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2016 MICHIGAN BLACK BEAR HUNTER SURVEY

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ABSTRACT

We contacted a random sample of bear hunters after the 2016 hunting season to determine hunter participation, hunting methods, bear harvest, and hunter satisfaction. In 2016, an estimated 5,013 hunters spent nearly 34,773 days afield and harvested about 1,584 bears. The estimated number of hunters, hunting effort, and harvest did not differ significantly from 2015 to 2016. Statewide, 32% of hunters harvested a bear in 2016, which was not significantly different from 2015. The average number of days required to harvest a bear statewide was 22.5 days in 2016, which also was not significantly different from 2015. Baiting was the most common hunting method used to harvest bears (84% of hunters primarily used bait only), although hunters using dogs had greater hunting success than hunters that only used bait. Statewide, about 58% of hunters rated their hunting experience as very good or good in 2016 (versus 57% in 2015).

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 2% of the licenses were issued to nonresidents.

In 2016, 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 9-24 in Benzie, Leelanau, Grand Traverse, and part of Kalkaska counties and during September 18-26 for remaining counties in the Northern Lower Peninsula (LP) units. The first day of hunt periods in the LP (September 18) was restricted to hunting with bait only, and the last two days of the hunt periods in the LP (September 25-26) were restricted to hunters using dogs. In addition, the first day of the Baldwin North Area season (Sept. 9) was for bait-only hunting. The Red Oak Management Unit in the LP also had an archery-only hunt during October 7-13 (i.e., firearms and crossbows prohibited).

The number of bear hunting licenses available in the state in 2016 (license quota) was reduced by 55 licenses (less than 1% decrease) from 2015. All units except Red Oak and Newberry had the same quotas in 2016 and 2015. The quotas decreased by about 3% in the Red Oak Unit (from 660 to 630 licenses) and the Newberry Unit (from 1,190 to 1,155 licenses).

Hunters had to be at least 10 years old to purchase a hunting license. 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. Hunters could use bait or dogs to hunt bears (except dogs could not be used during September 10-14 in the UP, September 13-18 in the Red Oak, Baldwin, and Gladwin units, September 4-9 in the Baldwin North Area, and during the archery-only season [October 7-13] in the Red Oak Management Unit).

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 among 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 (N=2,430) 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 bear 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 2016 bear hunting season, a questionnaire (Appendix A) was mailed to 3,080 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 995 out of 1,000 times, if the study had been repeated (Payton et al. 2003).

We initially mailed questionnaires during late November 2016, and sent up to two follow-up questionnaires to nonrespondents. Of the 3,080 questionnaires mailed, 35 were undeliverable, resulting in an adjusted sample size of 3,045. We received questionnaires from 2,111 people, yielding a 69% adjusted response rate. In addition, 334 people voluntarily reported information about their hunting activity via the internet before we selected the random sample.

RESULTS

In 2016, hunters purchased 5,482 bear hunting licenses (Table 1), which was slightly more than 2015 (5,464). Most of the hunters buying a license in 2016 were men (89%), and the average age of the license buyers was 49 years (Figure 2). About 4% of the license buyers (232) were younger than 17 years old.

Compared to 10 years ago, the number of people buying a bear hunting license in 2016 decreased 42% (9,457 people purchased a license in 2006). Although the overall number of license buyers decreased, hunter numbers among the youngest and oldest age classes were similar or slightly higher in 2016 than in 2006 (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 2016, 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 2006.

Nearly $91 \pm 1\%$ of the license buyers hunted bear (Table 2). These hunters spent 34,773 days afield ($\bar{x} = 6.9$ days/hunter) and harvested 1,584 bears. The number of hunters, hunting effort, and overall harvest did not change significantly between 2015 and 2016 (Figure 4). Marquette, Baraga, and Ontonagon counties had the greatest number of bear hunters, and these three counties had the greatest number of bears harvested during 2016 (Table 3).

The average number of days required to harvest a bear statewide was 22.5 days in 2016 (Table 2, Figure 5), which was not significantly different than in 2015 (20.1 days). Mean effort per harvested bear also was not significantly different western UP or the LP between 2015 and 2016; however, mean effort per harvested bear was significantly greater in the eastern UP (Figure 6). Long-term trends are difficult to interpret because of changes to hunting season's length, 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 2006, the area of the Bladwin 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).

About 39% of the bear hunters hunted on private lands only in 2016, 42% hunted on public lands only, and 17% hunted on both private and public lands (Table 4). Bear hunters spent 13,319 days afield on private land, 13,946 days hunting on public land only, and 7,037 days hunting on both private and public lands (Table 5). Of the estimated 1,584 bear harvested in 2016, hunters harvested $42 \pm 3\%$ of these bears (659 ± 53) on private land. Hunters harvested about $58 \pm 3\%$ of the bears (923 ± 65) on public land.

Based on reported harvest dates, hunters took about 22% of these bears during the first five days and 44% during the first ten days of the hunting season (Figure 8). Of the bears harvested and their sex known, $58 \pm 3\%$ were males (920 ± 64) and $42 \pm 3\%$ were females (661 ± 53 ; Table 6). Statewide, 32% of hunters harvested a bear in 2016 (Table 2), which was not significantly different from 2015 (34% success in 2015). Hunter success ranged from 19-100% 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 long bows), and 9% used a crossbow (Tables 7 and 8). Totals equal more than 100% because hunters could use more than one type of equipment during season. Most hunters (88%) used a firearm to harvest their bear, while 6% used archery equipment, and 5% used a crossbow (Tables 9 and 10).

Most hunters ($84 \pm 1\%$) relied primarily on baiting only as a means of locating and attracting bears (Table 11). About 13% ($\pm 1\%$) of hunters relied primarily on dogs alone or a combination of baiting and dogs to locate bears. About 2% of hunters relied on a hunting method not involving dogs or bait. Among hunters using bait, about 70% of hunters used bakery products or corn and grains as bait (Tables 12 and 13).

Hunters harvested about $82 \pm 2\%$ of the bears with the aid of bait only (Table 14). Hunting success for hunters primarily using bait only was $31 \pm 2\%$, while hunting success for hunters using dogs was $45 \pm 5\%$ in 2016. Success among hunters using dogs has usually been greater than among hunters using baits only (Figure 9).

About 40% of bear hunters statewide rated the number of bear seen during the 2016 hunting season as very good or good, and 35% rated bear seen as poor or very poor (Table 15). Similarly, about 33% of hunters statewide rated the number of chances they had to take a bear during the 2016 hunting season as very good or good, and 37% rated their chances as poor or very poor (Table 16).

Statewide, about 58% of hunters rated their hunting experiences as very good or good (versus 57% in 2015), and 22% rated their hunting experiences as poor or very poor (Table 17). Many factors may affect hunter satisfaction, including hunting success and whether anyone interfered with their hunting activities (Figure 10). In 2016, 19% 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 11).

Only 13% of the hunters (670 hunters) hired a hunting guide in 2016 (Table 19). Furthermore,

most hunting guides (84%) relied on baiting only to locate bears for their clients in 2016 (Table 20). Hunting success of hunters using a guide was significantly greater than hunters not using a guide ($44 \pm 4\%$ with a guide versus $30 \pm 2\%$ without a guide).

About 77% 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, 92% reported they took a photograph of a bear (Table 22).

ACKNOWLEDGEMENTS

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Payton, M. E., M. H. Greenstone, and N. Schenker. 2003. Overlapping confidence intervals or standard error intervals: what do they mean in terms of statistical significance? *Journal of Insect Science* 3:34.



Figure 1. Bear management units open to hunting in Michigan, 2016.

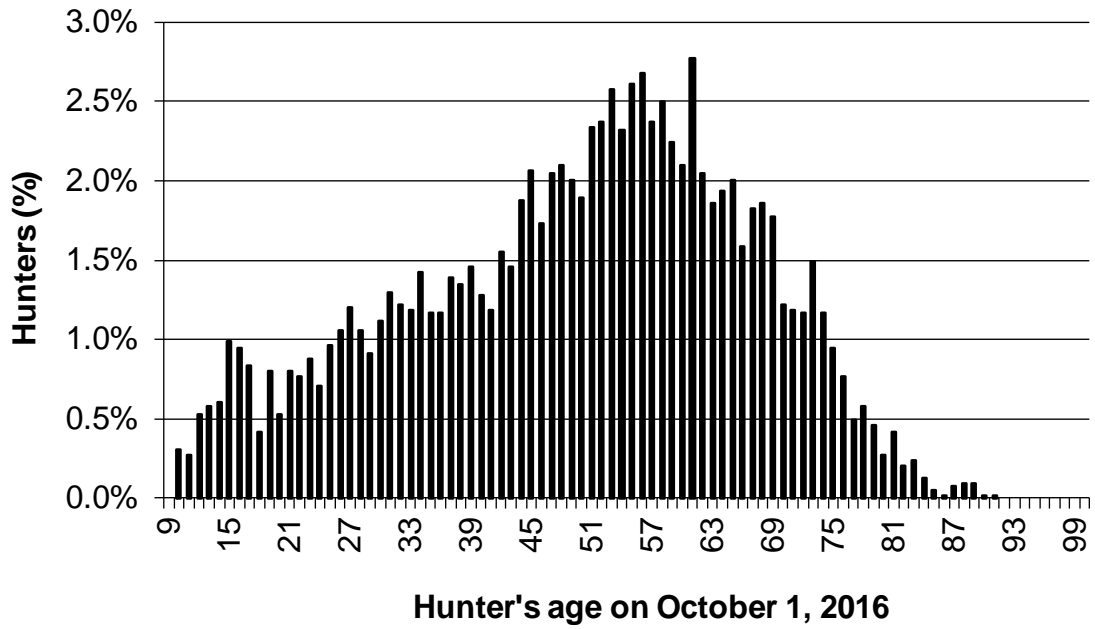


Figure 2. Age of people that purchased a bear hunting license in Michigan for the 2016 hunting season (mean = 49 years). Licenses were purchased by 5,482 people.



Figure 3. Number of bear hunting license buyers in Michigan by age and sex during 2006 and 2016 hunting seasons. The number of people buying a license was 9,457 in 2006 and 5,482 in 2016.

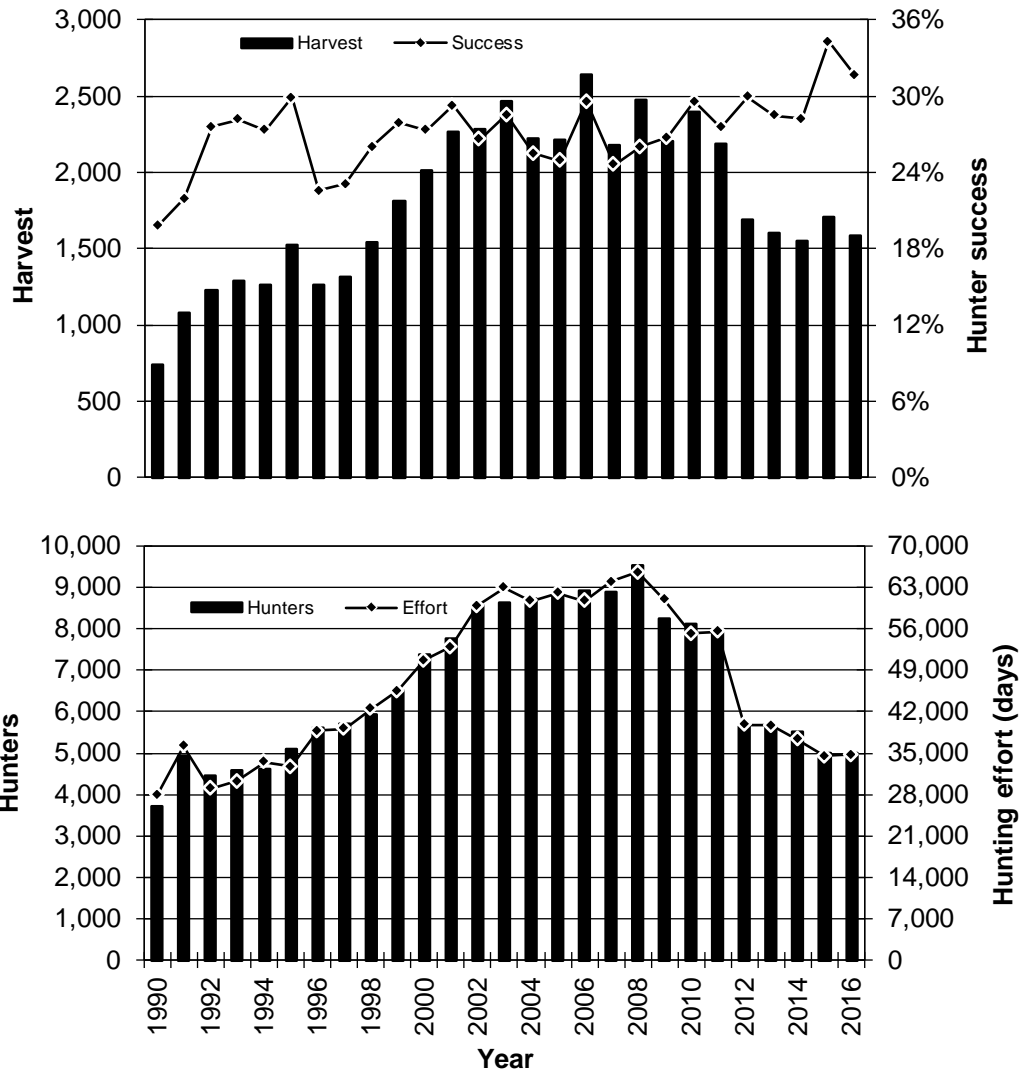


Figure 4. Estimated harvest, hunting success, number of hunters, and hunting effort during bear hunting seasons, 1990-2016.

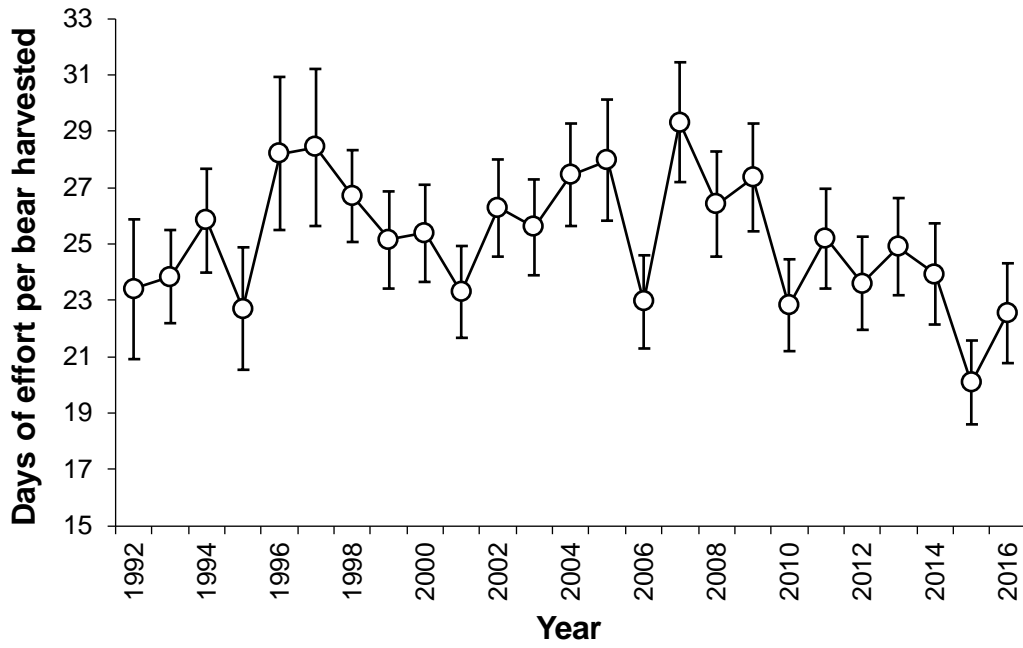


Figure 5. Estimated mean number of days required to harvest a bear statewide in Michigan during 1992-2016. Vertical bars represent the 95% confidence interval.

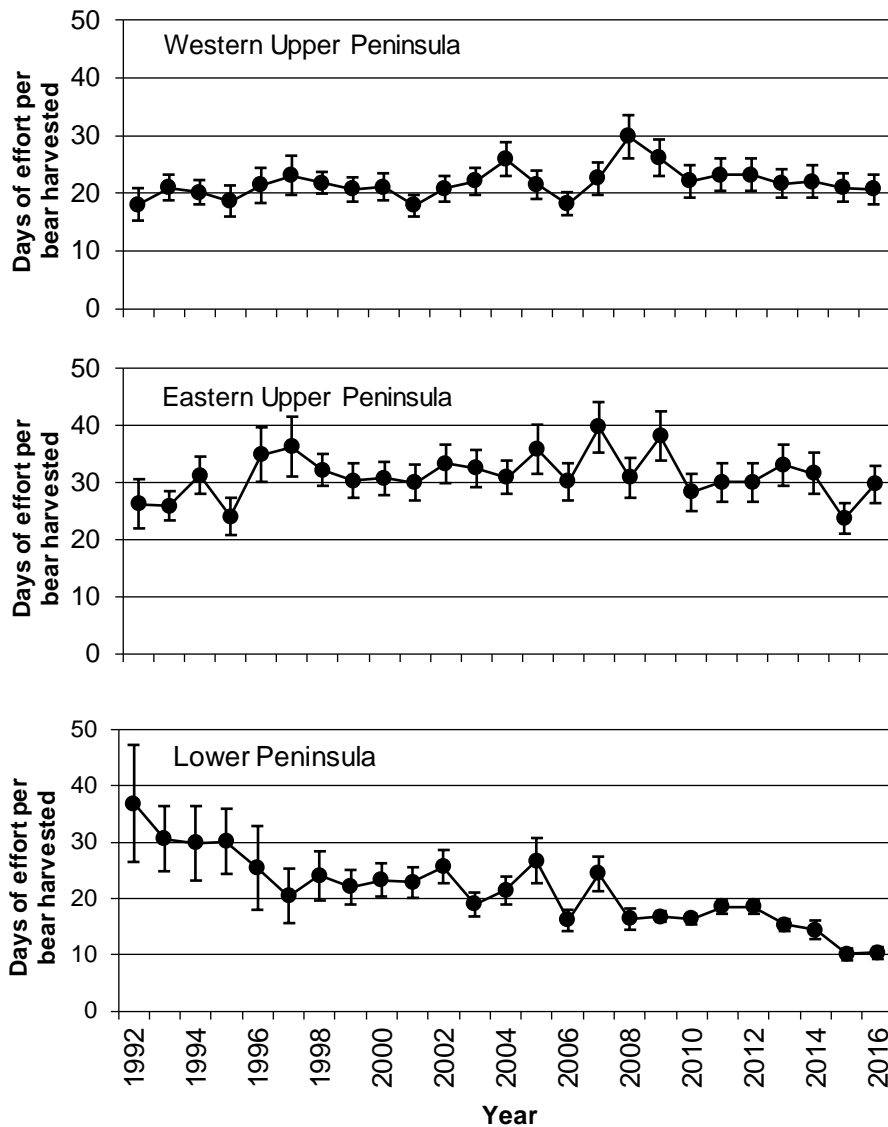


Figure 6. Estimated mean number of days required to harvest a bear in Michigan during 1992-2016, summarized by ecological region. Western UP consisted of Amasa, Baraga, and Bergland units, and Eastern UP consisted of Carney, Gwinn, and Newberry units (Drummond Island Management Unit excluded). Lower Peninsula consisted of Baldwin, Gladwin, and Red Oak management units. Vertical bars represent the 95% confidence interval.

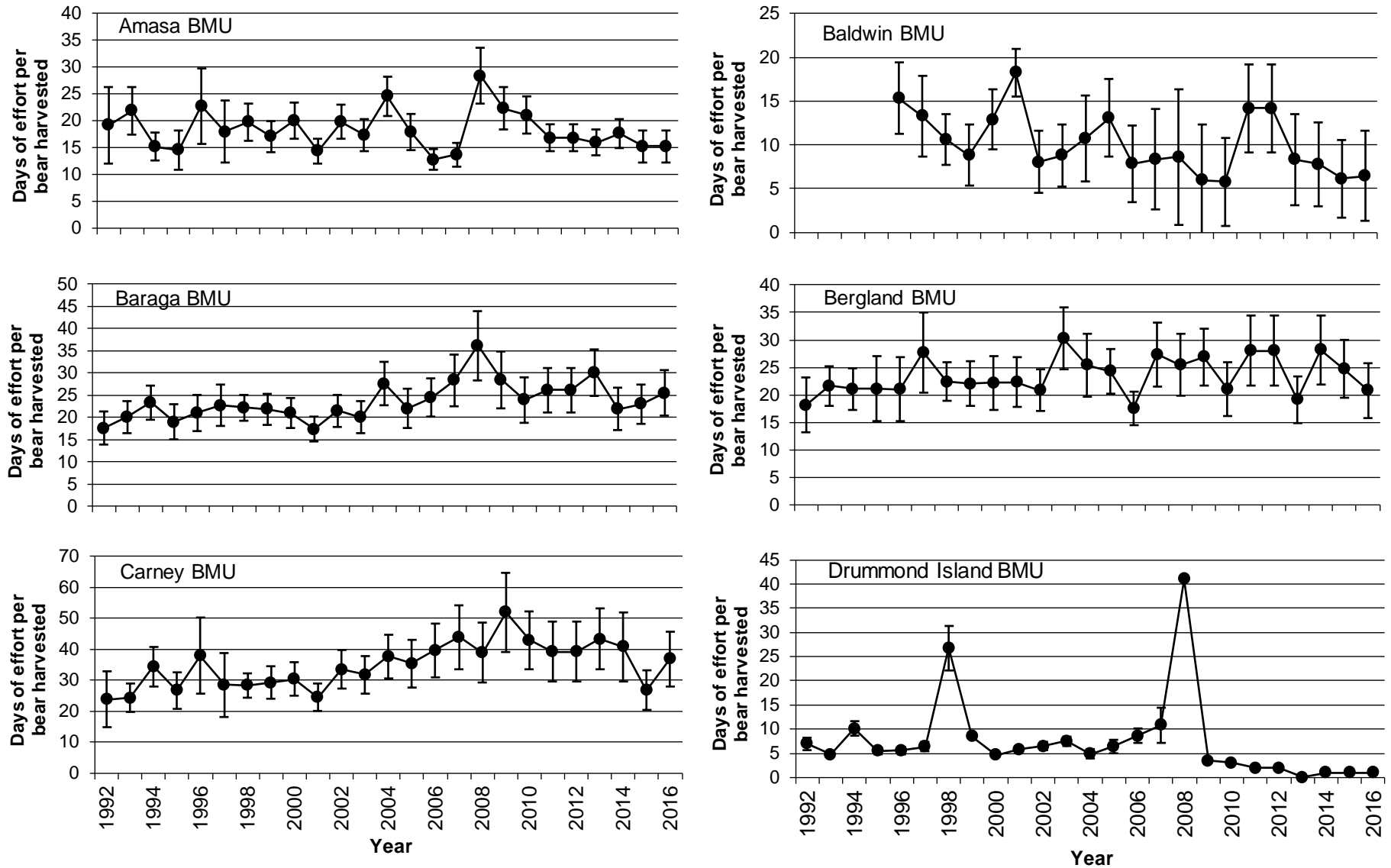


Figure 7. Estimated mean number of days required to harvest a bear in Michigan during 1992-2016, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.

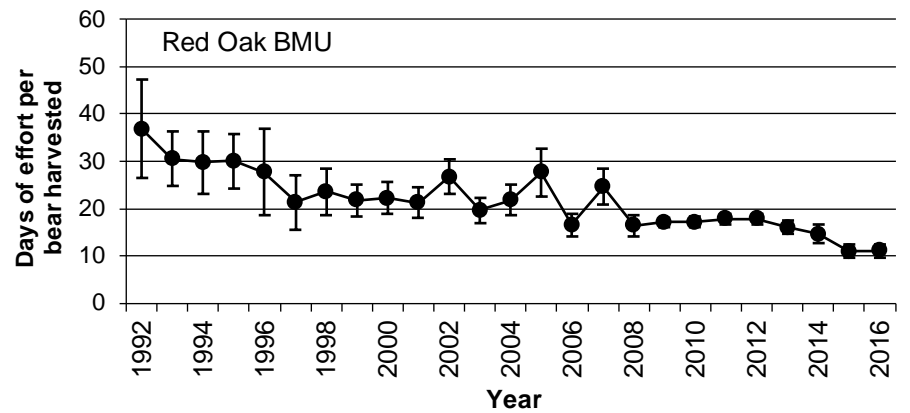
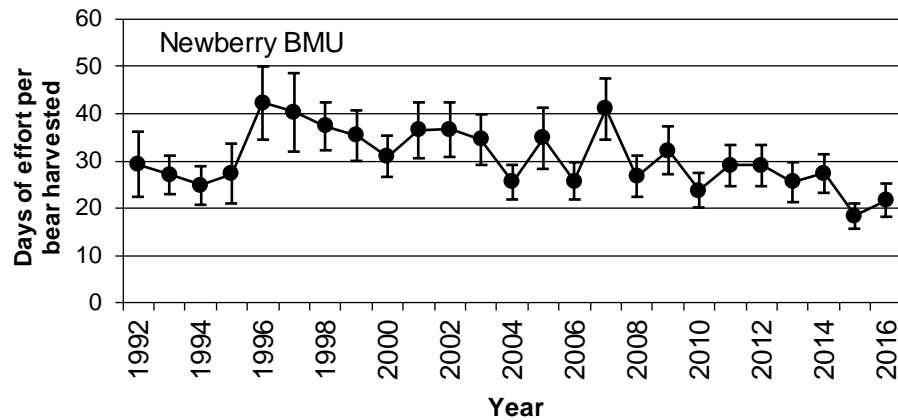
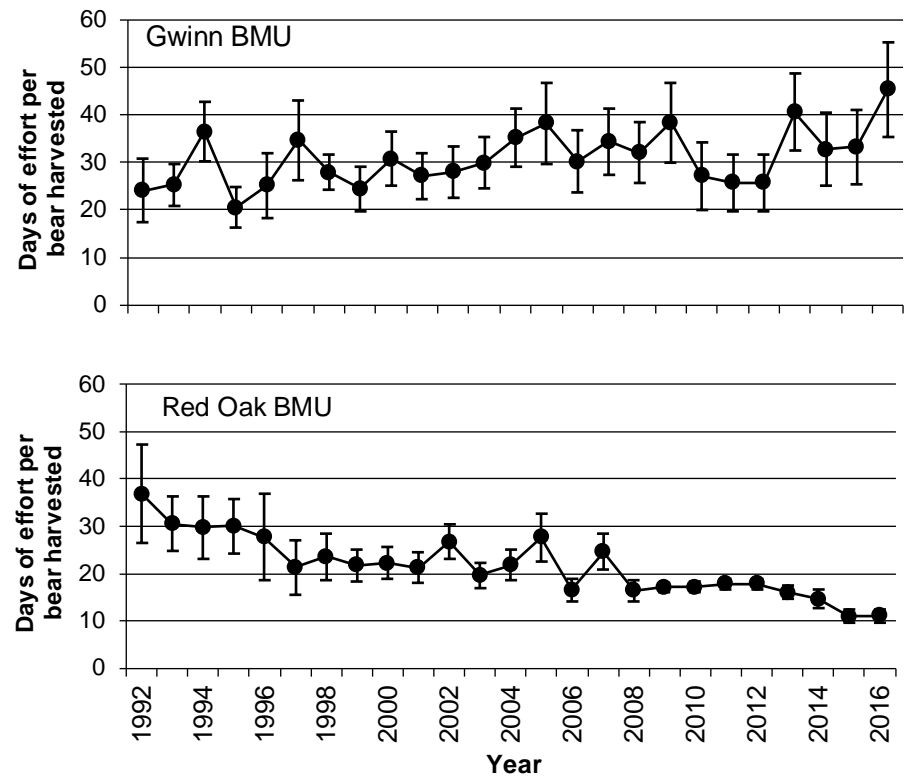
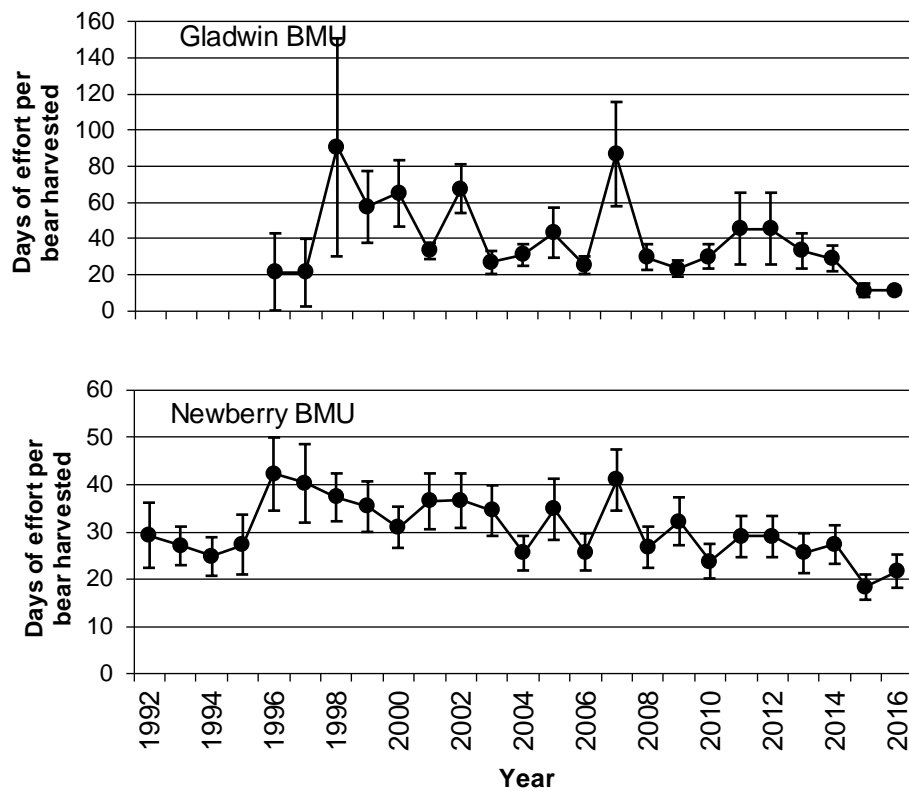


Figure 7 (continued). Estimated mean number of days required to harvest a bear in Michigan during 1992-2016, summarized by management unit. Baldwin and Gladwin management units were created in 1996. Vertical bars represent the 95% confidence interval. The scale of the vertical axis differs for each unit.

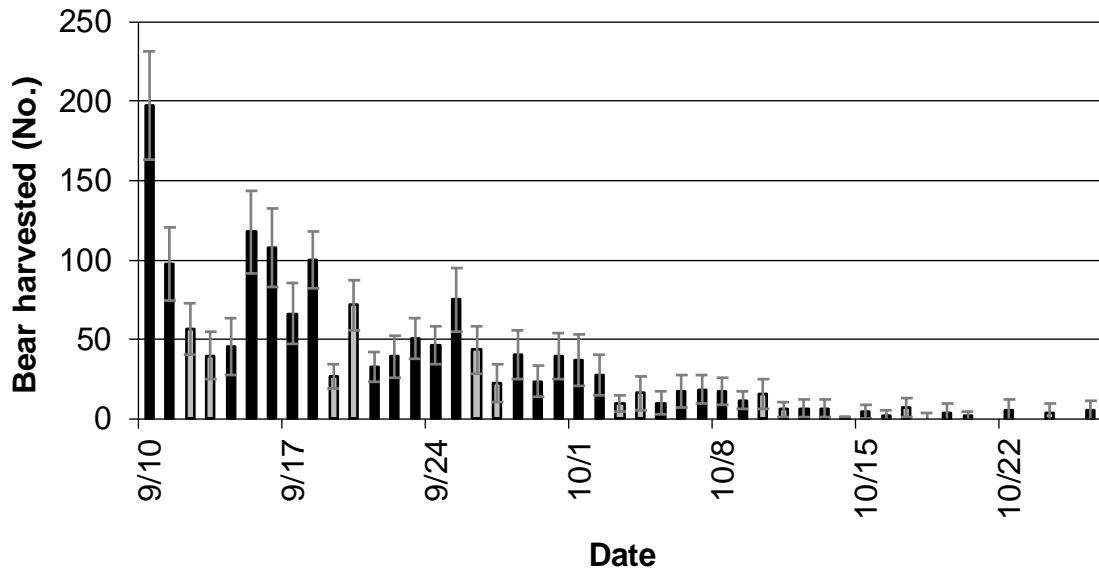


Figure 8. Estimated number of bear harvested by date during the 2016 bear hunting season (includes all hunt periods). Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval. The opening of the bear hunting season was September 10 in the UP and September 20 in the LP (except northern Baldwin Unit). Hunting with dogs in the UP started on September 15.

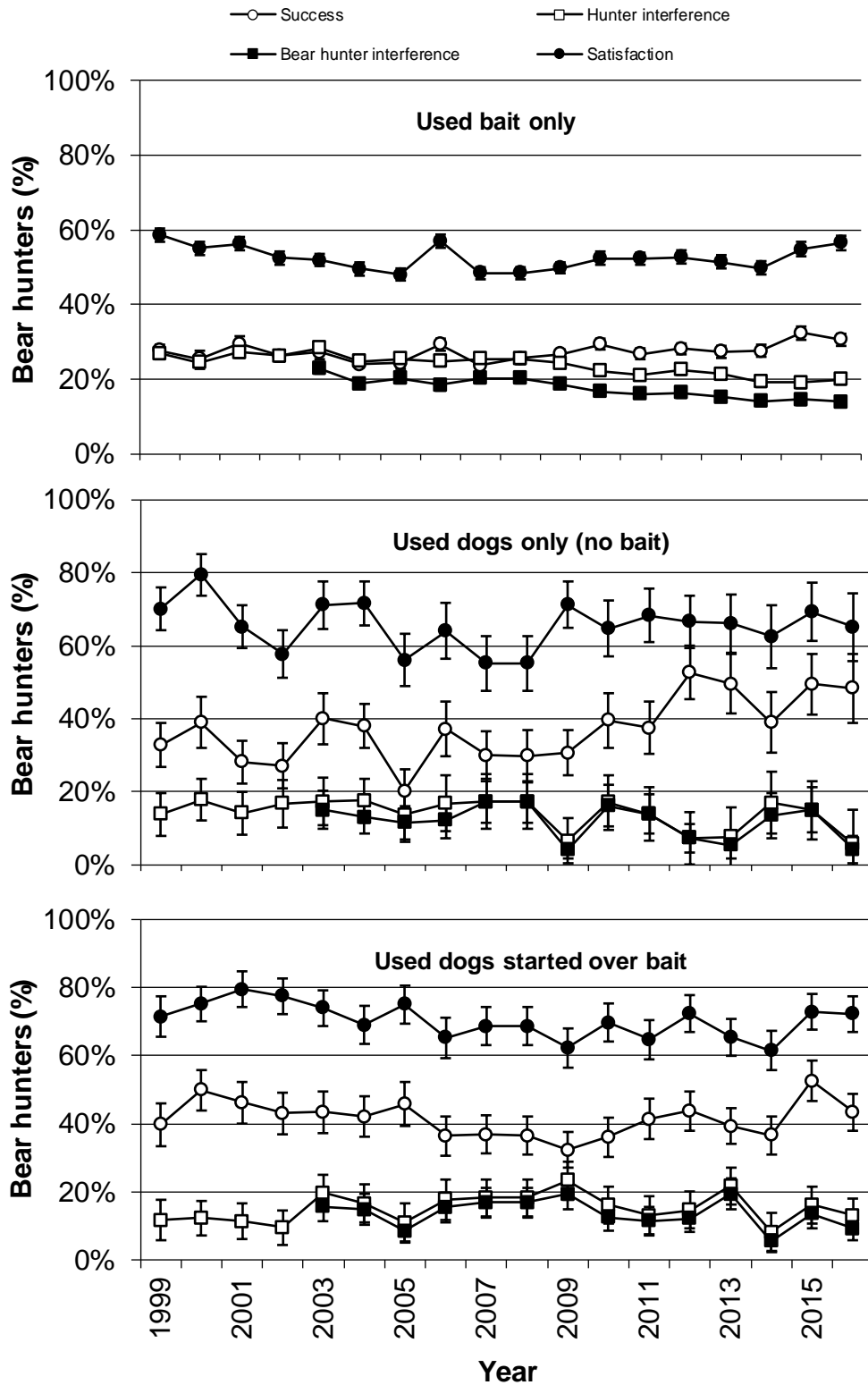


Figure 9. Estimated hunter success, interference, and satisfaction of bear hunters with their hunting experience in Michigan during 1999-2016, summarized by primary method of hunt. Vertical bars represent the 95% confidence interval. Interference was the proportion of hunters indicating they experienced interference from other hunters. Satisfaction was the proportion of hunters rating their hunting experience as very good or good.

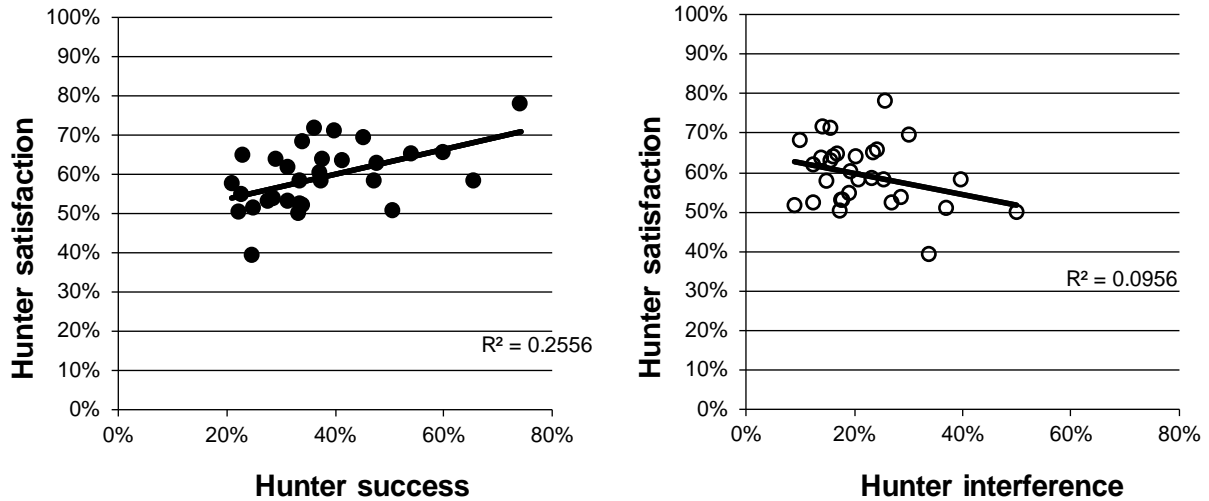


Figure 10. Hunter satisfaction (hunters rating their hunting experience as very good or good) relative to hunter success and hunter interference for 29 counties in Michigan during the 2016 bear hunting season (included only counties with at least 20 hunt

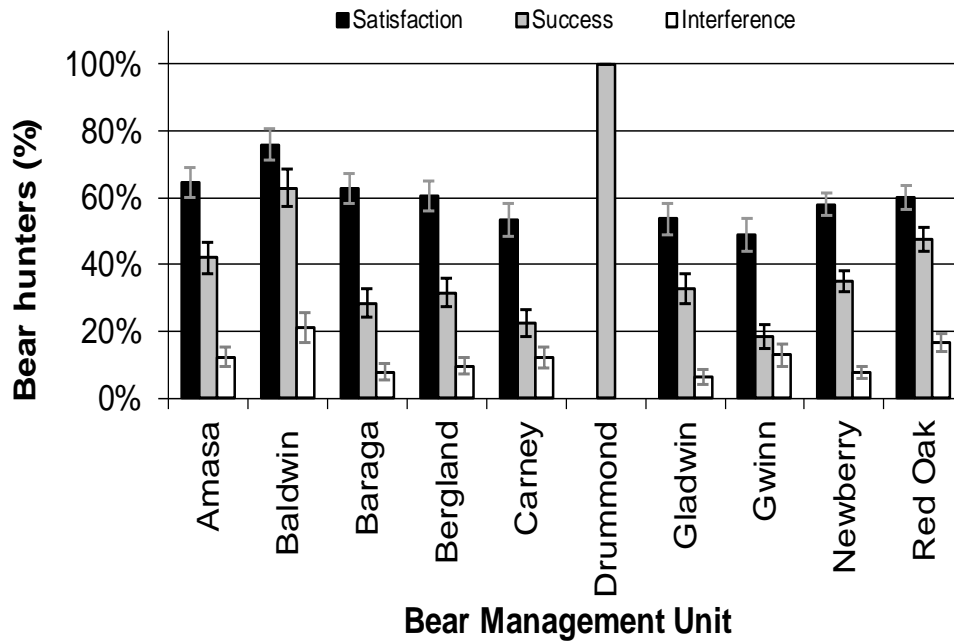


Figure 11. Estimated hunter satisfaction, hunting success, and level of hunter interference in Michigan's bear management units during the 2016 bear hunting season. Satisfaction measures the proportion of hunters rating their hunting experiences as very good or good. Error bars represent the 95% confidence limit. Interference was the proportion of hunters that reported interference from other hunters (all types of hunters).

Table 1. Number of people purchasing hunting licenses for the 2016 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	460	2,019	382	273
Baldwin	80	2,834	77	61
Baraga	1,490	3,248	1,135	474
Bergland	1,090	1,797	840	416
Carney	735	1,855	563	346
Drummond Island	1	175	1	1
Gladwin	90	1,095	74	65
Gwinn	1,165	2,610	871	428
Newberry	1,155	5,721	967	588
Red Oak	630	9,766	570	426
Pure Michigan Hunt	3	NA	2	2
Statewide	6,899	31,120	5,482	3,080
Applicants opting for Preference Point ^d		20,647		

^aNumber of eligible applicants selecting the management unit as their first choice to hunt.

^bFewer licenses were sold than the number available because some successful applicants failed to purchase a license.

^cAn additional 334 hunters responded on the internet before the mail sample was selected; these internet responders were assigned to a separate stratum when calculating survey estimates.

^dApplicants 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 2016 Michigan bear hunting season, summarized by area.

Management Unit	Hunters		Harvest		Hunter success		Hunting effort		Days hunted per hunter (\bar{x})		Days hunted per harvested bear (\bar{x})	
	No.	95% CL ^a	No.	95% CL ^a	%	95% CL ^a	Days	95% CL ^a	Days	95% CL ^a	Days	95% CL ^a
Amasa	359	9	151	17	42	5	2,271	196	6.3	0.5	15.1	2.6
Baldwin	74	2	47	4	63	6	313	27	4.2	0.4	6.7	0.9
Baraga	1,060	25	302	44	29	4	7,539	629	7.1	0.6	24.9	4.5
Bergland	726	26	230	33	32	4	4,795	445	6.6	0.6	20.9	4.2
Carney	488	17	110	19	23	4	3,826	352	7.8	0.7	35.2	7.5
Drummond Is.	1	0	1	0	100	0	1	0	1.0	0.0	1.0	0.0
Gladwin	71	1	23	3	33	4	284	16	4.0	0.2	12.3	1.8
Gwinn	792	23	147	29	19	4	6,354	541	8.0	0.6	43.6	8.4
Newberry	897	17	314	30	35	3	6,577	440	7.3	0.5	20.9	2.9
Red Oak	543	8	257	20	47	4	2,804	160	5.2	0.3	10.9	1.2
Pure MI Hunt	2	0	2	0	100	0	10	0	5.0	0.0	5.0	0.0
Statewide ^b	5,013	51	1,584	77	32	2	34,773	1,126	6.9	0.2	22.5	1.8

^a95% confidence limits.

^bColumn 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 2016 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	92	14	42	10	45	8	491	93	69	8	30	8
Alger	159	29	40	12	25	7	1,117	288	52	9	9	5
Alpena	60	13	22	8	37	11	222	61	58	11	21	9
Antrim	5	4	2	2	33	35	20	15	100	0	33	35
Arenac	2	1	1	1	50	27	6	3	0	0	100	0
Baraga	480	50	140	33	29	6	2,930	440	64	6	20	5
Bay	0	0	0	0	0	0	0	0	0	0	0	0
Benzie	10	3	6	2	62	15	44	15	100	0	35	13
Charlevoix	12	6	4	3	29	22	57	33	43	24	43	24
Cheboygan	37	10	9	5	25	11	195	75	39	13	34	13
Chippewa	199	26	63	16	31	7	1,611	296	53	7	18	6
Clare	15	3	4	2	23	9	56	11	61	10	16	8
Crawford	14	6	7	4	51	21	46	25	51	21	37	21
Delta	319	40	73	21	23	6	2,441	467	55	7	19	6
Dickinson	212	31	58	18	28	7	1,602	308	53	8	18	6
Emmet	12	6	5	4	43	24	39	23	43	24	0	0
Gladwin	32	3	9	2	29	6	103	13	54	7	29	6

^aNumber 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.

^bProportion of hunters that rated their hunting experience as very good or good.

^cProportion 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 2016 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	329	36	111	25	34	7	2,256	397	58	7	23	6
Gd. Traverse	4	2	3	2	67	27	15	11	100	0	0	0
Houghton	257	42	59	21	23	8	1,839	399	65	9	17	7
Iosco	9	5	4	3	40	28	34	26	80	23	0	0
Iron	240	17	115	16	48	6	1,539	203	63	6	16	4
Isabella	0	0	0	0	0	0	0	0	0	0	0	0
Kalkaska	27	8	10	5	37	15	127	50	60	15	19	13
Keweenaw	104	29	35	18	34	14	633	245	68	14	10	9
Lake	16	3	7	2	47	12	53	13	60	12	40	12
Leelanau	0	0	0	0	0	0	0	0	0	0	0	0
Luce	214	27	67	16	31	6	1,254	216	62	7	12	5
Mackinac	103	20	43	13	41	10	611	156	64	10	14	7
Manistee	10	3	5	2	50	16	41	16	80	6	37	15
Marquette	556	55	124	30	22	5	4,343	615	50	6	17	4
Mason	2	1	1	0	43	24	9	6	100	0	0	0
Mecosta	2	1	1	1	57	24	7	1	100	0	0	0
Menominee	295	25	62	15	21	5	2,330	322	58	6	15	4

^aNumber 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.

^bProportion of hunters that rated their hunting experience as very good or good.

^cProportion 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 2016 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	21	8	7	5	33	18	134	60	50	19	50	19
Montmorency	80	14	43	10	54	9	393	89	65	9	24	8
Muskegon	0	0	0	0	0	0	0	0	0	0	0	0
Newaygo	10	3	4	2	40	16	47	17	40	16	47	16
Oceana	2	1	1	1	57	24	8	6	100	0	0	0
Ogemaw	33	9	15	6	47	13	146	49	58	13	25	11
Ontonagon	388	43	155	30	40	6	2,324	393	71	6	16	5
Osceola	17	3	6	2	34	9	64	14	52	9	13	5
Oscoda	49	11	32	9	65	11	239	70	58	12	40	12
Otsego	25	8	9	5	36	15	68	32	72	15	14	12
Presque Isle	63	13	38	10	60	10	292	72	66	10	24	9
Roscommon	43	10	14	6	34	12	282	84	52	13	27	11
Schoolcraft	266	29	101	20	38	6	1,895	318	64	6	16	5
Wexford	21	4	16	3	74	11	68	14	78	8	26	11
Unreported	412	47	12	5	3	1	2,744	412	46	6	22	5

^aNumber 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.

^bProportion of hunters that rated their hunting experience as very good or good.

^cProportion 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 2016 bear hunting season, summarized by area.

Management unit	Land type															
	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	135	17	37	5	152	17	42	5	73	14	20	4	0	0	0	0
Baldwin	19	4	25	5	35	4	47	6	18	4	24	5	3	2	4	2
Baraga	325	45	31	4	487	50	46	5	228	41	22	4	21	14	2	1
Bergland	238	33	33	4	379	37	52	5	103	24	14	3	6	6	1	1
Carney	289	25	59	5	128	21	26	4	67	16	14	3	4	4	1	1
Drummond Is.	1	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Gladwin	48	3	68	5	12	3	17	4	9	2	13	3	1	1	2	1
Gwinn	316	38	40	5	353	39	45	5	120	28	15	3	3	5	0	1
Newberry	316	31	35	3	407	32	45	3	159	24	18	3	16	8	2	1
Red Oak	294	20	54	4	167	18	31	3	68	13	13	2	14	6	3	1
Pure MI Hunt	0	0	0	0	1	0	50	0	1	0	50	0	0	0	0	0
Statewide	1,980	83	39	2	2,119	86	42	2	846	65	17	1	67	20	1	0

Table 5. Estimated number of days of hunting effort on private and public lands during the 2016 Michigan bear hunting season, summarized by area.

Management unit	Land type							
	Private lands		Public lands		Both private and public lands		Unknown	
	Total	95% CL	Total	95% CL	Total	95% CL	Total	95% CL
Amasa	793	150	967	165	510	130	0	0
Baldwin	82	18	141	26	83	20	7	6
Baraga	2,276	475	3,286	487	1,721	415	255	240
Bergland	1,531	331	2,357	355	887	267	20	18
Carney	2,318	329	884	194	610	203	13	19
Drummond Is.	1	0	0	0	0	0	0	0
Gladwin	193	17	57	12	28	10	6	5
Gwinn	2,507	440	2,583	394	1,243	397	21	33
Newberry	2,066	291	2,855	344	1,530	334	127	93
Red Oak	1,551	152	809	119	421	95	23	20
Pure MI Hunt	0	0	8	0	2	0	0	0
Statewide ^a	13,319	876	13,946	846	7,037	762	471	262

^aColumn 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, 2009-2016.

Region	Year						
	2010	2011	2012	2013	2014	2015	2016
Upper Peninsula							
Applicants	22,370	20,175	18,880	18,776	17,510	17,284	17,425
Licenses sold	7,786	7,813	5,323	5,408	5,322	4,729	4,759
Hunters	6,975	6,808	4,782	4,871	4,784	4,280	4,323
Harvest	2,046	1,873	1,376	1,350	1,297	1,387	1,255
Males (%)	57	61	59	60	63	59	61
Females (%)	42	39	41	40	36	41	38
Unknown (%)	0	0	0	0	0	0	0
Hunter-days	49,329	49,627	35,348	35,847	33,702	31,279	31,361
Hunter success (%)	29	28	29	28	27	32	29
Lower Peninsula							
Applicants	14,855	13,644	13,224	13,169	12,641	13,534	13,695
Licenses sold	1,187	1,204	900	806	757	732	721
Hunters	1,122	1,141	860	754	715	711	688
Harvest	347	313	314	252	256	323	327
Males (%)	54	59	49	55	55	64	46
Females (%)	46	40	51	45	45	36	54
Unknown (%)	0	0	0	0	0	0	0
Hunter-days	5,791	5,862	4,385	3,851	3,548	3,209	3,401
Hunter success (%)	31	27	37	33	36	45	48
Statewide							
Applicants ^a	54,937	51,621	51,152	51,715	48,882	51,077	51,767
Licenses sold ^b	8,976	9,020	6,226	6,217	6,082	5,464	5,483
Hunters ^c	8,097	7,949	5,643	5,626	5,499	4,991	5,011
Harvest ^c	2,393	2,187	1,690	1,602	1,552	1,710	1,582
Males (%)	57	61	57	59	62	60	58
Females (%)	43	39	43	41	38	40	42
Unknown (%)	0	0	0	0	0	0	0
Hunter-days ^c	55,120	55,489	39,733	39,699	37,250	34,488	34,763
Hunter success (%) ^c	30	28	30	28	28	34	32

^aNumber of applicants statewide included people that applied for a preference point.

^bNumber of license sold statewide included people that received Pure Michigan Hunt licenses, which were valid in both the UP and LP.

^cExcluded Pure Michigan Hunt licenses.

Table 7. Estimated proportion of hunters that used firearms, crossbows, and archery equipment while hunting bears in Michigan, 2016, summarized by area.

Management unit	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	84	3	12	3	10	3	1	1
Baldwin	77	5	21	4	6	2	0	0
Baraga	90	3	8	2	7	2	0	0
Bergland	85	3	10	3	9	3	0	1
Carney	85	3	12	3	8	2	0	0
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	89	3	6	2	13	3	0	0
Gwinn	85	3	13	3	9	3	0	0
Newberry	91	2	8	2	6	2	0	0
Red Oak	88	2	17	3	22	3	0	0
Pure MI Hunt	50	0	0	0	50	0	0	0
Statewide ^a	87	1	11	1	9	1	0	0

^aRow 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, 2016, summarized by area.

Management unit	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	301	14	45	11	34	10	2	3
Baldwin	57	4	16	3	5	2	0	0
Baraga	957	37	83	26	69	24	0	0
Bergland	618	33	70	18	65	20	3	4
Carney	417	22	60	15	37	12	0	0
Drummond Is.	1	0	0	0	0	0	0	0
Gladwin	63	2	5	2	9	2	0	0
Gwinn	673	34	102	25	73	22	0	0
Newberry	819	24	68	17	53	15	0	0
Red Oak	478	15	91	15	121	16	0	0
Pure MI Hunt	1	0	0	0	1	0	0	0
Statewide ^a	4,386	71	539	50	469	47	5	5

^aRow 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 2016 bear hunting season in Michigan, summarized by area.

Management unit	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
	%	95% CL	%	95% CL	%	95% CL	%	95% CL
Amasa	85	5	8	4	6	4	1	2
Baldwin	83	5	15	5	2	0	0	0
Baraga	93	4	4	3	3	3	0	0
Bergland	85	6	7	4	7	5	0	0
Carney	88	6	9	6	3	3	0	0
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	90	5	0	0	10	5	0	0
Gwinn	91	6	5	4	4	4	0	0
Newberry	92	3	4	2	4	2	0	0
Red Oak	82	4	9	3	9	3	0	0
Pure MI Hunt	50	0	0	0	50	0	0	0
Statewide	88	2	6	1	5	1	0	0

Table 10. Estimated number of bears harvested during the 2016 bear hunting season in Michigan, summarized by hunting equipment used to take the bear, summarized by area.

Management unit	Hunting equipment							
	Firearms		Compound, recurve, or long bows		Crossbows		Unknown	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	128	16	11	6	9	6	2	3
Baldwin	39	4	7	2	1	0	0	0
Baraga	281	43	11	10	10	10	0	0
Bergland	196	31	17	10	17	11	0	0
Carney	97	18	10	6	3	3	0	0
Drummond Is.	1	0	0	0	0	0	0	0
Gladwin	21	3	0	0	2	1	0	0
Gwinn	133	28	8	7	6	7	0	0
Newberry	288	30	13	7	13	7	0	0
Red Oak	212	19	23	8	23	8	0	0
Pure MI Hunt	1	0	0	0	1	0	0	0
Statewide	1,396	74	100	21	86	20	2	3

Table 11. Primary hunting methods used to hunt bear in Michigan, 2016.

Method	Number of hunters	95% CL	Method used (%)
Bait only	4,231	76	
Dogs only	144	27	
Dogs and bait	495	52	
Other	84	22	
Unknown	60	18	

Table 12. Proportion of bait hunters that used various types of bait, summarized by management unit. ^{a,b,c}

Management unit	Type of bait											
	Chocolate or cocoa derivatives		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% %	95% CL	95% %	95% CL	95% %	95% CL	95% %	95% CL	95% %	95% CL	95% %	95% CL
Amasa	17	4	18	4	72	4	76	4	31	4	8	2
Baldwin	11	4	17	4	68	5	55	6	30	5	5	2
Baraga	10	3	23	4	68	4	68	4	36	4	13	3
Bergland	17	4	17	4	61	5	78	4	27	4	6	2
Carney	14	3	17	4	70	4	69	5	24	4	5	2
Drummond Is.	0	0	0	0	100	0	100	0	100	0	0	0
Gladwin	10	3	17	3	73	4	86	3	49	5	17	3
Gwinn	15	4	23	4	75	4	65	5	29	4	12	3
Newberry	9	2	14	2	74	3	63	4	25	3	5	2
Red Oak	12	2	14	3	58	4	83	3	30	3	8	2
Pure MI Hunt	0	0	0	0	100	0	50	0	50	0	50	0
Statewide	13	1	18	1	69	2	70	2	30	2	9	1

^aBait 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.

^bExcluded hunters that did not use bait.

^cRow 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											
	Chocolate or cocoa derivatives		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	No.	95% CL
Amasa	59	13	63	13	256	16	267	16	109	16	28	9
Baldwin	8	3	12	3	47	4	38	4	21	4	3	1
Baraga	104	29	229	40	690	49	693	49	363	47	129	32
Bergland	119	26	122	26	425	37	543	36	190	30	45	17
Carney	62	16	77	17	315	25	309	25	106	20	24	9
Drummond Is.	0	0	0	0	1	0	1	0	1	0	0	0
Gladwin	7	2	11	2	50	3	59	3	33	3	11	2
Gwinn	114	27	170	31	558	38	484	40	213	34	86	24
Newberry	77	18	113	21	609	32	521	32	209	27	38	13
Red Oak	58	12	69	13	287	20	413	18	149	18	40	10
Pure MI Hunt	0	0	0	0	2	0	1	0	1	0	1	0
Statewide	609	56	867	66	3,240	87	3,328	87	1,396	77	405	48

^aBait 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.

^bExcluded hunters that did not use bait.

Table 14. Hunting methods used to harvest bear in Michigan, 2016.

Method	Number of hunters	95% CL	Method used (%)
Bait only	1,292	72	
Dogs only	93	20	
Dogs and bait	191	31	
Other	4	3	
Unknown	5	5	

Table 15. Hunters' level of satisfaction with the number of bear seen during the 2016 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	50	5	15	3	30	4	5	2
Baldwin	55	6	17	4	25	5	3	2
Baraga	41	5	16	3	33	4	9	3
Bergland	41	5	16	3	37	5	6	2
Carney	31	4	14	3	44	5	11	3
Drummond Is.	100	0	0	0	0	0	0	0
Gladwin	36	5	11	3	42	5	10	3
Gwinn	32	4	17	4	41	5	10	3
Newberry	43	3	17	3	32	3	7	2
Red Oak	45	4	15	3	31	3	9	2
Pure MI Hunt	0	0	50	0	50	0	0	0
Statewide	40	2	16	1	35	2	8	1

Table 16. Hunters' level of satisfaction with the number of opportunities to take a bear during the 2016 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	37	5	18	4	32	4	13	3
Baldwin	50	6	18	4	26	5	5	2
Baraga	32	4	16	3	34	4	18	4
Bergland	35	4	13	3	37	5	16	4
Carney	23	4	13	3	45	5	19	4
Drummond Is.	0	0	0	0	0	0	100	0
Gladwin	33	4	10	3	34	4	23	4
Gwinn	24	4	14	3	47	5	15	3
Newberry	38	3	17	3	33	3	12	2
Red Oak	42	4	11	2	31	3	16	3
Pure MI Hunt	0	0	50	0	50	0	0	0
Statewide	33	2	15	1	37	2	15	1

Table 17. Hunters' level of satisfaction with overall bear hunting experience during the 2016 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	65	4	12	3	20	4	3	2
Baldwin	76	5	4	2	21	4	0	0
Baraga	63	4	14	3	19	4	4	2
Bergland	61	5	14	3	21	4	5	2
Carney	53	5	18	4	24	4	4	2
Drummond Is.	0	0	0	0	0	0	100	0
Gladwin	54	5	6	2	33	5	7	2
Gwinn	49	5	23	4	25	4	3	2
Newberry	58	3	14	2	25	3	3	1
Red Oak	60	4	15	3	20	3	6	2
Pure MI Hunt	100	0	0	0	0	0	0	0
Statewide	58	2	16	1	22	1	4	1

Table 18. Number and proportion of hunters that experienced interference with another hunter during the 2016 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	16	3	57	13	11	3	38	11
Baldwin	29	5	22	4	23	5	17	4
Baraga	18	3	188	37	14	3	154	34
Bergland	20	4	148	28	15	3	108	24
Carney	16	3	77	17	9	3	44	13
Drummond Is.	100	0	1	0	100	0	1	0
Gladwin	28	4	20	3	12	3	8	2
Gwinn	17	4	138	29	12	3	98	25
Newberry	16	3	145	23	14	2	126	22
Red Oak	27	3	147	18	13	3	72	14
Pure MI Hunt	0	0	0	0	0	0	0	0
Statewide	19	1	940	66	13	1	666	58

Table 19. Number and proportion of hunters that used a hunting guide during the 2016 bear hunting season, summarized by area.

Management unit	%	95% CL	No.	95% CL
Amasa	14	3	50	12
Baldwin	25	5	19	4
Baraga	14	3	146	33
Bergland	18	4	130	27
Carney	10	3	49	14
Drummond Island	0	0	0	0
Gladwin	2	1	1	1
Gwinn	11	3	87	23
Newberry	17	3	152	23
Red Oak	6	2	33	9
Pure MI Hunt	100	0	2	0
Statewide	13	1	670	58

Table 20. Methods used by guides to hunt bear in Michigan, 2016, summarized by area.

Management unit	Hunted over bait only		Used dogs only (no bait)		Used dogs started over bait		Used other method		Unknown method	
	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL	No.	95% CL
Amasa	94	5	0	0	6	5	0	0	0	0
Baldwin	74	10	0	0	26	10	0	0	0	0
Baraga	89	7	1	0	10	7	0	0	0	0
Bergland	93	6	0	0	2	3	0	0	4	5
Carney	51	15	11	9	33	14	0	0	4	6
Drummond Island	0	0	0	0	0	0	0	0	0	0
Gladwin	100	0	0	0	0	0	0	0	0	0
Gwinn	81	11	0	0	19	11	0	0	0	0
Newberry	85	6	10	5	5	4	0	0	0	0
Red Oak	57	14	21	12	16	11	0	0	5	7
Pure MI Hunt	100	0	0	0	0	0	0	0	0	0
Statewide	84	3	4	2	11	3	0	0	1	1

Table 21. Proportion and number of bait hunters using a trail camera in 2016, summarized by area.^a

Management unit	Bait hunters using a trail camera			
	%	95% CL	Total	95% CL
Amasa	81	4	287	15
Baldwin	88	4	61	4
Baraga	76	4	772	47
Bergland	75	4	526	36
Carney	76	4	341	24
Drummond Is.	100	0	1	0
Gladwin	88	3	60	3
Gwinn	76	4	571	38
Newberry	73	3	604	32
Red Oak	82	3	409	18
Pure MI Hunt	50	0	1	0
Statewide	77	1	3,632	84

^aExcluded hunters that did not use bait.

Table 22. Proportion of bear hunters using a trail camera that photographed the following animals with their trail camera in 2016, summarized by area.^a

Management unit	Species													
	Bear		Coyote		Deer		Bobcat		Wolf		Marten		Fisher	
	%	CL	%	CL	%	CL	%	CL	%	CL	%	CL	%	CL
Amasa	95	2	22	4	41	5	1	1	24	5	20	4	24	5
Baldwin	100	0	20	5	26	5	9	3	0	0	0	0	0	0
Baraga	91	3	25	5	33	5	2	1	34	5	34	5	24	5
Bergland	91	3	31	5	25	5	3	2	40	5	12	3	19	4
Carney	93	3	23	5	56	6	7	3	13	4	5	2	13	4
Drummond Is.	100	0	100	0	100	0	0	0	0	0	0	0	0	0
Gladwin	87	3	18	4	44	5	6	3	2	2	0	0	0	0
Gwinn	88	4	28	5	38	5	2	1	14	4	15	4	17	4
Newberry	93	2	21	3	25	4	2	1	26	4	19	3	18	3
Red Oak	91	2	33	4	36	4	6	2	0	1	0	1	0	0
Pure MI Hunt	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Statewide	92	1	26	2	35	2	3	1	23	2	17	2	16	2

^aExcluded hunters that did not use a trail camera.

APPENDIX A

2016 Michigan Bear Harvest Questionnaire



2016 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 2016 season?

- Yes 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 <i>(List each county that you hunted for bear; for example, Marquette County)</i>	NUMBER OF DAYS HUNTED	TYPE OF LAND
		<input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Both
		<input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Both
		<input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Both
		<input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Both

3. Did you hunt with a firearm, crossbow, or bow during the 2016 bear season? (select all that apply)

- Firearm Crossbow Bow (recurve, compound, or long bow)

4. What hunting method did you use most often when hunting bear in Michigan during the 2016 bear season? (Please select only one item.)

- Hunted over bait only Used dogs only (bait not used)
 Used dogs started over bait 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)

- Chocolate or cocoa derivatives Fruit or vegetables Corn, grains, or granola
 Bakery products including jams, jellies, or sweeteners Meat and meat products, including dog food or grease Fish and products, including cat food

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

- Yes No (If no, please skip to question 9.)

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

- None Bear Coyote Deer Bobcat
 Wolf Marten Fisher Other: _____

Please continue on back

9. At any time during the 2016 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 2016						
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 2016						
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 2016 bear hunting season:

(Select one choice per item.)

	Very Good	Good	Neutral	Poor	Very Poor	Not Applicable
a. Number of bear you saw.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
b. Number of opportunities you had to take a bear.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
c. Your overall bear hunting experience.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>

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