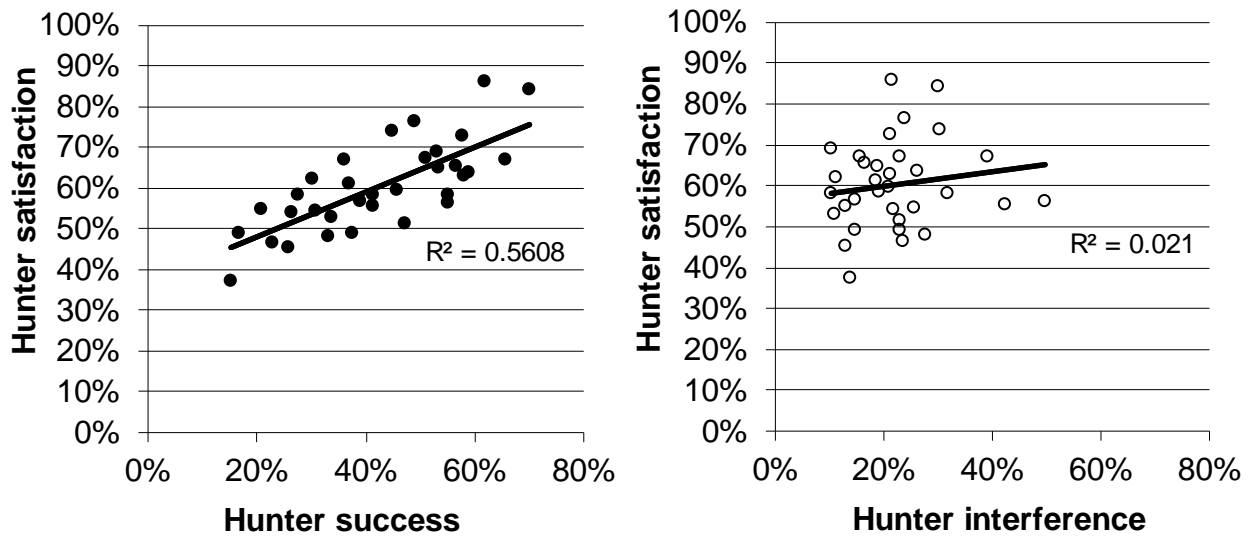
Figure 12. Hunter satisfaction (hunters rating their hunting experience as very good or good) relative to hunter success and hunter interference for 33 counties in Michigan during the 2019 bear hunting season (included only counties with at least 20 hunters).
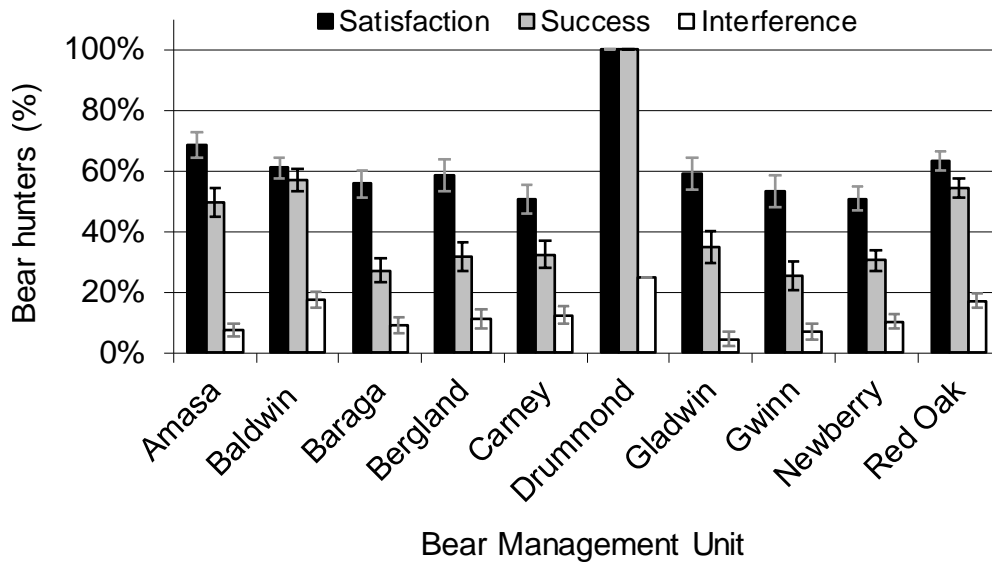
Figure 13. Estimated hunter satisfaction, hunting success, and level of hunter interference in Michigan's bear management units during the 2019 bear hunting season. Satisfaction measures the proportion of hunters rating their hunting experiences as very good or good. Error bars represent the 95% confidence limit. Interference was the proportion of hunters that reported interference from other hunters (all types of hunters).

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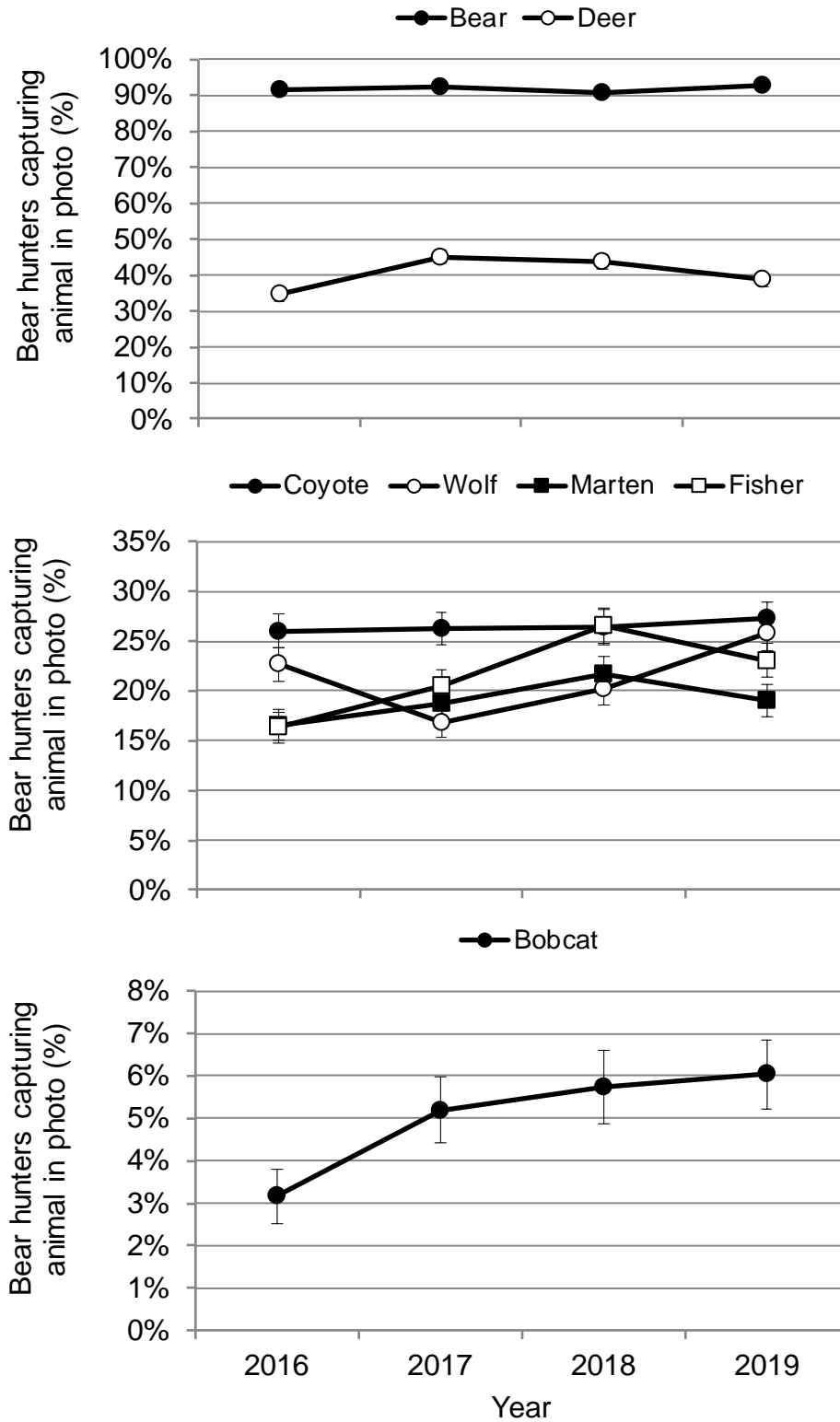
Figure 14. The proportion of bear hunters that used a trail camera and photographed selected carnivores and deer with their camera in 2016-2019.

Table 1. The number of people purchasing hunting licenses for the 2019 Michigan bear hunting seasons and the number of people selected for the 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	490	1,887	421	285
Baldwin	260	3,464	242	200
Baraga	1,550	2,952	1,154	473
Bergland	1,195	1,703	929	435
Carney	600	1,919	480	312
Drummond Island	5	240	4	2
Gladwin	110	1,326	86	72
Gwinn	1,060	2,382	759	396
Newberry	1,110	5,105	894	553
Red Oak	700	10,308	641	450
Pure Michigan Hunt	3	NA	3	3
Statewide	7,083	31,286	5,613	3,181
Applicants opting for Preference Point[d]		23,862		

[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 480 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 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 2019 Michigan bear hunting season, summarized by area.

Manage-ment Unit	Hunters No.	Hunters 95% CL[a]	Harvest No.	Harvest 95% CL[a]	Hunter success %	Hunter success 95% CL[a]	Hunting effort Days	Hunting effort 95% CL[a]	Days hunted per hunter ($\bar{x}$) Days	Days hunted per hunter ($\bar{x}$) 95% CL[a]	Days hunted per harvested bear ($\bar{x}$) Days	Days hunted per harvested bear ($\bar{x}$) 95% CL[a]
Amasa	388	10	193	18	50	5	2,497	220	6.4	0.5	13.3	2.5
Baldwin	234	3	133	9	57	4	1,006	52	4.3	0.2	7.6	0.9
Baraga	1,076	26	293	45	27	4	7,168	605	6.7	0.5	24.6	4.9
Bergland	754	35	239	38	32	5	5,174	547	6.9	0.7	21.6	5.3
Carney	436	13	141	20	32	5	3,606	312	8.3	0.7	25.9	5.4
Drummond Is.	4	0	4	0	100	0	11	0	2.8	0.0	4.0	0.0
Gladwin	86	0	30	4	35	5	384	26	4.5	0.3	12.0	3.2
Gwinn	676	25	171	32	25	5	4,682	579	6.9	0.8	28.2	7.5
Newberry	809	20	247	29	31	3	6,225	520	7.7	0.6	26.3	4.4
Red Oak	611	9	332	21	54	3	3,141	165	5.1	0.3	9.5	1.0
Pure MI Hunt	3	0	3	0	100	0	5	2	1.5	0.6	1.5	0.6
Statewide[b]	5,076	58	1,786	81	35	2	33,899	1,203	6.7	0.2	19.1	1.4

[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 2019 Michigan bear hunting season, summarized by county.

County	Hunters[a]		Harvest[a]		Hunter success		Hunting effort (days)[a]		Hunter satisfaction[b]		Interfered hunters[c]	
	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Alcona	98	15	55	11	57	8	521	101	65	8	16	6
Alger	132	28	35	15	26	10	1,003	305	54	11	22	9
Alpena	55	12	32	9	58	11	229	65	63	11	21	9
Antrim	10	5	2	0	20	9	44	19	47	22	27	20
Arenac	4	2	1	0	28	13	15	6	100	0	36	25
Baraga	560	52	153	34	27	5	3,204	409	58	6	19	5
Bay	0	0	0	0	0	0	0	0	0	0	0	0
Benzie	23	5	13	4	58	11	88	21	73	10	21	8
Charlevoix	11	5	5	3	42	23	35	20	33	23	58	23
Cheboygan	24	8	11	5	45	16	118	43	74	14	30	14
Chippewa	184	26	57	15	31	7	1,414	286	54	8	25	7
Clare	15	4	5	2	35	13	61	16	52	13	50	13
Crawford	18	7	8	5	45	19	72	32	85	12	45	19
Delta	272	38	62	20	23	7	1,849	355	47	8	23	7
Dickinson	190	30	79	20	41	8	1,202	286	58	8	10	5
Emmet	13	6	2	2	13	16	66	30	26	20	0	0
Gladwin	34	5	12	3	36	8	172	28	67	8	15	7

[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 2019 Michigan bear hunting season, summarized by county.

County	Hunters[a]		Harvest[a]		Hunter success		Hunting effort (days)[a]		Hunter satisfaction[b]		Interfered hunters[c]	
	Total	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	%	95% CL
Gogebic	285	40	130	30	46	8	1,724	365	60	8	21	7
Gd. Traverse	15	5	6	3	37	16	61	21	57	16	39	16
Houghton	224	41	58	22	26	9	1,433	367	45	10	13	7
Iosco	17	6	8	5	48	19	75	31	64	18	20	16
Iron	255	18	135	17	53	6	1,663	215	69	5	10	3
Isabella	0	0	0	0	0	0	0	0	0	0	0	0
Kalkaska	24	7	13	5	53	15	123	49	65	15	19	12
Keweenaw	106	30	32	18	30	14	671	277	62	15	11	9
Lake	68	8	28	5	41	7	240	37	56	7	42	7
Leelanau	3	2	1	1	50	0	18	13	100	0	0	0
Luce	214	28	83	19	39	7	1,644	301	57	7	15	5
Mackinac	101	21	17	8	17	7	702	191	49	11	15	7
Manistee	26	5	13	4	49	10	101	25	76	8	24	8
Marquette	461	53	95	26	21	5	3,203	536	55	7	13	4
Mason	17	4	6	2	37	13	69	20	39	13	41	14
Mecosta	5	2	2	1	45	23	11	7	100	0	0	0
Menominee	287	22	96	18	34	6	2,486	299	53	6	11	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).

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Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunt interference during the 2019 Michigan bear hunting season, summarized by county.

| County | Hunters[a] | | Harvest[a] | | Hunter success | | Hunting effort (days)[a] | | Hunter satisfaction[b] | | Interfered hunters[c] | |
	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	37	10	22	8	59	13	137	46	64	12	26	12
Montmorency	70	13	43	10	62	9	256	62	86	7	21	8
Muskegon	0	0	0	0	0	0	0	0	0	0	0	0
Newaygo	36	6	20	5	55	10	135	32	56	10	50	10
Oceana	3	1	1	0	30	13	13	4	70	13	30	13
Ogemaw	43	9	24	7	55	11	183	53	58	11	32	10
Ontonagon	477	52	176	36	37	6	3,426	589	61	7	18	5
Osceola	27	5	4	2	15	8	125	24	37	9	14	7
Oscoda	56	11	39	10	70	10	243	68	84	8	30	10
Otsego	28	8	14	6	51	15	153	49	67	14	39	14
Presque Isle	84	14	40	10	47	9	463	99	51	9	23	8
Roscommon	70	13	23	8	33	9	402	92	48	10	28	9
Schoolcraft	210	28	78	19	37	7	1,270	241	49	8	23	6
Wexford	66	8	43	7	66	7	208	31	67	7	23	6
Unknown	411	50	0	0	0	0	2,571	404	40	6	19	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 2019 bear hunting season, summarized by area.

Management unit	Private land only				Public land only				Both private and public lands				Unknown land			
	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL	Total	95% CL	%	95% CL
Amasa	156	18	40	4	172	18	44	5	61	13	16	3	0	0	0	0
Baldwin	93	8	40	4	93	9	40	4	49	7	21	3	0	0	0	0
Baraga	338	47	31	4	553	51	51	5	178	37	17	3	7	8	1	1
Bergland	178	35	24	5	434	44	58	5	139	31	18	4	3	5	0	1
Carney	257	22	59	5	102	18	23	4	61	15	14	3	15	8	3	2
Drummond Is.	0	0	0	0	4	0	100	0	0	0	0	0	0	0	0	0
Gladwin	60	4	70	5	18	4	21	5	8	3	9	3	0	0	0	0
Gwinn	253	37	37	5	309	38	46	5	105	27	15	4	10	9	1	1
Newberry	299	31	37	4	371	32	46	4	138	24	17	3	2	4	0	0
Red Oak	347	20	57	3	182	18	30	3	76	13	12	2	5	4	1	1
Pure MI Hunt	2	2	50	57	0	0	0	0	2	2	50	57	0	0	0	0
Statewide	1,983	84	39	2	2,236	90	44	2	814	65	16	1	43	17	1	0

Table 5. Estimated number of days of hunting effort on private and public lands during the 2019 Michigan bear hunting season, summarized by area.

Management unit	Private lands		Public lands		Both private and public lands		Unknown	
	Total	95% CL	Total	95% CL	Total	95% CL	Total	95% CL
Amasa	1,008	181	1,029	166	460	132	0	0
Baldwin	393	41	409	47	205	42	0	0
Baraga	2,208	431	3,256	444	1,672	483	32	40
Bergland	1,121	338	3,052	479	1,001	290	0	0
Carney	2,020	268	792	196	643	191	151	134
Drummond Is.	0	0	11	0	0	0	0	0
Gladwin	254	25	94	22	37	16	0	0
Gwinn	1,913	362	1,883	452	856	359	30	32
Newberry	2,087	302	2,453	312	1,678	463	7	11
Red Oak	1,780	154	909	121	445	103	7	6
Pure MI Hunt	2	2	0	0	3	3	0	0
Statewide[a]	12,785	808	13,887	901	7,000	853	227	144

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

Table 6. The number of applicants, licenses sold, estimated number of hunters, harvest, hunting effort (days), and hunting success during Michigan bear hunting seasons, 2013-2019.

	Year						
Region	2013	2014	2015	2016	2017	2018	2019
Upper Peninsula							
Applicants	18,776	17,510	17,284	17,425	18,380	16,625	16,188
Licenses sold	5,408	5,322	4,729	4,759	4,867	4,730	4,641
Hunters	4,871	4,784	4,280	4,323	4,334	4,235	4,142
Harvest	1,350	1,297	1,387	1,255	1,479	1,194	1,288
Males (%)	60	63	59	61	58	58	63
Females (%)	40	36	41	38	41	41	37
Unknown (%)	0	0	0	0	1	1	0
Hunter-days	35,847	33,702	31,279	31,361	31,094	30,866	29,363
Hunter success (%)	28	27	32	29	34	28	31
Lower Peninsula							
Applicants	13,169	12,641	13,534	13,695	15,722	14,508	15,098
Licenses sold	806	757	732	721	888	858	969
Hunters	754	715	711	688	843	828	931
Harvest	252	256	323	327	409	325	495
Males (%)	55	55	64	46	55	58	54
Females (%)	45	45	36	54	45	42	46
Unknown (%)	0	0	0	0	0	0	0
Hunter-days	3,851	3,548	3,209	3,401	4,330	4,630	4,532
Hunter success (%)	33	36	45	48	49	39	53
Statewide							
Applicants[a]	51,715	48,882	51,077	51,767	56,502	54,095	55,148
Licenses sold[b]	6,217	6,082	5,464	5,483	5,759	5,591	5,613
Hunters[c]	5,626	5,499	4,991	5,011	5,177	5,063	5,073
Harvest[c]	1,602	1,552	1,710	1,582	1,888	1,519	1,783
Males (%)	59	62	60	58	57	58	61
Females (%)	41	38	40	42	42	41	39
Unknown (%)	0	0	0	0	1	0	0
Hunter-days[c]	39,699	37,250	34,488	34,763	35,424	35,496	33,895
Hunter success (%)[c]	28	28	34	32	36	30	35

[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. The estimated proportion of hunters that used firearms, crossbows, and archery equipment while hunting bears in Michigan, 2019, summarized by area.

| | Hunting equipment | | | | | | | |
| | Firearms | | Compound, recurve, or longbows | | Crossbows | | Unknown | |
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	87	3	7	2	10	3	0	0
Baldwin	83	3	17	3	7	2	1	1
Baraga	87	3	9	3	9	3	0	0
Bergland	89	3	11	3	5	2	0	0
Carney	86	3	12	3	5	2	0	1
Drummond Is.	75	0	25	0	0	0	0	0
Gladwin	88	4	5	2	10	3	0	0
Gwinn	90	3	7	3	7	3	0	0
Newberry	88	3	10	2	8	2	0	0
Red Oak	84	2	17	2	25	3	0	0
Pure MI Hunt	50	57	50	57	0	0	0	0
Statewide[a]	87	1	11	1	9	1	0	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, 2019, 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	337	15	29	9	38	11	0	0
Baldwin	193	7	41	7	17	4	1	1
Baraga	935	40	100	28	93	28	0	0
Bergland	672	40	84	24	37	17	0	0
Carney	376	18	54	13	21	9	2	3
Drummond Is.	3	0	1	0	0	0	0	0
Gladwin	76	3	4	2	9	3	0	0
Gwinn	611	31	47	18	49	18	0	0
Newberry	713	27	83	19	64	17	0	0
Red Oak	516	16	105	15	154	17	2	2
Pure MI Hunt	2	2	2	2	0	0	0	0
Statewide[a]	4,434	76	549	51	480	47	5	4

[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. The estimated proportion of bears harvested by firearms, crossbows, and archery equipment during the 2019 bear hunting season in Michigan, summarized by area.

| | Hunting equipment | | | | | | | |
| | Firearms | | Compound, recurve, or longbows | | Crossbows | | Unknown | |
Management unit	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	88	4	7	3	6	3	0	0
Baldwin	86	3	9	3	5	2	0	0
Baraga	89	5	6	4	5	4	0	0
Bergland	90	6	6	4	4	4	0	0
Carney	92	5	8	5	1	0	0	0
Drummond Is.	75	0	25	0	0	0	0	0
Gladwin	83	7	9	6	9	6	0	0
Gwinn	91	6	3	3	7	5	0	0
Newberry	91	4	5	3	5	3	0	0
Red Oak	72	4	12	3	15	3	1	1
Pure MI Hunt	50	57	50	57	0	0	0	0
Statewide	86	2	7	1	7	1	0	0

Table 10. Estimated number of bears harvested during the 2019 bear hunting season in Michigan, summarized by hunting equipment used to take the bear, summarized by area.

| | Hunting equipment | | | | | | | |
| | Firearms | | Compound, recurve, or longbows | | Crossbows | | Unknown | |
Management unit	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	170	18	13	6	11	5	0	0
Baldwin	115	9	12	4	7	3	0	0
Baraga	261	43	16	12	15	12	0	0
Bergland	216	37	13	11	10	9	0	0
Carney	130	20	11	7	1	0	0	0
Drummond Is.	3	0	1	0	0	0	0	0
Gladwin	25	4	3	2	3	2	0	0
Gwinn	154	31	4	5	12	9	0	0
Newberry	224	28	12	7	12	7	0	0
Red Oak	240	20	40	9	50	11	2	2
Pure MI Hunt	2	2	2	2	0	0	0	0
Statewide	1,538	79	126	23	119	23	2	2

Table 11. The primary hunting method used by bear hunters in Michigan, 2019.

Method	Number of hunters	95% CL	Method used (%)
Bait only	4,340	79	
Dogs only	119	26	
Dogs and bait	493	53	
Other	92	25	
Unknown	32	14	

Dogs Only 2.3%
Dogs & Bait 9.7%
Bait Only 85.5%
Other 1.8%
Unknown 0.6%

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

Management unit	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	22	4	66	4	68	4	26	4	7	2
Baldwin	12	2	60	4	79	3	41	4	12	2
Baraga	17	4	70	4	70	4	32	4	12	3
Bergland	16	4	69	5	75	5	21	4	6	3
Carney	19	4	78	4	73	4	21	4	5	2
Drummond Is.	0	0	100	0	75	0	50	0	0	0
Gladwin	15	4	66	5	88	4	43	5	10	3
Gwinn	15	4	71	5	64	5	22	5	7	3
Newberry	22	3	76	3	71	4	30	4	8	2
Red Oak	13	2	69	3	86	2	30	3	6	2
Pure MI Hunt	0	0	0	0	100	0	0	0	0	0
Statewide	17	1	71	2	73	2	28	2	8	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 before August 11 and after October 26 in Amasa, Bergland, Baraga, Carney, Gwinn, and Newberry units; before August 11 and after October 21 in Drummond Island Unit; before August 15 and after September 23 in the Baldwin and Gladwin units, and before August 15 and after October 11 in the Red Oak unit.
[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	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	83	14	256	18	263	18	101	16	28	9
Baldwin	27	5	136	9	177	8	92	8	26	5
Baraga	177	36	720	50	719	50	330	46	122	31
Bergland	119	29	503	44	540	44	153	32	46	19
Carney	78	17	317	21	299	22	87	17	19	9
Drummond Is.	0	0	4	0	3	0	2	0	0	0
Gladwin	12	3	55	4	73	3	36	5	8	2
Gwinn	95	25	457	39	409	39	144	31	42	17
Newberry	160	25	559	32	522	32	225	28	60	16
Red Oak	77	13	408	20	514	17	176	18	35	10
Pure MI Hunt	0	0	0	0	2	2	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 before August 11 and after October 26 in Amasa, Bergland, Baraga, Carney, Gwinn, and Newberry units; before August 11 and after October 21 in Drummond Island Unit; before August 15 and after September 23 in the Baldwin and Gladwin units, and before August 15 and after October 11 in the Red Oak unit.
[b]Excluded hunters that did not use bait.

Table 14. The number of bears taken by each hunting method in Michigan, 2019.

Method	Number of bears taken	95% CL	Method used (%)
Bait only	1,427	75	
Dogs only	80	18	
Dogs and bait	264	39	
Other	0	0	
Unknown	15	10	

Pie chart: Bait Only 79.9%; Dogs Only 4.5%; Dogs & Bait 14.8%; Other 0.0%; Unknown 0.8%

Table 15. Hunters' level of satisfaction with the number of bears seen during the 2019 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	45	5	25	4	26	4	4	2
Baldwin	54	4	11	2	31	3	4	2
Baraga	34	4	19	4	40	5	8	2
Bergland	39	5	15	4	40	5	6	3
Carney	32	5	21	4	39	5	9	3
Drummond Is.	50	0	50	0	0	0	0	0
Gladwin	41	5	16	4	28	5	15	4
Gwinn	38	5	19	4	34	5	8	3
Newberry	37	4	17	3	39	4	7	2
Red Oak	51	3	15	2	27	3	6	2
Pure MI Hunt	100	0	0	0	0	0	0	0
Statewide	40	2	18	1	36	2	7	1

Table 16. Hunters' level of satisfaction with the number of opportunities to take a bear during the 2019 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	36	4	21	4	35	4	8	3
Baldwin	43	4	13	2	36	3	8	2
Baraga	27	4	17	3	45	5	11	3
Bergland	32	5	17	4	38	5	13	4
Carney	25	4	11	3	48	5	16	4
Drummond Is.	50	0	50	0	0	0	0	0
Gladwin	26	5	16	4	33	5	24	5
Gwinn	31	5	11	3	41	5	16	4
Newberry	30	4	14	3	42	4	14	3
Red Oak	41	3	16	2	32	3	10	2
Pure MI Hunt	100	0	0	0	0	0	0	0
Statewide	32	2	15	1	40	2	13	1

Table 17. Hunters' level of satisfaction with overall bear hunting experience during the 2019 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	68	4	12	3	18	3	2	1
Baldwin	61	4	13	2	23	3	4	1
Baraga	56	5	20	4	21	4	3	2
Bergland	59	5	17	4	22	4	3	2
Carney	51	5	24	4	21	4	5	2
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	59	5	16	4	20	4	5	2
Gwinn	53	5	20	4	23	5	4	2
Newberry	51	4	23	3	22	3	4	1
Red Oak	64	3	13	2	19	3	4	1
Pure MI Hunt	100	0	0	0	0	0	0	0
Statewide	57	2	19	1	21	1	4	1

Table 18. Number and proportion of hunters that experienced interference with another hunter during the 2019 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	9	3	37	11	7	2	27	9
Baldwin	32	3	75	8	18	3	41	6
Baraga	17	3	179	37	12	3	134	32
Bergland	21	4	160	33	16	4	118	29
Carney	11	3	47	13	7	3	31	11
Drummond Is.	25	0	1	0	25	0	1	0
Gladwin	21	5	18	4	7	3	6	2
Gwinn	15	4	100	27	12	4	83	24
Newberry	21	3	172	26	17	3	140	24
Red Oak	24	3	149	17	17	2	102	15
Pure MI Hunt	0	0	0	0	0	0	0	0
Statewide	18	1	937	67	13	1	683	60

Table 19. Number and proportion of hunters that used a hunting guide during the 2019 bear hunting season, summarized by area.

Management unit	%	95% CL	No.	95% CL
Amasa	15	3	60	13
Baldwin	16	3	38	6
Baraga	12	3	131	32
Bergland	19	4	143	31
Carney	10	3	42	12
Drummond Island	0	0	0	0
Gladwin	8	3	7	3
Gwinn	14	4	95	26
Newberry	17	3	137	24
Red Oak	9	2	55	11
Pure MI Hunt	100	0	3	0
Statewide	14	1	711	61

Table 20. Methods used by guides to hunt bear in Michigan, 2019, summarized by area.

Management unit	Hunted over bait only		Used dogs only (no bait)		Used dogs started over bait		Used another method		Unknown method	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	89	7	3	4	8	6	0	0	0	0
Baldwin	58	9	4	4	35	9	0	0	4	4
Baraga	91	8	0	0	9	8	0	0	0	0
Bergland	91	7	0	0	9	7	0	0	0	0
Carney	57	14	0	0	43	14	0	0	0	0
Drummond Island	0	0	0	0	0	0	0	0	0	0
Gladwin	60	21	20	17	20	17	0	0	0	0
Gwinn	68	14	3	6	25	13	0	0	3	6
Newberry	80	8	4	4	16	7	0	0	0	0
Red Oak	76	9	6	6	18	8	0	0	0	0
Pure MI Hunt	50	57	50	57	0	0	0	0	0	0
Statewide	80	4	3	1	17	3	0	0	1	1

Table 21. Proportion and number of bait hunters using a trail camera in 2019, summarized by area.[a]

Management unit	Bait hunters using a trail camera			
	%	95% CL	Total	95% CL
Amasa	83	3	320	16
Baldwin	92	2	207	6
Baraga	78	4	802	48
Bergland	71	5	515	44
Carney	86	3	351	20
Drummond Is.	100	0	4	0
Gladwin	95	3	79	3
Gwinn	83	4	534	36
Newberry	86	3	635	30
Red Oak	90	2	537	15
Pure MI Hunt	100	0	2	2
Statewide	82	1	3,986	86

[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 2019, 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	93	3	22	4	45	5	9	3	42	5	19	4	27	4
Baldwin	94	2	32	4	44	4	14	3	0	0	1	1	0	0
Baraga	93	3	25	5	39	5	3	2	35	5	39	5	40	5
Bergland	93	3	25	6	32	6	3	2	41	6	26	6	34	6
Carney	95	2	32	5	56	5	6	3	11	3	6	2	18	4
Drummond Is.	100	0	50	0	50	0	0	0	0	0	0	0	0	0
Gladwin	89	3	20	4	35	5	9	3	0	0	0	0	0	0
Gwinn	90	4	32	6	45	6	5	3	22	5	19	5	29	6
Newberry	93	2	24	4	32	4	6	2	40	4	19	3	18	3
Red Oak	94	2	32	3	30	3	9	2	0	0	0	0	0	0
Pure MI Hunt	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Statewide	93	1	27	2	39	2	6	1	26	2	19	2	23	2

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

APPENDIX A

2019 Michigan Bear Harvest Questionnaire

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

2019 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.

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1. Did you hunt bear in Michigan during the 2019 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 2019 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 2019 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   4 ☐ Meat and meat products,   5 ☐ Fish and fish products,
    jams, jellies, or sweeteners   including dog food or grease   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 2019 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?** (*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

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 2019						
S	M	T	W	T	F	S
		11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October 2019						
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 2019 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.

PR-2161 (Rev. 08/26/2019)