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2016 MICHIGAN SPRING TURKEY HUNTER SURVEY

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ABSTRACT

A survey of turkey hunters was conducted following the 2016 spring hunting season to determine turkey harvest and hunter participation. In 2016, about 74,295 hunters harvested about 30,386 turkeys. Statewide, 41% of hunters harvested a turkey. Nearly 70% of the hunters rated their hunting experience as excellent, very good, or good in 2016. About 92% of the hunters reported they experienced no or only minor interference from other hunters. The number of hunters (+3%) and hunting effort (+5%) increased significantly between 2015 and 2016; however, harvest, hunter success, and hunter satisfaction was not significantly different.

INTRODUCTION

Michigan's spring turkey (*Meleagris gallopavo*) hunting season was based originally on an area and quota system. This system was set up primarily to distribute hunters across geographic areas (management units) and time (hunt periods). As the turkey population has expanded statewide, license types were created that allowed hunters to hunt in multiple management units. The goal of the current system has been to provide hunting opportunities while maintaining acceptable levels of hunter satisfaction (Luukkonen 1998).

In 2016, nearly the entire state was open for wild turkey hunting from April 18 through May 31 (Figure 1). The area open for turkey hunting (58,114 square miles) was the same as last year. The statewide hunting area was divided into 13 management units (Figure 1). Hunting licenses were available on these management units for three types of hunts: (1) quota [limited licenses available] hunts on both public and private lands in a



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specific management unit, (2) quota hunt on private lands in southern Michigan [Hunt 301 in Unit ZZ], and (3) a guaranteed hunt (no quota) that included all units [Hunt 234], but excluded public lands in the Southern Lower Peninsula (SLP).

People interested in obtaining a turkey hunting license could enter into a random drawing (lottery) conducted by the Department of Natural Resources (DNR) or purchase a license not allocated through the lottery (i.e., left-over licenses and licenses for Hunt 234). Each applicant in the lottery could select up to two hunt choices (any combination of quota and unlimited quota hunts). The lottery consisted of two drawings. The first drawing was used to select applicants based on their preferred hunt choice. The second drawing was among applicants who were not successful in the first drawing, and was based on the hunter's second choice for a hunt. Any licenses available after the drawing was completed were made available on a first-come, first-served basis to applicants that were unsuccessful in the drawing. Unsuccessful applicants could purchase one leftover license or a license for Hunt 234. Beginning one week after licenses were available to unsuccessful applicants, all remaining licenses were made available to nonapplicants. Hunters were allowed to purchase one license and take one bearded turkey with the harvest tag issued with their license. Hunters could use a bow and arrow, crossbow, or shotgun with number 4 or smaller shot (including a muzzleloading shotgun) to hunt turkeys.

A limited number of licenses were available for quota hunts, and they were valid only in a certain management unit and only during a limited time period (7-42 days). Most quota hunts began before May 5 and lasted for seven days. A private land management unit (Unit ZZ) was created in 2002 that included all private lands in southern Michigan (Figure 1). Hunters who selected Hunt 301 could hunt the first two weeks of the season (April 18-May 1) anywhere on private lands in Unit ZZ. This unit and hunt period was created to provide additional hunting opportunity and increased flexibility for hunters who had difficulty finding time to hunt during shorter quota hunts.

Licenses for Hunt 234 could be used in any management unit. They were valid on public and private lands, except in Unit ZZ, where they were only valid on private lands or on Fort Custer military lands. Hunt 234 started later than most quota hunts but lasted for 30 days (May 2-31). Licenses for Hunt 234 were sold as a leftover license with no quota and could be purchased throughout the entire spring turkey hunting season.

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 individuals were randomly chosen from all applications, and winners 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 turkey hunting licenses were valid for all areas open for hunting turkey and during all turkey hunting periods. Furthermore, the PMH license holder could hunt any season until their turkey harvest tag was filled.

A mentored youth hunting program started in 2012. Under this program, a mentored youth hunting license was created and could be purchased by youth hunters aged 9 and younger. The youth hunter had to participate with a mentor who was at least 21 years

old. The mentored youth hunting license allowed the youth hunter to hunt small game, turkey, deer, trap furbearers, and fish for all species. A turkey kill tag issued under the mentored youth hunting license was valid for one turkey during any hunt period, in any open hunt unit, on private or public land. No application was required to purchase the mentored youth license.

The DNR and the Natural Resources Commission have the authority and responsibility to protect and manage the wildlife resources of the state of Michigan. Harvest surveys are a management tool used by the Wildlife Division to accomplish its statutory responsibility. Estimating harvest, hunting effort, and hunter satisfaction are the primary objectives of this survey.

METHODS

The Wildlife Division provided all hunters the option to report voluntarily information about their turkey hunting activity via the internet. This option was advertised in the hunting regulation booklet and through a statewide news release. Hunters could report information anytime during the hunting season. Hunters reported whether they hunted, the days spent afield, whether they harvested a turkey, type of device used while hunting (i.e., firearm, crossbow, or bow and arrow), and whether other hunters caused interference during their hunt (none, minor, some irritation, or major problem). Successful hunters were also asked to report where their turkeys were taken (public or private land), date of harvest, and beard length of the harvested bird. Birds with a beard less than six inches were classified as juveniles (one year old), while birds with longer beards were adults (two years old or greater; Kelly, 1975). Finally, hunters were asked to rate their overall hunting experience (excellent, very good, good, fair, or poor), and indicate the status of the turkey population in their hunting area (increasing, decreasing, stable, or unknown).

Following the 2016 spring turkey hunting season, a questionnaire was sent to 13,633 randomly selected people that had purchased a turkey hunting license (resident turkey, senior resident turkey, nonresident turkey, mentored youth, and Pure Michigan hunting licenses) and had not already voluntarily reported harvest information via the internet. Hunters receiving the questionnaire were asked to report the same information that was collected from hunters that reported voluntarily on the internet.

Estimates were calculated using a stratified random sampling design that included 18 strata (Cochran 1977). Hunters were stratified based on the management unit where their license was valid (13 management units). Hunters who purchased a license that could be used in multiple management units (mentored youth hunters, PMH license holders, and licenses for hunts 234 and 301) were treated as separate strata (strata 14-17). Moreover, people that had voluntarily reported information about their hunting activity via the internet were treated as a separate stratum (eighteenth stratum).

A 95% confidence limit (CL) was calculated for each estimate. This CL could be added to and subtracted from the estimate to calculate the 95% confidence interval. The confidence interval was a measure of the precision associated with the estimate and

implies the true value would be within this interval 95 times out of 100. Estimates were based on information collected from random samples of hunting license buyers. Thus, these estimates were subject to sampling errors (Cochran 1977). Estimates were not adjusted for possible response or nonresponse biases.

Statistical tests are used routinely to determine the likelihood that differences among estimates are larger than expected by chance alone. The overlap of 95% confidence intervals was used to determine whether estimates differed. Non-overlapping 95% confidence intervals was equivalent to stating the difference between the means was larger than would be expected 995 out of 1,000 times ($P < 0.005$), if the study had been repeated (Payton et al. 2003).

Questionnaires were mailed initially during early July 2016, and nonrespondents were mailed up to two follow-up questionnaires. Although 13,633 people were sent the questionnaire, 242 surveys were undeliverable resulting in an adjusted sample size of 13,391. Questionnaires were returned by 7,197 people, yielding a 54% adjusted response rate. In addition, 3,000 people voluntarily reported information about their hunting activity via the internet before the random sample was selected.

RESULTS AND DISCUSSION

In 2016, licenses were purchased by 90,774 people, an increase of about 4% from 2015 (Table 1). Most of the people buying a license were males (92%), and the average age of the license buyers was 45 years (Figure 2). Nearly 11% (9,675) of the license buyers were younger than 17 years old. Mentored youth hunting licenses were purchased by 2,264 youths.

The number of people buying a turkey hunting license in 2016 decreased nearly 28% in ten years from 2006 (125,934 people purchased a license in 2006). There were fewer license buyers for age classes between 25 and 57 years of age in 2016, compared to 2006 (Figure 3). However, there were increased hunter numbers among the youngest and oldest age classes in 2016. The increased 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 reflected the lowering of the minimum age requirements. In 2016, there was no minimum age limit to hunt turkeys; while hunters had to be at least 12 years old to participate in 2006.

About 82% ($\pm 1\%$) of license buyers hunted turkeys (74,295 hunters). Most of these hunters were males (68,315 \pm 903), although nearly 8% ($\pm 1\%$) of the hunters were females (5,979 \pm 520). The estimated number of hunters increased significantly by 3% between 2015 and 2016 (71,902 versus 74,295 hunters). Counties listed in descending order with more than 2,000 hunters afield included Allegan, Kent, Montcalm, Jackson, Lapeer, Newaygo, and Tuscola (Table 3).

Hunters spent an estimated 298,486 days afield pursuing turkeys (4.0 \pm 0.1 days/hunter), and harvested approximately 30,386 birds (Figure 4). Counties

listed in descending order with hunters taking more than 900 turkeys included Montcalm, Allegan, Jackson, Tuscola, Kent, and Newaygo (Table 3). Hunter effort was significantly higher by 5% in 2016 than 2015, but harvest was not significantly different from 2015. Hunter success was 41% in 2016, which was not significantly different from the 42% hunter success experienced in 2015.

About 20% ($\pm 2\%$) of the harvested birds were juvenile males ($6,088 \pm 524$); 79% ($\pm 2\%$) were adult males ($23,901 \pm 909$), and about 1% were bearded females (198 ± 89). Additionally, the age of a small number of harvested birds ($< 1\%$) was unknown (199 ± 95) because hunters failed to report a beard length.

Hunting effort and the number of turkeys harvested were generally highest during the earliest hunting periods (Figures 5-8). For turkeys that the harvest date was known, 45% of these birds were taken during the first seven days (April 18-24). Daily hunter success generally was more than 8% during April 18 through May 10. Daily hunter success was generally below 8% during May 11-31. Hunting effort and harvest generally was greater on the weekends than weekdays.

About 81% of turkey hunters hunted solely on private land; 14% hunted on public land only; and 5% hunted on both private and public lands (Table 4). Of the 30,386 turkeys harvested in 2016, $90\% \pm 1\%$ were taken on private land ($27,251 \pm 933$ birds). About $10\% \pm 1\%$ of the harvest ($3,069 \pm 383$ birds) was taken on public land.

Sixteen percent of turkey hunters believed turkey numbers were increasing in their hunting area (Table 5); while, 43% thought turkey numbers were stable, 22% thought turkey were decreasing; 18% of turkey hunters were uncertain about the status of turkeys; and 1% did not comment on the status of turkey.

Hunter satisfaction is one measure used to assess the turkey management program in Michigan. Of the estimated 74,295 people hunting turkeys in 2016, $70\% \pm 1\%$ of the hunters rated their hunting experience as either excellent ($15,322 \pm 768$ hunters), very good ($15,738 \pm 786$), or good ($20,711 \pm 879$) (Table 6). Nearly $18\% \pm 1\%$ of the hunters rated their experience as fair ($13,269 \pm 757$ hunters). Only $12\% \pm 1\%$ of the hunters rated their experience as poor ($8,572 \pm 625$ hunters). About 1% of the hunters (683 ± 185 hunters) failed to rate their hunting experience.

Hunter satisfaction is affected by many factors such as hunting success and whether hunting activities were completed without interference (Luukkonen 1998). In 2016, $75\% \pm 1\%$ of the hunters reported no hunter interference; $18\% \pm 1\%$ reported minor interference; $6\% \pm 1\%$ reported some irritation caused by hunter interference; and 1% reported hunter interference was a major problem (Table 7).

Although interference can affect hunter satisfaction, hunter satisfaction was more closely associated with hunter success (Figures 9 and 10). Hunter success was greatest for hunts beginning April 18; however, satisfaction varied little among the hunt periods (Table 8).

Compared to 2015, hunter numbers and hunting effort increased significantly statewide in 2016 (Table 9); however, harvest changed little. In addition, hunter success, hunter satisfaction, and the proportion of hunters that indicated they experienced no or only minor interference with another hunter were similar in both 2015 and 2016 (Table 10).

Most hunters ($89 \pm 1\%$) used firearms while hunting turkeys, although $6\% \pm 1\%$ of the hunters used archery equipment (compound, recurve, or long bows), and $5\% \pm 1\%$ used a crossbow. Most hunters ($94\% \pm 1\%$) used a firearm to harvest their turkeys, while $3\% \pm 1\%$ used archery equipment, and $3\% \pm 1\%$ used a crossbow. About 42% of hunters using a firearm harvested a turkey, while 21% of hunters using a crossbow took a turkey, and 21% of hunters using another type of bow (longbows, recurve, or compound bows) took a turkey (Table 11).

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Table 1. Number of hunting licenses available and people applying for licenses during the 2016 Michigan spring turkey hunting season.

Management unit or hunt period	Licenses available (quota)	Number of eligible applicants ^a	Number of applicants successful in drawing	Number of licenses remaining after drawing	Number of licenses purchased by successful applicants ^b	Number of licenses purchased by unsuccessful applicants ^b	Number of licenses purchased by people not in the drawing ^b	Number of licensees ^b
A	5,500	1,312	1,314	4,186	966	0	1,060	2,026
B	1,000	27	27	973	17	0	14	31
E	1,700	1,734	1,673	27	1,232	2	19	1,253
F	5,000	2,870	2,890	2,107	2,145	1	1,008	3,154
J	4,000	1,253	1,258	2,741	911	0	1,067	1,978
K	8,500	7,925	7,689	808	5,695	24	759	6,478
M	6,000	724	728	5,272	574	0	3,600	4,174
ZA	4,800	1,428	1,447	3,353	1,048	3	1,649	2,700
ZB	2,600	699	706	1,894	521	0	692	1,213
ZC	2,400	1,139	1,133	1,265	810	2	865	1,677
ZD	40	68	40	0	18	0	0	18
ZE	2,000	1,614	1,542	458	1,121	18	434	1,573
ZF	5,600	1,581	1,601	3,999	1,185	0	2,675	3,860
Hunt 234	NA	NA	NA	NA	524	78	32,676	33,278
Hunt 301	65,000	4,543	4,591	60,409	3,702	23	21,372	25,097
Pure MI Hunts	3	NA	NA	NA	NA	NA	NA	3
Mentored Hunts	NA	NA	NA	NA	NA	NA	NA	2,261
Statewide	114,143	26,917	26,639	87,492	20,469	151	67,890	90,774

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

^bIf a licensee purchased more than one license, only the latest purchase is included in the summary of licenses purchased.

Table 2. Number of hunters, hunting efforts, harvest, hunter success, hunter satisfaction, and hunter interference during the spring 2016 Michigan turkey hunting season.

Management unit	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
Hunt periods with quotas (General limited quota hunt periods)												
A	1,683	95	5,901	601	487	104	29	6	60	7	94	3
B	22	4	59	18	6	4	28	16	76	16	100	0
E	1,140	43	3,340	278	444	70	39	6	70	6	90	4
F	2,741	130	9,799	829	803	165	29	6	59	6	92	4
J	1,575	106	5,810	676	562	117	36	7	59	7	89	5
K	5,694	257	19,407	1,565	2,412	369	42	6	65	6	90	4
M	2,926	240	15,123	2,294	1,062	223	36	7	55	7	96	3
ZA	2,263	142	8,208	1,075	799	174	35	7	64	7	87	5
ZB	1,020	62	3,409	327	309	72	30	7	79	6	90	5
ZC	1,247	106	4,503	646	340	95	27	7	63	8	79	7
ZD	16	3	62	31	5	4	33	24	87	19	87	19
ZE	1,290	81	5,102	613	355	85	27	6	67	7	84	5
ZF	3,317	181	14,712	1,784	1,069	228	32	7	68	7	89	5
Pure MI Hunt	3	0	15	3	2	2	50	57	100	0	100	0
Subtotal	24,937	487	95,450	3,812	8,655	588	35	2	64	2	90	1
Hunt period 301 with quota (Private lands in Management Unit ZZ; April 18-May 1, 2016)												
ZA	5,316	412	18,733	1,922	2,875	320	54	4	79	4	95	2
ZB	2,355	295	8,673	1,428	1,170	212	50	7	76	6	91	4
ZC	3,143	334	10,622	1,433	1,530	239	49	6	77	5	95	3
ZD	331	116	1,167	470	65	50	20	14	71	16	93	9
ZE	6,118	434	21,390	2,082	3,190	335	52	4	78	3	92	2
ZF	4,573	390	17,715	1,991	2,415	296	51	5	76	4	92	3
Unknown	430	133	1,302	523	0	0	0	0	67	15	97	5
Subtotal	21,777	346	79,603	2,985	11,244	502	52	2	78	2	93	1

^aNumber of hunters does not add up to statewide total because mentored youth and hunters with licenses for hunts 234 and 301 can hunt in more than one unit. 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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 2 (continued). Number of hunters, hunting efforts, harvest, hunter success, hunter satisfaction, and hunter interference during the spring 2016 Michigan turkey hunting season.

Management unit	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
Unlimited quota hunt period (Guaranteed Hunt 234; May 2-31, 2016)												
A	648	180	2,425	918	153	87	24	12	45	14	95	6
B	0	0	0	0	0	0	0	0	0	0	0	0
E	1,344	256	5,718	1,403	443	148	33	9	61	9	94	4
F	1,222	243	5,052	1,246	238	107	19	8	51	10	95	4
J	865	204	2,954	837	284	117	33	11	65	11	96	4
K	5,421	478	24,668	2,840	1,921	299	35	5	65	5	92	3
M	182	96	770	488	62	55	34	25	59	26	100	0
ZA	5,465	482	23,699	3,002	2,212	322	40	5	68	5	94	2
ZB	1,483	269	6,645	1,572	610	173	41	9	64	9	94	4
ZC	2,089	315	8,315	1,778	889	208	43	8	74	7	95	3
ZD	192	99	955	593	45	48	23	22	70	24	100	0
ZE	4,381	437	20,213	2,728	1,749	285	40	5	76	5	92	3
ZF	3,515	399	15,584	2,325	1,398	258	39	6	77	5	91	4
Unknown	380	140	1,403	767	0	0	0	0	50	19	92	10
Subtotal	25,989	542	118,403	5,104	10,004	592	38	2	68	2	93	1

^aNumber of hunters does not add up to statewide total because mentored youth and hunters with licenses for hunts 234 and 301 can hunt in more than one unit. 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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 2 (continued). Number of hunters, hunting efforts, harvest, hunter success, hunter satisfaction, and hunter interference during the spring 2016 Michigan turkey hunting season.

Management unit	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
Mentored hunts (youth hunters nine years old and younger could hunt during any open season)												
A	23	13	66	43	3	5	13	19	63	27	100	0
B	0	0	0	0	0	0	0	0	0	0	0	0
E	49	19	141	63	14	10	29	17	88	12	100	0
F	40	17	135	64	11	9	29	19	79	17	93	11
J	52	19	227	98	6	6	11	12	89	12	94	9
K	204	37	534	112	60	21	30	9	83	7	90	6
M	43	17	106	59	14	10	33	19	73	18	87	14
ZA	402	49	1,261	217	118	28	29	6	83	5	94	3
ZB	118	28	391	134	43	17	37	12	80	10	95	5
ZC	132	30	359	97	40	17	30	11	72	11	89	7
ZD	3	5	20	32	0	0	0	0	100	0	100	0
ZE	282	42	856	159	92	25	33	8	87	5	95	4
ZF	282	42	893	192	80	24	28	7	80	6	92	4
Unknown	20	12	40	43	0	0	0	0	71	27	86	21
Subtotal	1,592	58	5,031	334	483	52	30	3	81	3	93	2
Statewide	74,295	808	298,486	7,043	30,386	976	41	1	70	1	92	1

^aNumber of hunters does not add up to statewide total because mentored youth and hunters with licenses for hunts 234 and 301 can hunt in more than one unit. 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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 3. Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunter interference during the 2016 Michigan spring turkey hunting season. Estimates combined quota and unlimited quota hunts in each county.

County	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95%	Total	95%	Total	95%	%	95%	%	95%	%	95%
		CL		CL		CL		CL		CL		CL
Alcona	948	191	3,268	734	204	89	21	8	53	10	95	4
Alger	87	72	210	196	52	56	60	40	57	41	100	0
Allegan	2,516	335	10,040	1,839	1,034	220	41	7	73	7	91	4
Alpena	443	119	1,122	370	185	77	42	14	50	14	92	8
Antrim	727	157	2,383	628	273	96	38	11	74	10	97	4
Arenac	454	118	1,749	630	169	68	37	13	72	13	86	9
Baraga	61	60	228	233	2	0	3	3	40	47	98	2
Barry	1,743	290	6,878	1,418	560	166	32	8	68	8	91	5
Bay	503	149	1,738	774	239	101	47	15	87	10	91	9
Benzie	333	157	1,422	700	66	64	20	18	43	23	84	19
Berrien	911	207	3,562	1,046	396	135	43	11	75	10	93	5
Branch	862	192	3,652	1,088	429	134	50	11	74	10	95	5
Calhoun	1,404	245	5,550	1,359	615	162	44	9	67	8	91	5
Cass	757	192	3,330	1,078	255	109	34	12	71	12	84	9
Charlevoix	373	111	1,406	469	136	65	37	15	75	14	91	8
Cheboygan	489	131	1,570	530	94	60	19	11	37	14	85	10
Chippewa	136	87	683	627	28	35	21	24	47	32	100	0
Clare	991	181	3,473	810	384	115	39	9	65	9	93	5
Clinton	1,269	239	5,868	1,695	434	137	34	9	71	9	94	5
Crawford	653	166	2,202	658	163	85	25	11	65	13	97	4
Delta	566	177	2,590	1,214	190	106	34	16	44	17	100	0

^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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunter interference during the 2016 Michigan spring turkey hunting season. Estimates combined quota and unlimited quota hunts in each county.

County	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
Dickinson	567	178	2,506	998	154	97	27	15	44	17	93	8
Eaton	1,030	211	3,609	909	491	149	48	10	75	9	91	6
Emmet	314	109	983	370	103	64	33	17	63	17	87	11
Genesee	1,400	242	4,953	1,132	642	164	46	9	76	8	94	4
Gladwin	1,006	178	3,680	1,042	328	100	33	9	66	9	96	3
Gogebic	138	91	582	455	41	49	29	30	30	30	100	0
Gd. Traverse	523	189	1,729	693	184	110	35	17	70	18	91	10
Gratiot	1,298	242	4,200	1,087	485	148	37	9	62	9	88	6
Hillsdale	1,332	237	4,939	1,088	508	147	38	9	77	7	90	5
Houghton	81	69	677	671	22	35	27	37	75	37	100	0
Huron	1,315	222	5,309	1,193	503	141	38	8	72	8	88	5
Ingham	1,076	211	3,913	1,026	487	141	45	10	84	7	90	6
Ionia	1,324	241	4,629	1,016	574	159	43	9	71	8	94	4
Iosco	692	174	2,782	797	153	82	22	11	50	13	94	6
Iron	353	143	1,451	719	173	101	49	21	65	20	100	0
Isabella	1,257	234	3,771	900	650	167	52	9	73	9	94	4
Jackson	2,120	288	7,917	1,534	1,012	202	48	7	73	6	90	4
Kalamazoo	938	210	3,610	1,032	350	126	37	11	76	10	96	5
Kalkaska	784	225	3,216	1,108	265	132	34	14	72	13	94	6
Kent	2,283	318	8,617	1,569	941	204	41	7	76	6	94	3
Keweenaw	39	49	66	80	18	35	46	63	54	63	100	0

^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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunter interference during the 2016 Michigan spring turkey hunting season. Estimates combined quota and unlimited quota hunts in each county.

County	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95%	Total	95%	Total	95%	%	95%	%	95%	%	95%
		CL		CL		CL		CL		CL		CL
Lake	1,143	277	4,283	1,227	330	162	29	12	61	12	84	9
Lapeer	2,078	293	7,149	1,367	896	195	43	7	73	6	93	4
Leelanau	359	149	1,295	606	243	127	68	19	91	11	92	13
Lenawee	1,100	215	4,473	1,206	533	150	48	10	79	8	91	6
Livingston	1,727	253	6,198	1,164	665	159	39	7	75	7	91	4
Luce	0	0	0	0	0	0	0	0	0	0	0	0
Mackinac	1	0	6	0	0	0	0	0	100	0	100	0
Macomb	576	155	2,048	645	232	98	40	13	76	11	95	6
Manistee	755	222	3,010	1,079	189	114	25	13	49	15	87	11
Marquette	322	138	1,158	589	23	35	7	11	59	22	100	0
Mason	853	244	2,965	974	330	147	39	14	61	15	95	7
Mecosta	1,107	258	4,123	1,186	458	167	41	12	73	10	97	4
Menominee	981	220	4,324	1,401	396	148	40	12	56	13	92	7
Midland	1,025	212	4,040	1,140	581	162	57	10	72	10	94	5
Missaukee	708	222	2,235	810	309	158	44	16	62	16	98	4
Monroe	424	136	1,820	710	78	58	18	12	72	15	97	5
Montcalm	2,220	312	8,391	1,652	1,048	217	47	7	71	7	91	4
Montmorency	687	146	2,656	862	180	78	26	10	60	11	92	6
Muskegon	1,125	237	4,448	1,182	433	146	39	10	78	9	92	6
Newaygo	2,075	358	7,620	1,560	932	247	45	9	72	8	91	5
Oakland	1,234	200	4,151	833	366	115	30	8	66	8	82	7

^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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 3 (continued). Estimated number of hunters, hunting effort, harvest, hunter success, hunter satisfaction, and hunter interference during the 2016 Michigan spring turkey hunting season. Estimates combined quota and unlimited quota hunts in each county.

County	Hunters ^a		Hunting efforts (days) ^a		Harvest ^a		Hunter success		Hunter satisfaction ^b		Noninterfered hunters ^c	
	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
Oceana	969	247	4,100	1,191	377	154	39	13	66	12	88	8
Ogemaw	780	176	2,793	792	226	97	29	11	47	12	92	7
Ontonagon	61	60	835	912	19	35	32	47	64	47	95	9
Osceola	1,164	275	3,892	1,099	404	172	35	12	61	12	88	8
Oscoda	722	175	2,467	774	189	92	26	11	63	12	94	6
Otsego	645	151	2,349	669	242	99	37	12	59	12	94	5
Ottawa	1,631	272	5,713	1,131	788	190	48	8	79	7	90	5
Presque Isle	642	138	2,503	639	152	70	24	10	53	12	96	5
Roscommon	739	171	2,845	778	220	97	30	11	64	12	87	9
Saginaw	1,489	257	5,497	1,207	582	162	39	9	72	8	91	5
St. Clair	1,389	237	5,069	1,279	661	164	48	9	79	7	94	4
St. Joseph	939	213	3,841	1,188	477	151	51	11	72	10	93	6
Sanilac	1,598	251	5,423	1,101	662	164	41	8	77	7	95	4
Schoolcraft	110	82	446	395	20	35	18	29	69	34	100	0
Shiawassee	1,050	215	4,099	1,030	418	134	40	10	75	9	92	6
Tuscola	2,011	264	7,521	1,320	964	190	48	7	74	6	92	4
Van Buren	1,243	242	5,521	1,481	535	158	43	10	75	9	88	7
Washtenaw	1,630	245	6,204	1,217	622	155	38	7	81	6	90	5
Wayne	115	71	381	266	37	39	32	28	66	30	90	19
Wexford	998	259	3,611	1,104	278	145	28	12	61	13	91	8
Unknown	2,669	363	10,923	2,030	300	120	11	4	55	7	91	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 excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

Table 4. Estimated number and proportion of hunters hunting on private and public lands during the spring 2016 Michigan turkey hunting season.^a

Management unit	Private land only				Public land only				Both private and public lands				Unknown land			
	Total	95% CL	95% %	95% CL	Total	95% CL	95% %	95% CL	Total	95% CL	95% %	95% CL	Total	95% CL	95% %	95% CL
Hunt periods with quotas (General limited quota hunt periods)																
A	1,211	122	72	6	304	88	18	5	140	62	8	4	28	30	2	2
B	17	5	76	16	4	3	16	14	2	2	8	10	0	0	0	0
E	834	70	73	5	218	56	19	5	82	37	7	3	6	10	1	1
F	1,217	186	44	6	1,241	186	45	6	257	104	9	4	27	36	1	1
J	983	130	62	7	384	102	24	6	197	79	13	5	10	19	1	1
K	3,591	383	63	6	1,450	319	25	5	600	224	11	4	52	71	1	1
M	1,977	259	68	7	481	164	16	5	468	164	16	5	0	0	0	0
ZA	1,178	190	52	8	862	177	38	7	208	102	9	4	15	29	1	1
ZB	391	78	38	7	582	83	57	7	40	29	4	3	7	13	1	1
ZC	537	113	43	8	633	116	51	8	57	42	5	3	21	27	2	2
ZD	13	4	80	19	3	3	20	19	0	0	0	0	0	0	0	0
ZE	352	87	27	6	835	103	65	7	104	50	8	4	0	0	0	0
ZF	1,590	253	48	7	1,287	242	39	7	440	163	13	5	0	0	0	0
PMH	2	2	50	57	0	0	0	0	2	2	50	57	0	0	0	0
Subtotal	13,891	641	56	2	8,284	553	33	2	2,596	376	10	1	166	97	1	0
Hunt 301 with quota (Private lands in Management Unit ZZ; April 18-May 1, 2016)																
ZA	5,204	403	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZB	2,305	288	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZC	3,077	326	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZD	323	113	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZE	5,988	424	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZF	4,476	381	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	421	130	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	21,314	338	100	0	0	0	0	0	0	0	0	0	0	0	0	0

^aRow totals may not equal 100% because of rounding errors.

Table 4 (continued). Estimated number and proportion of hunters hunting on private and public lands during the spring 2016 Michigan turkey hunting season.^a

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
Unlimited quota hunt period (Guaranteed Hunt 234; May 2-31, 2016)																
A	527	162	81	11	77	62	12	9	44	48	7	7	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	1,030	225	77	8	255	114	19	8	58	55	4	4	0	0	0	0
F	693	186	57	10	424	143	35	10	105	73	9	6	0	0	0	0
J	587	169	68	11	202	99	23	10	75	62	9	7	0	0	0	0
K	3,794	412	70	4	1,072	228	20	4	554	165	10	3	0	0	0	0
M	79	62	43	26	59	55	33	25	44	48	24	23	0	0	0	0
ZA ^b	5,465	482	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZB ^b	1,483	269	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZC ^b	2,089	315	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZD ^b	192	99	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZE ^b	4,381	437	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZF ^b	3,515	399	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	351	135	92	10	29	39	8	10	0	0	0	0	0	0	0	0
Subtotal	23,006	602	89	1	1,803	292	7	1	1,181	238	5	1	0	0	0	0

^aRow totals may not equal 100% because of rounding errors.

^bLicenses for the unlimited quota hunt were valid only on private lands in Management Unit ZZ in southern Michigan (Figure 1).

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one unit for the unlimited quota hunts.

Table 4 (continued). Estimated number and proportion of hunters hunting on private and public lands during the spring 2016 Michigan turkey hunting season.^a

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
Mentored hunts (youth hunters nine years old and younger could hunt during any open season)																
A	20	12	88	19	3	5	13	19	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E	43	17	88	12	6	6	12	12	0	0	0	0	0	0	0	0
F	26	14	64	20	6	6	14	15	9	8	21	17	0	0	0	0
J	40	17	78	16	6	6	11	12	6	6	11	12	0	0	0	0
K	161	33	79	8	37	16	18	7	6	6	3	3	0	0	0	0
M	29	14	67	19	11	9	27	18	3	5	7	10	0	0	0	0
ZA	388	48	96	2	6	6	1	2	3	5	1	1	6	6	1	2
ZB	109	27	93	6	6	6	5	5	0	0	0	0	3	5	2	4
ZC	118	28	89	7	11	9	9	7	3	5	2	3	0	0	0	0
ZD	3	5	100	0	0	0	0	0	0	0	0	0	0	0	0	0
ZE	259	41	92	4	17	11	6	4	6	6	2	2	0	0	0	0
ZF	256	40	91	5	14	10	5	4	9	8	3	3	3	5	1	2
Unknown	20	12	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	1,413	62	89	2	112	28	7	2	55	20	3	1	11	9	1	1
Statewide ^c	60,087	948	81	1	10,196	626	14	1	3,832	446	5	1	210	105	0	0

^aRow totals may not equal 100% because of rounding errors.

^bLicenses for the unlimited quota hunt were valid only on private lands in Management Unit ZZ in southern Michigan (Figure 1).

^cNumber of hunters does not add up to statewide total because hunters can hunt in more than one unit for the unlimited quota hunts.

Table 5. Status of turkey population reported by turkey hunters during the spring 2016 Michigan turkey hunting season.

Management unit	Turkey population status (% of hunters) ^a				
	Increasing	Decreasing	Stable	Unknown	No answer
Hunt periods with quotas (General limited quota hunt periods)					
A	16	37	31	15	1
B	24	16	36	24	0
E	20	18	41	20	1
F	14	26	34	24	2
J	14	27	30	28	1
K	12	28	41	17	0
M	14	33	26	26	1
ZA	12	18	44	26	1
ZB	19	15	48	18	0
ZC	18	14	38	29	0
ZD	6	0	67	27	0
ZE	17	15	36	31	1
ZF	19	21	38	20	2
Pure MI Hunt	0	0	0	100	0
Mean	15	25	37	22	1
Hunt 301 with quota (Private lands in Management Unit ZZ; April 18-May 1, 2016)					
ZA	13	19	56	11	0
ZB	19	20	47	13	1
ZC	17	19	48	16	0
ZD	8	26	44	19	4
ZE	19	15	49	16	0
ZF	20	16	51	11	2
Unknown	11	25	47	17	0
Mean	17	17	51	14	1

^aRow totals may not equal 100% because of rounding errors.

Table 5 (continued). Status of turkey population reported by turkey hunters during the spring 2016 Michigan turkey hunting season.

Management unit	Turkey population status (% of hunters) ^a				
	Increasing	Decreasing	Stable	Unknown	No answer
Unlimited quota hunt period (Guaranteed Hunt 234; May 2-31, 2016)					
A	7	42	32	18	0
B	0	0	0	0	0
E	22	25	35	16	2
F	12	36	35	17	0
J	16	20	48	16	0
K	14	29	38	19	1
M	24	34	25	9	8
ZA	10	27	47	15	1
ZB	18	15	51	16	0
ZC	19	19	45	16	1
ZD	8	8	76	8	0
ZE	20	17	45	17	2
ZF	19	19	44	18	0
Unknown	0	27	46	19	8
Mean	15	23	43	17	1
Mentored hunts (youth hunters nine years old and younger could hunt during any open season)					
A	13	38	50	0	0
B	0	0	0	0	0
E	24	0	41	35	0
F	29	21	21	29	0
J	6	22	39	33	0
K	10	14	45	31	0
M	7	13	47	33	0
ZA	11	16	46	26	0
ZB	24	5	44	24	2
ZC	13	20	30	30	7
ZD	0	0	100	0	0
ZE	21	8	52	18	0
ZF	16	11	47	24	1
Unknown	14	0	71	14	0
Mean	15	13	45	25	1
Statewide ^b	16	22	43	18	1

^aRow totals may not equal 100% because of rounding errors.

^bStatewide mean interference levels (all hunts and periods).

Table 6. How hunters rated their hunting experience during the spring 2016 Michigan turkey hunting season.

Management unit	Satisfaction level (% of hunters) ^a					
	Excellent	Very good	Good	Fair	Poor	No answer
Hunt periods with quotas (General limited quota hunt periods)						
A	15	16	28	18	20	2
B	24	28	24	16	0	8
E	17	29	24	17	12	1
F	13	17	28	22	18	1
J	16	19	24	21	16	3
K	20	21	23	20	14	1
M	15	16	24	26	19	0
ZA	18	12	34	20	15	1
ZB	19	21	39	14	7	0
ZC	16	22	26	19	16	2
ZD	27	6	54	0	13	0
ZE	14	21	32	21	11	1
ZF	18	23	26	21	9	2
Pure MI Hunt	100	0	0	0	0	0
Mean	17	20	27	21	15	1
Hunt 301 with quota (Private lands in Management Unit ZZ; April 18-May 1, 2016)						
ZA	26	25	28	12	8	1
ZB	24	23	30	15	7	1
ZC	29	21	28	14	7	1
ZD	27	22	22	8	14	7
ZE	29	24	25	13	9	0
ZF	27	23	27	17	6	1
Unknown	17	8	42	14	17	3
Mean	27	23	27	14	8	1

^aRow totals may not equal 100% because of rounding errors.

Table 6 (continued). How hunters rated their hunting experience during the spring 2016 Michigan turkey hunting season.

Management unit	Satisfaction level (% of hunters) ^a					
	Excellent	Very good	Good	Fair	Poor	No answer
Unlimited quota hunt period (Guaranteed Hunt 234; May 2-31, 2016)						
A	10	11	24	18	37	0
B	0	0	0	0	0	0
E	15	17	29	22	16	1
F	7	12	32	26	23	0
J	16	20	28	22	14	0
K	17	20	29	19	15	1
M	10	9	41	25	16	0
ZA	19	19	30	21	10	0
ZB	24	24	16	24	12	0
ZC	24	26	25	16	9	1
ZD	15	9	46	30	0	0
ZE	20	25	30	15	8	1
ZF	19	22	36	15	7	0
Unknown	0	27	23	27	15	8
Mean	18	21	29	19	12	1
Mentored hunts (youth hunters nine years old and younger could hunt during any open season)						
A	13	0	50	13	25	0
B	0	0	0	0	0	0
E	24	29	35	12	0	0
F	14	21	43	14	7	0
J	11	28	50	6	6	0
K	28	27	28	13	3	1
M	33	20	20	20	7	0
ZA	28	21	34	9	8	1
ZB	37	17	27	15	2	2
ZC	26	20	26	20	4	4
ZD	100	0	0	0	0	0
ZE	31	24	32	12	1	0
ZF	26	28	27	13	6	1
Unknown	29	14	29	29	0	0
Mean	28	23	31	12	5	1
Statewide ^b	21	21	28	18	12	1

^aRow totals may not equal 100% because of rounding errors.

^bStatewide mean satisfaction levels (all hunts and periods).

Table 7. Estimated amount of hunter interference experienced by turkey hunters during the spring 2016 Michigan turkey hunting season.

Management unit	Interference level (% of hunters) ^a				
	None	Minor	Some irritation	Major problem	No answer
Hunt periods with quotas (General limited quota hunt periods)					
A	77	16	5	1	1
B	92	8	0	0	0
E	78	12	7	2	1
F	67	24	6	1	1
J	70	19	7	4	1
K	73	18	7	1	1
M	82	14	3	1	0
ZA	65	23	11	2	0
ZB	62	28	9	1	1
ZC	59	20	17	4	0
ZD	73	13	13	0	0
ZE	59	26	12	4	0
ZF	57	31	10	0	1
Pure MI Hunt	100	0	0	0	0
Mean	69	21	8	2	1
Hunt 301 with quota (Private lands in Management Unit ZZ; April 18-May 1, 2016)					
ZA	78	16	4	1	0
ZB	73	19	8	0	1
ZC	80	15	4	0	1
ZD	82	11	7	0	0
ZE	79	13	6	1	0
ZF	70	22	5	1	2
Unknown	89	8	3	0	0
Mean	77	16	5	1	1

^aRow totals may not equal 100% because of rounding errors.

Table 7 (continued). Estimated amount of hunter interference experienced by turkey hunters during the spring 2016 Michigan turkey hunting season.

Management unit	Interference level (% of hunters) ^a				
	None	Minor	Some irritation	Major problem	No answer
Unlimited quota hunt period (Guaranteed Hunt 234; May 2-31, 2016)					
A	86	9	5	0	0
B	0	0	0	0	0
E	79	16	4	1	0
F	80	15	4	1	0
J	74	23	4	0	0
K	73	19	6	2	0
M	84	16	0	0	0
ZA	80	14	4	2	1
ZB	81	13	5	1	0
ZC	82	13	3	2	0
ZD	85	15	0	0	0
ZE	76	16	6	1	1
ZF	73	17	7	1	1
Unknown	62	31	4	0	4
Mean	77	16	5	1	0
Mentored hunts (youth hunters nine years old and younger could hunt during any open season)					
A	75	25	0	0	0
B	0	0	0	0	0
E	82	18	0	0	0
F	79	14	7	0	0
J	78	17	6	0	0
K	80	10	7	3	0
M	80	7	13	0	0
ZA	81	13	5	1	0
ZB	83	12	5	0	0
ZC	72	17	7	0	4
ZD	100	0	0	0	0
ZE	89	6	5	0	0
ZF	81	11	8	0	0
Unknown	86	0	14	0	0
Mean	81	11	6	1	0
Statewide ^b	75	18	6	1	1

^aRow totals may not equal 100% because of rounding errors.

^bStatewide mean interference levels (all hunts and periods).

Table 8. Estimated number of hunting efforts, hunters, hunting success, noninterfered hunters, and hunter rating of the 2016 spring turkey hunting season, by hunt periods.

Variable	Hunt periods beginning									
	April 18		April 25		May 2		May 9		All periods ^a	
	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL	Estimate	95% CL
Hunting efforts (days)	138,622	4,471	21,070	2,111	130,326	5,466	8,467	1,396	298,486	7,043
Number of hunters	37,969	703	5,989	485	28,479	615	1,858	232	74,295	808
Successful hunters (n)	17,207	703	2,001	345	10,676	621	503	136	30,386	976
Successful hunters (%)	45	2	33	5	37	2	27	7	41	1
Noninterfered hunters (n) ^b	34,992	725	5,381	476	26,466	649	1,599	221	68,437	906
Noninterfered hunters (%) ^b	92	1	90	3	93	1	86	5	92	1
Favorable rating (n) ^c	27,808	759	3,581	422	19,351	700	1,031	183	51,771	1,033
Favorable rating (%) ^c	73	2	60	5	68	2	55	7	70	1

^aRow totals may not equal totals for all periods because of rounding errors.

^bProportion of hunters that indicated they experienced no or only minor interference from other hunters.

^cHunters rating their hunting experience as excellent, very good, or good.

Table 9. Comparison of the estimated number of hunters, hunting effort, and harvest between 2015 and 2016 Michigan spring turkey hunting seasons, summarized by regions.

Region ^a	Hunters (No.) ^b					Hunting efforts (days)					Harvest (No.)				
	2015		2016		Change (%)	2015		2016		Change (%)	2015		2016		Change (%)
	Total	95% CL	Total	95% CL		Total	95% CL	Total	95% CL		Total	95% CL	Total	95% CL	
UP	3,040	253	3,097	261	2	15,426	2,320	15,762	2,354	2	1,292	237	1,139	230	-12
NLP	20,795	645	21,884	681	5	80,484	4,150	83,732	3,981	4	6,878	531	7,765	573	13
SLP	45,697	764	47,405	813	4*	175,642	5,649	188,069	5,950	7*	21,458	751	21,183	793	-1
Unknown	3,233	378	2,669	363		12,212	1,910	10,923	2,030		412	139	300	120	
Total	71,902	757	74,295	808	3*	283,764	6,897	298,486	7,043	5*	30,039	922	30,386	976	1

^aRegions included the Upper Peninsula (UP), the Northern Lower Peninsula north of Management Unit ZZ (NLP), and Management Unit ZZ in the Southern Lower Peninsula (SLP).

^bNumber of hunters did not add up to statewide total because mentored youth and hunters with a license for the unlimited quota hunt can hunt in more than one unit.

*P<0.005.

Table 10. Comparison of estimated hunter success, hunter satisfaction, and hunt interference between 2015 and 2016 Michigan spring turkey hunting season, summarized by regions.

Region ^a	Hunter success					Hunter satisfaction ^b					Noninterfered hunters ^c				
	2015		2016		Differ-ence (%)	2015		2016		Differ-ence (%)	2015		2016		Differ-ence (%)
	%	95% CL	%	95% CL		%	95% CL	%	95% CL		%	95% CL	%	95% CL	
UP	43	7	37	7	-6	63	7	55	7	-7	96	3	96	3	0
NLP	33	2	35	2	2	63	2	63	2	-1	92	1	92	1	0
SLP	47	1	45	2	-2	75	1	74	1	0	92	1	92	1	0
Total	42	1	41	1	-1	70	1	70	1	0	92	1	92	1	0

^aRegions included the Upper Peninsula (UP), the Northern Lower Peninsula north of Management Unit ZZ (NLP), and Management Unit ZZ in the Southern Lower Peninsula (SLP).

^bHunters rating their hunting experience as excellent, very good, or good.

^cProportion of hunters that indicated they experienced no or only minor interference from other hunters.

*P<0.005.

Table 11. Number of turkeys harvested and hunter success, summarized by hunting device, during the spring turkey hunting season in Michigan, 2010-2016.

Year	Number of turkey harvested by device								Hunter success by device ^a					
	Firearm		Crossbows		Other bows ^b		Unknown		Firearm		Crossbows		Other bows ^b	
	Total	95% CL	Total	95% CL	Total	95% CL	Total	95% CL	%	95% CL	%	95% CL	%	95% CL
2010	34,984	1,093	525	161	1,519	279	22	32	41	1	20	6	20	3
2011	28,831	1,017	590	170	1,143	228	23	34	37	1	17	5	17	3
2012	29,611	984	650	172	1,055	214	62	57	39	1	17	4	18	3
2013	30,152	1,038	921	210	1,090	231	80	76	39	1	22	5	18	4
2014	27,746	919	516	143	838	195	9	13	41	1	17	4	21	4
2015	28,272	908	751	188	935	196	81	63	43	1	20	5	21	4
2016	28,422	959	860	200	963	221	142	87	42	1	21	4	21	4

^aHunters harvesting a turkey.

^bIncluded longbows, recurve, and compound bows.

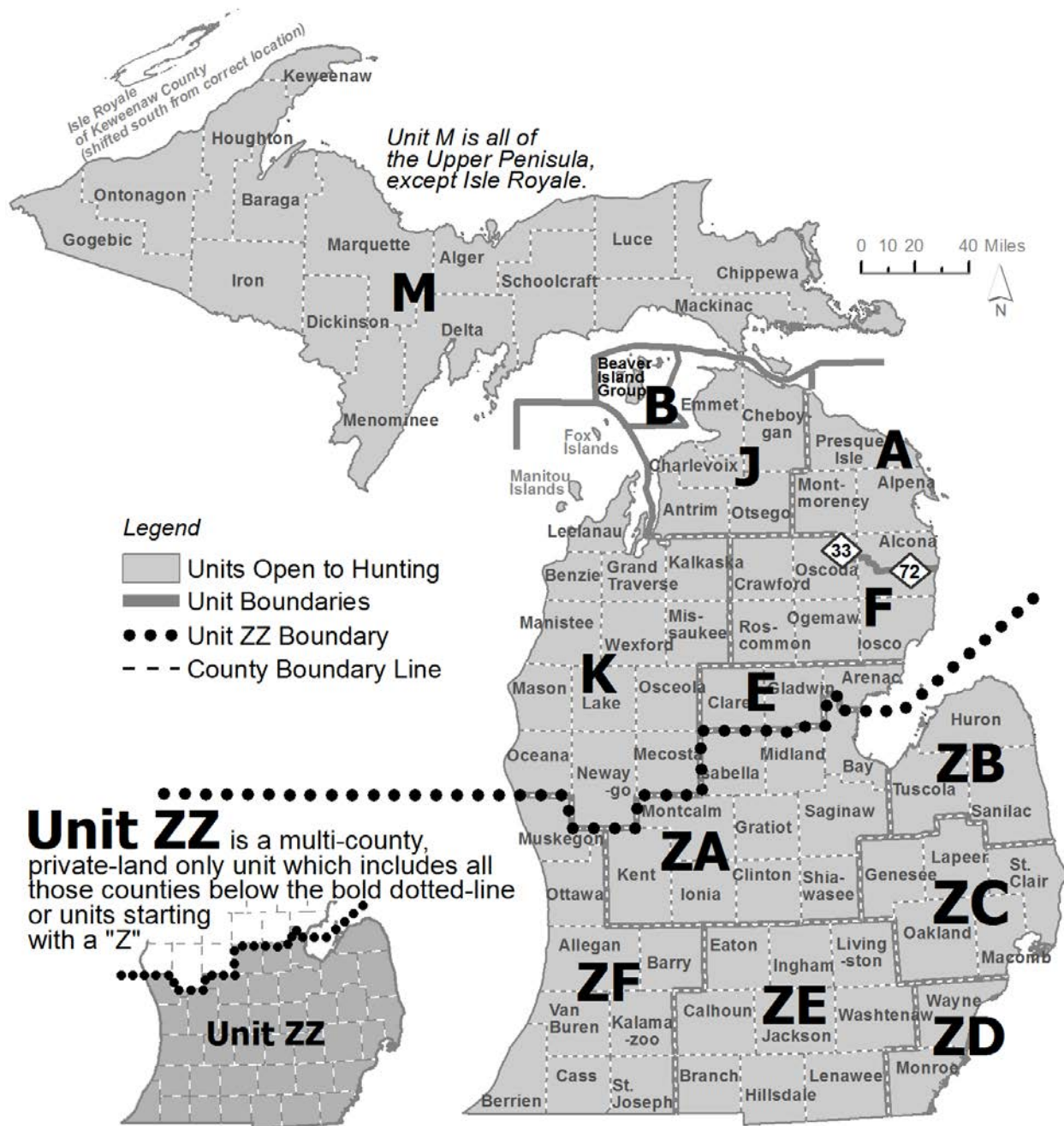


Figure 1. Management units in Michigan open to spring turkey hunting in 2016.

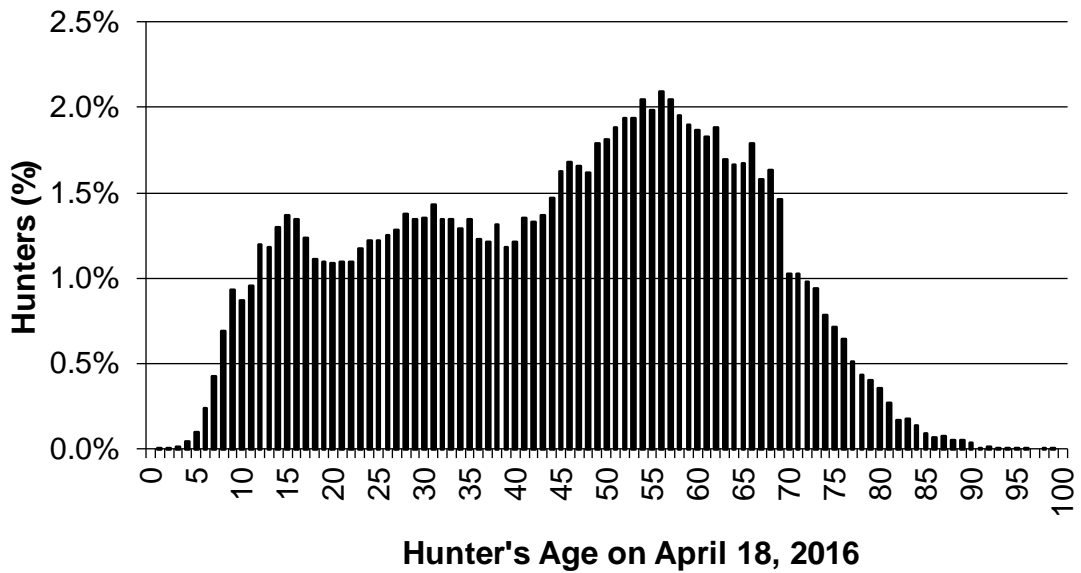


Figure 2. Age of people that purchased a turkey hunting license in Michigan for the 2016 spring hunting season (mean = 45 years). Licenses were purchased by 90,774 people.

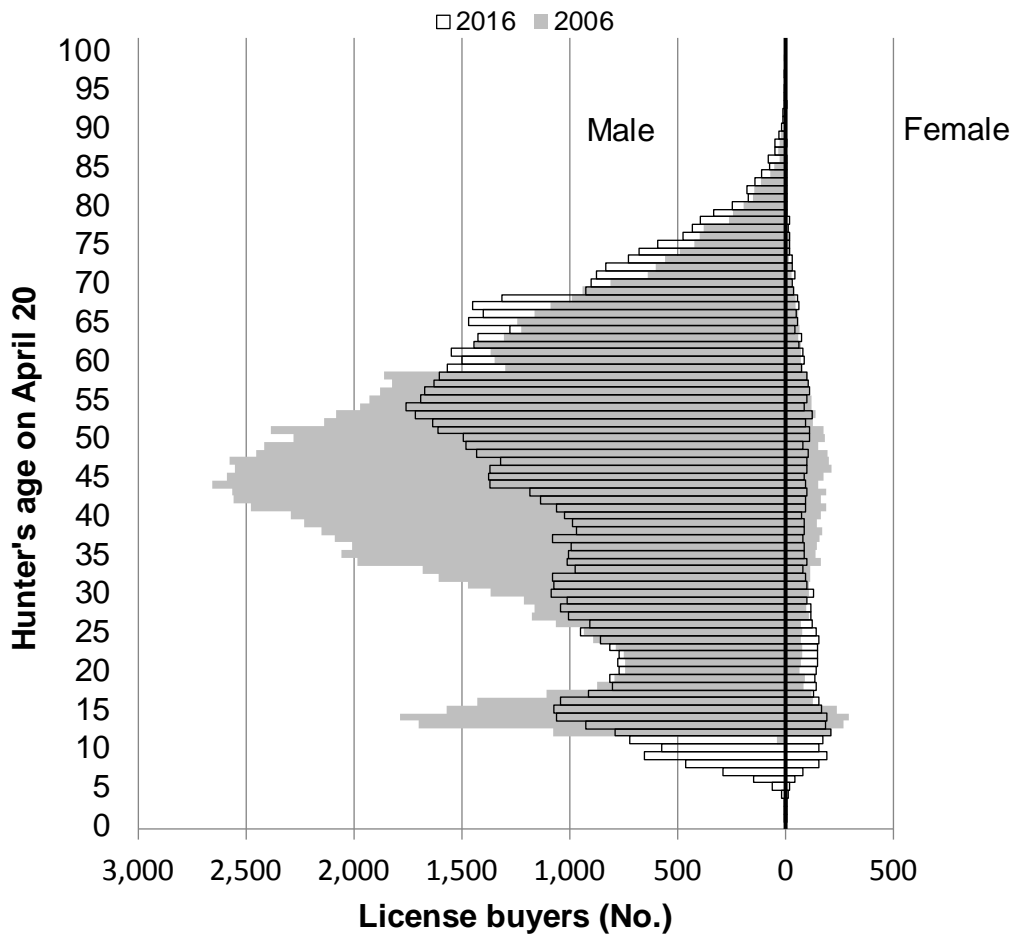


Figure 3. Number of spring turkey hunting license buyers in Michigan by age and sex during 2006 and 2016 hunting seasons. The number of people buying a license was 125,934 in 2006 and 90,774 in 2016.

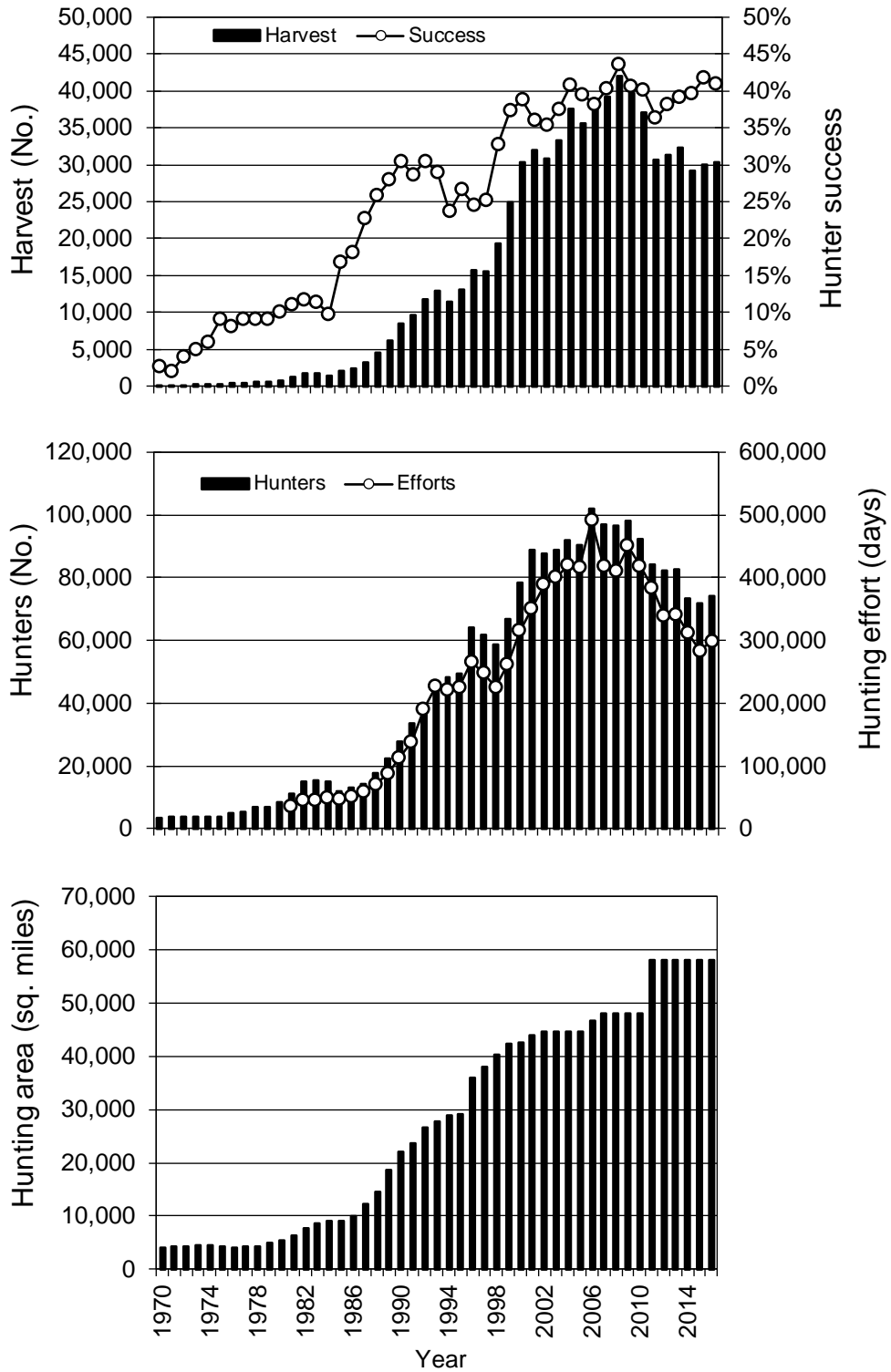


Figure 4. Estimated number of hunters, harvest, hunting efforts, hunter success, and area open to hunting during the Michigan spring turkey hunting season, 1970-2016. Estimates of hunting effort generally were not available before 1981.

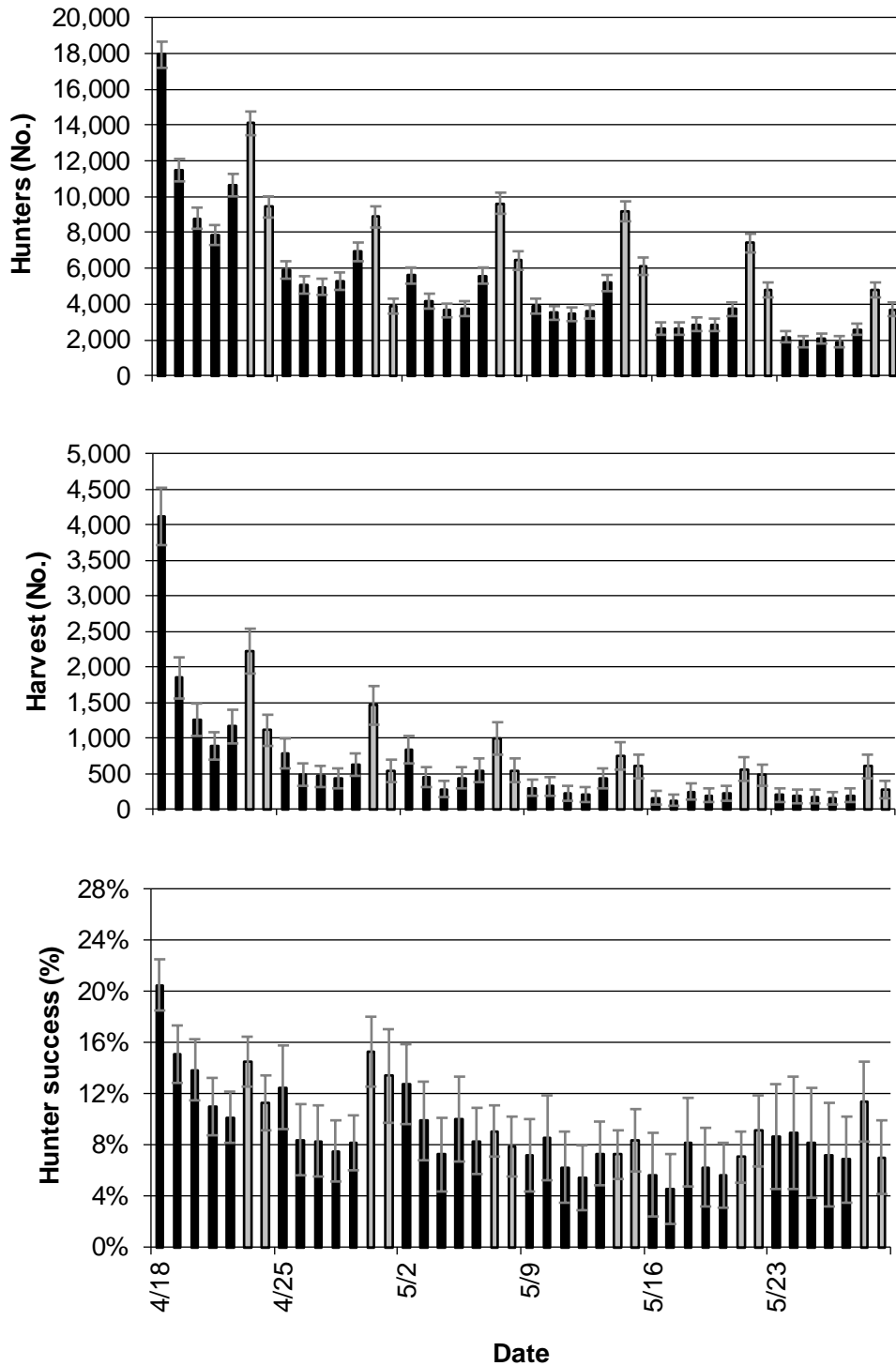


Figure 5. Estimated number of hunters, harvest, and hunter success by date during the 2016 Michigan spring turkey hunting season (includes all hunts). An additional $1,545 \pm 271$ birds were taken on unknown dates. Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval.

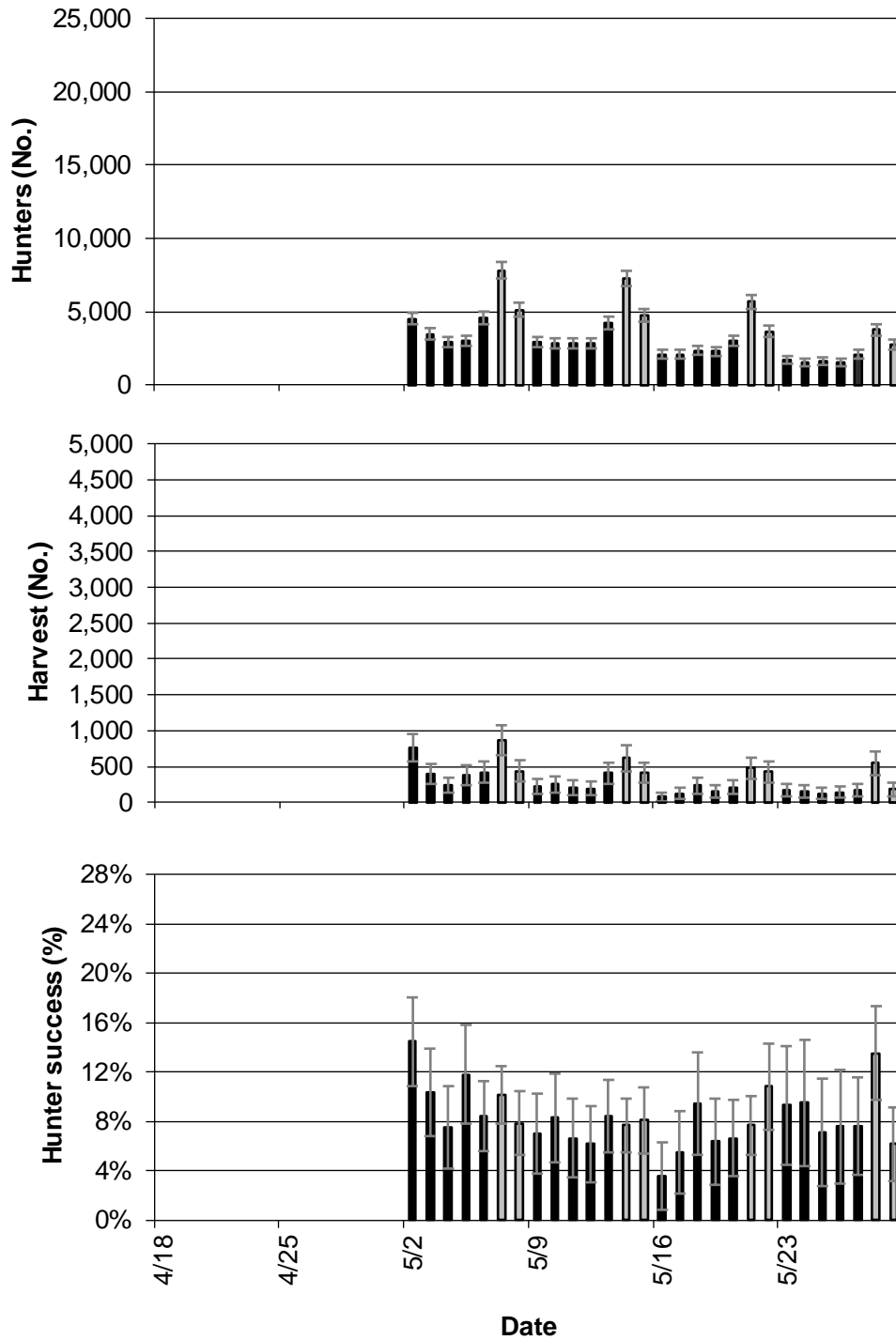


Figure 6. Estimated number of hunters, harvest, and hunter success by date during Hunt 234 of the 2016 Michigan spring turkey hunting season (May 2-31). An additional 512 ± 162 birds were taken on unknown dates. Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval.

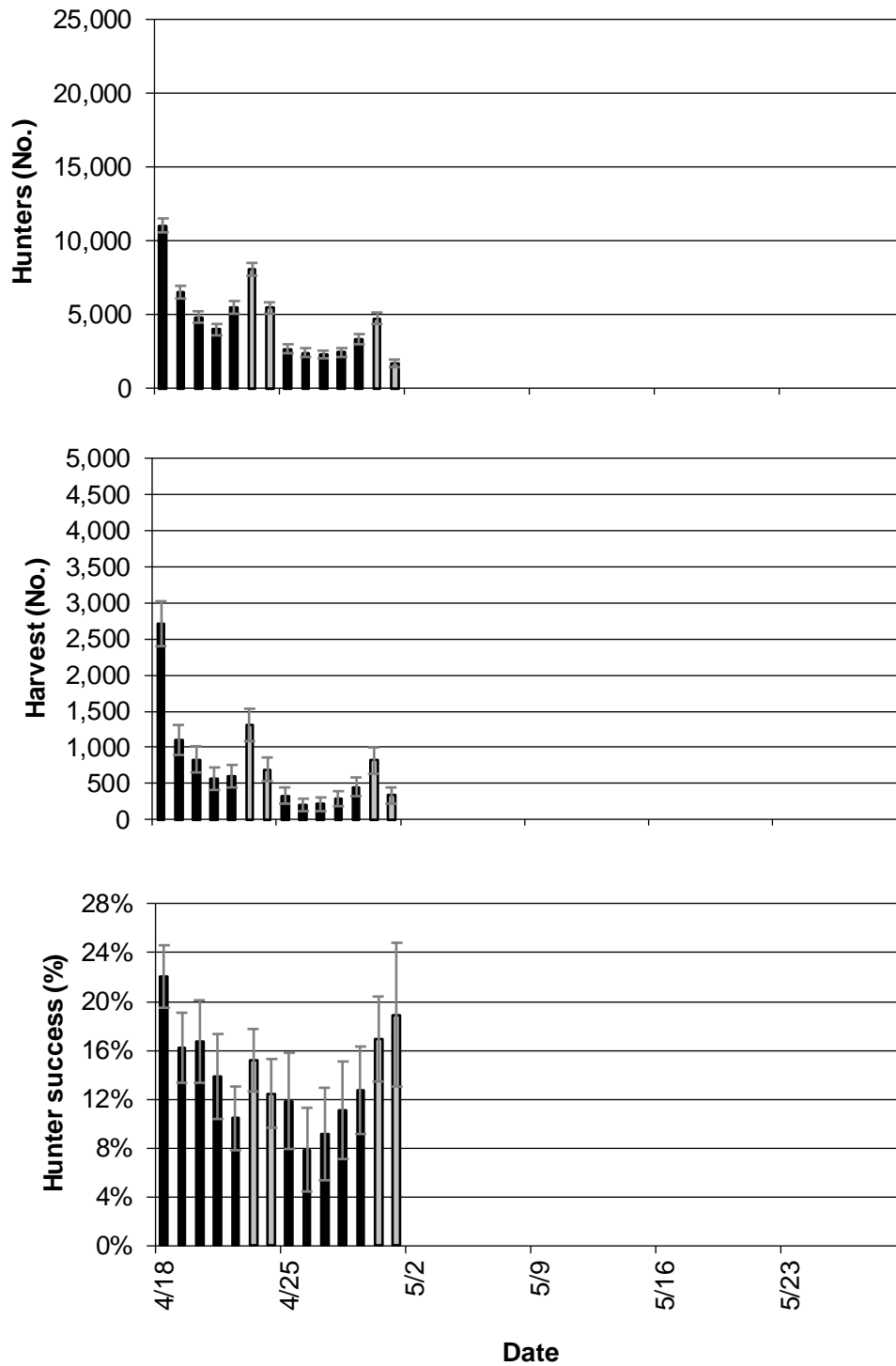


Figure 7. Estimated number of hunters, harvest, and hunter success by date during Hunt 301 of the 2016 Michigan spring turkey hunting season (April 18-May 1). An additional 777 ± 178 birds were taken on unknown dates. Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval.

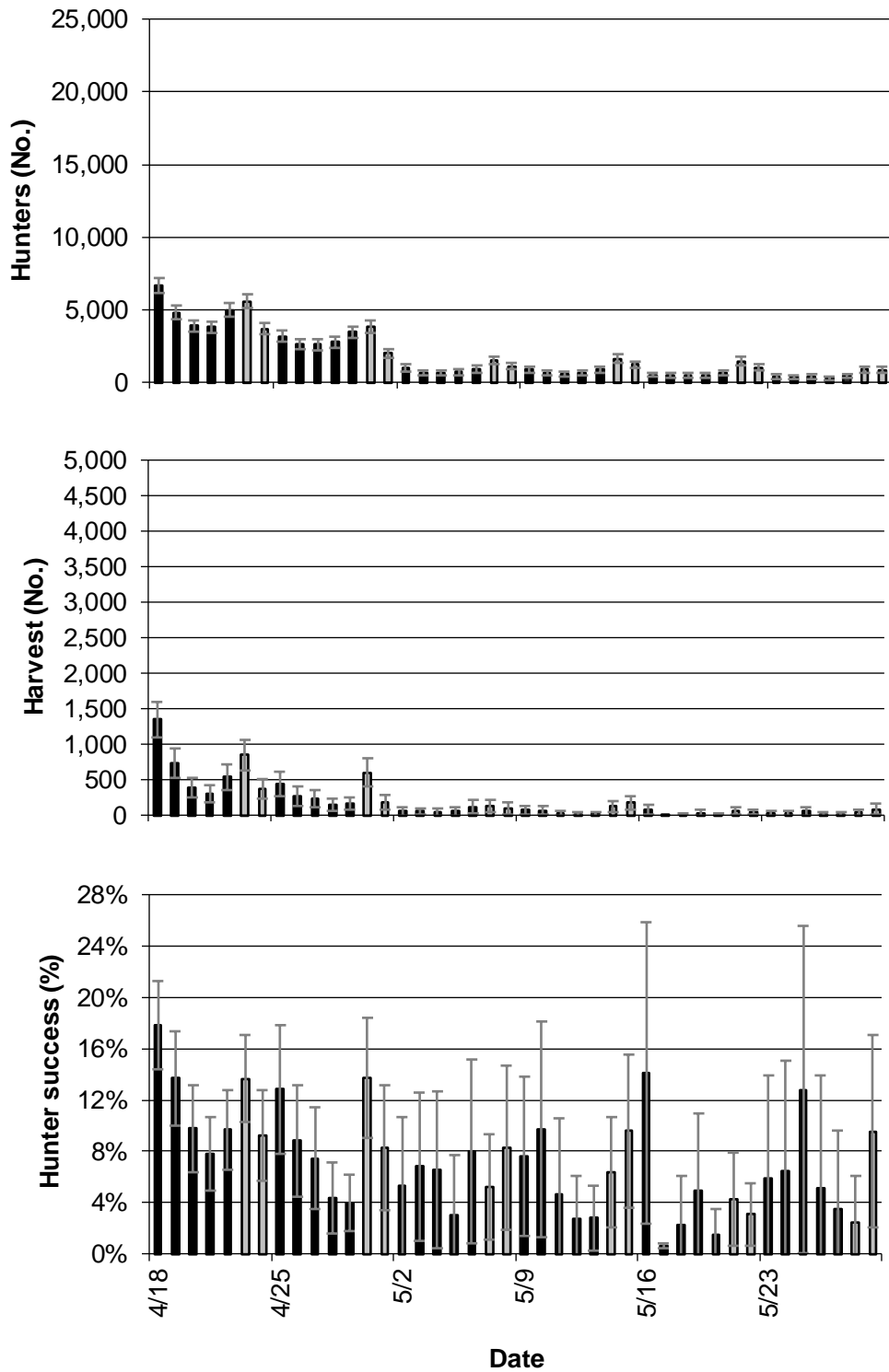


Figure 8. Estimated number of hunters, harvest, and hunter success by date during all hunts, except for mentored youth hunts and hunts 234 and 301 of the 2016 Michigan spring turkey hunting season. An additional 231 ± 124 birds were taken on unknown dates. Gray-shaded bars indicate weekends. Vertical bars represent the 95% confidence interval.

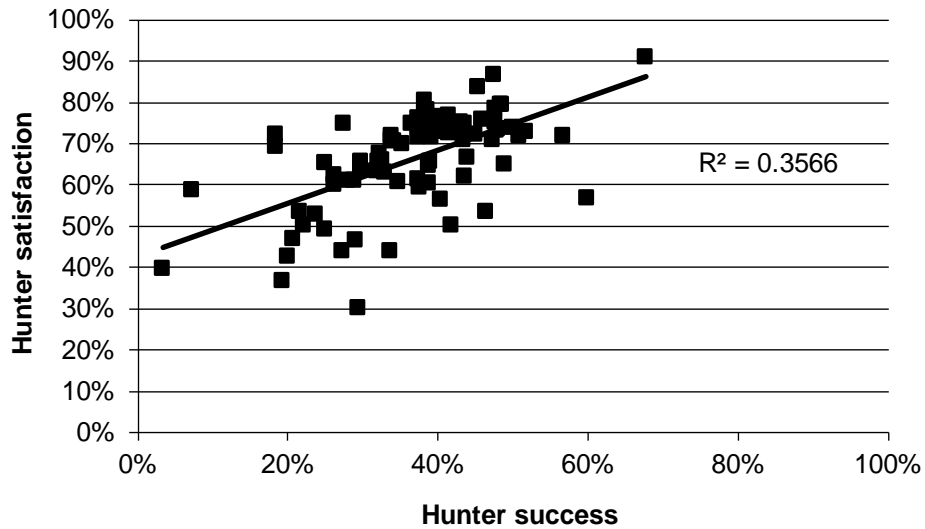


Figure 9. Relationship between hunter satisfaction (expressed as the percentage of hunters rating their hunting experience as excellent, very good, or good) and hunter success for each of 81 counties in Michigan during the 2016 spring turkey hunting season (included only counties with at least 30 hunters).

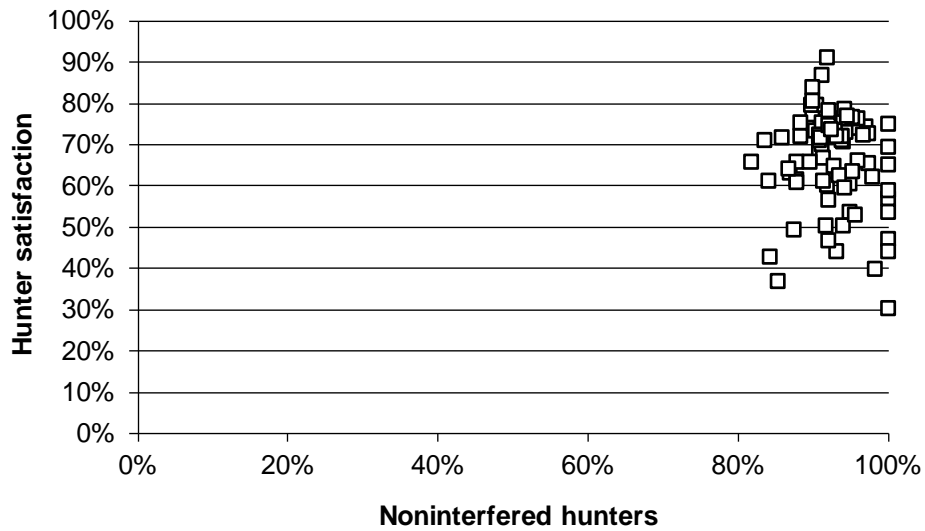


Figure 10. Relationship between hunter satisfaction (expressed as the percentage of hunters rating their hunting experience as excellent, very good, or good) and hunter interference for each of 81 counties in Michigan during the 2016 spring turkey hunting season (included only counties with at least 30 hunters). Noninterfered hunters were the proportion of hunters that indicated that they experienced no or only minor interference from other hunters.